TRAUMA PSYCHOLOGY

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Issues in Violence, Disaster, Health, and Illness

VOLUME 1: VIOLENCE AND DISASTER

Edited by Elizabeth K. Carll

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Praeger Perspectives

Contemporary Psychology
Chris E. Stout, Series Editor

PRAEGER

Westport, Connecticut
London

Library of Congress Cataloging-in-Publication Data

Trauma psychology : issues in violence, disaster, health, and illness / edited by
Elizabeth K. Carll ; foreword by H. E. Khunying Laxanachantorn Laohaphan.
v. ; cm. — (Praeger perspectives) (Contemporary psychology, ISSN 1546–668X)
Includes bibliographical references and index.
ISBN-13: 978–0–275–98525–7 (set : alk. paper)
ISBN-13: 978–0–275–98531–8 (v. 1 : alk. paper)
ISBN-13: 978–0–275–98532–5 (v. 2 : alk. paper)
1. Post-traumatic stress disorder. 2. Psychic trauma. 3. Violence—
Psychological aspects. 4. Disasters—Psychological aspects. I. Carll,
Elizabeth K. II. Series. III. Series: Contemporary psychology (Praeger
Publishers)
[DNLM: 1. Stress Disorders, Traumatic. 2. Crime Victims—
psychology. 3. Disasters. 4. Violence. WM 172 T77755 2007]
RC552.P67T552 2007
616.85'21—dc22 2007009459

British Library Cataloguing in Publication Data is available.

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Library of Congress Catalog Card Number: 2007009459
ISBN-13: 978–0–275–98525–7 (set)
ISBN-13: 978–0–275–98531–8 (vol. 1)
ISBN-13: 978–0–275–98532–5 (vol. 2)
ISSN: 1546–668X

First published in 2007

Praeger Publishers, 88 Post Road West, Westport, CT 06881
An imprint of Greenwood Publishing Group, Inc.
www.praeger.com

Printed in the United States of America

The paper used in this book complies with the
Permanent Paper Standard issued by the National
Information Standards Organization (Z39.48–1984).

10 9 8 7 6 5 4 3 2 1

CONTENTS

Foreword by H. E. Khunying Laxanachantorn Laohaphan vii

Introduction by Elizabeth K. Carll xi

Volume 1: Violence and Disaster

CHAPTER 1 The Psychological Aftermath of Terrorism: The 2001 World Trade Center Attack 1
Mary Tramontin and James Halpern

CHAPTER 2 The Trauma of Politically Motivated Torture 33
Judy B. Okawa and Ronda Bresnick Hauss

CHAPTER 3 The Psychological Impact of Kidnap 61
James R. Alvarez

CHAPTER 4 Workplace Violence and Psychological Trauma 97
Jakob Steinberg

CHAPTER 5 Stalking: Prevention and Intervention 125
Robert J. Martin

CHAPTER 6 Killing as Trauma 147
Rachel M. MacNair

CHAPTER 7 The 2004 Madrid Terrorist Attack: Organizing a Large-Scale Psychological Response 163
Fernando Chacón and María Luisa Vecina

CHAPTER 8 The Psychological Effects of War on Children: A Psychosocial Approach 195
Martha Bragin

CHAPTER 9 The Psychological Aftermath of Large- and Small-Scale Fires 231
Jeffrey T. Mitchell

CHAPTER 10 Online Psychotrauma Intervention in the Aftermath of the Tsunami: A Community-Building Effort 255
Eric Vermetten, Corine J. van Middelkoop, Luc Taal, and Elizabeth K. Carll

CHAPTER 11 First Responders: Coping with Traumatic Events 273
Harvey Schlossberg and Antoinette Collarini Schlossberg

CHAPTER 12 Xenophobia: A Consequence of Posttraumatic Stress Disorder 289
Rona M. Fields

Index 307

About the Editor 319

About the Contributors 321

About the Editorial Advisory Board 329

About the Series 333

FOREWORD

Having worked in and traveled to many countries, most recently as the Ambassador and Permanent Representative of Thailand to the United Nations, I have seen people in different societies react to trauma in various ways. While experts contributed to this important book, *Trauma Psychology: Issues in Violence, Disaster, Health, and Illness*, I share my perspectives from serving the people of Thailand and other nations and from my experiences in the aftermath of the 2004 tsunami that struck the cities and towns in the Indian Ocean rim, including Thailand. However, in all cultures, it is essential to recognize the importance of the psychological well-being of communities as being essential to recovery in the aftermath of disaster and crises.

We interpret and react to events in our lives according to our mindsets, which have been shaped by our upbringing. For example, people in the Buddhist culture may see death as a fundamental part of life. In Buddhism, we are taught that from the very minute we are born, we are already aging and dying. This might not be the case in other cultures. Another example is how Italians reacted to the announcement of the passing of Pope John Paul II. When they first learned of his passing, people in the square, directly in front of the Vatican, promptly gave a big round of applause. That was their reaction to the loss of the great spiritual leader. In my society, the average person would not think of applauding in this situation. These examples serve to illustrate how differently people from other cultures may react to events.

In the immediate months and year following the tragedy of the tsunami, survivors were still struggling to cope with its impact. Tens of thousands of lives across 11 countries had been lost. It was one of the worst natural disasters in the history of humankind. Most of those affected had suffered almost complete losses of assets and homes, and the impact on their livelihoods will probably last for years to come. Where entire communities were destroyed, the loss of previously existing livelihood may be permanent. Experts discussed the effects of the tsunami on the psychological well-being of the victims, and it was reported that survivors had developed psychological disorders. For example, there were reports that in Indonesia alone, 70 percent of those who survived the tsunami were suffering from psychological problems ranging from anxiety to depression. In Thailand, there were also reports of survivors committing suicide because of their inability to cope with stress. I also heard of many Thai children who lost their parents unable to utter a word for months following the tragedy.

Experts have pointed out that the key ingredient to recovery from such a tragedy is social support. It is better for the survivors to cope with such adversity in a community, rather than as individuals, to know that they are not alone, that others are sharing the same plight and are suffering. In the aftermath of the tragedy, many in the community reached out to each other; I learned of projects initiated by a group of Thai writers to help child survivors to recover emotionally through writing to express their feelings. These kinds of projects need to be supported. I am pleased that, in Thailand, many innovative measures had been taken up by private individuals to help the survivors to cope with the impact of the tragedy, including the psychological impact. The government also upgraded medical units in the affected areas in order to provide psychological assistance to the survivors. Vocational and psychological counseling centers were set up to assist the survivors, especially orphans and widows.

How people deal with events, disasters, or trauma also depends upon infrastructural factors in each society. For instance, when we talk about an important infrastructure such as the media and information technology, which I will use in the following examples, we need to also understand that while the availability of the Internet, newspapers, televisions, and radios in the United States and in Western societies is generally taken for granted, they may not be readily available in other societies in remote corners of the world. In addition, media should not be limited to only television, radio, newspaper, Internet, but may include other means such as human media (religious and community leaders). Religious and community leaders can serve as messengers of hope and carriers of information and can serve to foster psychological well-being better than any news media would be able to do. In parts of the world where the Internet, television, and radio are not available, using human media can be even more effective.

The media can be a positive force in mobilizing international support for the survivors and in creating a shared sense of sympathy. Responsible media should also be aware of negative effects that might develop as a result of their reporting. Avoiding the broadcasting of gruesome pictures of victims is also essential, as respect for the relatives of those who lost their lives.

The comprehensive coverage of the consequences of the disaster by international news can have great impact in bringing attention and aid to a crisis. The responses to the humanitarian needs by the international community had been swift and generous. The United Nations, which coordinated the emergency response, described the relief efforts as the largest relief operation in the history of the organization. During his visit to Phuket, Thailand, in February 2006, former President Clinton informed Prime Minister Thaksin Shinawatra that about one-third of all American households had made some kind of donation to the victims of the tsunami. The swift and overwhelming responses from around the world came as a result of the media spotlight.

From day one and throughout the media coverage of the catastrophe, we saw and heard heartwarming stories from Thailand about locals who were also survivors and had suffered tremendous losses of family members, and yet those people lent helping hands to foreign survivors by offering food, clothing, and shelter. We also heard other similar stories, both on television and in various Internet chat rooms, about students who volunteered as translators to help foreign survivors, or saw footage of people lining up at donation centers to donate blood and basic necessities. It is these kinds of heartwarming stories of people helping other people, or strangers reaching out to other strangers and survivors assisting other survivors, which I believe have positive effects on all of us. It is the kind of encouragement and social support that we all need.

In conclusion, helping people cope with trauma, whether it impacts the individual, family, or the larger community, is important to the health and well-being of all communities. In order to provide beneficial support and services, we must also be sensitive to different cultures and constraints in each society to appropriately design strategies and tools that will best respond to the needs of a community. The key is to be sensitive and innovative and to ensure the sustainability of the measures adopted when designing support for the psychological well-being of those in need.

H. E. Khunying Laxanachantorn Laohaphan
Ambassador and Permanent Representative of
Thailand to the United Nations, December 2006

INTRODUCTION

Elizabeth K. Carll

Across the last 15 years, there has been a mushrooming interest in the effects of traumatic events on people and societies. The news media report daily occurrences of war atrocities, disasters, violence, and mayhem. Simultaneously, more attention and research is now focused on examining the psychological effects, particularly stress and trauma, of disaster and violence. Close attention is also being paid to psychological responses to chronic and acute health conditions and disease, and how stress and trauma may affect the course of recovery.

The Evolution of Trauma Psychology

Attention has always been focused on various aspects of trauma, whether the traumas were large scale or individual or occurring as a single event or as a series of ongoing repeated events, as for instance, war, domestic violence, or a catastrophic health condition. The study of these various types of events, though, was generally compartmentalized. In the early 1990s, however, a series of large-scale stressful events—the Persian Gulf Crisis, the first World Trade Center bombing, the Long Island Railroad shooting, and finally, in the mid-1990s, the Oklahoma City bombing—shook the security of our nation.

As a result of these high-profile events, the news media began to increasingly cover the human side of disasters, paying special attention to the trauma experienced by both the survivors and the public. This attention at first appeared specific to each event that occurred; yet it soon became obvious that for mental health professionals and the public a broader understanding was necessary to put the events in context and to understand the relationship of short-term intervention to longer-term treatment. Because of the short life of news stories, for example, the global audience gained the impression that a few months after any disaster everyone had recovered and moved on. This was far from reality, however, especially if the trauma involved the loss of one's home or friends and family. It was also important to recognize that trauma is related not only to violence and disaster, but may have a broad range of causes and precipitating events.

This became especially apparent when I was developing the training course for the Disaster/Crisis Response Network (DRN) that I had established in 1990 for the New York State Psychological Association. The DRN was the first statewide volunteer disaster mental health network in the nation, and it focused, in particular, on the needs of the public and the community. Training for volunteers was a priority. Training included a compilation of modalities, including Critical Incident Stress Intervention, which was an adaptation of Jeffrey Mitchell's Critical Incident Stress Management Model, as well as psychological first aid, and the distinction between crisis intervention, onsite intervention services, and long term psychotherapy. In addition, it was important for mental health professionals to put these events in context with longer-term traumatic events as well as relate them to trauma issues presented by clients in their practice.

Since a training course or training manual that included all of these facets did not appear to exist in 1990, I began to develop training modules—including one on *Trauma Psychology*—that were sponsored by the state psychological association and to which experienced volunteer members of the Network contributed information. These training modules covered not only crisis intervention and immediate onsite response, but also looked at the continuum of services necessary to help individuals and communities recover. In addition, the training took into consideration preexisting psychological conditions, both recent and longstanding, and the distinction between the use of emergency psychological first aid, short term psychotherapy, and long term psychotherapy as effective interventions.

These training sessions were attended not only by psychologists but also by other mental health professionals and by first responders from the community, including EMS, law enforcement, criminal justice system personnel, clergy, and various hospital staff. By the mid- to late 1990s, other organizations and hospitals were developing various training courses for their own staffs. Universities began looking into developing courses as the demand for trauma training increased.

In the early 1990s, I was often asked to define the term *trauma psychology.* The term was not familiar to mental health professionals, although some were familiar with terms such as psychological trauma, PTSD, and psychotraumatology. Trauma psychology focuses on studying trauma victims and examining intervention modes for immediate, short-term, and long-term trauma caused by a single episode or by ongoing, longer-term events. It also encompasses possible trauma related to the diversity of individual, family, and community events and experiences. The description or definition of trauma psychology, from my perspective, included a broad spectrum of events, that could range from interpersonal violence, sexual assault, war, motor vehicle accidents, workplace violence, and catastrophic illness to trauma relating to acute and chronic health conditions (e.g., cancer, heart disease, spinal cord injury, and paralysis), as well as other types of accidents violence, and illness. Thus, the concept for the two volumes of *Trauma Psychology: Issues in Violence, Disaster, Health, and Illness* grew out of the need for a reference compendium that reflected a wide variety of trauma-related issues. The need for a recognized body or specialty area of trauma research and knowledge within the discipline of psychology had been growing significantly. For example, the International Society for Traumatic Stress Studies was formed in 1985 and has since grown into the largest international organization devoted to the study of trauma-related issues. In addition, the rapidly growing interest in trauma psychology is evidenced by the recent formation, in 2006, of the new Division of Trauma Psychology of the American Psychological Association.

Given this evolution of trauma psychology, it was important that the volumes include not only the typical types of events associated with trauma but also those underrecognized areas that nonetheless have significant traumatic components. Having such a cross section of trauma issues reflects the broad and diverse field of trauma psychology. The two volumes of *Trauma Psychology: Issues in Violence, Disaster, Health, and Illness* (*Volume 1* and *Volume 2*) are unique, as both volumes include chapters that discuss recognized trauma-related events as well as those underrecognized important areas that reflect the evolving diversity of areas within the specialty of trauma psychology. Volume 1 covers violence and disaster, whereas Volume 2 covers health and medical illness. The chapters in the volumes include a discussion of trauma-related issues and background, along with real-life vignettes and case examples, with recommendations for intervention, treatment, and public policies. The book includes pragmatic information on a broad range of areas related to trauma. *Trauma Psychology: Issues in Violence, Disaster, Health, and Illness* offers chapters discussing well-recognized disasters such as tsunami and fires; accidental disasters such as explosions and transportation accidents; terrorism and violence such as 9/11 and the Madrid terrorist attacks; workplace violence; interpersonal violence; motor vehicle accidents; violence against women; violence and the media; trauma and first responders; the impact of ongoing armed conflict and war on children's development; integrating psychopharmacology into the treatment of PTSD; and the impact of medical illness on children and families.

The volumes also contain often underrecognized trauma-related topics. Included are chapters discussing the impact and effects of politically motivated torture; stalking; kidnapping; the impact of killing on the perpetrator; xenophobia; the effects of homelessness on families and youth; spinal cord injury; burns; AIDS; pain; the difficulty of disclosing trauma in a medical setting; and anesthesia awareness.

The topic of anesthesia awareness, for example, is relatively unknown to many professionals, but it is estimated to occur in one or two of every 1,000 patients who have received general anesthesia and who wake up during surgery because they are underanesthetized. It is estimated that about 50 percent of these patients can hear or feel what is going on but are unable to communicate what is happening because they are temporarily paralyzed, and approximately 30 percent of these patients experience pain. As a result, half of these awareness patients develop significant psychological problems including PTSD.

Defining Trauma

It is important to note, that many people may experience traumatic stress symptoms in the immediate aftermath of crises, but that most do not go on to develop posttraumatic stress disorder. Some people may recover, while others may have lingering and ongoing symptoms, and a still smaller percentage may develop the full syndrome, which can last months, years, and, for a small minority, a lifetime. It is also helpful to keep in mind that individuals may experience a wide variety of traumatic events, but the intensity of a person's responses is a combination of many factors; for instance, the nature of the trauma, its severity, its duration, and, of course, the existence of prior traumatic experiences, as well as what resources and supports are available for dealing with the trauma.

Because the terms *acute stress disorder*, *posttraumatic stress disorder*, and *complex trauma* are mentioned in the various chapters, the following definitions will assist the reader. *Posttraumatic stress disorder (PTSD)* is considered one of the more extreme forms of anxiety disorders. It is distinguished from all other anxiety disorders in that it is caused by an external event. PTSD is often described as a normal response to an abnormal event. Whether the diagnostic label of acute stress disorder (ASD) or PTSD is used is generally determined by the duration of the symptoms. Essentially they are a set of similar symptoms (as defined below). However, ASD describes the experiencing of symptoms of up to one month's duration. If the symptoms continue past one month, the diagnostic label of PTSD applies. PTSD may develop months or even years after having experienced or witnessed a traumatic event.

A traumatic event can lead to PTSD if it threatens one's physical or mental well-being or results in feelings of intense fear, helplessness, or horror. The major symptoms of PTSD include reexperiencing of the traumatic event (i.e., nightmares, intrusive thoughts, or flashbacks); avoiding reminders of the event and numbing (i.e., avoiding thoughts, people, and activities related to the trauma or an inability to recall aspects of the trauma); and also increased arousal (i.e., difficulty concentrating, trouble falling or staying asleep, hypervigilance, and anger outbursts).

When an individual perceives a danger or threat, a biological alarm is raised, adrenalin increases, heart rate increases, breathing becomes rapid, and the body sets itself up for a fight or flight response. In the majority of individuals, this response returns to equilibrium in a relatively short period of time. For the individual with PTSD, the response may endure. One of my clients described his PTSD as being similar to a car being revved up, where the gas pedal is being pressed but the brakes are on and there is nowhere to go, so the motor just continues to spin and churn.

The terms *Complex PTSD* or *Disorders of Extreme Stress Not Otherwise Specified (DESNOS)* have been suggested to describe a set of symptoms associated with prolonged experiences of severe trauma or interpersonal abuse. This term developed because some experts see PTSD as insufficient to describe the experience and impact of ongoing pervasive trauma. This type of trauma may result from experiences such as chronic child sexual or physical abuse, domestic violence, or ongoing war and torture. Ongoing severe trauma may lead to significant impairment in regulating emotions and behavior, and may have an impact on how survivors perceive themselves and their view of the world.

It is also important to keep in mind that the way people experience, perceive, and display distress is culturally determined, as culture cannot be separated from the worldview of an individual. Definitions of trauma and designations of posttraumatic stress need to be sensitive to the cultural context in which traumatic events occur. For example, for those living in a chronic war zone, the issue of "post" as it relates to stress may not be viewed as meaningful. The chapter on children and war highlights the importance of culture and context, and also gives an overview of the controversy about how differently PTSD may be viewed in different parts of the world.

Interventions also need to take into consideration culture and context because what is considered pathological may vary widely across cultures. Culture also influences peoples' styles of coping, and therefore interventions must address the strengths, rituals, and supports within a community. This was evident in the aftermath of the tsunami, where interventions based on Western values of individualism and open talk may not be viewed as effective in an Eastern culture that values community and interconnectedness and a stoic acceptance of life's adversities. Therefore appropriate interventions need to be tailored to the culture and context in which the traumatic events occur.

These two volumes reflect and highlight a cross section of both recognized and often underrecognized areas within trauma psychology, with a variety of descriptive examples, interventions, recommendations, and suggestions for public policy included. As a result of perusing the volumes, it is hoped the reader will gain a better understanding of the diversity and complexity of issues, as well as the diversity of intervention strategies within trauma psychology.

CHAPTER 1

THE PSYCHOLOGICAL AFTERMATH OF TERRORISM: THE 2001 WORLD TRADE CENTER ATTACK

Mary Tramontin and James Halpern

> To our anguish, terrorism has become one of the most destructive threats to the human condition. Each event tears at the fabric of society and raises questions about the impact of these traumas and the capacity of humans to adapt to cataclysmic events.... What price tag shall we place on the loss of innocence, on the loss of freedom?
>
> —*G. Sprang (2003, p. 133)*

The events of September 11, 2001, redefined modern life throughout the world. In the single largest terrorist attack in history, four U.S. airliners were hijacked and used as weapons in a tightly coordinated, violent, and high-profile assault executed by the Al Qaeda terrorist conglomerate.

This chapter will examine the psychological aftermath of terrorism by taking a look at what transpired in New York City after the Twin Towers of the World Trade Center (WTC) were attacked and destroyed. It is a summary of clinical observations and relevant disaster research findings as well as reflections and recommendations derived from a vantage point of five years later. This chapter reflects the clinical experiences of two psychologists involved in the coordination and provision of mental health services offered to survivors, to the family members and colleagues of those who died, to respondent emergency service providers, and to others affected by the devastation.

For nearly a decade prior to September 11, 2001 (9/11), the mental health community had made a concerted effort to determine what types of psychological services and support to offer people impacted by disasters and other large-scale and mass-casualty catastrophes. The global goals of such interventions were, and remain, prevention and mitigation.

The integration of mental health in emergency response and planning began its evolution after the effects of trauma were legitimized in the late 1970s and early 1980s. The potential impact of a traumatic event was formally recognized by mental health professionals by the addition of posttraumatic stress disorder (PTSD) to the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* in 1980. In 1994, this diagnosis was refined and the rarity of a traumatic event was deemphasized. More importance was placed on a survivor's perception. Significantly, PTSD could now be diagnosed in someone who was not directly exposed to a horrific trauma. Additionally, acute stress disorder (ASD) was introduced as a way to predict future PTSD by acknowledging people who were suffering from significant distress in the immediate aftermath. The impact of trauma was now formally "on the table."

In addition to appreciating that PTSD might be a severe and unique psychological reaction to a traumatic event, other reactions, including depression, anxiety, somatization, and general posttraumatic distress are noted reactions associated with disaster exposure (Norris et al., 2002). However, disaster research discovered that most people recover spontaneously. Natural human resilience allows most to recover from trauma with no outside interventions. Immediate, common reactions that result from exposure to severe stress can look somewhat like PTSD. People may have a heightened startle response, be generally anxious, and have problems sleeping. They may reexperience the event, especially when there are cues in the environment (e.g., storm clouds after a devastating hurricane or loud noises after a bombing). Over time, such reactions fade, becoming less frequent and intense. The traumatic event becomes a normal memory, which is accessed from time to time but does not possess the immediacy of the original experience. Stress, even extreme stress, does not equal trauma (Shalev, 2004). Would this be the case following the WTC attack?

Trauma, Terrorism, and the Mental Health Community

In the absence of empirical data on whether psychological outcomes to terrorism are comparable to those observed after other traumatic events, and whether the immediate effects of terrorism require mental health support, interventions following terrorist attacks have been modeled after those developed for disasters (Yehuda, Bryant, Zohar, & Marmar, 2007). Hence, the disaster research and clinical literature will serve as a reference point for understanding the impact of the WTC attack. Yet there do seem to be characteristics of a disaster caused by terrorists that make it distinct.

Since the events of 9/11, terrorism has received significant attention and resources and some experts view it as a type of disaster (Ursano, Fullerton, & Norwood, 2003). Terrorism is meant to be traumatizing (Silke, 2003), and this can be accomplished in a number of ways.

An intrinsic aim of terrorist acts is to produce psychological effects far beyond the immediate physical damage (Yehuda et al., 2007). It is psychological warfare

(Everly & Mitchell, 2001). Crenshaw (1992) views terrorism as a particular style of political violence that strategically uses attacks on a limited number to influence a wider audience. "Terrorism can be thought of as a psychological assault that challenges the society's sense of safety, security and cohesion" (Hamaoka, Shigemura, & Hall 2004, p. 533). A sense of safety and security is central to human development and part of the foundation of Maslow's hierarchy of needs.

Acts of terrorism extend beyond personal, individual impact and disrupt communities, causing massive social trauma (Twemlow, 2004). They induce a sense of dread and foreboding, eroding a valuable and needed sense of safety and order. Malevolent, intentionally human-caused disasters evoke more psychological distress than those caused by nature. A consequence of terrorism is demoralization and emotional distress in the general population, even if there is no direct or proximal exposure. Thus, emotional contagion is greater. As a result, individuals and communities have to contend with a persistent if subliminal sense of arousal and vigilance. This increases the collective stress level. Demoralization and distress, though not clinical syndromes, deeply affect people's well-being. As Beutler, Reyes, Franco, & Housley (2007) note, "The fear generated by terrorist attacks extends into the most basic reaches of the human mind, activating systems that have been fundamental to our survival but long unused, and this may cause reactions that undermine one's emotional and mental well-being" (p. 33). The recent film *The Great New Wonderful* weaves five stories against the backdrop of an anxious and uncertain post-9/11 New York City. The event is never mentioned yet it permeates the lives of all the characters.

Terrorist acts are also especially difficult to integrate because they violate basic assumptions through their intentionality, shock value, and choice of noncombatants as victims. In the aftermath, it feels that such events can happen at anytime, anyplace, to anyone. With no advance warning, they are unfamiliar and unpredictable, and the inherent surprise element serves to perpetuate and reinforce the basic fight or flight response.

Event Characteristics

Disasters differ with regard to scope, intensity, and duration, all measures of the size of an event. Size is highly correlated with disaster's psychological impact. Scope refers to the number of people, families, and structures affected. Intensity is related to scope, but is not the same thing. Intensity serves to "up" the psychological ante: An event that is small in scope but intense—such as those events that include the loss of life—carry more psychological consequence. Duration refers to the length of time that people are affected so that events of prolonged or uncertain duration are particularly difficult to cope with. Survivors and the community not only have to deal with the consequences of the event, but remain anxious about what will happen next.

The events of 9/11 can be distinguished from what Americans had previously experienced in terms of mass casualty disasters by several elements. These include its magnitude, cause, ongoing nature, and unique position of service providers.

The magnitude of the WTC attack is reflected in terms of the number of lives lost, physical space impacted, numbers of helping agencies involved, and long-term recovery efforts. Although initially estimated at 60,000, the number of people now understood to have died in New York City is 2,602, another 147 passengers and crew in the two planes, and 24 still missing and presumed dead. At the time, this amount exceeded the death toll for any natural or man-made disaster in many decades.

The potential for more casualties was far greater as the estimated population of the Twin Towers during business hours was 50,000. The area of devastation is approximately 16 acres, and included, not only major financial institutions, but also residences; schools; small businesses; senior centers; churches; and city, state, and federal government agencies. Many of these entities were either displaced or entirely destroyed.

The attack was also distinguished by its cause, a deliberate and conscious attempt to destroy people, property, and spirit. In this attack, the expectation that the worst was not over persisted as recovery efforts took place. In other disasters, there are some lingering effects related to the actual event. In earthquakes, there are aftershocks, while in hurricanes there can be tidal waves or flooding. Still, the perception is mostly that the "big" event has passed. In such a perspective, the work that remains is arduous, long and stressful but is viewed as a bounded recovery phenomenon. In the WTC attack, ongoing fears were present. Immediately after the attack, renowned intelligence and security agencies predicted that there would be additional attacks "with a 100% degree of certainty." The scope of terrorist acts was expanded to include biochemical and nuclear threats. As a result, a heightened sense of vulnerability existed and still persists.

Service providers were uniquely affected. In the Oklahoma City bombing, none of the victims were speculated to have been first responders. In NYC it was calculated that every firefighter, for example, knew at least one fallen companion well. Emergency providers became intimately affected in an unprecedented way. Providers of other services were deeply impacted as well, having either witnessed the event, also known someone killed or injured, or by being attached in some proximal way.

This disaster evolved uniquely and, through this process, increased the number of people who could have been injured and who witnessed parts of the event. The disaster first began at 8:46 A.M. when an airplane crashed into the north tower of the WTC. This was witnessed predominantly by those within the immediate area. Approximately 20 minutes later, another plane crashed into the second tower. This event was witnessed live by millions, either firsthand, or by viewing it on television or on the internet or by hearing radio broadcasts. This second, unexpected tragedy was followed 30 minutes later by another one: the unanticipated collapse of one of the towers. And, in another 30 minutes, the remaining

WTC tower subsequently collapsed. During this time, other attacks were occurring relatively close to New York City, thus setting the stage for increased shock and fear, and the growth of rumors. Because of this extended time period that included several catastrophic episodes, the number of those impacted proportionately rose. Not only were emergency service providers the first responders to this event, but also federal agents and employees, humanitarian relief staff and volunteers, city agency representatives, civilians who desired to help, medical personnel, and the mayor and police commissioner of New York City and their entourage. Those who would eventually be providing and directing rescue and recovery services also had direct, primary exposure to this traumatic event. In most disasters, there are cleaner or sharper boundaries between those affected and those who provide postevent aid.

As a result, the disaster operation itself included an escalation in, and intensification of, those elements common to disasters: heightened chaos; exacerbated loss of control; increased sense of vulnerability; immense and obvious devastation; and the expanded presence of multiple barriers to access, traveling, and communication as a result of heightened security. Psychologically, this event was inherently overwhelming. Physically, the landscape of a major metropolitan city had been permanently altered. New barriers and restrictions were instituted that made traveling, commuting, and accessing New York City difficult and confusing. In the first few hours and for some weeks afterward, communication was faulty. Multiple communication lines, wires, and transmitters were located in this geographic area so that cellular phones, normal land lines, computer e-mail systems, and television and radio broadcasts were disrupted. The ability to exchange vital information (often with life and death implications) was severed. Because of the magnitude of this disaster and the concomitant amplification of the elements listed previously, the ability to give and direct help was immediately challenged.

Psychological Reactions

Anyone exposed to a disaster, directly or indirectly, will feel its impact. Disasters have an intense and acute beginning and a collective impact; involve significant disruption of biopsychosocial resources; affect those who are either directly impacted, who bear witness, or who come to help; and include a spectrum of losses. Reactions can be understood to evolve through the stages of a disaster's lifecycle. Reactions are best understood from this perspective because short-term reactions can be quite different from long-terms ones. Reactions to traumatic events occur on a continuum from normative to the more extreme ones resulting in clinical psychopathology. The most common psychological aftereffect is a heightened sense of distress, reflected in individually specific ways (Norris et al., 2002).

As Neria, Jung Suh, and Marshall (2004) point out, in the days following the attack, the mental health community in the greater New York City area braced itself for an anticipated increase in the need for mental health support and treatment. There were good reasons for this, even though there exists a paucity of rigorous scientific studies assessing the psychological sequelae of terrorist acts in urban communities. Research in disasters' aftermath (Norris et al., 2002) has found that disaster's effects appear to be most extreme when at least two of the following conditions are met: (1) salient property damage, (2) extreme financial problems for a community, (3) causation by human intention, and (4) injuries and threat to, or loss of, life. Terrorist acts combine these risk factors. The expectation therefore that a surge in post-9/11 mental health needs might occur was not unreasonable.

Loss permeates the disaster experience. Perhaps the greatest loss is that of our loved ones. Other tangible, important losses include that of property, irreplaceable possessions, pets, or occupation and income. Intangible losses may be of a way of life or that of cherished beliefs, deeply held schemas. Janoff-Bulman (1992) has referred to these as losses of the assumptive world or "shattered beliefs." Fullilove and Saul (2006) talk about the actual destruction of the Twin Towers as a loss that reached beyond its immediate surroundings. Kaniasty (2006) expands, "Loss of attachments to places is psychologically hurtful because physical structures with their familiar symbolic, social and cultural dimensions are foundations of self- and collective identities. How many New Yorkers, how many Americans, actually appreciated beforehand the psychological magnitude of these symbols?" (p. 537). Underlying, fundamental and usually unarticulated principles that are challenged include the belief that the world is benevolent, that life is meaningful, and that the self is worthy.

Losses lead to grief, the emotional reaction to loss, to mourning, and to bereavement, the painful and thorny process of relinquishing and readjusting after a meaningful loss. Those who died during the WTC attack died under traumatic circumstances, leading to traumatic loss, which connotes losing a loved one in horrific or violent circumstances that reflect and intensify the experience of trauma. Traumatic loss is compounded and made more complex by the shared, communal context of disasters. Traumatic loss may lead to complicated grief, a process characterized by unremitting bereavement and that shares symptom overlap with PTSD. Indeed, loss and trauma have similarities: Exposure to traumatic stress almost always includes some component of loss and frequently traumatic loss. To add to the complexity of loss in disaster, in the WTC attack, survivors who had direct exposure to the event may have also lost someone close to them, constituting a double blow. It can be difficult to tease apart the differences between complicated grief and a severe traumatic stress response in such individuals.

Those who are impacted by a disaster may share reactions of an existential nature, relating to issues of meaning and identity. Traumatic stress has the potential to fragment a survivor's sense of self. One's smooth functioning in the world is mediated by implicit assumptions that organize thoughts, feelings, and actions. Severe stressors can lead to a reconfiguration of such self-schemas and to issues of meaning-making. Deeply personal searches can lead to posttraumatic growth. Tedeschi and Calhoun (1995) write of three areas that may benefit: self-perception, interpersonal relationships, and one's philosophy of life. Traumatic events may reinforce one's ability to cope with adversity. Close relationships can become of increasing importance, and people may end up giving more time and thought to the purpose of life and increase their investment in spiritual issues or charitable causes.

Changing our focus from nonclinical, nonpsychopathological reactions to more severe outcomes, we consider PTSD, an often chronic disorder that may include functional impairment. It is the condition most commonly assessed and observed in disaster victims (Norris et al., 2002). PTSD rarely shows up alone; depression is frequently present. And, generalized anxiety disorder, somatization, and substance abuse disorders also rank among the other most diagnosed clinical entities. Note that any of these can be an exclusive diagnosis, without the occurrence of PTSD.

WTC Research Findings

Since the WTC attack, a number of surveys have been conducted to elucidate the extent of psychopathology and other reactions experienced by adults, adolescents, and children in New York City and surrounding areas. Adults have been surveyed by Galea, Ahern, Resnick, and Vlahov (2006), Vlahov et al. (2004), Schlenger (2004), Silver et al. (2006), Neria, Gross, and Marshall (2006), and also by Gross (2006). These researchers each look at different groups and issues. Adolescents were specifically a focus for Gould, Munfakh, and Kleinman (2004) and children's mental health reactions addressed by Hoven, Mandell, Duarte, Wu, and Giordano (2006).

Galea and his colleagues (2006) conceived that all residents of New York were potentially exposed and could possibly develop psychological symptoms. Consistent with other surveys, a persistent, concentric pattern of PTSD and depression was discovered. Both invariant and changing variables were predictive of PTSD, including being directly affected, being Latino, being female, peri-event emotional reactions, ongoing traumas, and ongoing stressors. Additionally, low social support was a central determinant. Daily life stressors, not just other traumatic events, were independently predictive, thus strengthening a stress-vulnerability model of PTSD and pointing to a possible preventive strategy of focusing efforts to mitigate postdisaster stressors. The same survey also showed significant increases in tobacco, alcohol, and marijuana use (Vlahov et al., 2004).

Schlenger (2004) found the prevalence of PTSD due to 9/11 to be higher in New York than in Washington, D.C., and the rest of the country. In contrast to the WTC, the Pentagon is more isolated and perceived as a military base. New Yorkers may have felt a greater sense of personal vulnerability. Additionally, the WTC attack was viewed by many more people as it took place and received more ongoing media coverage.

Silver et al. (2006) discovered that psychological aftereffects for people were multiply determined and there were important influences beyond exposure or loss that were predictive. The authors write, "[T]o understand fully how trauma affects human functioning, we need to consider the unique roles of individual differences (e.g., coping responses, previous experience with trauma), and social interactions (e.g., social constraints, conflict, social support) in mediating the relations between specific events and subsequent outcomes" (p. 46).

Focusing on nonuniformed workers who were at Ground Zero for the nine-month recovery period, Gross (2006) discovered significant rates of PTSD, major depressive disorder (MDD), and generalized anxiety disorder (GAD), and that more than a quarter of respondents had sought mental health services. Workers all experienced traumatic exposures, and the risk factors of having experienced 9/11–related loss and peri-event emotional reactions were identified. Additionally, workers expressed that the significance of their roles in recovery efforts was overlooked. There were 152 members of the trades unions who were killed at the WTC site. These are groups that are not traditionally associated with exposure to trauma, death, and danger but which indeed were placed at risk in unexpected ways on that day and in the ensuing months. This led Gross and his colleagues to consider aggressive outreach and screening efforts, to develop ways to destigmatize receiving assistance and to provide predeployment training before exposure.

Neria et al. (2006) studied the impact on a lower socioeconomic group located in upper Manhattan. In general, the researchers concluded that this poorer population had higher rates of all disorders found postdisaster, including PTSD, MDD, GAD, and panic disorder.

Gould et al. (2004) focused on teenagers' mental health and found that, although the majority did not exhibit "untoward psychological consequences from the attack," a minority did report clinically significant psychological sequelae. Initial responses of numbing were significantly associated with all of the negative psychological outcomes. In terms of help-seeking behaviors among this group, it appeared that the teenagers assessed sought more assistance from informal (e.g., teachers) rather than formal (e.g., hotlines) sources, at least in the immediate aftermath. The researchers felt this underscored the concept that schools are one of the best settings for dispensing services during a postdisaster period.

Recent disaster mental health research has proved that children are at high risk for suffering mental health consequences following large-scale disasters (Halpern & Tramontin, 2007). Hoven et al. (2006) reported findings from the NYC public school system, which is the largest in the United States. Children were "exposed" to the attack in several ways: directly because of their proximity to Ground Zero, through family members who were WTC evacuees, through television coverage, through family member's involvement in the recovery efforts. Children with exposure had increased rates of probable disorders compared with those surveyed without such exposure. Because proximity to the disaster was not the exclusive factor in determining who might be most affected, the vulnerability of children via exposure through indirect ways is underscored.

A novel feature of these studies consistent with one of the more unique features of terrorism, that of widespread impact, is that they investigated "remote exposure" (Stewart, 2004). The psychological effects of a major national trauma are not limited to those who experience it directly, and the degree of response is not predicted simply by objective measures of exposure or loss. Outcomes are the products of a variety of factors. Disasters are "like motion pictures," not snapshots: Effects are not linear, and how people fare relates to the nature of their lives, circumstances, and the set of continuing adversities that follow (Norris, Donahue, Watson, Hamblen, & Marshall, 2006).

The research captures the fact that initial distress was high, that there are those individuals who suffered chronic negative mental health consequences, that proximity and loss were not always the key determinants of how people fared, and that certain populations had increased vulnerability or susceptibility to the event. WTC research suggests that the psychological aftermath of this event was not very different from other significant disasters.

Finally, a unique outcome of the WTC attack has yet to be measured in terms of its psychological toll. Five years later, many New Yorkers continue to suffer disaster-associated physical conditions. Such physical health problems can have significant mental health consequences. Symptoms of illness can serve as reminders or "triggers" back to 9/11 involvement. In addition, little is known about the spectrum of illnesses that can be connected to exposure to toxins and to where they will lead. This fear and uncertainty may contribute to increases in somatization, helplessness or depression, anxiety or panic, and to potentially drastic lifestyle changes in response to a perceived foreshortened future.

Risk and Resilience Factors

Norris et al. (2002) has identified disaster-specific findings regarding risk and resilience. Preevent, event, and postevent factors were reviewed. Being female, being middle-aged, having a lower socioeconomic status, living in a developing country, having a predisaster psychiatric history, being a parent, children subjected to familial conflict, greater event exposure, injury of a loved one, panic or emotionality during an event, children separated from their families, blaming and avoidant coping, and a significant amount of resource loss and disruption were all risk factors. Resiliency factors elucidated were being part of a cultural majority group, those already exposed to a smaller magnitude disaster, professionalism and training for recovery workers, competency during an event, perceived positive postevent social support, and a belief in one's ability to cope. As we can note from this list, some of these are reflected in the WTC research as well.

The presence or absence of any of these factors does not dictate an individual survivor's recovery course because risk and resilience factors operate through mechanisms that the field is still striving to identify. Coping is not static but an ongoing process. Most cases of PTSD recover within one year, and after six years, recovery without treatment is unlikely (Yehuda et al., 2007). An underlying belief regarding postdisaster mental health interventions is that survivors can and will benefit from support, though most will ultimately be able to regroup with little or no assistance. It is hoped that the continued identification of risk and resilience factors will help us to foster these capacities and identify those people who need our help so that they may achieve the best outcome possible. This will maximize our use of mental health resources during critical times.

Mental Health Providers, Clients, and Settings

Even the most involved WTC mental health providers had little firsthand experience of the array of mental health services provided in the aftermath. Mental health responders included local and national Red Cross volunteers, psychologists from the New York State Disaster Response Network (DRN), Disaster Psychiatry Outreach (DPO), city and state mental health employees, Project Liberty staff, crisis counselors organized by employers and insurance companies, FDNY and NYPD counselors, private practitioners, peer counselors, members of the clergy, and even Doctors without Borders. As diverse as the practitioners were providing services, so too were the clients they served and the settings in which they practiced.

The Counselors

Disaster mental health (DMH) workers were deployed by the local American Red Cross chapter in Greater New York almost immediately after the planes struck the towers. One of us was at the WTC site when the buildings collapsed. Later in the day, the other led the first organized mental health team to the site in search of the “walking wounded.” In the days after the attack, trained Red Cross DMH volunteers were assisted by other local mental health professionals, many of whom had little or no training in disaster mental health. Because planes were grounded and bridges to Manhattan were closed, it took some time before the Red Cross was able to mount its customary national mental health response. This placed considerable strain on local mental health practitioners. Although many wanted to offer assistance, they were not trained, and the changing circumstances and chaotic conditions made it difficult to match the need for services with the many trained and spontaneous volunteers who wanted to help.

Throughout the New York metropolitan area, school counselors and psychologists provided assessment, screening, and services within their schools while hospital mental health staff provided this in their setting. The American Red Cross deployed hundreds of local DMH volunteers and thousands of national DMH volunteers. The organization also deployed more than 900 spiritual care workers (chaplains) to various sites throughout New York City. Members of the clergy were called on to provide considerable pastoral support in the weeks and months that followed.

The presidential declaration of a disaster in New York City and 10 surrounding counties (which contained a large commuter population) made the entire region eligible for FEMA programs, including the Crisis Counseling Assistance and Training Program, which is designed to provide supplemental funding to states for short-term crisis counseling services after national disasters. More than $137 million was spent on Project Liberty, as the 9/11 program was named, which served about 1.5 million people, making it the largest federally funded disaster mental health program in history (Donahue, Lanzara, Felton, Essock, & Carpinello, 2006). Project Liberty relied on marketing its mental health response programs through television, radio, the print media, and the Web. Unusual outreach strategies were used, such as posting program information in restrooms of local pubs favored by recovery workers. Of those who knew of these programs, most learned about them from television commercials. Crisis counseling was provided by 5,000 professionals and paraprofessionals with varying levels of experience and education working through about 200 agencies (Naturale, 2006).

The primary goal of Project Liberty and most early disaster mental health interventions is to provide counseling that will enable survivors to return to a predisaster level of functioning. Some survivors needed continued care and referral to traditional providers. So, for the first time in history, the federal government funded enhanced services through Project Liberty. Research suggested that a brief scale administered by Project Liberty counselors could identify those people needing enhanced professional services (Norris et al., 2006). Red Cross volunteers, teachers, emergency services personnel, friends, and family also made referrals for long-term care. In the same way that crisis counselors had various levels of training, professional long-term care was provided by clinicians with various levels of expertise in treating trauma-related symptoms. For this reason, the New York City Consortium for Effective Trauma Treatment, composed of a number of local, prominent trauma mental health practitioners and scholars and their staff, was created to address the needs of New Yorkers suffering from posttraumatic symptoms. The group conducted lectures and trainings in the year following September 11 to clinicians who would provide treatment to victims (Marshall & Jung Suh, 2003). The Mount Sinai Medical Center provided health and mental health screening and ongoing monitoring to the workers and volunteers who responded to the WTC attack. Screenings showed that both upper- and lower-respiratory problems and mental health difficulties were widespread among rescue and recovery workers with more than half of workers examined showing persistent psychological symptoms.

Most treatment was and continues to be provided by private practitioners located throughout the metropolitan area. In the summer of 2002, the American Red Cross and the September 11 Fund in New York City initiated a joint long-term psychiatric benefit program for an estimated 150,000 eligible families, including relatives of the deceased or seriously injured, rescue and recovery workers or volunteers, displaced residents, those who lost their jobs, evacuees from the Twin Towers and nearby buildings, and children attending schools in the area and their families. Almost five years later, a survey of 1,500 responders, survivors, and victims' relatives who sought long-term help from the American Red Cross in dealing with emotional problems found that two-thirds continued to suffer from grief that interfered with their day-to-day functioning. Long-term counseling was available for those who are eligible through December 2007 (DePalma, 2006).

The Clients

Clients were from all socioeconomic classes as well as from urban, suburban, and rural areas in New York. One of the many challenges to mounting an effective DMH response was the extraordinary diversity in clientele. Those impacted included the Chinese-American community close to the WTC site, a sizable immigrant community, Holocaust survivors, a significant Hispanic community that was further traumatized by the 260 deaths caused by the crash of Dominican Republic–bound flight 587 in November 2001, children of all ages attending schools in the area, the elderly, and the first responder communities with their own cultures and rituals (Naturale, 2006).

In the aftermath of a terror attack the ripple effect is far-reaching. In every disaster there are typically "primary" victims and "secondary or indirect" victims—those with close ties to the primary victims (National Institute of Mental Health [NIMH], 2002). With very large disasters the impact can extend well beyond these groups as illustrated in the following case example.

> Several months after the attacks on 9/11, a young member of the clergy was one of many assigned the task of assisting at Ground Zero. Identifying body parts is the responsibility of the medical examiner's office. However, at Ground Zero it was the responsibility of many working in the recovery efforts to make some preliminary judgment about what may or may not be a body part and to bring it to the medical examiner's attention. This young pastoral counselor, who had been out of town on 9/11 and did not directly experience the attacks, was given a *Grey's Anatomy* text and told to check possible body parts against pictures in the book to help determine matches to call in to the temporary mortuary. He did his job thoroughly and responsibly for several months. Two years later he began to suffer panic attacks and flashbacks.

As this example shows, sometimes the ripple effect from a terror attack is so great that there is a danger that we might overlook some of the people who most need care. Tens of thousands of men and women, including the clergyman described, worked through the recovery efforts at Ground Zero, recovering more than 30,000 body parts—at unknowable personal costs. All of these people had family and friends who were also affected by the disaster through its impact on their loved one. Those at the recovery site were exposed not only to emotional trauma but to air that was filled with carcinogens. The combined physical and emotional toll on these workers and their families has yet to be reckoned with.

The Settings

In the immediate aftermath of the attack it was a challenge to find the survivors/victims who most needed assistance. Residents in lower Manhattan were not allowed to return to their homes and stayed with friends, family, or in hotels. The anxious, the injured, the bereaved were also likely to be at home and not likely to be seeking mental health support. Outreach seemed essential. Mental health services were offered at shelters, in hospitals, over the phone on the Missing Person's Hotline (described below), at the NYC Armory and later at Family Assistance Centers, where responders, victims, and survivors went to obtain information and services. Prior to 9/11, FDNY had one crisis counselor go into a firehouse after a fatal fire. In response to the immense loss of 343 firefighters in one day, its Counseling Services Unit (CSU) expanded services by assigning 42 clinicians to 62 firehouses, making the scope of their "firehouse clinician project" unprecedented (Greene, Kane, Christ, Lynch, & Corrigan, 2006). The CSU also provided support in the homes of bereaved widows and their children.

Early in the response mental health workers were deployed to airports to mitigate anxiety, at hotels where bereaved family members gathered, on boats where survivors were escorted to Ground Zero to see where their loved ones had perished, in lobbies as residents moved back into their apartment buildings, and at many funerals and memorials. Teams of crisis counselors were deployed by employee assistance programs, both in the private and public sector, to support employees in offices and workplaces. Mental health support was available at St. Paul's Chapel and at the "Big White Tent" (described below) where recovery workers went for their breaks.

Evidence Informed Best Practices

Evidence informed best practices for early interventions postdisaster and mass violence have moved away from Critical Incident Stress Debriefing (CISD) and toward psychological first aid (PFA), psychoeducation, screening, and identifying vulnerable populations for possible referral to long-term care (Halpern & Tramontin, 2007). Intermediate interventions and long-term care may include a combination of psychoeducation, cognitive (CT), cognitive behavior (CBT), insight-oriented, group, systemic, and psychopharmacological therapies (Halpern & Tramontin, 2007).

At the time of this event, one of the more commonly used early interventions was CISD, a structured group process developed by Dr. Jeffrey Mitchell (Mitchell & Everly, 2001). CISD was offered in various forms by employee assistance programs, the American Red Cross to its staff and volunteers, and to members of the NYPD through its Early Intervention Unit and the department's peer assistance program (POPPA). All NYPD members of service were later offered precinct-based, modified CISD/psychoeducational sessions. Research has come to question the effectiveness of CISD (Bisson, McFarlane, & Rose, 2000), particularly without the more comprehensive Critical Incident Stress Management (CISM). Concerns about the usefulness of CISD were not widely known on September 11, 2001.

Because of these criticisms, some have questioned the value of *any* early intervention, believing that mental health should be administered only weeks or months after a disaster with traditional counseling and psychotherapy. The National Institute of Mental Health (NIMH) consensus report (2002) has made clear that early interventions can be effective, endorsing "key components of early intervention [that] include preparation, planning, education, training, service provision, and evaluation of efforts to assist those affected by mass violence and disasters" (p. 6) The report recommends early interventions that include psychological first aid, psychoeducation, screening, and referral for long-term treatment.

In the next three sections we describe evidence informed practices postdisaster and provide case examples of how each was used in early, intermediate, and long-term interventions with 9/11 survivors.

Early Interventions

Because the great majority of survivors recover from trauma and disaster without professional help (e.g., Litz & Gray, 2004), the best early interventions should not interfere with natural recovery. Psychological first aid (PFA) may be seen as an approach that sets the stage for this (Brewin, 2003) and removes obstacles to its progression. The fundamental nature of PFA is to provide soothing, basic, practical, and emotional support.

Sometimes such assistance can appear to be a commonsense approach to helping with the attributes of kindness, comfort, and practical and emotional support as its core. But there is nothing at all common about common sense in the aftermath of a terror attack. In the chaos of disaster, counselors can overlook many obvious and practical considerations. Helpers trained in PFA should be attentive to and respond to addressing basic needs. Although the practice of PFA as an early intervention was first described by Beverly Raphael in 1977, it was not widely known or taught at the time of the WTC attack. However fortunate it was that many skilled clinicians had the good sense to practice PFA, most did not describe it as such. Certainly it is preferable that there is now an explicit consensus about the usefulness of PFA as the intervention of choice in the immediate aftermath of disaster. Five years after the attack there are more formal trainings in this early intervention. The elements and practice of PFA can be found in recent trainings described by the National Child Traumatic Stress Network and National Center for PTSD (2006), the American Red Cross (2006), and summarized by Halpern and Tramontin (2007).

There are no studies that address whether mental health professionals, paraprofessionals, or others are best equipped to provide PFA, nor is there empirical support for PFA's effectiveness in preventing long-term problems in the aftermath of trauma or disaster (Neria et al., 2004). There is evidence for the effectiveness of many of its components (Halpern & Tramontin, 2007), and it may also lay the groundwork for later more intensive interventions. As DeWolfe (2000) observes, "when disaster mental health workers are visible and perceived as helpful during [the earliest] phase, they are more readily accepted and have a foundation from which to provide assistance in the difficult phases ahead" (p. 11). The following case study describes such an early intervention applied over the phone a few days after the attack.

EARLY INTERVENTIONS: A CASE STUDY

Early on the morning of September 12, 2001, one of us went to Red Cross headquarters in Midtown. I met a disaster comrade who told me that she had been on the phone all night taking and returning calls to those who were missing loved ones. She looked exhausted and "shell-shocked" as she explained that, "Sometime around 3 A.M., it occurred to me that many of the callers were asking about their husbands who worked for the same company on the same high floor of the towers. I realized that they all must have died. I wanted to take some time away and cry but couldn't because the moment I put the phone down it rang again."

I requested to be deployed to the Missing Person's Hotline because there was no training and a lack of supervision for the volunteers. For one week, I worked at the hotline, later called the City Hotline when it became more apparent that there would be few survivors of the disaster. Volunteers received incoming calls from people wanting information about when they might be able to get to their homes, about pets that were left in apartments they could no longer reach, and many other matters. Calls came in from all over the world and most were inquires about missing persons from friends and family members.

Information about the person being sought was matched with a Consolidated Hospital List to establish the status of the person: "Found," "Possibly Found," and "Still Missing." Mental health workers would call back family members to inform them of their loved one's status. The operation had two goals: to provide crisis counseling and to develop a database of missing persons. This extensive operation was set up literally overnight by the NYPD and many volunteers, some from the New York Public Broadcasting Station (channel 13), who volunteered their time, expertise, and office space. The station conveniently had the telephone banks that were needed in place from their pledge drives.

My primary function was to supervise and train volunteers deployed by the Red Cross as they arrived and to "debrief" them as they left. A central theme in the training sessions was "to meet the client where the client was." Volunteers needed to be forewarned that some callers would express devastating grief. In the trainings some counselors were overwhelmed and were asked to not be on the front line of this operation. Some callers knew that their loved one was lost. Others talked about the caverns and spaces in the basement of the WTC, where their loved one was waiting to be rescued. Often family members had to choose between denial and overwhelming pain. Our job was not to convince clients to be more hopeful or to be more realistic, but to be with clients and help them to cope. The crisis-counseling stance we recommended was for the counselor to "be there for the other person who was in pain."

Late one night, three days after the attack, a mental health volunteer asked me to take a call from a distraught woman, who was now certain that her husband, a financial services worker, was dead. The counselor did not feel competent to assist the caller who said as I picked up the phone: "I feel hopeless. I can't sleep or eat. I have two children and I am several weeks pregnant. Although I am Catholic, I think I will have an abortion tomorrow. What do you think?" I understood why the counselor did not know how to respond. What could possibly be the correct answer to such a question? The caller said she would not see a therapist as she had no time and her overwhelming grief was not something she wanted to be "treated." She also said she would not talk to her priest because she already knew what his response would be. So she talked and I listened. I asked her about her children, her lost husband, and herself. "John always wore his wedding ring. It had a little scratch from the time he fell down playing basketball on a cement court. I gave him such a hard time about that. I guess I shouldn't have, should I?" She replayed the incident several times in the course of our 30-minute conversation. We talked about the fact that following traumatic loss people can often be hard rather than gentle with themselves. I told her I was sure John wouldn't want her to be upset with herself about the argument they had about the scratch on the ring. For the most part I did what is most often done for those in grief: I was willing to share her loss and listened as she expressed her feelings. Psychological First Aid can involve many components, including assisting clients to safety or helping with basic practical and physical needs. This client was not in danger nor did she need shelter, food, or water. She did seem to benefit from the empathy and warmth provided. I also encouraged her to access her natural support system, to talk with others close to her. I asked: "Who knows how you are feeling? Who are you talking with about your dilemma? Do you have family or friends you can trust to help you at this time? Who can you confide in? Who are you willing to talk with about your crisis?" These inquiries into her support system were meant to help her to be known to others, to not feel alone and find support from others.

There is substantial evidence that perceived social support can be a significant buffer to stress, even if the support comes exclusively from one reliable person. Friends and family can offer money, food, clothes, help with chores, affection, perspective, comfort, advice, and information—a sense that survivors are not isolated or alone. The cognition that a caring other or others will be available to help shoulder a burden can significantly lower the amount of distress a survivor experiences, thereby mitigating anxiety and depression and lowering maladaptive coping behaviors such as drinking alcohol or taking drugs (Cohen, 2004).

At the end of the conversation the caller thanked me for listening and said she felt a little better. She then asked again if I thought she should make an appointment to have the abortion. She was so grief-struck that she did not think she could survive the pregnancy. This time I knew she wanted an answer. I told her I thought three days after this traumatic loss might be too early to make such a decision. I suggested she wait and talk about it with the friends and family we identified as being trustworthy. She said she thought this was good advice. As is true for crisis counseling over the phone where the client did not provide identifying information, it is impossible to know the ultimate outcome of this and countless other cases. I hope we were helpful in some small way.

Intermediate Interventions

Intermediate postdisaster interventions are those occurring several weeks after the immediate impact has passed. Though including elements of PFA, they are increasingly psychoeducational and cognitive-behavioral in nature. For those who are identified as having acute stress disorder or who evidence salient distress, these interventions are conducted by mental health professionals and can include trauma exposure. However, there are caveats. As of this writing, there is no research on the use of CBT in the context of mass violence. Bryant and Litz (2006) speculate that there may be some inherent contraindications regarding the use of CBT in the intermediate postdisaster period after such an event. Following huge disasters, chaos, significant secondary stressors, and multiple sources of trauma abound that may interfere with the ability to focus on purely cognitive-behavioral interventions, thus making them less appropriate.

Interventions during the intermediate period focus on impacting thought and action. Intermediate, supportive counseling should help alleviate distress, help someone identify coping strategies, help facilitate social connections, and help to provide pragmatic resources. After even a few weeks, many of those impacted can more competently begin to reflect upon their experiences, problem-solve, and be receptive to psychoeducation and stress management.

Psychoeducation in the aftermath of a terrorist attack involves providing information about a range of biopsychosocial processes, including common reactions to disaster, stages of reactions to disaster, symptoms, resilience, treatment, effective and ineffective coping strategies, the stages of loss and other information about grief, and ways that parents can help children. Psychoeducation appears to be one of the least controversial and most recommended early and intermediate interventions in disaster mental health (Litz & Gray, 2004; Miller, 2002; Raphael & Wooding, 2004).

In the following paragraphs, we describe an intermediate intervention case study with a first responder who was involved at recovery efforts at the WTC site.

INTERMEDIATE INTERVENTIONS: A CASE STUDY

Paul, a middle-aged firefighter, was committed to working on "the pile," as the mountain of remains of the Twin Towers was initially dubbed. He had not been on duty on 9/11, but upon arrival to his firehouse, he and other firefighters were transported down to the site. This was around noon on the 11th: "I remember we were standing around for a while trying to figure out what was happening. There were so many people and there was so much confusion. We were standing on the corner of West Street. I felt something under my feet. It was the body of a police officer, covered with dust, crushed to death. We placed him in a body bag and police officers came to take him away."

After 12 hours, Paul returned to his firehouse; he had been scheduled to work that night and had to stay put to respond to fires and other emergencies. After his shift, he asked to return to the site. After a total of three days, Paul finally made it home. He felt it hard to pull away from what he was doing at the WTC site. He sought to be assigned to working at the site exclusively and managed to obtain this wish.

In between long stretches of searching through debris, Paul and his brothers would take breaks at one of the respite centers set up around the perimeter of the WTC site. During the recovery efforts, such sites were at different locations and included churches, a military ship, small onsite shacks, and even a huge white tent. Workers were offered not only the basics of food and shelter but also various healing arts. Clean socks, lip and face balm, hand and foot warmers, eye drops, chocolates, gum and mints, scarves and gloves were available. When they sat down to their meals, they found heartwarming letters written by children from across the country that were available for them to read. Pet therapy dogs led by their handlers circulated the perimeter of the site and in the respite centers. As time passed, the sites became more elaborate, offering more and more alternative forms of care and comfort. St. Paul's Chapel, for example, retained its church atmosphere, with its soft lighting and pews featuring tissues and prayers from diverse religious denominations. It included live musicians who played classical or rock music softly in the background, chiropractors, massage therapists, and podiatrists.

The respite centers all included mental health support. Mental health workers walked and talked around these sites, providing bottles of water, tissues, snacks, and conversation. In the respite centers, they strategically placed themselves where they assessed they could be of service—for example, if someone were observed to be isolated or if a group of first responders seemed unusually dispirited. Because of the protracted recovery efforts, consistent connections were possible. This was unusual in disaster mental health where interventions are often one-time opportunities.

I spent several days and overnight shifts regularly at two of these respite centers from December 2001 through June 2002. I met Paul one evening in March 2002 as he sat with another firefighter. Both commented on how the site was changing as the recovery efforts were winding down. Tony, who was with Paul this evening, talked about his family, about how the rest of the guys at their firehouse were doing, about what supplies they needed in order to complete their job. In contrast, Paul was quiet and self-protective—chiming in only on occasion. He presented as more withdrawn and preoccupied. No one from their firehouse had died, but both knew many who were lost.

Paul and I had the opportunity to meet several times alone—a relative term in a bustling respite center. He customarily used humor and minimization to deflect painful affect, "I have been to so many funerals that I feel like a professional mourner." He discussed early reactions: shock, disbelief, sleeplessness, loss of appetite, and restlessness. I provided reassurance, but he already had heard that these were "normal reactions to abnormal events" from other counselors, both from the FDNY and at the site.

He alluded to some of the underlying dynamics and thoughts that motivated his behavior. The timing of our interactions placed us nearer to the end of the recovery efforts, a time when he would have to return to a more "routine" life. "I have a complicated situation at home—my wife and I are divorcing and we don't get along at all." He talked about some of the practical elements inherent in the process of divorcing. Clearly, this had been a long time in the making, and despite their marital discord, Paul and his wife and their extended families had made provisions and reached agreements regarding property and childcare. He wondered if this was a good time to get divorced. Probing around this revealed that this was not an "issue": that in fact not to proceed with these well-thought-out plans would serve to disrupt his family even more. Yet, he questioned his decision.

In April 2002, Paul began to report a renewed inability to sleep. He seemed increasingly restless and quiet. He disclosed that another firefighter was doing "a mutual" for him on 9/11. Paul had been scheduled to work but asked his mutual partner to trade with him. This firefighter had died, and they still had yet to find him. "How can I go on if we don't find him? What will happen to his kids? His wife doesn't have any family here in New York. What will they do?" Paul felt a gnawing sense of guilt as he continually went through these questions.

Survivor guilt is a type of remorse felt by people who manage to survive a tragic event involving loss of life, especially the lives of friends and loved ones or other people commonly associated with the survivor. Sufferers often feel guilty that they and their family get to move on with their lives, whereas other people and their families are not so lucky. Summed up by the phrases, "I should have died with them," "I could've done something," or "I should have died instead of them," guilt is believed to protect against helplessness, effect self-punishment, and prevent an event from becoming meaningless (Opp & Samson, 1989). Such thinking is not logical, but makes sense emotionally.

Cognitively, Paul thought he was responsible: He blamed himself for trading places with his friend. I hypothesized that he held an irrational belief that his friend's death may have been his fault. During our "chats," I sought opportunities to explore and challenge Paul's irrational thoughts by carefully asking questions when I could while also acknowledging the validity and depth of his painful emotions. I felt it was important to help him to examine his guilt, to see how it matched objective reality. Paul was able to begin to grant he regularly traded places with his mutual partner whenever each of them needed to. He conceded that he could have easily been the one to have perished. He connected that his zealous involvement in the recovery efforts helped him alleviate his feelings of guilt. Paul also felt that his guilt changed his focus from uncontrollable events of the past to controllable events of the present. He began to admit that sometimes life is unfair or arbitrary, and that innocent people can be hurt for no reason.

Aaron Hass (1995) wrote that, "guilt is the penance one pays for the gift of survival" (p. 173). Together, Paul and I reconstructed what happened, and, as a result, his perceptions seemed to shift somewhat. In addition to what I saw as efforts at cognitive restructuring, I provided psychoeducation as well. I told Paul that one's beliefs about why something happens, especially when it is traumatic, and the way we judge our behaviors, influence the degree to which we continue to suffer. It seemed that Paul began to "reframe" some of his perceptions of his role in his friend's death. I shared that I felt he had done the best he could, even now in trying to find his friend's remains. I suggested that given all he was facing, the family changes ahead and the changes in his other family, that of the FDNY, he might find it useful to talk to someone, after the "dust had settled."

Screening and Long-Term Treatment

In the previous case we saw examples of both screening and treatment. The client was seen to be at risk for possible problems in the future and was encouraged to find long-term help if he needed it. Brewin et al. (2002) suggests that rather than treating all disaster victims, "an alternative, and perhaps more rational, strategy is called *Screen and Treat*, which involves careful monitoring of survivors' symptoms and referral for treatment only when symptoms are failing to subside naturally" (p. 190). In the aftermath of a terrorist attack, screening survivors can involve monitoring a large population in order to determine which individuals need or will need treatment, a practice that raises both logistical and ethical concerns. "Specific screening methodologies used for individuals or groups considered to be at high risk for chronic PTSD and other serious mental health outcomes following mass violence and disasters should be evaluated to ensure that their use is both safe and effective" (NIMH, 2002, p. 8). Survivors of mass violence and disaster that should be considered for possible follow-up include those:

- who have acute stress disorder or other clinically significant symptoms;
- who are bereaved;
- who have a preexisting psychiatric disorder;
- who require medical or surgical attention;
- whose exposure to the incident is particularly intense and of long duration.

After an act of terrorism with large populations impacted, it may be most effective to direct resources where they are most likely to be needed, for example, to children or those with fewer resources. In the early stages of a response, disaster mental health workers might therefore be best deployed to sites where there are the most vulnerable populations such as schools, hospitals, morgues, shelters, and family assistance centers.

Mental health workers should be able to make referrals for long-term treatment to those with specialized training in treating trauma survivors. As North and Westerhaus (2003) explain, "because posttraumatic disorders often become chronic, mental health resources will need to remain in place to manage the long-term consequences and serve the many who do not seek treatment right away. Applying emergency emotional first aid in the short run only to abandon people in their long-term need will be shortsighted" (p. 102).

Evidence informed best practice for long-term treatment of PTSD involves a combination of cognitive and exposure therapies (Brewin, 2003). Cognitive processing has a place in the long-term treatment of disaster survivors because exposure to a disaster can contradict the fundamental beliefs of the survivor. A review of the literature examining PTSD treatments (Rothbaum, Meadows, Resick, & Foy, 2000) concludes: "In summary, compelling evidence from many well-controlled trials with a mixed variety of trauma survivors indicates that [exposure therapy] is quite effective. In fact, no other treatment modality has evidence this strong indicating its efficacy" (p. 75). The following case study illustrates an eclectic approach to long-term treatment with a focus on CBT.

LONG-TERM TREATMENT: A CASE STUDY

Michelle, a 36-year-old radio reporter, called the office eight months after the attacks. She worked for a local news station in New York and was at the scene when the towers collapsed. Michelle grew up in the South where she began as a police reporter, "hanging out with cops and covering violent deaths." She said she had to be tough to do this job. She took pride in being able to hold her own when she went out drinking with her peers, "the guys." On 9/11, she arrived at the WTC site in her news van, parked, called in stories, and then watched as the first tower began to cascade down. She did not know which way to run, was buried in the rubble, could not see and could not breathe for what seemed like a minute. She said she felt more numb than frightened and believed for a short while that she would die. For months Michelle thought she was alright and continued working long days for the station covering all things related to the event. It was "the story of her lifetime."

There was one exception: She could not bring herself to return to the actual site, where the station news van had been completely demolished. Six months later, while on the job, she heard a rumbling sound and had her first panic attack. She thought they would dissipate, but they did not, and eventually she sought treatment.

Michelle did not keep the first appointment we made. This is consistent with the many patients who enter therapy for trauma-related symptoms and do not fully participate once treatment has begun. Michelle identified with the first responder culture that emphasized strength, self-sufficiency, and comradeship rather than seeking professional help. For her, there was stigma about asking for help. Further compounding her resistance to counseling was that she knew we would be talking about that day and one of the primary symptoms of PTSD is avoidance.

Treatment began with a focus on the development of rapport and psychoeducation—understanding the nature of PTSD. I explained that treatment would be largely focused on helping her to learn new cognitions and to know that she was safe. She talked at length about that day and over the next two weeks wrote about the details of the day in great depth. She had to learn not to edit her personal narrative, her "story," to fit the internalized demands of the station and her listeners. She would have to struggle to articulate all of the undeveloped sensations, depressive affect, denial, and other feelings and turn them into more complete articulate narratives. Among the many subtleties that emerged in the course of our exploration of her inner world were her feelings of guilt and shame about her inability to handle her emotions.

Exposure therapy is one form of cognitive behavior therapy that is used in the treatment of disaster victims. It uses careful, repeated, detailed imagining of the trauma (i.e., exposure to the memory) in a safe, controlled context to help the survivor face and gain control of the fear and distress that was overwhelming during the trauma. Michelle provided her own narrative by discussing the traumatic experience in the present tense. She was able to imagine the events of that day, and her anxiety was significantly reduced. She learned that remembering the trauma did not lead to injury or threat or a loss of control. Her symptoms were reduced (Jaycox & Foa, 1996).

In exposure therapy, reproduction of the traumatic material occurs within the patient's imagination in order to target his or her memories, which often cannot be reproduced *in vivo* (in real life) (Bryant & Harvey, 2000). However, in Michelle's case, *in vivo* exposure could be achieved by assisting her to actually visit the WTC site. Within several months, she did so, and this too improved her condition.

Cognitive therapy emphasizes that exposure to a disaster can contradict the fundamental beliefs of the survivor and contribute to the development of PTSD symptoms. Trauma can disrupt beliefs associated with safety, trust, power, esteem, and intimacy (Brewin, 2003). Michelle needed to see herself as safe in New York City. This was not easy as there were bomb threats, evacuations, the crash of flight 587, and a color-coding threat system that put NYC in a chronic state of danger. Michelle also needed to see herself as competent in spite of the fact that she was unsure which way to run away from the collapsing tower. It was pointed out that not many people had much experience at judging how far away to be from a potentially falling skyscraper or how fast or in which direction to run. She was eventually able to laugh at her unrealistic expectations of herself in thinking that she should be an expert in dealing with such an unimaginable event. What was most difficult for her to integrate cognitively was the fact that there were people who wanted her dead. Conversations involved assisting her to have a more accurate appraisal of these thoughts.

Bryant and Harvey (2000) note the importance of *systemic considerations* that view the patient in the context of his or her family and environment. Their concerns seem especially apt for victims of disaster or terrorism because several members of one family can be impacted by the same trauma. It is always important to consider family and social relationships—the other people in the life of the patient.

Michelle's partner, William, had always been less than happy about Michelle's devotion to her work as a reporter. There were occasions like birthdays, holidays, and anniversaries that went uncelebrated because Michelle was covering a story. After the attack Michelle managed to leave a telephone message for William that she was OK. This was not easy to accomplish because cell phones did not work, and it was difficult to find a pay phone. William was understandably very angry that they did not speak at all that day until almost midnight. When she finally got home, William retaliated by giving her "the silent treatment." Michelle said she was too numb to cry. This negative support may have played a significant role in the development of Michelle's symptoms (Brewin, 2003). Treatment included couple sessions that allowed them both to express their disappointment with each other and to have an explicit fight. The focus of the couple work was for them to see not just how their relationship was injured by the terror attack but to find ways to help each other to heal. Treatment thus was an eclectic approach incorporating aspects of humanistic, CBT, CT, insight-oriented, and systems theories. By the end of 30 sessions, Michelle no longer had panic attacks and her relationship with William seemed on-track.

Reflections and Recommendations

The events of September 11, 2001, brought considerable attention to key interrelated areas in disaster mental health: the impact of traumatic stress, emerging best practices, the role and influence of the media, and the importance of preparedness.

The Impact of Traumatic Stress

Research regarding the psychological aftermath of this terrorist act is generally consistent with and provides support for previous findings after large-scale disasters. Initial worst-case fears of significant psychopathology occurring in huge numbers were not discovered. "Disaster victims do not exhibit irrational and self-destructive behavior nor do they become helpless and dependent. While some are killed or injured, most victims are not. They become resources" (Dynes & Drabek, 1994, p. 12). The pattern of help utilization after the WTC attack appears to have followed the pyramid that Kaniasty (2006) describes with a broad foundation being family, friends, colleagues, general practitioners, and other immediate networks, and "its narrow top being aid provided by professionals and formal agencies" (p. 531).

However, this event took place in one of the most exceptionally resource-rich environments in the nation and in the world, replete with resources at all levels: financial, cultural, medical, and psychiatric. New York City is a mental health sophisticated setting. The response from the professional community to the attacks was both "immediate and exceptional" (Kaniasty, 2006, p. 532). Perhaps this contributed to how our greater New York City community fared. The response programs described earlier presented themselves to individuals and communities with care and sensitivity. Such efforts may have effectively minimized traditional barriers to help seeking by neutralizing potential stigma.

We should also note that in addition to assessing psychopathology, some believe the most important outcome in response to a terrorist act is its functional impact (Maguen & Litz, 2006). To the extent that the WTC attack disrupted home, family, and community life, as well as the ability to work and play, it will have profound effects on everyday social and individual behaviors. Symptoms alone are the not only guide to understanding effects. Some of the WTC research alludes to the subclinical impact of the event and more study on this might broaden our understanding of the nature and scope of impact, contributing to our understanding of risk and resilience factors. There are issues of functional adjustment (being able to adapt to the demands of daily life) as well as issues around one's broader happiness and quality of life. There can be little doubt that many suffered, and still do.

In addition to the symptoms and distress experienced by millions we should not overlook resilience, and even posttraumatic growth. Kaniasty (2006) speculated whether the most strategically potent force of organized terrorism is also its greatest point of weakness. The initial shock and pain of an event such as 9/11 was followed by a passionate collective resolve and determination: "Just as victims of natural disasters have their 'altruistic and heroic' stage, the victims of terrorism may have their 'altruistic and patriotic' stage" (Kaniasty & Norris, 2004, p. 222). The New York community endured the exposure to threat and possible further perils bounded together by a sense of common outrage, collective purpose, and a drive to survive. People responded in various ways to the WTC attack, but what they did not do was withdraw from others (Felton, Donahue, Lanzara, Pease, & Marshall, 2006).

Best Practices

The mental health community recognizes the importance of early intervention to address the emotional needs of those whose lives are touched by disaster and mass violence, and efforts to increase the effectiveness of those interventions are a current focus of the field. Research findings reflect that most people were able to integrate the WTC attack. As noted in this chapter, PFA with its goals of protecting (ensuring safety and helping victims to meeting their most basic needs), connecting (facilitating contact and closeness to support systems), and directing (providing information, referrals, practical aid) remains a best practice recommendation. PFA allows mental health practitioners the advantage of nonintrusively monitoring how recovery is proceeding so that they can identify those who may be at risk and step in as needed. Social support has been repeatedly shown to be mitigating after traumatic stress while *negative* social support is a risk factor. This is something else we can observe while applying psychological first aid: ensuring that those we are caring for have access to the most positive and supportive recovery environment we can provide.

For those impacted who continued to present with significant problems, there is a need for more evidence-based psychotherapies, which require both time and skilled, trained professionals. Enhancing expertise in trauma treatment among mental health practitioners as well as an appreciation for the vagaries in recovery trajectories should be a priority. Evidence informed best practice needs to be better disseminated. A critical factor in differentiating normal from pathological responses is the passage of time. Mental health services will be needed when the explicit emergency is over, and "normal" life must be resumed. As Yehuda, et al. (2007) hypothesize, "In the context of ongoing threat, identifying persistent disorder may be more accurately defined after the immediate threat is substantially reduced" (p. 273).

It is imperative that the ways we assist those in crisis reflect the best scientific knowledge available. It has been noted (Beutler et al., 2007) that, "Despite the extensive instruction that is frequently offered and treatments that are accepted as if their use represents factual and scientifically derived knowledge, actual scientifically generated and supported knowledge about what best to do in the immediate wake of trauma is quite limited" (p. 51). There is a need to advance research on the impact and treatment of survivors of disasters and, specifically, terrorism.

Yet, there are several challenges to effective research. Because of the unpredictability of disasters, randomized control designs, research's gold standard, are not easily achieved. There are ethical and practical considerations in collecting data on those traumatized, especially in the context of competing and pressing disaster-related needs. There is much work to be done, both on hypothesis-testing questions involving issues of population-based symptomatology and on theory-generating questions involving the type of social phenomena more readily studied on a small-case sample (Mitchell, 2005). Preevent strategies to address these issues are at the forefront of the disaster mental health research agenda (see Norris, Galea, Friedman, & Watson, 2007).

Because postevent stressors (not just additional traumatic events) were found to influence healing, the role of such adversities as mediators of a focal event has to be appreciated from the outset so that resources remain in place for future use. Many activities of the WTC projects described have not ceased. In the disaster literature, the postevent difficulties experienced by victims in negotiating systems in order to obtain deserved assistance has been informally nicknamed the "second disaster." It is important to keep help available and accessible so that seeking such services does not exacerbate existing resource loss. Additionally, both LIFENET and Project Liberty reported relative underutilization of their services by Asian, and to a lesser extent, Latino populations. The role of psychocultural forces that impinge on acquiring support must continue to be addressed. Special efforts need to be directed to groups understood to be vulnerable populations.

The Role of the Media

The media has a central role during disasters. Print, broadcast, and electronic media alert, inform, and educate the public. These roles are intensified during a terrorist attack when good information becomes essential to quell mounting urgency and when warnings and advisories must be shared quickly. Yet, media coverage can also alarm and incite the public.

WTC research has again underscored the role of the media as an inadvertent agent of exposure. A significant relationship was discovered between media exposure to the event and postdisaster distress, especially among children (Browne, 2003). Sensitive reporting of traumatic events is needed, and adults should monitor their own exposure to graphic images and details while paying careful attention to their children's exposure to media.

Messages to an audience can change during different times of disaster. In the earliest stages, when people are most excited and upset and the arousal level is highest, it is advisable to keep messages simple and repeat those that are most important and accurate. Emergency managers and officials must remain alert and attuned to the psychological impact of their actions and messages. The media can work with mental health and other partners prior to and during an event to provide information in ways that are not sensational and alarming beyond its content. For example, on the morning of 9/11, broadcast and television media in New York urged mental health practitioners to go to lower Manhattan and advised a total recall of firefighters—not helpful or appropriate information.

Preparedness

Mental health providers still need to be better incorporated into a comprehensive response to disaster. The landmark 2002 NIMH report states that "mental health personnel have key roles to play when integrated into mass violence or disaster management teams. These personnel can help coordinate service provisions so that mental health is an integrated element of comprehensive disaster management plans" (p. 6). Mental health providers in addition to direct clinical service can offer technical assistance, consultation, and training to emergency managers, leaders, and their frontline workers. Consultant mental health experts can be of value in this regard. In almost any organizational setting, be it a school, hospital, prison, bank, or department store, disaster mental health experts can enhance workers' resilience, wellness, and coping through training and support by increasing mental and emotional preparation for what they may face. Mental health organizations and agencies need to continue to plan and prepare together to contribute to creating a "culture of preparedness." An all-hazards approach would incorporate terrorist acts.

The "surge" of those wanting to help on and after the day of the attack was noted as creating logistical and philosophical dilemmas for those in various agencies who did not want to turn away helpers but who also had to determine ways to "credentialize" eager spontaneous volunteers. Agencies should develop advance plans for how they will manage a possible influx of truly needed helpers; conversely, they should also plan for how they will recruit helpers if this is the case instead. This advance planning could include ready-to-use curriculums that can be modified to match an event. For mental health workers, such training might offer basics about working in a disaster setting, the structure and expectations of the deploying agency, the principles of psychological first aid, and the importance of self-care and self-monitoring.

An adequately trained supply of mental health practitioners who understand how to provide services during times of disaster and/or who are able to offer the evidence informed best practices when indicated is needed. This points to the need for graduate mental health programs to offer increased instruction in addressing the traumatic stress engendered by large-scale catastrophes. Disaster mental health courses need to be a part of professional mental health curriculums.

Mental health and emergency management experts continue to plan for worst-case scenarios, and the destructive power of new disasters continues to exceed these plans. The 2001 New York City World Trade Center attack challenged us: our efforts at planning and preparedness, our imagination, our denial. The events of that day continue to influence our field and subsequent unforeseen events will continue to shape our understanding of the psychological aftermath of such events and how to best take care of those impacted.

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CHAPTER 2

The Trauma of Politically Motivated Torture

Judy B. Okawa and Ronda Bresnick Hauss

Please note that the material described in this chapter is graphic in nature and may be disturbing to the reader.

Torture, one of the most devastating of the human rights abuses, is practiced in more than 150 countries worldwide (Amnesty International [AI], 2000). Through brutal, degrading, and disorienting strategies, the torturer aims to reduce his victim[1] to a state of utter helplessness and to shatter the psychological structures of the personality to such an extent that the individual will no longer be able to engage in behavior deemed problematic by those in power. Sister Dianna Ortiz (2001), a survivor of torture herself and author of *The Blindfold's Eyes: My Journey from Torture to Truth* (2002),[2] describes torture as a "soul-searing experience" (p. 13) that not only affects the survivors but also strikes terror in their communities, silencing opposition, and intimidating entire societies into silence. Torture has a profound effect both on a country's citizens and on its social fabric (Gonsalves, Torres, Fischman, Ross, & Vargas, 1993).

In recent months, the question of the morality of torturing prisoners considered suspects in the war on terror has received national and international attention because of evidence that the U.S. government has been subjecting these prisoners to torture, has secret CIA prisons abroad, and has been sending other prisoners to countries that will torture them in order to extract information (Danner, 2004). During the writing of this chapter, President Bush signed into law the Military Commissions Act of 2006, which specifies certain interrogation techniques that are outlawed (Fletcher, 2006). The many forms of torture that are omitted from this specific list appear to be fair game for U.S. military or intelligence interrogators to use.

It is difficult to know how many people have suffered torture because this information is usually concealed by governments. Because of the political sensitivity of the topic, epidemiological studies of torture are very difficult to perform (Basoglu, Jaranson, Mollica, & Kastrup, 2001). AI (2000) states that "many of the world's 15 million refugees are torture victims" (p. 3), and Baker (1992) estimates that between 5 and 35 percent of the world's refugees have suffered at least one experience of torture (p. 85). Using Baker's estimates, the U.S. Department of Health and Human Services Office of Refugee Resettlement (2006) estimates that more than 400,000 torture survivors from all over the world live in the United States. However, these estimates refer only to torture survivors who have fled their countries. They do not take into account the thousands of people who remain in their own countries after being tortured.

Definitions of Torture

The two most commonly used definitions of torture are the World Medical Association definition, often referred to as the Declaration of Tokyo, and the United Nations definition. The World Medical Association (1975) defines torture as "the deliberate, systematic or wanton infliction of physical or mental suffering by one or more persons acting alone *or on the orders of any authority,* to force another person to yield information, to make a confession, or for any reason" (cited in Gerrity, Keane, & Tuma, 2001, p. 6, italics added).

The definition of torture in the United Nations Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment is "any act by which pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person has committed or is suspected of having committed, or intimidating or coercing him or a third person for any reason based on discrimination of any kind, *when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity*" (United Nations, 1989, p. 17, italics added). The United Nations definition differs from the World Medical Association definition in that for an act to be considered torture according to the U.N. definition, the perpetrator must be acting on the part of a public official or a person acting in an official capacity; hence the terms *politically motivated torture* and *governmental torture.*

Who Is Singled out for Torture?

Men, women, and children, rich and poor, educated and uneducated, leaders and followers, are subjected to torture in countries all over the globe. They represent all walks of life—physicians, mechanics, physical therapists, attorneys, homemakers, judges, journalists, radio personalities, high school and university students, and street vendors. Survivors may be student activists demonstrating for university reform, or they may be the children or siblings of political activists who are tortured merely because of their family affiliation. They may be seeking improved social conditions and freedoms such as the right to participate in an opposition political party, or they may be innocent passersby. Survivors may be members of particular religious, ethnic, or social groups who are targeted by the ruling party, officials of the former ruling party, or members of the political group formerly in power.

Just as there is no limit to who can be subjected to torture, there is no limit to where torture occurs. Survivors are tortured in their own homes, abandoned buildings, and secret torture houses, such as the Sudanese "Houses of Ghosts." They are tortured in police stations, jails, military camps, prisons, secret police facilities, and in isolated spots in the countryside.

Types of Torture

Torture is a devastating trauma that involves a broad range of techniques (Basoglu, 1992; Gerrity et al., 2001; Jaranson & Popkin, 1998; van der Veer, 1998). The types of torture are many, limited only by the cruelty of the torturers' imaginations. Although in some countries torturers use sophisticated equipment for torture, in many others they use common implements, such as fists, heavy boots, branches, bricks, whips, batons, ropes, matches, candles, metal rods, vats of icy water, crude electrical devices, hot tin roofs, trees, or ceiling fans (Skylv, 1992). Torturers often subject their victims to a combination of different forms of torture in order to render them powerless and to break their will to resist (Basoglu et al., 2001).

Torture techniques can be classified as falling into the following categories: physical torture, psychological torture, sexual torture, social deprivation, sensory deprivation, sleep deprivation, nutritional deprivation, hygiene deprivation, and deprivation of medical care (Vesti, Somnier, & Kastrup, 1992).

Physical Torture

The most common form of physical torture is *beatings* to the head and body with hands, feet, or implements such as batons, boards, iron rods, bricks, cables, electric cords, and barbed wire (AI, 2000). *Teléfono* refers to beatings on the ears with cupped hands. *Falanga*, or *bastinade*, refers to beatings on the soles of the feet, which causes excruciating pain (Forrest, 2002). The feet become so swollen that the person can barely walk. Sometimes victims of *falanga* are forced to put shoes on their wounded feet immediately after being beaten, or are forced to walk on gravel or broken glass. Some survivors report being forced to participate in "torture sport" after *falanga:* that is, they are forced to walk on their swollen, lacerated feet around a gravel track for hours with the threat that they will be beaten even more if they stop.[3] Survivors report trying to disinfect the wounds on their feet by urinating on them, as their feet become badly infected because of the filthy living conditions.

Survivors often report suffering *positional torture*, during which they are beaten while tied in a painful position or are forced to maintain a nearly impossible position for a prolonged period of time (Basoglu et al., 2001; Forrest, 2002). Survivors describe being forced to sit and having their wrists and ankles tied, with a pole then thrust behind their knees. The pole is then elevated so that the person can be beaten while trussed in that position, utterly helpless to protect any part of the body. Torturers often give innocent-sounding euphemisms to forms of torture, such as the "torture sport" mentioned above, "the morning coffee" (referring to morning beatings at the time of the guards' change of shifts), or "planting the cauliflower." This latter form of positional torture involves balancing with one index finger on the floor and the opposite leg raised high in the air; if the person lowers his or her leg, he or she is beaten more severely.

Suspension torture involves hanging people from the wall, a hook, or a rod hanging from the ceiling, either by their ankles, thumbs, ankles, wrists, or by their wrists while their hands are behind their backs (Genefke & Vesti, 1998). Victims are then beaten. Survivors report being "hung like leaves" with other prisoners from the branches of trees. Many survivors report being beaten while they are hanging from a ceiling fan and swinging through the air as the fan oscillates. This form of torture is even more excruciating if the person is suspended upside down, by the ankles.

Asphyxiation and *near drowning* are other forms of torture that cause extreme terror (Basoglu & Mineka, 1992; Forrest, 2002; Randall & Lutz, 1991). A person may have a plastic bag smeared with feces or insecticides tied over his or her head, or be dipped in a barrel of water filthy with feces, urine, and blood until the point of near death. In waterboarding, the person is strapped to a board and either tipped back or lowered under water or has water poured on his or her face until he or she believes that drowning is imminent. The tortured person then is removed from the water and revived. If deemed necessary, the routine is repeated. This is both a physical and a psychological form of torture, as victims realize that they will be drowned unless they agree to the torturers' demands.

Burnings are also common. Torturers may burn people with cigarettes, molten rubber, acid, or candles, or force them to lie on steaming hot tin roofs. Survivors have reported being forced to stare into the sun or a bright light and being beaten if they look away. Torturers may also *cut* their victims with knives, scissors, barbed wire, or broken glass. Survivors from an African country, for example, report having their heads shaved with a broken bottle when they are arrested.

Electrical torture is an extraordinarily painful form of torture, causing massive contraction of the musculature. The electric shock is usually applied to sensitive parts of the body, such as the ears, teeth, nipples, or genitals (Danielsen, 2002). The instrument used to apply the electric shock may resemble a common object, such as a telephone. Thus the survivor may live for the rest of his or her life with memories of that form of torture triggered by the sight of a telephone.

Psychological Torture

Psychological torture occurs in many forms, some of which are highly subtle, yet quite devastating (Iacopino, 2002). Being kept in an overcrowded cell, forced to urinate and defecate in front of others, and living in chronic uncertainty are only a few of the strategies used to break a person down and lower resistance. Survivors report being told convincingly that they will go crazy or will be disabled for life by their torture. *Humiliation*, *verbal abuse*, and *degradation* techniques are pervasive and are aimed at stripping the individual of dignity and any sense of value (Basoglu & Mineka, 1992). Some of these strategies were evident in the photographs that were published of U.S. soldiers mistreating prisoners at Abu Ghraib, such as hooding prisoners, keeping them naked, piling them naked on top of each other, and recording their nakedness and misery in photographs. The Abu Ghraib photographs also illustrated the use of strategies to terrify victims, such as the hanging of electrical wires from their bodies with the implication that they will be electrocuted, or using dogs to attack them while they are shackled and unable to protect themselves.

Threats of death and *mock executions* convince the victim that he or she could certainly die at the hands of the torturer (Iacopino, 2002). Often torturers threaten to arrest, torture, or kill a victim's family members, including children. Another devastating form of torture is to be *forced to listen to others being tortured* without being able to intervene, or to *witness the torture of others*, including family members and friends (Physicians for Human Rights, 1996). Survivors often say that they could tolerate their own pain, but they could not stand the cries of the person being tortured next door. Survivors report being forced to watch others being raped, both men and women, and experiencing the terror of knowing that they might be next. Often people are tortured in a large room, with different forms of torture being perpetrated on other people in the room; they are told that what is being done to the others will be done to them if they do not comply with the torturers' demands. A particularly egregious form of torture is to *force a person to participate in the torture of others*, which can engrave on the soul of the survivor an overwhelming sense of guilt and self-hatred.

Many survivors report being *forced to sign false statements and to confess* to acts that they never committed, simply to stop their torture (Basoglu & Mineka, 1992; Physicians for Human Rights, 1996). It is a myth that torture will force the victim to tell the truth. Rather, torture forces the individual to say anything that comes to his or her mind that might stop the torture. As a number of survivors have reported to one of the authors of this chapter, "If I had seen you walking down the street that day, I would have given your name. I would have said anything to stop the torture."

Torturers often force people *to violate taboos* that lie at the center of their personal or religious ethics, such as to eat foods prohibited by their religion, to be naked in front of others, or for sons to be forced to have sex with their mothers or fathers with their daughters.

Sexual Torture

Sexual torture can cause profound emotional and physical wounds. Gonsalves et al. (1993) describe how sexuality "can be turned into a weapon" against the survivor through leers, degrading comments, and violence to the genitals or anus (p. 359). Sexual humiliation is a common tactic, consistent with the torturer's goal of causing his victim to lose all respect for the self. Torturers often force their victims to strip and keep them naked or in their underwear throughout their detention and torture. Survivors report being forced to reveal intimate personal information about their sexual relationships with their spouses and then being forced to simulate what they talked about.

Sexual torture may include rape, gang rape, or rape with implements such as batons, broom handles, or broken bottles (Peel, 2002). Victims may be forced to have sex with a person of their own gender, or with their own children. Survivors have reported having their pubic hair burned off with a candle and then being raped with the burning candle.

Torture through Deprivation

Torturers employ many forms of deprivation to try to break the strength of their victims, including social, sensory, sleep, nutritional, and hygiene deprivation and deprivation of medical care (Iacopino, 2002; Vesti et al., 1992). In some cases, survivors report that these forms of deprivation are more debilitating than their physical torture because at least the physical torture occurred in discrete episodes, while the deprivation techniques were constant. *Social deprivation* refers to the deprivation of human contact or of interaction with the outside world (Basoglu & Mineka, 1992). Survivors frequently report being deprived of visitors, kept isolated, not allowed to speak to others, and having no access to information about the outside world. They describe being tormented by thoughts that their families may not know where they are and thus may not be able to intervene to obtain their release, or they fear that they will be killed and their families will never find their bodies.

Sleep deprivation is accomplished by strategies such as forcefully keeping the individual from sleeping, holding nighttime interrogations, or forcing so many prisoners into such a small cell that there is no room to sit down. Sleep deprivation can cause disorientation and confusion in the survivor.

Nutritional deprivation is a very basic form of torture that is widely used by torturers as a means of breaking down the individual. Survivors report being deprived of food and water, forced to eat food that has been despoiled with feces or urine, or forced to eat substances that are not food. The South Vietnamese who were imprisoned for years in so-called reeducation camps, for example, describe being forced to eat industrial manioc and food mixed with laundry detergent, which wreaked havoc with their digestive tracts.

Sensory deprivation can include imprisoning an individual in solitary confinement, in total darkness, or in a cell where the light is never extinguished. Water cell torture, for example, where a person is imprisoned alone in a dark cell in which the level of water rises and falls unpredictably, includes solitary confinement and deprivation of visual and tactile stimulation as well as nutritional deprivation, as the person may be forced to drink the water that contains their urine and excrement. *Sensory bombardment* may be used as well (Physicians for Human Rights, 1996). The most common example is imprisoning a person in a cell where they cannot escape the stench of urine, feces, and sweat. An Iranian survivor reported being forced to hear recitations of the Koran broadcast over loudspeakers at high volume for hours without end. Mexican survivors report being kept in the bottom of a well for days while popular Mexican folk music is blared down into the well, echoing off the walls. Afterward, when they hear this music on the streets or in restaurants, it elicits flashbacks of their torture.

Hygiene deprivation is a powerful torture strategy that increases the vulnerability of the survivor. Survivors are often kept in a filthy environment, in insect- or rodent-infested cells, and are unable to wash, bathe, or change clothes for weeks or months. Toilet facilities are frequently inadequate or nonexistent and may consist of only a bucket or hole in the floor of the cell. Many survivors struggle for years with flashbacks triggered by the smell of feces because of the fact that there was no toilet in their cells, only a small, overflowing bucket. Survivors have reported that they could tolerate physical torture, such as being forced head down into a barrel of water, urine, and feces, but could absolutely not tolerate the biting insects in the cell, which tormented them ceaselessly throughout the months of imprisonment.

Deprivation of appropriate medical care is another form of torture that can result in a weakened condition, infections, and long-term damage to the body. Survivors report being denied medical care altogether, being given inappropriate care (such as being administered intravenous fluids while lying on a filthy floor), or being given medical care in a way that is a form of torture in itself. In a typical example, a survivor whose head was cracked open during a beating was returned to his cell for several weeks with no bandages or medical care until the wound had been badly infected for some time. At that point, he was taken to a "doctor" who stapled the head wound with a stapler. Other survivors describe having injections with dirty needles, which resulted in their contracting AIDS.

The Sequelae of Torture

It should be clear that few human beings could be subjected to these forms of torture and come out unscathed. Ortiz (2001) states, "The consequences of torture are multidimensional and interconnected; no part of the survivor's life is untouched" (p. 15). Survivors of torture often report feeling shattered physically, psychologically, socially, and spiritually by the torture they experienced. In many ways survivors continue to reexperience the torture in the present.

Physiological Sequelae

Survivors may suffer a broad range of physiological symptoms as a result of their torture (Basoglu et al., 2001; Skylv, 1992; Wenzel, 2002). However, visible injuries may be difficult to identify, as they may heal rapidly and, in addition, torturers often use implements that do not leave much physical evidence (Somnier, Vesti, Kastrup, & Genefke, 1992). The following is a partial list of physiological sequelae of torture (Basoglu, 1992; Gerrity et al., 2001; Wilson & Drozdek, 2004):

- Scarring
- Fractures, dislocated vertebrae
- Neurological symptoms, such as headaches, seizures, and gait disturbance
- Vertigo resulting from frequent head injuries
- Visual problems
- Hearing loss from *teléfono* and beatings to the head
- Musculoskeletal pain
- Chronic pain in the feet from *falanga*
- Joint pain and paraplegia from suspension torture
- Loss of sensation and motor function in the extremities resulting from strapping, positional torture, and suspension
- Lesions in the muscle fibers from electroshock torture
- Broken teeth or jaw from blows to the face; pain in the temporo-mandibular joints (Skylv, 1992)
- Cardiovascular and respiratory symptoms
- Gastrointestinal problems
- Urinary tract infections
- Sexually transmitted diseases, menstrual problems, pain in the genitals, and pain in the lower back from sexual torture (Skylv, 1992). Sexual dysfunction is not uncommon after sexual torture. Men who have suffered sexual torture may have testicular atrophy (Basoglu et al., 2001).
- Unwanted pregnancies from rape

Psychological Sequelae

The worst sequelae of torture are often psychological. Survivors may experience symptoms of depression, anxiety, social withdrawal, emotional lability, and irritability or rage as a consequence of torture (Basoglu et al., 2001). They often describe having overwhelming feelings of fear, grief, and guilt (Gonsalves et al., 1993). Ortiz (2001) describes the “shroud of guilt” that many survivors carry—guilt over witnessing someone else’s torture but not being able to intervene, guilt over being forced to participate in someone else’s torture, guilt over surviving when others did not (p. 17). Cognitive symptoms can include difficulty concentrating, confusion, disorientation, and problems with memory and attention (Mollica & Caspi-Yavin, 1992). Sleep disturbances are common, and many survivors report difficulty falling asleep, difficulty staying asleep, and early morning awakening.

The Istanbul Protocol reports that the two primary psychiatric disorders associated with torture are posttraumatic stress disorder (PTSD) and depression, although the survivor’s interpretation of torture may be influenced by unique cultural and political factors (United Nations, 2004). Basoglu et al. (2001) state that studies on the prevalence of posttraumatic stress disorder (PTSD) in survivor populations give estimates that vary widely, from 15 to 73 percent. Basoglu et al. (2001), citing Shrestha et al. (1998), reports that PTSD appears to be a component of a "universal reaction to torture" (p. 44).

The survivor's torture frequently refuses to be relegated to the past but rather continues to plague him or her in the present. Many survivors report having frequent nightmares, so upsetting that the survivor tries to avoid sleep completely. Night can feel like a very dangerous time. Many describe staying awake most of the night and keeping every light on so that they don't have to face being tortured again in their sleep. Survivors of torture may suffer from flashbacks, during which they feel like they are vividly reliving their torture. They may describe this experience as "going back there" in their minds and describe having sensory flashbacks during which they can actually hear people screaming while they are being tortured.

Survivors also report having intrusive memories of torture that come into their minds even when they are thinking of something positive. A torture survivor happily attending a party, for example, may suddenly have an intense memory of being raped and have to flee the party, go home, and close herself in her room. Memories are sometimes triggered by something innocuous in the environment that reminds the survivor of his or her trauma. A survivor might turn around and run away from an office building door where occupants had been smoking because the cigarette smoke reminds her of the guards who puffed cigarette smoke in her face before raping her. Sometimes survivors report hating their own bodies or their bodily functions because they serve as reminders of their torture. For example, a survivor might cover up mirrors in his apartment because seeing the scars on his chest from his beatings gives him flashbacks. Some survivors report restricting their food intake in order to avoid defecating, as the resultant smell is reminiscent of the stench in the prison cell. Or a survivor might avoid the kitchen out of fear that he might see red meat, which is a reminder of the blood he had seen on the bodies of dead people piled on top of one another.

Because remembering their torture experiences can be so upsetting to survivors, they often do everything they can to avoid such memories (Basoglu et al., 2001). Survivors may avoid talking about what happened to them at all costs. This may include avoiding visits to doctors, attorneys, or mental health professionals where they might have to talk about their trauma. Gonsalves et al. (1993) suggest another explanation for why survivors avoid talking about what happened to them: the torture protocol often contains "embedded messages" that the survivors will never be able to talk about what happened to them, and even if they did, no one would ever believe them (p. 358).

Many survivors report avoiding certain people because they might trigger memories of their torture. Fear is often engendered by the sight of a policeman, security guard, or military man wearing a uniform, as uniformed men may have been involved in the survivor's torture. The sight of a physician in a white coat might trigger memories of a doctor who participated in the survivor's torture. Many survivors report fear of people from their own country, who they feel might endanger them or their family members back home by reporting their whereabouts and activities to their government. Other triggers of trauma memories may include crowded places, police cars, authority figures, people who resemble the torturer in some way, television news programs, enclosed areas, being alone, and even certain times of day (Basoglu et al., 2001).

Sometimes the memories of torture are so incapacitating that the survivor represses parts of the memory. Men and women who are gang raped may not remember how many men raped them, for example, or on how many occasions they were raped (Hinshelwood, 2002). In some cases, the person might not even remember being raped at all, although there is physical evidence to indicate that he or she was. It is also common for survivors not to be able to remember dates or periods of time related to their torture, which could be related both to the severity of the trauma and the fact that normal stimuli for tracking time (such as watches, clocks, or sunlight) are unavailable to them in detention.

Torture disrupts the body's normal way of processing, integrating, and storing information. Dissociative symptoms are not uncommon among survivors of torture, as survivors may experience alterations in consciousness that take many forms (Okawa, Gaby, & Griffith, 2003). They may experience depersonalization, or a sense of detachment from the self, during which they have difficulty recognizing themselves in the mirror, or have out-of-body experiences. Survivors may also report a feeling of detachment from their emotions. For example, a survivor reported, "I don't feel anything at all, ever. And I never cry. Water comes out of my eyes but I don't cry." Many survivors have reported hearing voices that did not seem related to psychosis, most commonly the voice of a loved one talking to them, the voice of the torturer, or the screams of people being tortured. Many survivors have reported derealization symptoms, or the feeling that their surroundings are unfamiliar or even unknown to them. Dissociative flashbacks, where the past intrudes into the present, are frequently reported. Survivors also describe having somatic flashbacks, during which they reexperience the trauma in a part of their body but do not have accompanying memories of the trauma.

Many torture survivors are plagued with severely disturbed sleep, difficulty concentrating, irritability, and outbursts of anger or rage that surprise them, as these reactions represent a marked change from how they used to function. These symptoms of hyperarousal are thought to be neurobiological in nature, caused by prolonged exposure to inescapable pain and terror.

In addition, people who have suffered torture and the stress of trying to adapt to a new country without funds or social support often describe symptoms of depression, including a lack of interest in formerly enjoyed activities, lack of energy, profound sadness and hopelessness, and loss of interest in sex. Although many survivors report suicidal thoughts, many claim they would never kill themselves because of their religious beliefs. Ortiz (2001) explains that for survivors who have suicidal thoughts, death may seem like a way to end the unstoppable memories and flashbacks, to alleviate physical and emotional pain, or "to cleanse one's self" (p. 21). Ortiz notes, however, that many survivors feel that suicide would mean that the perpetrators had succeeded in destroying them. Thus "survival is [their] ultimate act of defiance" (p. 21).

Torture can also have a profound impact on the survivor's family. Family members may be harassed, interrogated, or tortured because of the survivor's political activities, and families may be split up as different members seek asylum in other countries. Wenzel (2002) cautions that torture's impact can be seen in the second generation. Often the survivor is separated from his or her family for prolonged periods of time because of the flight into exile. After a long separation, marital relationships may suffer, and children may not remember the parent who has been away. The stresses of resettlement and financial strain combined with the emotional sequelae of torture may impact a survivor's ability to cope with the stresses of parenting.

Psychotherapy with Survivors of Torture

Special Considerations When Beginning to Work with Survivors of Torture

Establishing Safety

The establishment of safety is the most important first step in providing any services to a survivor of torture, whether they be legal, medical, social, or psychological services. As Herman (1992) discusses in her seminal work, *Trauma and Recovery*, "Trauma robs the victim of power and control; the guiding principle of recovery is to restore power and control to the survivor.... No other therapeutic work can possibly succeed if safety has not been adequately secured" (p. 159). Thus before therapists engage in the work of exploring the trauma of torture, it is critical that they first work with the survivor on establishing a sense of safety and what van der Veer and van Waning (2004) call "safe therapeutic sanctuary" (p. 187). The survivor's ability to trust another human being may have been deeply damaged by torture, and it may take a long time, even years, to achieve this first step of safety. Safety issues include ensuring that the survivor feels at ease and is not afraid.

Another critical safety issue is whether the survivor can trust that the therapist will be able to tolerate the trauma material that he or she needs to relate (van der Veer & van Waning, 2004). Piwowarczyk, Moreno, & Grodin (2000) state that "unless clinicians are aware of their own discomfort at listening to such material, they may unwittingly communicate that it is inappropriate to discuss torture" (p. 540). Survivors will be exquisitely sensitive to any signs that the therapist finds their accounts—or them—repugnant or disgusting. If the survivor feels that the therapist may not be able to "hold" the trauma or that the therapist may be harmed by it, he or she will not feel safe to do the work of therapy.

Addressing the Survivor's Urgent Needs

The establishment of safety also involves helping trauma survivors to restore a sense of control over their own bodies. This might entail linking survivors with the appropriate medical care to address the physiological sequelae of torture, as well as addressing any difficulties they may be having with sleeping, eating, or managing the most debilitating posttraumatic symptoms or suicidal thoughts.

Establishing safety also entails assisting survivors in gaining some measure of control over their environment. Survivors who are recent arrivals to the United States and are not yet allowed to work may have many critical needs that must be addressed first, including finding a safe living situation, obtaining food, accessing legal services to assist in their request for political asylum, and locating English-as-a-Second-Language classes. Gorman (2001) points out that this sequential approach of addressing situational, medical, economic, or legal issues demonstrates the therapist's acknowledgment of and respect for the survivor's most urgent needs and rights, and is essential before moving into the more sensitive psychological issues.

Example of Holistic Approach to Care

The importance of a comprehensive approach to the care of a survivor is illustrated by the case of Ms. R., a torture survivor from Cameroon. Ms. R. came to therapy with a number of pressing problems. She was unable to sleep because of constant nightmares. She described feeling suicidal because she did not know if her husband and her children were alive or dead. Ms. R. suffered from severe foot pain resulting from torture to the soles of her feet (*falanga*). She was not able to get a work permit and did not have the money to buy the most basic of food supplies. Also, she had no attorney and no knowledge of how to apply for political asylum. A holistic approach was necessary to address Ms. R.'s urgent needs. The therapist arranged for a psychiatric evaluation and obtaining prescriptions for medication to address her sleep disturbances, nightmares, and suicidal urges, assisted her in getting food from the local food bank, arranged for a physical exam and treatment of her chronic foot pain, linked her to a pro bono attorney to begin the asylum process, and helped Ms. R. get in touch with the Red Cross, who searched for her family members. Only after these issues were addressed could Ms. R. turn her attention and energies to working in therapy on the psychological sequelae of her torture. It took many months for the issues of safety to be addressed.

Attention to Cultural Differences

Sensitivity to cultural issues is critical from the outset of therapy and is a requirement for therapists working with torture survivors, who come from all over the world. Lack of knowledge about the survivor's culture and experiences may make it difficult for the clinician to grasp the full implications of the survivor's words and behaviors (Okawa, 2007). Survivors may be unfamiliar with concepts of informed consent and confidentiality agreements (Gorman, 2001). Thus these issues must be explained carefully. The therapist must be alert to possible reactions that survivors from different cultures may have to the physical setting of the therapy, such as the seating arrangements. For example, if the survivor is a tribal leader, the first step to restoration of respect and the establishment of a working relationship may be to ensure that he is seated in relation to the therapist and the interpreter in a way that is in accordance with his custom. The therapist must also be cognizant of the cultural significance of age and role differences, as well as power issues (Fabri, 2001). Sensitivity to cultural issues will also be important in the provision of case management services.

Respect the Survivor's Resilience

In providing treatment to survivors of torture, it is critical for therapists to remember that survivors have considerable strengths that have enabled them to endure unspeakable experiences of abuse and to cope with overwhelming torture stressors. An Iranian colleague and torture survivor who spent more than seven years as a political prisoner in an Iranian prison reported that one of the many forms of torture she was subjected to was the blaring of the Koran at ear-splitting volume over a loudspeaker for hours on end. To cope with this overwhelming sensory bombardment, she said, she converted it in her mind into the sounds of a beautiful symphony, which brought her comfort.

Ortiz (2001) describes survivors sharing "delicate pieces of their painful ordeal" with grace and strength (p. 13). Many survivors show remarkable resilience (Piwowarczyk et al., 2000). They may have a strong spiritual or religious connection, a passion for political activism, a desire to fight against injustices, compassion for others, and a deep commitment to family or community that are truly inspiring. The therapist should be attuned to these strengths because when the survivor first comes for therapy, he or she may have lost contact with them in the face of the pain and helplessness engendered by torture. The therapist may be the one who identifies and holds these strengths in memory for the survivor until he or she is able to reconnect with them. The therapist's awareness of the survivor's strengths and resilience may help the survivor and the therapist as they work in partnership on material that is so painful as to be unbearable.

The Survivor Must Control the Pace

Finally, it is important to keep in mind when working with survivors of torture that talking about their experiences even in the most general way can be destabilizing to varying degrees. It is crucial that the pace and intensity of the therapy work of telling his or her story remain tolerable for the survivor. Some may never discuss their torture because it is too overwhelming. However, other survivors report a sense of relief in having someone bear witness to what they endured.

Goals for Treatment

Judith Herman's (1992) trauma treatment model provides useful guidelines for work with torture survivors. We have already discussed the important task of helping survivors restore a sense of power and control in their lives by establishing safety. The other tasks of trauma therapy, according to Herman, are reconstruction and reconnection.

Reconstruction

During the process of reconstruction, the survivor constructs a narrative of the trauma over time. During this process, the survivor can modify the traumatic memory, incorporate it more fully into his or her life experience, and bring greater meaning to this part of his or her life story (Gorman, 2001). The trauma story may, in fact, be the centerpiece of treatment, although different intervention strategies or models of treatment may be used to facilitate its emergence (Mollica, 1988). Mollica reports that inherent in the telling of the story is the need for the survivor to grieve. As the story is told, it gradually becomes possible for survivors to integrate the traumatic memories into their life experience in such a way that they have meaning and are transformed from events of overwhelming powerlessness into an experience involving renewal of dignity (Mollica, 1988).

While the torture story may be a central element involved in the treatment of survivors, survivors from some cultures may not be willing to talk about their traumatic experiences directly, or they may provide only a few details when they can tolerate doing so. These details need to be pieced together by the therapist over time. Pushing survivors to talk about their experiences before they are ready would be counter-therapeutic. It may be particularly challenging for therapists to decide how to proceed with treatment when they do not have a clear idea what happened to the survivor. This challenge is illustrated by the case of Mrs. G. from Cambodia. Mrs. G. was a survivor of the Pol Pot regime who had witnessed the death by starvation of most of her children. She was not able to talk in any specific way about what happened to her or her family. However, she was able to respond to interventions that addressed her physical well-being. She was particularly open to trying yoga and tai chi, both of which enhanced her ability to manage her symptoms of PTSD. She also responded well to the use of art therapy and produced images of trauma and healing that brought her a feeling of peace. By the end of therapy, her symptoms of PTSD and depression were significantly reduced, although the therapist was no further along in knowing her client's experiences.

Reconnection

The final stage of treatment in Herman's model is reconnection. She states that "having come to terms with the traumatic past, the survivor faces the task of creating a future" (Herman, 1992, p. 195). While the primary experiences of torture were helplessness and isolation, the essential experiences of the recovery are empowerment and reconnection with others (Herman, 1992, p. 196). According to Gorman (2001), reconnection means that survivors "draw on those aspects of themselves that they most value from the time before the torture … to forge a more resilient and enabling sense of identity."

Treatment: Best Practices for Treating Torture Survivors

Many therapeutic modalities have been used with torture survivors, including narrative therapy, cognitive therapy, behavioral therapy, group therapy, and psychodynamic therapy, to name just a few. Gurr and Quiroga (2001) remark that generally speaking, the services provided by torture treatment centers have thus far used the knowledge and skills developed in mainstream mental health services and assumed that these approaches will be as effective in caring for survivors of torture. However, the effectiveness of these approaches remains underresearched and not adequately evaluated for the torture survivor population (Gurr & Quiroga, 2001). Amris and Arenas (2003) in their study of treatment outcomes noted that "only a few clinical outcome studies exist and these studies have limitations due to the lack of: control groups; definition of diagnostic criteria; theoretical framework for problem identification and understanding, goal setting in therapy and provided interventions; validation of assessment instruments and identification of relevant outcome indicators" (p. 11).

An additional complicating factor contributing to the lack of outcome studies is that the needs of torture survivors are many and often urgent. There is strong pressure to provide services and spend resources on immediate care because these clients are suffering, and services for survivors often have long waiting lists (Gurr & Quiroga, 2001).

Gurr and Quiroga (2001) claim that there is little evidence in the professional literature that one school of psychotherapy is better than another; however, there is evidence that a clinician well trained in a particular therapy framework will be more effective than someone providing general counseling with no framework. Keeping this in mind, a brief review of the most common approaches to therapy with torture survivors is presented here.

Testimony Method

This method was first used in Latin America with Chilean survivors of political repression and torture (McIvor & Turner, 1995; Weine & Laub, 1995). It consists of asking survivors to tell in detail the story of their experiences and recording their narrative account. In the process of recording, writing, and editing the trauma story, the survivors develop a permanent record, or "testimony," of their experiences. During this process they can integrate into their life experience the significance of their political activism and their consequent suffering

(McIvor & Turner, 1995). In this way, a survivor's story of shame and powerlessness can be transformed into a story about dignity and courage (Gurr & Quiroga, 2001). This brief, psychodynamically oriented approach generally takes between 12 and 20 weekly sessions. The role of the therapist is to clarify, encourage, and witness, while the survivor is an active participant in the process (McIvor & Turner, 1995). Gurr and Quiroga (2001) suggest that this method of exposure to the trauma may be a key element in improving the positive symptoms of PTSD, which include intrusive memories, nightmares, reexperiencing of the trauma, sleep disturbance, irritability, and startle responses.

Cognitive Therapy

Cognitive interventions are directed at helping survivors reframe their thoughts about their behavior under torture as normal human responses and necessary for their survival (Gurr & Quiroga, 2001). The therapist encourages the survivor to consider that the purpose of the torture he or she experienced was to create in him or her a sense of helplessness and total loss of control, which explains his or her behavior under torture (Gurr & Quiroga, 2001). The therapist also redirects the survivor's thoughts away from self-blame and places responsibility for the torture firmly on the torturer. The survivor is encouraged to create new interpretations and assumptions about the world that allow again for the possibility of trust and meaning in life (Basoglu, 1998).

Behavioral Therapy

Behavioral therapy involves an imaginal reconstruction of the traumatic events in a supportive therapeutic setting (Gurr & Quiroga, 2001). In exposure therapy, the survivor is requested on multiple occasions to imagine the traumatic situation and retain that image until the anxiety and fear diminishes. The role of the therapist is to focus on the "conditioned stimuli relating to the individual's cognitive and emotional responses to torture, such as fear, guilt, self-blame, humiliation, shame and loss of control" (Gurr & Quiroga, 2001). Exposure therapy usually involves 10 to 20 sessions of 1 1/2 to 2 hours per session. Although this approach is considered in the general trauma literature to be effective in diminishing the positive symptoms of PTSD, it is not always directly applicable to work with torture survivors, who may have experienced multiple and diverse forms of torture over a long period of time. McIvor and Turner (1995) comment on the difficulties involved in using exposure therapy "following complex traumatization in torture," asserting that survivors could find it very difficult to cope with the high levels of distress and the memories recalled during exposure therapy (p. 707).

Group Therapy

Group therapy for survivors of torture has a number of advantages. It brings together people with similar traumatic experiences and reactions, which can help to validate survivors' experiences. Group work can promote healing by reducing survivors' social isolation and by providing a sense of belonging to a community (Fischman & Ross, 1990). Having a homogeneous group with similar experiences is viewed by Fischman and Ross as important, as it can also provide a sense of commonality and can increase the opportunity for group cohesion. Group treatment can also maximize the use of therapeutic resources, since the survivor population is increasing beyond the pool of trained therapists to provide services. However, not all survivors will benefit from group therapy, and it may not be a culturally and politically viable approach to treatment (McIvor & Turner, 1995). In many cultures, for example, talking about personal problems in a group context is a foreign concept, as personal issues are not to be discussed with strangers. Also, with some severely traumatized torture survivors, hearing others in the group speak about their torture may be destabilizing. In such circumstances, group therapy may not be appropriate or should be considered in conjunction with ongoing individual therapy (Drozdek & Wilson, 2004).

Drozdek and Wilson (2004) describe using a five-phase treatment model for trauma-focused group therapy with asylum seekers and refugees from political and war violence from all over the world. This model incorporates psychodynamic, cognitive-behavioral therapy, and supportive treatment approaches and is designed to "help members place their traumas in a life-span developmental perspective" (p. 250). The stages of this model include (1) establishing a therapeutic alliance and psychoeducation; (2) presentation of biographies, discussing damaged core beliefs, and discussion of symptoms; (3) telling the trauma story (which involves exposure and cognitive restructuring); (4) reconnecting with the present, past, and future (which involves focusing on pre- and posttrauma changes in the survivor's worldview and assumptions); and (5) termination, relapse prevention, and future orientation (Drozdek & Wilson, 2004, p. 255).

Psychoeducation

Providing education to survivors, their families, and the community about the effects of torture, the symptoms of PTSD, and ways of treating those symptoms can make an important difference in helping survivors cope. Normalizing symptoms that they may be experiencing can reassure survivors and also their families. Psychoeducation can be provided to individual survivors in therapy, groups of survivors, and families of survivors as well as to community leaders.

Psychodynamic Therapy

Psychodynamic therapy addresses the psychic decompensation that occurs as a result of torture and the disorganization or disintegration of the self (McIvor & Turner, 1995). McIvor and Turner, citing Bustos (1990), report that the effectiveness of psychotherapy depends on the survivor's ability "to integrate and organize the intrapsychic processes in relation to outer traumatic events" (p. 706). They note that the effectiveness of this process is affected by factors such as previous traumas experienced by the survivor and the survivor's personality structure

(McIvor & Turner, 1995, p. 706). Wilson (2004) notes that effective posttraumatic therapy involves helping the patient "mobilize and transform the negative energies, memories and emotions of PTSD and associated conditions into a healthy self-synthesis, which evolves into a positive integration of the trauma experience" (p. 278).

Other Modalities

Nonverbal techniques such as art therapy, music therapy, and sand play therapy have been used effectively to work with both adult and child survivors of torture who do not respond well to verbal processing. These therapies can be either an adjunct to or an alternative to traditional therapy. The case of Ms. T. illustrates the value of using nonverbal therapies. Ms. T. fled to the United States from Somalia, where she experienced torture and also witnessed the murder of her only sibling. Ms. T. had great difficulty talking about her experiences in therapy and could not discuss the murder of her brother. However, she was able to use objects in the sand tray to enact in great detail the death of her brother and her escape from Somalia. This process enabled her to begin to speak of her traumatic experiences and greatly facilitated her healing process, as she and the therapist became witnesses to the trauma story as it unfolded in the sand tray.

Elements of Commonality in Different Treatment Approaches

All of the therapeutic approaches discussed previously require that the therapy takes place in a setting of physical and emotional safety. Regardless of the approach, therapists must be aware of the potential for retraumatization of the survivor and must educate themselves about the potential trauma triggers that might exist in the environment or occur in the session. These trauma triggers may be obvious (such as giving the survivor the feeling that he or she is being interrogated) or subtle (such as fluorescent lights that remind the survivor of the torture cell, or clipboards similar to those used by the torturer).

The telling and retelling of the trauma story is another element common to most approaches to treating torture survivors. Most approaches have elements of behavioral therapy, such as repeated exposure to elements of the trauma story and a certain degree of systematic desensitization (McIvor & Turner, 1995). For example, the testimony method involves a detailed telling of the trauma story over a period of time, as the survivor records, writes, and edits the story of his or her experiences.

Some form of cognitive restructuring also occurs during most therapeutic approaches, as the therapist and survivor address negative beliefs and reframe them in a way that can bring new meaning to the experience (McIvor & Turner, 1995). For example, survivors may initially have the negative belief that their behavior during torture was shameful. During treatment, they may be able to reframe that belief, incorporating a realization that they did what they needed to do in order to survive.

Finally, the use of psychoeducation to empower and inform survivors is an element in many approaches. Teaching survivors about the goals of torture, the natural reactions of the human being to trauma, PTSD symptoms, memory dysfunction, methods of coping with flashbacks, and the potential usefulness of treatment may help lower the survivors' level of anxiety, allay any fears they may have that they are "going crazy" (Drozdek & Wilson, 2004, p. 256), and assist them in recognizing the many ways in which they stood strong and survived.

Jaranson et al. (2001) have described important principles that underlie the treatment of severely traumatized clients and that apply well to work with torture survivors. Some of these principles include:

- First, do no harm;
- Show respect to survivors by permitting them to tell their story at their own pace;
- Provide supportive therapy by having regular and expected meetings in which there is "warmth and continuity" (p. 257);
- Support the physical, social, and medical needs of clients;
- Be aware of cultural differences and the impact this has on the trauma work;
- Support the traditional religious beliefs of clients; and
- Understand that the client may need long-term support (pp. 257–258).

Cultural Considerations

It is essential that any therapist working with torture survivors be willing to accept the challenge of understanding and being sensitive to cultural issues that arise during therapy, since survivors often come from cultures very different from that of the therapist (Okawa, 2007). Survivors come to treatment with different degrees of cultural preparedness for therapy. In many cultures, there is no tradition of psychotherapy or mental health treatment except for people who are seriously mentally ill. The concept of talking to a stranger about one's personal problems rather than talking to family, an elder in the community, or a religious leader may be unheard of (Fabri, 2001). Therapists must be willing to listen to the survivor's needs, to consider what the survivor would find helpful, and consider adjusting the therapeutic model used with mainstream American clients to include interventions that are culturally meaningful to the survivor (Fischman, 1991; Fischman, 1998).

It is important to be aware that cultural stereotypes can be misleading and that each survivor has unique individual characteristics. Ultimately, the survivor is the expert on his or her culture, and it is the survivor who will educate the therapist in this regard. Survivors will be the therapist's most important teachers.

There are many differences among cultures as to the meaning of torture, what is considered torture, and why the survivor may have been subjected to it. Cultural meanings have an impact on the type of therapeutic approach and intervention that may be effective with a survivor. For example, in some cultures, such as in Chile, a survivor may create meaning about his or her torture by placing it in a political context, given the history of political oppression in that culture and the use of torture as a weapon to control political differences (Gurr & Quiroga, 2001). Other cultures, such as the Cambodian and Tibetan cultures, may see torture and suffering in light of the Buddhist concept of karma (Gurr & Quiroga, 2001).

In many cultures, it is expected that a health professional will give patients medication so that they can be "cured" of what is troubling them. However, in other cultures, medication is unavailable or reserved for only the most seriously ill. Few cultures place as strong an emphasis on taking pills to cure ills as the American culture. Many survivors report being afraid of becoming addicted to prescribed medications. When working with survivors who are highly symptomatic but resist medication for such reasons, the therapist can use alternative methods, such as relaxation techniques, meditation, or exercise, to address symptoms of anxiety, hyperarousal, or depression.

Cultures also differ in the perception of the individual in relation to his or her surroundings. Many cultures are collectivistic: that is, they perceive the individual in the context of the group or community, in contrast to the individualistic orientation of Western societies, which focus on the individual as a distinct, independent agent. Survivors from collectivistic cultures may respond more effectively to group or family work than to individual psychotherapy.

Performing Culturally Competent Therapy with Torture Survivors

The following suggestions are offered to the therapist working with torture survivors from different cultures:

- Recognize that different cultures may have different communication styles. For example, in some cultures it is considered rude or aggressive to look directly into the eyes of the person with whom you are speaking.
- Be aware of gender issues. For example, in some cultures it is inappropriate for a woman to meet alone in a room with a male, even if he is a therapist.
- Take the age of the survivor into account. In some cultures, an older person would not expect a younger person to be in a position of "expert" or advisor, regardless of whether that person has the title of therapist.
- Interview in a culturally sensitive way. In some cultures, asking questions in an indirect way is considered much more appropriate than direct questioning. Certain issues may be considered taboo for a stranger to ask about, such as questions about sexuality.
- Be attuned to the physical setting. If the room reminds the survivor of the interrogation room in which he or she was tortured, for example, the therapist may want to make changes to the room or the environment in which the therapy takes place.
- Honor traditional practices. Show respect for the survivor and his or her culture by being aware of and willing to honor the religious traditions or other traditional practices that hold meaning for the survivor.

Working with an Interpreter

It is often necessary for therapists to work through an interpreter when providing therapy to survivors of torture from other language groups. Including an interpreter significantly alters the traditional therapeutic dyad. Because of their brutal experiences at the hands of the torturer, issues of trust are extremely important for survivors. If the interpreter is accepting and nonjudgmental of the client, the therapeutic experience can be facilitated by the presence of the interpreter. If the interpreter is intrusive, distant, judgmental, or disinterested, trust can break down, and the therapy process will be disrupted (Miller, Martell, Pazdirek, Caruth, & Lopez, 2005).

If the interpreter is from the same country or culture as the client, he or she can act as a cultural broker, helping the therapist understand the cultural context and cultural meanings of certain behaviors. However, some survivors feel unsafe with interpreters from their country of origin because they fear that information might be passed back to authorities in their country. Another common fear that survivors have is that their most personal issues might become a subject of gossip in their often small local community. Depending on the survivor's cultural background and the trauma he or she endured, the gender of the interpreter may have some bearing on the survivor's ability to relate his or her experiences. The clinician must be vigilant for signs that the survivor is not feeling comfortable with the interpreter and check with the client directly about this when possible.

Because torture survivors' personal histories and torture descriptions can be quite graphic, it is also important to consider whether the interpreter is experiencing secondary traumatization. If, as is often the case, the interpreter is also a refugee, the trauma story of the survivor could echo the interpreter's own experiences (Miller et al., 2005). Interpreters, therefore, need an adequate support system, clinical supervision, debriefing, and adequate training for work with survivors of torture.

Therapists may also find that they have an emotional reaction to the triad that is created when interpreters are present in the therapy. They may at first feel excluded, especially if the interpreter is playing multiple roles, such as accompanying the client to other appointments, or being available to the survivor to answer basic cultural questions. In addition, therapists may initially feel self-conscious about having a third person present in the session. Communication between the therapist and the interpreter prior to therapy and throughout the course of therapy is essential (Miller et al., 2005).

Policy Considerations

The following recommendations are offered to government policymakers who have an impact on the funding of torture treatment programs as well as other public services and policies that may affect torture survivors. In addition, recommendations are offered to mental health and medical practitioners providing direct service to torture survivors and to academics working in the torture treatment research field.

For Government Policymakers

- Policymakers concerned with immigration and asylum issues need to become more aware that significant proportions of refugees seeking asylum have experienced torture.

- Education and training about the prevalence of torture and its impact on individuals and on communities should be provided to those in government who make decisions about asylum policy and claims.
- Members of the judiciary can also benefit from education and training on the pervasive impact of torture, including the psychological sequelae, as many political asylum cases are adjudicated in immigration courts.
- Personnel working in government agencies that address broader issues such as services for refugees and policies on resettlement should have a solid background on the wide-ranging effects of torture and the ways that torture trauma might differ from other forms of refugee trauma in its impact.
- Given the severity of torture trauma, it is important for government agencies to be aware that mental health services are as important as providing legal, social, and economic services for refugees. Consideration should also be given to having the mental health professions play a more central role in the policymaking aspects of refugee care (Basoglu et al., 2001).
- The availability of torture treatment services should be increased, given the high prevalence rates of torture in the world and among refugees in this country and the debilitating effects of such experiences. There is a need for strong continued financial support from the U.S. government for torture treatment programs, as these programs have accumulated a wealth of knowledge on the care and treatment of survivors.
- Rigorous research on torture treatment should be further supported and funded by the government.

For Medical and Mental Health Professionals

- Consideration could be given to better adapting the health care system to the needs of those who have survived torture.
  - Magruder, Mollica, and Friedman (2001) suggest that it would be useful to organize primary care systems so that health care providers can have easy access to professionals with expertise in working with torture survivors, who can provide the needed assessment and treatment services.
  - They also recommend that primary care providers have easier access to treatment guidelines and screening and diagnostic instruments that have been developed for use with trauma survivors (Magruder et al., 2001). In addition, they recommend that consideration be given to providing more community-based mental health care and possibly residential-based care.
- Mental health professionals working with refugees in community-based mental health programs and other settings could improve their ability to identify those who have experienced torture by gaining a fuller understanding of the medical and psychological sequelae of torture as well as the treatment needs of survivors (Gurr & Quiroga, 2001).
- Mental health professionals who are knowledgeable about torture treatment can play a greater role in educating the general public on the wide-ranging sequelae of torture and the need for effective and better-funded treatment programs.

- Scientific research on the efficacy of various treatment models should be given higher priority. There is an urgent need for controlled treatment trials to help identify the most effective treatment methods for the care of survivors.

Further Considerations

Torture is often described as an interpersonal trauma, the perpetration of cruel and sadistic acts by one human being upon another in an attempt to shatter the self and break down the will to resist. A survivor of torture, whose very identity has been threatened in such a violent way, may suffer from physiological consequences, emotional trauma, and damage to his or her relationships. His or her peace may be shattered, as he or she learns at a deep level about the pain that other human beings are capable of inflicting.

It is tempting to believe that torture only affects the person who directly experiences it. In fact, however, torture is an insidious practice that leaves a broad and poisonous wake behind it, its impact rippling from individual survivors to families to communities, ultimately affecting society as a whole.

Beyond the immediate survivor, the families of survivors are also impacted by torture. Survivors and family members may be separated for years if the survivor must flee for safety. When reunited, family members may notice that the survivor has changed from the person he or she was before. Research on the impact of the Holocaust on families reveals that massive trauma can have effects that endure across generations (Danieli, 1998). Auerhahn and Laub (1998) note that the "knowledge of psychic trauma weaves through the memories of several generations," shaping "the internal representations of reality" of the traumatized parents, their children, and ultimately even their children's children (p. 22). They conclude that the children "become burdened by memories that are not their own" (p. 22).

The practice of torture also takes a toll on communities, inducing a culture of fear and promulgating the message that individual lives do not have value. Freedom of expression is stifled. Members of the community adopt protective stances, restricting open communication because of the distrust in others that torture engenders. The fabric of the community is torn, as the trust between people is affected, and relationships that make life meaningful can become seriously, if not irrevocably, damaged.

Finally, torture results in costs to society as a whole—financial, social, spiritual, health, and political costs. With torture comes the loss of leadership, both intellectual and moral, as people such as political activists, opposition leaders, spiritual leaders, and students are jailed, tortured, and sometimes killed. Health costs related to the physical and emotional damage caused by torture also stress already burdened medical systems in countries such as the United States to which survivors flee for safe haven.

Just as violence begets violence, torture begets torture. The practice of torture by a government has international implications. When one government tortures for political reasons, it implicitly condones the use of torture by other governments. No matter how governments try to whitewash their actions by redefining torture or by justifying it in the name of national security, torture remains a grave abuse of human rights. A country or government that tortures, using inhumane strategies for its own political ends, can no longer claim the moral high ground. The leaders and citizens of these countries diminish their humanity when they support policies advocating torture. If we do not stand up for the basic human right of humane treatment, who might be affected next? The haunting words of Pastor Martin Niemoller say it best:

> First they came for the communists, and I did not speak out because I was not a communist. Then they came for the socialists, and I did not speak out because I was not a socialist. Then they came for the trade unionists, and I did not speak out because I was not a trade unionist. Then they came for the Jews, and I did not speak out because I was not a Jew. Then they came for me and by that time, there was no one left to speak for me.
>
> — *Pastor Martin Niemoller, 1945*

Notes

1. With a few exceptions such as this one, we will use the word *survivor* to refer to those who have been tortured, as the term *victim* evokes a picture of a defenseless person and does not acknowledge the extraordinary strength and resilience that survivors show in living through torture and then continuing to build their lives afterward.

2. For a powerful personal account of torture and its impact, the reader is referred to *The Blindfold's Eyes: My Journey from Torture to Truth* (2002) by Sister Dianna Ortiz (Maryknoll, NY: Orbis Books).

3. Many of the reports of torture referenced in this section were expressed to the authors by survivors from all over the world who were participating in psychotherapy or psychological evaluations.

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CHAPTER 3

The Psychological Impact of Kidnap

James R. Alvarez

> Kidnapping. The deliberate creation and marketing of human grief, anguish and despair.
>
> —*Tom Hargrove, FARC hostage, Day 325 of 334, 1994, somewhere in the jungles of Colombia*

Since time immemorial, kidnapping has been a powerful tool in the malignant repertoire of those seeking to manipulate and control others. Despite the biblical prohibition against kidnap and the death penalty for he who "stealeth a man … and selleth him" (Exodus 21:16), criminals, terrorists, and other seekers of gain throughout history have kidnapped to extort concessions from their targets. Modern-day terrorists have continued the trend. For example, captured Al Qaeda training manuals reveal that the kidnapping of "enemy personnel" is number two on their list of required missions (Weiser, 2001). Worryingly, to Al Qaeda "enemy personnel" is anyone who does not subscribe to its radical version of Islam or who happens to be an innocent bystander during one of its attacks.

Because most of the kidnaps in the world occur to the local citizens of developing nations such as Colombia, the Philippines, and Iraq (Briggs, 2005), the crime and its sequelae have remained largely unnoticed by the governments, law enforcement agencies, and mental health communities of developed countries such as the United States and the United Kingdom.

The events of September 11, 2001, and recent well-publicized kidnaps of Westerners in Iraq and elsewhere, though, has brought kidnap into the consciousness of developed nations and focused unprecedented attention on the phenomenon. As the psychological reactions to these traumatic events have started to receive more attention, the mental health communities of the developed world have only recently begun to take an increased interest in the specific physical, psychological, social, economic, spiritual, and other consequences of kidnap on the publics they serve.

Because kidnappers seek to harm not only those they directly abduct, but the larger number of people indirectly affected, for the purpose of clarity, hostages, their families, employers, and affected others will hereinafter be referred to collectively as victims. For the purposes of this chapter, *kidnapping* is defined as seizing and detaining (a) person(s) unlawfully, usually for monetary or other gain. Because not all kidnappings are executed to extort concessions and some end in the death of the hostage, those cases in which hostages are killed are more appropriately considered murders and are addressed elsewhere in this volume. One highly experienced authority (Security Consultant B, personal communication, January 22, 2007) reports that as a very rough estimate, around 93 percent of hostages kidnapped for ransom return home alive. Of the 7 percent that die, about 4 percent are killed when rescue or arrest attempts go bad, 1 percent are killed while trying to escape, 1 percent succumb to starvation or disease, and the final 1 percent successfully escape.

Though many descriptions of kidnap and its aftermath exist in films, media, and popular literature, the body of empirical or research-based literature on victims' reactions to kidnap is relatively small. This is likely owing to several factors, including the previously noted lack of public and governmental attention and because the psychological treatment of kidnap victims does not differ radically from the treatment of other traumas.

This chapter will use vignettes, case examples, and a selective review of the literature to describe some of the general and specific psychological impacts of kidnap on victims. Examples from the literature and cases illustrating successful treatment approaches and best practices for reducing the distress of those touched by the malevolent power of kidnap will also be presented.

Recommendations for behaviors hostages can use to increase their chances of survival will be presented. Finally, recommendations will be presented aimed at helping policymakers, law enforcement, medical, emergency response, mental health communities, and other interested parties to understand and manage the unique set of biopsychosocial problems caused by kidnap.

Much of the information contained in this chapter comes from work done by the author directly with former hostages and other victims of kidnap and with professionals in the kidnap for ransom (K&R) insurance and security industry. Because of privacy, confidentiality, and business intelligence considerations, all case details have been rigorously disguised.

Background and Context

Ever since Spanish conquistador Francisco Pizarro strangled Atahuallpa, the last emperor of the Incas in 1533, despite receiving one of the largest ransoms in history—one room filled with gold and two with silver—Latin America has been the dominant force in the kidnapping industry.

Because of governmental weakness and endemic corruption, kidnap continues to be a relatively low-risk, high-payoff crime in Latin America and the majority of known kidnaps between 2000 and 2004 took place there. During that period nearly 75 percent of cases lasted between 0 and 50 days with a small number lasting more than 100 days (Asset Security Managers [ASM], 2005). It is not surprising therefore that a great deal of the current professional knowledge and kidnap research literature that does exist comes from this area and is in Spanish.

The majority of relevant kidnap cases fall into one of three groups. These are (1) kidnap for ransom, or economic/criminal kidnap, where kidnaps are executed to extort money in return for the hostage's safe release or to pressure a family or group to pay a debt as is the case among drug dealing groups; (2) political kidnap, which is kidnap executed to extort political, religious, or other concessions from authorities, usually governments; and (3) hybrid kidnaps where groups with political or religious causes commit kidnap to fund their cause.

Kidnap for ransom is one of the fastest-growing criminal businesses in the world, with Briggs (2001) estimating that kidnappers take home more than $500 million each year. Though accurate figures are hard to find because publicity can make hostages appear more valuable, and details about kidnapping and the payment of ransoms are purposely and understandably shrouded in secrecy by victims and associated parties such as the K&R insurance and security industry, estimates of the number of kidnaps worldwide exceed 10,000 per year (Briggs, 2005). The actual number is likely to be far higher, because in many countries kidnaps are not reported to the authorities for fear that they themselves are involved in the crime and because paying ransom to terrorist or criminal organizations may also be illegal.

Interestingly, like many industries, the kidnap business experiences a Christmas rush of activity. Approximately 30 percent of the kidnaps reported in Mexico City in 2002 happened in the three weeks leading up to Christmas, with one kidnapper demanding on December 23, "I want the money and I want it before the stores close tomorrow!" (Security Consultant J, personal communication, October 16, 2003). It seems that even kidnappers have to buy Christmas presents!

Kidnap groups' (KG) motivations and aims often determine how well or poorly a hostage is treated, the length of captivity, and chances of survival. For example, the chances of a hostage surviving his or her ordeal intact are much higher if the kidnappers' motivation is financial. One statistic shows that in South America, more than 90 percent of victims are released uninjured (Security Consultant J, personal communication, January 22, 2007). It is in the kidnappers' interest to keep the hostage or "merchandise" safe until the family or employer pays the ransom or "buys" it back. On the other hand, the very public beheadings ending several recent kidnaps attributed to the Abu Musab al-Zarqawi group in Iraq have shown that the motivations and aims of political kidnappers are often entirely unconnected with the hostage's safe return. Interestingly, in some countries there seems to be something of a kidnap "ethic." For example, in El Salvador, women and children are not generally kidnapped but grown men are. In Brazil, virtually anyone is fair game.

Kidnap for ransom is a human-made act with malicious, but nonetheless rational, aims. Research has shown that, in general, disasters caused by malicious human intent such as terrorism or mass violence produce higher rates of psychiatric casualties than naturally occurring ones (Hall, Norwood, Ursano, Fullerton, & Levinson, 2002) and increase the likelihood that victims will be severely or very severely impaired (Norris, 2005).

Attribution theory posits that a reason for this is that it is possible for people to take action to prevent being affected by a natural disaster in the future. In other words, most people will perceive an internal locus of control that allows them to take action to prevent future traumatization. For example, those affected by floods can move to mountainous areas where the threat of floods is eliminated. However, the great majority of people affected by human-caused violence will not isolate themselves from others to remove the threat of being hurt by them. Despite the possibility that people can hurt us, human beings are social animals and take great comfort from living in groups.

Hostage situations and the human responses to them differ greatly across a great number of variables, including location of event, culture, motivations of the kidnap group, intensity of mistreatment, length of captivity, individual psychological differences, etc. Despite this variation, however, it is possible to make some useful generalizations about kidnap cases.

A great variety of behavioral and psychological effects has been shown by kidnap victims at various times through captivity and postrelease (Taylor, Nailatikau, & Walkey, 2002). All their responses have several things in common. Their trust has usually been shaken, often to the core, and the negative physical, psychological, and social effects are not limited to the hostage, but radiate outward to touch all those involved in any way in the event.

The Experience Inside

Captivity: What to Expect

The abduction, or actual taking of the hostage, is one of the two most dangerous moments for the kidnapper and victim of any kidnap event (the other is the ransom money delivery and hostage release). Though kidnappers use stealth, surprise, and sharp, aggressive action quickly to dominate their victim, factors such as unexpected victim resistance, chance contact with law enforcement, etc., make the abduction a high-risk event for the kidnappers. Though not recommended unless absolutely certain of success, attempts to escape are most often successful during this phase, the most chaotic and unstructured part of the kidnap.

Extreme violence is normally avoided at this time not only to prevent attracting unwanted attention, but also to protect the valuable hostage (although third parties who accidentally get in the way or intentionally intervene can receive brusque and brutal treatment). Despite this, there is usually a great deal of noise and confusion, with the kidnappers being highly anxious, hypervigilant, and hyperaroused.

A systems approach to conflict analysis would posit that during the abduction, the system, composed in this case of kidnappers and hostages, is highly charged, tense, and characterized by "higher aggressiveness, higher emotionality, and lower constructiveness" (Lewin, 1947, p. 26). Victims are usually bundled into a vehicle, often forced to lay face down on the floor, blindfolded, beaten and/or drugged to reduce resistance and ensure compliance. At least one former hostage reports that to him it was better to be drugged than to be beaten unconscious (Hostage F, personal communication, October 16, 2002).

Fletcher (1996) provides an excellent summary of many typical conditions that hostages endure during and after a hostage-taking incident.[1] These are:

> Initial rapid, violent action
>   Noise, gunshot, screams, panic, smoke, injuries, deaths
> Sudden separation from family and friends under frightening circumstances
> Relative sensory deprivation
>   Visual: blindfolds, hoods
>   Tactile: ties, chains, handcuffs, restricting movement
>   Auditory: solitary confinement or imposed silence
> Cell conditions
>   Cramped (e.g., wardrobe, hole in the ground); hazardous (e.g., fueled-up aircraft, military target)
>   Subject to temperature extremes
>   Poor hygiene, restricted access to toilets and washing facilities
>   Frequent illness, with little or no medical treatment
>   Beatings, torture, mock executions, rape
>   Forced to witness maltreatment of loved ones
>   Fear of inappropriate action or dialogue from authorities or fellow hostages
>   Pervasive fear of death, exacerbated by waves of terror. (p. 232)

Notwithstanding the extreme hardships and the apparent contradiction, experience shows us that the hostage's life is generally protected. This makes sense when considering the fact that a dead or injured hostage is of less or no value to the kidnap group. It is in their interest to protect the "merchandise" in their possession. In short, killing hostages is not good for business. No one will pay in future kidnappings if they believe victims will be murdered despite payment of a ransom, for example.

What to Do If Kidnapped? Wisdom from Former Hostages and Professionals

No two kidnaps are the same, but often kidnappings by the same group are remarkably similar, which is to the advantage of law enforcement and negotiators. The experience of many former hostages and professionals shows that there are things hostages can do to maximize their chances of survival. The following guidelines are intended to increase the awareness of behaviors others have used to survive kidnaps or other wrongful detentions. It is not a complete or comprehensive list and may not apply to many situations. It is presented for general informational purposes only and is not intended or designed to replace advice and training from suitably qualified and experienced professionals.

Though apparently obvious and perhaps impossible, professionals in the military, law enforcement, and K&R security industry recommend that hostages do everything they can to remain calm—at least externally, under all circumstances. This helps reduce tension in the system and the possibility of anxiety- or stress-induced violence in response to a perceived threat. At first glance, this is a near impossible order. It might be surprising, therefore, for readers to learn that virtually all the hostages the author has worked with have managed to remain externally calm and in control despite suffering from severe anxiety and terror.

Other behaviors that have made a positive difference to hostages' survival are:

1. Do not fight back, harass, or complain about conditions to the kidnappers because it is likely to increase the amount of mistreatment.
2. Hostages are often questioned and/or interrogated to gather information about their background, finances, family, employers, knowledge of law enforcement or military operations, etc. In the majority of cases, this is done without torture. Be as polite, good tempered, reasonable, and cooperative as possible. Do not antagonize or otherwise behave aggressively toward captors. Hostility of this type is likely to result in longer captivity or increased mistreatment. A common interrogation tactic is for one kidnapper to play "good cop" and another to play "bad cop." The bad cop will be verbally and often physically abusive, after which the good cop will try to befriend the vulnerable hostage. As much as possible, do not tell the kidnappers about family, friends, or business because of the risk of making them targets. Devise a simple, plausible story for yourself and stick to it. Give short, unambiguous answers.
3. It is generally safer to be submissive, but not overly so, to the captors and to comply with their instructions. Overcompliance to the point of losing one's dignity is usually a mistake because it devalues the hostage's life not only to himself, but to the kidnappers.
4. If possible, humanize yourself to the captors. The goal of humanizing oneself is to make the kidnappers view the person as a human being, not simply as an object with monetary value. It is easier to hurt a "hostage" or "merchandise" than it is to hurt a human person with a name, family, etc.
    a. One way to humanize oneself is to attempt to establish some kind of rapport with one's captors. In many cases, especially in short-term kidnaps, this will not be possible because the kidnappers will usually limit interactions in order to avoid giving information that might help in their capture later as well as to avoid establishment of any rapport that might later inhibit their ability to do violence to the hostage in order to put pressure on those paying the ransom. In the event that interaction with the kidnappers is possible, rapport can be built through communicating with them in their language if one speaks it. Talking about sports and

   hobbies can be a way to reach across different cultures and languages, for example. It is important however, to strike a balance between establishing a meaningful rapport and taking unnecessary risks. Discussing or arguing about the rights or wrongs of kidnap or the kidnappers' cause (if they have one) is not advised because of the extreme risk of maltreatment that might be caused by disagreement.

   b. Research and thousands of years of experience show that the normal human reluctance to kill other humans can be overcome by increasing the physical and/or psychological distance between killer and victim (Grossman, 1996). This distance prevents the killer from establishing empathy for the victim. With distance, victims stop being people and instead become "targets." Any psychological costs normally associated with killing people are greatly reduced when one is eliminating "targets." In the absence of physical distance, however, the effect of psychological distance can be achieved through dehumanization of the victim. This is done by intentionally creating a failure of empathy between killer and victim. In a kidnap, it is done in a variety of ways, including hooding the hostage. Sophisticated kidnappers use this tactic not just to limit the danger of being visually identified, but also to prevent eye contact with the hostage, thereby preventing the building of rapport. It is for this reason that the risk of a hostage dying is much greater if the hostage is hooded while in captivity (Shalit, 1988) and why executions are so often done with a bullet to the *back* of the head. It is also why security professionals recommend to never turn your back toward an armed abductor.

5. When talking to the kidnappers it is often safer to keep eyes down, not look at them, and to appear slightly depressed.
6. Be discreetly alert to the environment because you might be able to use this information later.
7. Establish as much of a regular daily schedule as possible.
8. Exercise every day. If movement is limited, flex muscles by pressing against walls, floors, ceilings, etc., running in place or doing calisthenics.
9. Ask for medication if needed. Make requests in a reasonable, nonaggressive tone of voice.
10. Never refuse food, no matter how unappealing. This helps maintain strength and morale.
11. Calibrate expectations to avoid disappointment by assuming that one will be captive for a long time. Focus on an intermediate to long-range goal such as going on a pleasant trip or seeing a friend or relative.
12. Try to keep mentally occupied. Ask for a newspaper, books, or paper.
13. Invent mind games to stay mentally active. Time can be measured approximately by noting changes in temperature between day and night, outside noises such as traffic or birds, and by noticing how alert the guards may be.
14. Statistically, there is a significantly higher chance of being hurt during a rescue attempt than at any other time. One security company estimates that only 50 percent of hostages survive a rescue attempt (Security Consultant A, November 12, 2004). This is especially true in those underdeveloped countries noted earlier where law enforcement is undertrained, underequipped, and too often incompetent or corrupt. While in captivity, determine the safest place

to be in the event of a rescue attempt. If there is a rescue attempt, go there, lie face down on the ground, and stay down until the authorities tell you to get up. Follow the authorities' instructions and orders exactly. Hostage rescue teams are generally trained to fire at targets who present a threat. Often, these happen to be people who are standing up, so the chances of survival are increased by not presenting oneself as a potential target to the hostage rescue team.

15. Do not attempt to negotiate as this will interfere with others' work on your behalf. A recent case in Latin America offers a good example of why hostages should not conduct their own negotiations. The female hostage was able to overhear her kidnappers discussing the size of her ransom. She heard them discussing the amount of 5 million pesos, which at that time had a U.S.-dollar equivalent of about $50,000. Apparently, she believed she was worth much more than that, so she flew into a rage and screamed at the top of her lungs to the kidnappers that she was worth 5 million U.S. dollars, not pesos! Not surprisingly, the kidnappers immediately increased their ransom demand, thereby delaying her release by at least 14 days. It is unclear who wanted her released more, her family or the kidnappers.
16. Try to devise ways to communicate if another hostage is detected nearby. Tom Hargrove, a hostage in Colombia for more than 11 months and whose case formed the basis of the Hollywood movie *Proof of Life*, suffered terribly from isolation and loneliness during his captivity and said in an interview:

> I knew it was wrong, but always harbored an empty hope: that FARC [his kidnappers] would bring in another hostage, so I'd have a friend. The loneliness was the worst. Think of it. What is the longest you've ever spent without any way of communicating with a friend? Not very long, probably. Nor for me, until I was kidnapped. (Hargrove, 1998)

Captivity: General Issues

For the sake of clarity, the following description of the psychological and behavioral effects of captivity will be based on Fletcher's (1996) very clear and well-structured description of hostage reactions. It is arbitrarily divided into three sections labeled as follows: early captivity, ranging from hours to days; intermediate captivity, ranging from weeks to months; and long-term captivity, ranging from months to years. This distinction is made solely for the sake of organization and clarity and is not intended to imply that there are three discrete psychological or temporal phases of captivity.

Many of the psychological and behavioral effects of captivity, including outcomes such as acute stress disorder (ASD) and posttraumatic stress disorder (PTSD), are similar to those seen in victims of other traumas such as natural disasters, combat, and terrorist attacks. Because these disorders and the associated assessment, diagnostic, and treatment issues are addressed in greater detail and depth elsewhere in this volume, this chapter will focus on describing the unique set of problems presented by kidnap not shared by other traumatic events, and the solutions to them that we have found to be effective. As a result, only a cursory discussion of diagnosis and treatment of ASD and PTSD will be presented.

Kidnap has several differences that separate it from other types of trauma. Murder, for example, is first and foremost a physical event, unambiguous and inexorably final, which often leaves a body on which relatives can focus their natural mourning and recovery activities. Like murder, motor vehicle accidents are also physical events, which leave physical injuries that can be treated and healed. Both are limited in time and except in very unusual cases have an identifiable conclusion.

But unlike murder and motor vehicle accidents, and just like terrorism, kidnap is a fundamentally psychological event for all involved. Kidnap derives its malignant power from the way in which it disrupts at least two basic human drives. The first is the human drive for society. Human beings are social animals and in general prefer to be in company. We bond with each other and when that bond is broken through violent separation, we suffer. Another drive, toward increased control and mastery of one's world, is brought to an abrupt halt by the kidnappers' theft of the personal control over one's body and mind that most of us take for granted. The absolute helplessness and loss of control induced in both the hostage and family by kidnap is often reported to be the worst aspect of the event (Hostage N, personal communication, September 12, 2002; Hostage Q, personal communication, October 14, 2002; Hostage B, personal communication November 15, 2003).

The effects of kidnap on both hostages and victims will be observed in three realms: the physical, cognitive, and the affective. These can be conceptualized as occurring on an overlapping spectrum that ranges from mild, transient, expectable, and clinically insignificant reactions to those that severely and chronically impair social, occupational, or other functioning.

As with other traumas, the psychological effects of kidnap, including the development of PTSD, can be predicted by at least two groups of factors (Ozer, Best, Lipsey, & Weiss, 2003). The first group includes individual characteristics such as the hostage's history of prior trauma and the presence of a personal or family history of psychopathology. The second and more powerfully predictive group includes factors such as perceived life threat, emotionality, and dissociation during the event and perceived social support. Additional mediators of particular relevance to kidnaps include amount/intensity of maltreatment, presence and severity of physical injury, and length of time in captivity, with Gillespie, Duffy, Hackmann, and Clark (2002), for example, finding that people who had been physically injured during the trauma had poorer outcome than those without physical injuries.

Both Ozer et al.'s (2003) meta-analysis and Strelau and Zawadzki's (2005) study demonstrate that the level of perceived life threat and peritraumatic (during the event) dissociation are the two most significant predictors of the development of PTSD. A common view of the relationship between these two predictors is that high levels of perceived life threat can cause peritraumatic dissociation

(Spiegel & Cardeña, 1991). These findings carry at least two significant implications specific to the victims of kidnap.

The first is that level of perceived life threat is a variable under the kidnappers' control. They manipulate it to apply pressure to expedite concession to their demands. In other words, the kidnappers determine how high a life threat the victim will perceive. The higher the life threat, the higher the likelihood of dissociation, and as noted previously, the presence of dissociation is associated with a higher risk of PTSD.

Because the kidnappers' treatment of the hostage can be affected by external factors such as the family's attitude and behavior toward the negotiations, demands, etcetera, it is crucial that those conducting the negotiations understand the ramifications that their negotiation style might have on the hostage's treatment while in captivity and subsequent mental health. It is for this reason that information about the hostage's history, background, etc., should be factored into the family's decision-making process and negotiating strategies. In other words, though securing the safe release of the hostage is of primary and paramount importance, negotiators must give careful consideration to the ways in which their tactics might affect the hostage's psychological as well as physical health.

The second implication presented by these findings is that because peritraumatic emotionality is a powerful predictor of PTSD, those conducting the negotiations must know that anything they can do to help control and improve the hostage's emotionality while in captivity is also of great value.

Standard operating procedure for any kidnap negotiation is to ask for proof of life to establish whether the hostage is still alive. This is done at various stages of negotiation such as before negotiations start, after death threat deadlines, after silences from the kidnappers of unexpected or significant length, and before the payment sequence begins.

Obtaining proof of life often takes the form of giving the kidnappers a question that only the hostage will be able to answer. Kidnap and security professionals know that not only does requesting proof of life establish that the hostage is alive, it communicates to the kidnappers that the hostage is highly valued, and can also help improve the hostage's morale by reminding him or her that he or she is not forgotten, that he or she is missed, and that people are working very hard for his or her release. It is for this reason that experienced kidnap consultants give careful consideration to the proof of life questions that are chosen for use.

A study by Giebels, Noelanders, and Vervaeke (2005) confirms the value of this careful selection approach. They conducted interviews with 11 former hostages from siege and kidnap events and found that all had the feelings of helplessness during captivity that one would expect. However, only the kidnapped hostages reported feelings of uncertainty and isolation during captivity. The authors suggest that one way to address this would be to choose proof of life questions that reinforce, not undermine, the hostage's social identity and morale. As the authors put it, "asking for the nickname of an ex-girlfriend may be considered a good question tactically, but not psychologically" (p. 246). It is preferable, therefore, to ask questions that are sure to evoke positive memories and affect than take the risk of evoking a negative emotional response on the part of the hostage.

Early Captivity: Hours to Days

Not surprisingly, the acute psychological reactions to early captivity are anxiety-based (Fletcher, 1996) and as such are not dissimilar to those seen in any acute anxiety state. They can range from the expected and comparatively mild subjective feelings of terror, fear, and anxiety to the more severe, which include hallucinations and dissociation. These acute stress reactions, while prominent in the early phases of captivity, tend to fade as the hostage adapts to the situation the longer captivity goes on.

In one study, Siegel (1984) found that 25 percent of the hostages he studied reported experiencing hallucinations during captivity. Interestingly, hallucinations were not reported unless isolation and the threat of death were both present. These hallucinations did not persist postrelease and did not indicate the initial onset of a thought disorder. However, vulnerable individuals with a previous history of thought or other mental disorders will often see a worsening of symptoms (Weschler, 1990). As noted earlier, the presence of a previous psychiatric history and peritraumatic dissociation are good predictors of future development of PTSD and should be monitored by clinicians.

A great variety of other, including self-destructive, behaviors can be seen. In one case, for example, Hostage N, an attractive, 31-year-old, middle-class Latin American housewife was kidnapped and held blindfolded and with no food for seven days. She reported that on the fifth day of captivity she banged her head on the wall of the small room under the stairs she was held in repeatedly out of sheer frustration, rage, and anxiety. She also reports that her subjective experience was that the expenditure of energy and resultant pain from the headbanging reduced her anxiety temporarily. The kidnappers ignored her. Fortunately, she was released two days later (Hostage N, personal communication, October 15, 2002).

Intermediate Captivity: Weeks to Months

The psychological effects of intermediate captivity are often a continuation and exacerbation of those seen in early captivity. This period is often characterized by ongoing psychological shock, fear of death, uncontrolled mood swings, anger, grief, and other symptoms similar to those exhibited by other trauma victims. Conversely, this period can also be characterized by the hostage beginning to adapt to his or her situation. It is often during this time that gastrointestinal distress, difficulty in sleeping, pain from injuries suffered during the abduction, and other physical symptoms become more noticeable and problematic. A complicating factor that often emerges in cases lasting weeks or months is the possibility of continued or recurrent traumatization through beatings, threats of death, mock executions, etc.

Stockholm Syndrome is a recognized psychological phenomenon that can emerge during this time. The syndrome was named after a six-day 1973 siege in Stockholm, Sweden, where an escaped convict captured four hostages during the course of a bank robbery. Some days later, the hostages began to regard the authorities with suspicion and started to establish a relationship with their captors. Interviewed after the ordeal, the hostages reported they had no negative feelings toward their hostage takers and that they feared the police more than they feared their captors.

Also called hostage identification syndrome (Fletcher, 1996), it has been poorly studied in kidnaps. The few studies that do exist have yielded contradictory results. Fuselier (1999), for example, reports that of the more than 1,200 hostage situations contained in the FBI's Hostage/Barricade System database, 92 percent of the hostages involved showed no signs of developing the syndrome. According to Fuselier, the Stockholm Syndrome "has been overemphasized, overanalyzed, overpsychologized, and overpublicized" (p. 22) out of all proportion to its actual rate of occurrence in hostage situations. On the other hand, Favaro, Degortes, Colombo, and Santonastaso (2000) report the syndrome's presence in 50 percent of their sample of Italian kidnap victims during captivity.

It is likely that the wide divergence between these two studies can be accounted for by differences in the samples they studied. Largely because of the successful efforts of U.S. law enforcement authorities in the early and mid-twentieth century, kidnap for ransom is a relatively rare occurrence in the United States. As a result, Fuselier's data contain a large number of short-duration (4–5 hours) non–kidnap-for-ransom cases such as domestic or barricade incidents. The Italian study specifically investigated kidnap for ransom cases, which are more prevalent in Italy and therefore of more relevance to this chapter. Of the dozens of cases with which the author is familiar, none has shown any of the changes of mentality characteristic of the syndrome.

John Wayne Syndrome. Another, marginally more common psychological phenomenon that can start during the weeks and months of intermediate-length captivity has been called by Hatcher (1987) the "John Wayne syndrome" (p. 236). It is characterized by feelings of guilt for not having attempted some heroic act in order to protect others from harm. In some cases, it takes the form of hostage guilt for "allowing" themselves to be kidnapped and making their families suffer. Of the few cases in which the syndrome was present in cases with which the author is familiar, the syndrome only appeared in men. Not surprisingly, the syndrome is usually accompanied by feelings of weakness and inadequacy that generally fade over time.

Long-Term Captivity: Months to Years

Like intermediate-length captivity, the psychological effects of long-term captivity are often a continuation and exacerbation of those seen in previous phases. Though this period can be characterized by a reduction in acute anxiety symptoms such as psychological shock, terror, fear, and anxiety, other symptoms such as extreme emotional lability, despair, depression, anger, and grief continue to be present. Some excellent accounts of long-term captivity written by former hostages exist. Two examples include *An Evil Cradling*, by Brian Keenan (1992), and *Some Other Rainbow*, by John McCarthy and Jill Morrell (1993), which is each man's personal account of the same event and of their imprisonment together over several years.

Periods of relative normality, boredom, and tedium increase the number of challenges faced by the hostage during this period. This time can also be characterized by the hostage beginning to adapt to his or her situation through the development of various coping strategies aimed at reducing stress and gaining some modicum of control. The late U.S. Admiral James Stockdale, for example, a Vietnam War POW for seven years who was held in solitary confinement for more than four of them, devised memory games to relieve the extreme boredom and sensory deprivation. One game was trying to remember every single one of the presents he had received at his third birthday party. He also reported that he wrote at least one complete novel in his head without paper or writing instrument (Admiral James Stockdale, personal communication, May 1981).

Brian Keenan, who was held for four years in Beirut in the 1980s, writes eloquently about the internal cognitive experience of extreme understimulation, tedium, and boredom (1992).

> I begin as I have always begun these days to think of something, anything upon which I can concentrate. Something I can think about and so try to push away the crushing emptiness of this tiny, tiny cell and the day's long silence. I try with desperation to recall the dream of the night before or perhaps to push away the horror of it. (p. 62)
>
> The word "albumen" intrigues me for a while and I wonder where the name came from. How someone decided once to call that part of the egg "albumen." The shape of the night has lost its fascination for me. I have exhausted thinking about the form of an egg. A boiled egg with dry bread is doubly tasteless. I make this meaningless remark to myself every day and don't know why. (p. 63)

Keenan also writes vividly about the despair and utter hopelessness of captivity. On one day, he called it, "That slow down-dragging slide and pull into hopeless depression and weariness. The waters of the sea of despair are heavy and thick and I think I cannot swim through them" (p. 63). It is not uncommon for hostages to experience severe depression, apathy, and withdrawal, often accompanied by varying levels of suicidal ideation during long-term captivity.

Despite its short duration, however, the following intensely violent case provides an example of how overcoming previous psychological stressors can provide a protective effect against traumatic stress reactions. In 2002 Hostage Q, a bright, high-functioning, 28-year-old white male with no previous psychiatric or drug use history was kidnapped and held for four days by a particularly brutal kidnap gang. He was referred to me for evaluation and treatment by a security company at his own request shortly after release. Throughout captivity, he was kept bound, blindfolded, made to wear earplugs, and mercilessly beaten both randomly and for reasons such as asking to go to the toilet. On several separate occasions, the kidnappers held a gun to his head during interrogations.

Q reported that some of the coping mechanisms he used in captivity were voluntary dissociation, prayer, and meditation. When asked if he had experienced any suicidal thoughts, he reported that he briefly had some mild, transitory, and passive suicidal ideation but no plan. He reported that there had been several moments during captivity when he had felt extremely depressed and hopeless, but they were not as bad as the time some years ago when he had experienced suicidal ideation for the first time. He added that the depression two years ago had helped him cope with captivity.

When asked to elaborate, he reported that some years earlier he had left his very comfortable, wealthy, pleasant, close and supportive family and friends to get an advanced degree in the north of England. Though initially shocked by the cold, dark, and damp English weather, he was stunned when he saw the narrow, rusty, sagging cot in the damp, dirty, 9 ft × 9 ft dormitory room, or "cell," as he called it, which was to be his home for the next two years. The contrast between his pleasantly warm and sunny homeland and the famously unpleasant British weather was stark and became a symbol for him of the deep depression he eventually sank into.

He reports that this was the first time he had ever experienced any suicidal ideation. This was mostly passive, but there were moments when he had more active suicidal ideation that he reports he never had a plan or intention to carry out. Through meditation and other self-help efforts, he recovered from the depression several months later and reported that though difficult, it had been a learning experience for him.

In summary, the many and varied responses of hostages from short- to long-term captivity exhibit an extensive range of what can only be characterized as expected, normal reactions to extraordinary stressors. They are having normal reactions to abnormal events. Experience shows us that hostage reactions to kidnap are as varied as the hostages themselves are. Further, the great range of responses observed point out that there is probably no typical or normal way to respond to being kidnapped. Put another way, there are probably as many reactions to being a hostage as there are hostages.

The Experience Outside

> They also serve who stand and wait.
>
> —*Milton (1909)*

The psychological impact of kidnap is often worse on the family than the hostage. In fact, in one of the few studies of families who have suffered kidnap, Navia and Ossa (2003) go so far as to assert that "kidnapping was as traumatic for families as for actual victims" (p. 111).

This is not surprising if one remembers that the cold but inescapably rational logic of kidnap demands it be thus. Kidnap is not done to harm the hostage, but rather to use the credible threat of harming him or her to put psychological, not actual, pressure on the hostage's relations. Put simply, the kidnappers' ultimate target is not the hostage, but the family.

Though the captive hostage suffers a range of distressing sensations, many hostages have reported to the author that they have taken a certain amount of comfort from the fact that at the very least, their situation is known to them. They know they are alive, what their physical and psychological condition is, and they know their families do not and that this causes them a great deal of anguish.

The family, on the other hand, is suspended in an information vacuum, imprisoned by their intense need for information about the hostage and the kidnappers' constant, often exquisitely timed threats, which can induce a sense of being watched, and protracts the trauma. The torture is made worse by the utter, abject powerlessness imposed on them by the situation. Put another way, the family is a captive as the hostage.

It is well known that "social support is important for people coping with trauma" (Kaniasty 2005, p. 3) and that families are usually the single most important source of support in hostages' recovery. Further, research has shown that "Individuals reporting lower levels of perceived social support after the traumatic event reported higher levels of PTSD symptoms or rates of current PTSD" (Ozer et al., 2003, p. 61) than those reporting higher levels of social support. Despite withstanding the worst of kidnaps' impact and outcomes such as PTSD, though, families often receive less attention than the hostage does from health care professionals and others.

The País Libre (Free Country) Foundation, a Colombian nongovernmental organization (NGO) formed in response to that country's enormous kidnap problem, is dedicated to providing leadership, "to represent, promote, … and produce knowledge on kidnapping at a national and international level" (País Libre, 2005, 2). Part of their work includes supporting research projects on the psychological effects of kidnap on hostages and families. In one study, Rodríguez (2005) reports that of a sample of 74 former hostages and 193 families, 59.3 percent showed symptoms of ICD-10 phobic anxiety disorders (World Health Organization [WHO], 2003), which are comparable to the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* anxiety disorders (American Psychiatric Association [APA], 1994), and 49.2 percent showed symptoms of depression postrelease.

Other research on the psychological effects of life-threatening separations on families has studied the families of soldiers on military deployment. Case experience and anecdotal evidence indicate that there are many similarities between military and kidnap families and that it is safe to generalize from one to the other. Some of these generalizations include (1) if one member of a family is traumatized, others will be as well; (2) the family's reactions, needs, and recovery will generally mirror that of the hostage; (3) secondary traumatization of other family members will often depend on the psychological distance between the hostage and family member. In other words, extended family members appear to be less vulnerable to secondary trauma than nuclear, closer family members; and (4) adjustment to the hostage's return is commonly fraught with difficulty. In sum, many of the psychological effects on the family, as well as their needs for healing and recovery, mirror that of the returned hostage.

But the clinician can only meet these needs if they are first recognized. It is for this reason that clinicians working with this population should be intimately familiar with, and experienced in, family dynamics and therapy techniques in order to provide appropriate interventions. This will also include delivery of information about what the family can do to support the member with PTSD, and education and treatment about the nature and course of PTSD.

One recent study supports the notion that if one member of the family is traumatized, others will be too and that distance from the hostage affects who will be secondarily traumatized. Dirkzwager, Bramsen, Ader, & van der Ploeg (2005) found that partners of peacekeeping soldiers with PTSD symptoms were more likely to have traumatic stress reactions than were the partners of peacekeepers without PTSD symptoms. Interestingly, parents of symptomatic peacekeepers, on the other hand, did not show increased levels of traumatic stress reactions, compared to the parents of nonsymptomatic peacekeepers, possibly because most peacekeepers were no longer living with their parents and this distance protected parents from developing symptoms.

Navia and Ossa (2003) found similar effects in a sample of families who had experienced kidnap, reporting that 39.1 percent of family members studied had PTSD during the kidnap, and 19.6 percent had it after the kidnap. But contrary to the findings made by Dirkzwager et al. (2005), Navia and Ossa note that in their sample of kidnap families "psychological distress and PTSD in family members were due to the traumatic experience, not due to the presence of PTSD symptoms in the kidnapped person" (p. 111).

An additional, usually critical, and always stressful consequence of kidnap is the financial difficulties the families will experience because of having to collect a large cash ransom. This is exacerbated if the hostage is the breadwinner or family money manager. Even in the small minority of cases where the hostage is covered by kidnap insurance, the family must raise the large amounts of cash necessary to pay the ransom, which will later be reimbursed. But this often means that loans must be sought and houses, cars, and other family assets must be converted to cash. This must be done as secretly as possible to avoid attracting the unwanted attention of the kidnappers or the authorities.

Anyone who has experienced financial pressures under ordinary circumstances will know how stressful and taxing it can be. It is not hard to imagine, then, the enormous magnitudes of increased complication and difficulty presented by money problems during a kidnap. There has been at least one occasion where a son did not want to pay a ransom, for example, because it was his inheritance. Understandably, this caused a great deal of additional family turmoil.

Certain members of the family who are at lower risk of the development of posttrauma symptoms, such as older adults and childless men, might be encouraged to assume a larger share of the burden of the family's recovery by taking on a larger share of family responsibilities during this time.

Effects on the Family

As with individual hostages, families will also show a wide range of emotional, cognitive, and physical reactions to the kidnap of a loved one. Not surprisingly, these often closely resemble hostage reactions as noted earlier and can include marked anxiety, fear and worry, avoidance of reminders of the event, guilt and shame, anger, sadness, depression, numbness, self-blame, etc. As with hostages, many of the common responses that families exhibit during and after a kidnap are natural and expected reactions to extreme stress and can be managed as such by clinicians.

Though a traumatic event may bring some families closer together, this should not be assumed. Misunderstanding, fear, and blame regarding the incident can and does impair functioning in even the most close-knit, functional family.

Though not a comprehensive list, as individual family needs will vary, the following is presented to give a general overview of some of the issues that must be managed effectively to help family recovery.

Sleep problems are probably the single most crucial, yet difficult to manage, symptom faced by hostages and kidnap families. Animal and human studies have confirmed the functional relationship between fear and sleep systems in the brain (Woodward, 2004). Sleep disturbances have been implicated in the development and maintenance of many psychiatric disorders, especially depression (Nordin, Knutsson, Sundbom, & Stegmayr, 2005). Chronic pain and other physical complaints have also been associated with poor sleep (Carmichael & Reis, 2005), and poor sleep may also contribute to increased mortality (Nordin et al., 2005). Sleep deprivation from any cause can severely impair memory, energy levels, mental abilities, and mood, often causing pessimism, fatalism, sadness, depression, stress, and anger.

In most kidnap cases, sleep problems are characterized not by the excessive need to sleep, but by difficulty falling asleep or early-morning awakening. Exhaustion, fatigue, and lack of physical energy are caused by sleep deprivation and are commonly reported by kidnap families. It is not an accident that torturers the world over use sleep deprivation as the first and most powerful tool in their attempt to break their victims' will.

> To appreciate the value of a good night's sleep, just ask someone who hasn't slept well. Good sleep is a period of recuperation and rejuvenation. While asleep, people become physically and emotionally refreshed from the exertions and mental strains of the day. (Carmichael & Reis, 2005, p. 526)

Because sleep problems are not only symptomatic of extreme stress, but also contribute to it, proper clinical management becomes essential. Early clinical interventions might include psychiatric or medical consultation to determine the advisability of prescribing sedatives for the short-term relief of insomnia.

Sedatives and other sleep aids should be used only under the supervision of a qualified medical professional, for short periods, only for severe or extremely distressing insomnia, and every effort should be made to treat the problems that cause the insomnia.

Negative affect can take the uninitiated family by surprise. Despite knowing that negative feelings toward the traumatized person might be unfair, family members can still experience remarkably powerful negative affect toward the returned hostage. Traumas often change people, and families might believe that the traumatized individual is no longer the person they knew and loved. Happy-go-lucky people may become withdrawn, fearful, and aggressive. Alternatively, families can grow discouraged at the traumatized person's inability to "snap back" after the trauma.

Various health problems can appear or existing ones made worse by the effects of extreme stress. It is well known that stress can cause physical health problems (Everly, 1990). During a kidnap, families are under the most significant stress of their lives and will often complain of physical ailments that they do not know are caused by stress. Symptoms such as migraine headaches, head and neck pain, asthma, shortness of breath, significant body weight fluctuations, gastrointestinal or other bowel problems, and accident-proneness are often seen and treated by general medical practitioners who are unaware of the extreme stressors their patients have been experiencing. Though most will recover well, it is important to carefully monitor stress symptoms in kidnap families and to be alert to the possibility of the development of poor health practices such as increased drinking or smoking.

Families may show symptoms of ignored stress and distress in a variety of ways. It is often difficult for them to identify and manage it, so it is incumbent upon the experienced clinician to be alert to the presence of signs and symptoms. Some of these are:

- Repeated or unresolving family conflict
- Family members becoming isolated from one another
- Children's overdependency and clinging
- Scapegoating one or more family members (often children)
- Disciplinary or academic problems in school-age children
- Substance abuse, especially excessive alcohol use
- Violence, including verbal abuse
- Withdrawal from family interactions
- Continual tiredness or sleeping for longer than usual or during the day
- Insomnia
- Avoidance of normal social situations or family events
- Excessive pessimism or cynicism

In extreme cases, where stress is excessive or overwhelming the individual's or family's ability to cope and there is evidence of danger to the welfare of a child or there are signs of verbal or physical violence or suicidal thoughts or plans, action must be taken immediately to safeguard the lives and health of those involved. Clinicians and others should not hesitate to manage proactively the situation to ensure a safe outcome.

Effects on marriage are diverse and are mediated by many factors, including the pretrauma condition of the marriage and postrelease spousal responses, for example. Not surprisingly, marriages can become strained and difficult, and there can be changes in the way people see themselves, their spouses, or their children.

For example, in one study of 381 hostages held in the Middle East during the first Gulf War, Easton and Turner (1991) found that 47 percent of the married hostages reported some effect on their marriage, with 22 percenet experiencing a loss of libido and poor communication. Interestingly, 23 percent of the hostages studied reported a strengthening of the marital relationship. These results should be interpreted with caution, however, and not as an endorsement of kidnap as an alternative marital therapy technique.

Clinicians working with this population should be aware that the problem is not *that* spouses fight, but rather *how* they do it that matters for making the relationship stronger or causing serious, marriage-threatening problems (Markman, Stanley, & Blumberg, 2001). Though most couples will become frustrated and angry at each other from time to time, the greatest risk of damage to the relationship comes when the couple's pattern for managing frustration and anger becomes contempt for the other. "As their frustration mounts, people go from wanting to be heard by the other to wanting to hurt the other" (p. 47). The increased emotional intensity caused by the exchange of angry and negative comments can escalate to the point where the argument descends into the most damaging pattern of all, a caustic attack on character. This is painful and almost invariably leads to one or both of the partners putting up barriers to the relationship by becoming defensive (Markman, Stanley, & Blumberg, 2001).

The following summarizes many of the common effects on marriage and other intimate relationships that can be seen.

If one of the partners is suffering, he or she might find it difficult to talk to his or her partner and retreat behind a wall of silence or suppressed anger. This often leads to one or both of the partners feeling isolated and helpless.

Some victims and spouses find it difficult to stop talking about the event. Their constant preoccupation with the incident can become boring and irritating for partners whose only wish is to move on. This can be made worse by one partner not understanding how his or her behavior is affecting the other. This can be infuriating to the partner.

Conversely, other people work very hard to avoid anything to do with the incident and will go to great lengths such as keeping away from people, including spouses and those who are there to help, to maintain a large distance between themselves and the incident.

Traumatized people often have nightmares and dreams about the event and will wake up in a panic or suddenly jump out of bed. This can be very disturbing and frightening for partners.

Feelings of apathy, despair, hopelessness, and that life is a waste of time are common in those who have been traumatized. This is often accompanied by confusion and disorientation, the inability to make even simple decisions, poor concentration, and a loss of interest in family, friends, and hobbies.

Formerly competent and high-functioning people can appear to become incompetent, which frightens and disorients the partner.

Feelings of complete failure on the part of the released hostage and the expression of sentiments such as, "I didn't do what I could have or should have done. I didn't behave like a man. I should have … I shouldn't be like this…. I'm utterly degraded … " shows that the speaker is feeling shame, fear, and guilt about his behavior or lack of ability to cope at the time, as well as the loss of self-esteem that often results from traumatic stress. These feelings can cause the partner to work very hard, but in vain, to convince the spouse that these thoughts are not true. This, in turn, can induce feelings of failure in the partner and is extremely frustrating and taxing.

Spouses can become frustrated, and in extreme cases, disgusted by their spouse's constant anxiety about safety and feelings of vulnerability. Their angry response can be to tell them to pull themselves together.

Pent-up feelings in either spouse can result in the unpredictable and unexpected expression of anger, and in extreme cases, violence.

Depression can often lead to the loss of interest and joy in previously enjoyable activities such as work or hobbies. Another common effect of depression is reduced or absent sexual desire and/or sexual dysfunction. Additionally, the presence of stress hormones such as adrenaline often makes it difficult to initiate and enjoy sex. This can also include feelings of general dissatisfaction with one's present partner. The desire to act on this dissatisfaction and make changes such as looking for new relationships or wanting to move home can be attempts to recapture former joie de vivre. If left untreated, these can become extremely hurtful to the other spouse and can cause serious, but often unnecessary, marital upheaval.

What about the Kids? Effects on Children

Age, developmental stage, changes in care arrangements, daily routines, and many other factors will contribute to whether a particular child is negatively affected by the family's stress. Not surprisingly, one of the most important factors in determining whether this happens is how the parents react to the stress. Studies show that traumatized children with greater family support and less parental distress have lower levels of PTSD symptoms (Faust & Katchen, 2004). In fact, some researchers have speculated that the problems commonly found in traumatized children may be more influenced by risk factors such as parental reaction than the traumatic experience itself (McClellan, Adams, Douglas, McCurry, & Storck, 1995).

Ultimately, parents are the experts on their own children. Worrying about children under normal circumstances is a significant enough stressor, but worrying about children under the additional pressure of a kidnap is orders of magnitude worse. As a result, many parents become extremely anxious about whether their children's reactions to family stressors are normal and wonder what to do if they are not. Parents often need to be reassured that they are doing the right thing for their children and that is why interventions that can remove at least some of the burden of stress should be undertaken as soon as possible. It is for this reason also that the critical first step to any family or child intervention is to give parents the strong reassurance that most children, like most adults, will recover completely within a few months.

The following general overview of children's reactions to kidnap and suggestions for clinical interventions is not comprehensive, nor intended to represent the full range of possible reactions to stress.

Like adults, children can experience a wide range of reactions to the kidnap and release, but unlike adults, they are less likely to verbally express what is bothering them. Instead, their responses might appear behaviorally in the form of sleep disturbances or behaviors such as an increased desire to sleep in the parents' bed; increased separation or stranger anxiety; preoccupation with certain words or symbols; declining school performance; difficulty getting along with siblings, peers, or parents; social withdrawal; or increased accident-proneness.

Parents might be disappointed by a child's initially negative reaction to the hostage's safe return. A useful clinical intervention might be to help the parents understand that the child might be feeling reassured by the hostage's safe return, and as a result, feels safe enough to express feelings of fear or anger over what may have been perceived as abandonment.

To help children deal with the family stress of kidnap, parents might find it useful to:

- Remember that it is difficult, if not impossible, to keep secrets from children. Children may not know the specifics of what is happening to the family, but they will know that something is happening. This can make children feel afraid.
- Remember that children will often mirror parents' reactions. If parents are resilient, the child is more likely to be resilient.
- Communicate their positive expectations to children.
- Try to answer children's questions honestly and in an age-appropriate manner. A simple rule of thumb is to think of information as food. Give children as much as they want, but do not force it on them. If they want more, they will ask for it.
- Provide warmth and reassurance without minimizing the children's concerns. Children are very reassured by physical contact. This is a great time for hugging and holding hands. (This advice applies to adults as well!)
- Listen to children's thoughts and feelings in a nonjudgmental fashion. Remember that monsters are very real to children and they want to be protected from them by their parents.
- Realize that, like adults under stress, children will often retreat to places that feel safe. For young children in particular, this might mean that they will regress to behavior that is more babyish where they feel comfortable, such as

clinging more or temporarily losing an acquired developmental skill such as toilet training.

- Realize that it is normal for children to feel fear and anxiety and for it to find expression by crying, for example. But it is important to communicate to the children that even though their parents might be scared or sad, they can still take good care of the kids and that they love the children very much.
- Encourage children to think positively about the captive hostage. Some children benefit from drawing pictures or writing letters about what is happening.
- Try not to overwhelm the children with the parents' experiences; be sure to talk about what happened in the children's lives while the hostage was gone.
- Include the children in any family recovery activities.
- Seek help from a mental health professional for the family if it is having difficulty recovering or functioning on a daily basis.

The Release: Management, Issues, Assessment, and Treatment

> I walked into the living room of our home in Cali, accompanied by eight Indians who had brought me from the mountains, the night of 23 August 1995. By then, my family had assumed I was dead. I had lost more than 50 pounds, and vitamin deficiency and malnutrition had turned my gray hair to a garish orange. (Hargrove, 1998)

Planning

Though it is usually difficult to accurately predict the exact time of the hostage's return, there is a great deal that those at home can and should do to help themselves and the hostage reunite as smoothly as possible. These activities will vary according to many different variables, but it is important to remember that in all cases, hostage reception is a long-awaited, highly desired and emotionally charged moment that usually evokes exaggerated and unrealistic expectations. If handled well, the hostage reception can make a huge positive difference to the hostage and his family. If bungled, disappointment and a lingering bitter memory of the reception are probable outcomes.

Careful thought and planning is the important first element of a smooth hostage reception. Control of the environment and conditions into which the hostage will be received is usually a good place to start. Thought should be given to whom, of the many people who will want access to the hostage, should be allowed that access and when it should be allowed. Some kind of "gatekeeping" policy should be established at the earliest opportunity to protect the privacy of the hostage and his family and to reduce the number of unnecessary intrusions into this critical time.

Many different parties will want to have access to the hostage as soon as possible after his or her return. But because the overriding priority at this time is the health, safety, and comfort of the hostage and his or her family, the needs of other parties are secondary and steps should be taken to ensure that this remains so. Outside the immediate family, interested parties might include extended family, friends, neighbors and other well-wishers, law enforcement or other government authorities, private security or insurance company representatives, and the media. Some returning hostages will have to be protected from the intrusions caused by well-meaning, but emotionally draining, well-wishers. Others will want to tell their story many times and may need help coordinating the logistics of meetings and media appearances. In some cases, family or friends might have to turn down requests on behalf of the hostage who might feel obligated to accept all of them to the detriment of his or her own health.

The following questions give an idea of the issues that must be anticipated and provided for. Because no two cases are the same, the questions will vary and flexibility will be required.

- Where will the family reunion occur?
- Who should be there when the hostage arrives? Who will be there? Close or extended family? Friends?
- Who decides who is an appropriate person to be there?
- Will the media be an intrusive presence? If so, how will they be managed? Who will do it? What statements, if any, will the family make? Who will make them?
- What, if anything, will the authorities require of the hostage? When?
- Where will the hostage receive a physical checkup? Who will perform it?
- What if the hostage is released in the middle of the night, or needs immediate medical assistance? Will the physician be available?
- What if the hostage needs medication, such as sleeping tablets or tranquilizers, immediately? Can they be procured quickly and easily or at night?
- Is there a supply on hand of any medications the hostage requires or is likely to need?
- What if the hostage requires a dental checkup and treatment?
- If the hostage reception will take place somewhere away from the family home, is a bag packed and ready to go with all the things the returning hostage is likely to need?
- Who will coordinate and provide transportation if necessary?

Anticipating the hostage's wants and needs and preparing them for his or her return is not only an excellent way of showing caring and concern for the hostage but is a highly effective exercise in creating the expectation of a positive outcome for those awaiting his or her arrival at home. It also helps reduce anxiety by taking his or her mind off the event and increase the empowerment by giving him or her something active, positive, and useful to do.

Families can think and talk about the kinds of material, physical, and other needs the hostage is likely to want upon his or her arrival. This might include mundane but comforting things such as the preparation of his or her favorite or bland foods if the hostage has a delicate stomach, for example, making sure that comfortable clothes and footwear are ready to wear, providing a watch, a newspaper, or anything else the hostage might like.

Depending on the amount of time and the conditions under which they were imprisoned, hostages will show the ravages of stress, sleep deprivation, fear, terror, anxiety, foul conditions, disease, and maltreatment in their posture, gait, and haggard faces. Families can be surprised and taken aback by the disheveled, often smelly, stranger suddenly in their midst; with the hostage often being as taken aback by his or her own appearance because of never having a mirror in captivity. A dramatic loss of weight is not uncommon and previously clean-shaven hostages might return with long, straggly beards, for example.

After the initial greetings of the reunion, the first thing many hostages want is to shower or bathe and to eat some decent food. Other hostages might not be hungry because of the high levels of stress they have been experiencing.

Standard operating procedures for the returning hostage include provision of a physical examination from a trusted physician as soon as possible after release. If critical medical treatment is required, then that will determine the timing and nature of what the hostage and family and others do next.

Postrelease

For the sake of clarity, we again refer to and expand Fletcher's (1996) excellent and well-organized summary of postrelease effects. Fletcher divided this time into three periods labeled early, which includes the first few days postrelease; intermediate, weeks to months; and late, which ranges from months to years postrelease. Again, this division is used solely for the sake of organization and is not intended to imply that there are any discrete psychological or temporal phases of return from captivity.

Early: First Few Days

> Elated mood; emotional lability; overtalkativeness; overactivity; optimism; feeling special; tension; tiredness; nightmares; nervousness; phobias; vague physical complaints; insecurity; feeling misunderstood; preoccupation with event; indecisiveness; guilt: (a) for leaving others behind, (b) for surviving, (c) for behavior towards others in order to ensure own survival, (d) for not being more heroic (John Wayne Syndrome); injuries; infectious diseases; untreated illnesses (physical and psychiatric); nutritional deficits; dental problems; difficulty relating to loved ones; media pressure/interference. (Fletcher, 1996, p. 235)

There has been a great deal of controversy recently in the psychological literature and elsewhere about the advisability of administering early psychological trauma interventions such as Critical Incident Stress Debriefing (CISD), (Mitchell, 1983). Generically known as *debriefing*, these are usually single session, semistructured group crisis interventions designed to reduce the impact of the trauma and prevent later adverse outcomes such as PTSD. Usually conducted within one week of the event, CISD is intuitively appealing and has been the posttrauma treatment of choice, especially for pre-existing teams that have experienced traumatic mission events for more than 20 years.

Although it is generally well accepted by those who receive it, the CISD research literature does not support the efficacy of one-session interventions immediately after trauma in decreasing psychological distress beyond natural recovery (Foa, Keane & Friedman, 2000; Van Emmerik, Kamphuis, Hulsbosch, & Emmelkamp, 2002). In fact, some studies have found that single-session CISD might hinder natural recovery in the long run (Bisson, Jenkins, Alexander, & Bannister, 1997; Mayou, Ehlers, & Hobbs, 2000; Rose, Bisson, Churchill, & Wessely, 2001).

Despite these findings, however, there is at least one account in the literature (Turnbull, 1994) that supports the author's observation that most hostages receive and inadvertently benefit from the single-session operational debrief that concludes kidnap cases, and that in many cases, sufficiently meets the needs of hostages.

Hostages are usually interviewed as soon as possible after release to conduct the final operational debrief, the purpose of which is to gather detailed data about the kidnappers, their methods, etc. It is standard operating procedure for all law enforcement, government, and security professionals. Sometimes called intelligence debriefing, the interviews are done as soon as possible after release so that the hostage's memory of the events is fresh. Interviewers want to know about the events leading up to the kidnap and as much detail about every aspect of the event as possible. The recounting of the story not only provides security professionals with the vital data they need but also provides the hostages with an opportunity to tell their story in the exhaustive detail that could bore nonprofessionals.

Turnbull (1994) provides an excellent description of how operational and psychological debriefs complement each other when he writes, "Perhaps the greatest lesson which was learned during the debriefings of both POWs and released hostages in 1991 was the strong impression that intelligence debriefing and psychological debriefing … were mutually reinforcing" (10).

It is clear that the operational debrief provides the trained debriefer or clinician an opportunity to assess the hostage's psychological state. But it is important not to confuse operational with psychological debriefs, and to ensure the unqualified or untrained debriefers do not engage in psychological intervention and that untrained clinicians not conduct operational debriefs.

Reentry: There's More to Survival Than Just Coming Home

The most cherished desire of anyone connected to a kidnap is the hostage's safe release. Upon returning home, all anyone wants is to return to normal, and most hostages do so with no major problems.

The hostage's release can mark a convenient and intuitively appealing conclusion to what is in many cases the family's worst experience. As a result, many returned hostages, families, professionals, and others believe that release marks the end of the trauma, and in fact, there is research that supports this. Navia and Ossa (2003), for example, report that for the kidnap families they studied, the period of captivity was the most stressful of the whole event.

But in the euphoria and happiness of the hostage's return, some families may underestimate how long it will take to readjust to normal life. The fatigue and depression that follow the postrelease euphoria can surprise and disappoint those families who expect the elation to last.

While this is also true for the professionals involved with the case, experience tells them that this kind of elation is inevitably short-lived and almost invariably followed by a dive into low mood, fatigue, and even depression. A good clinical intervention at this point is to provide clients with the foreknowledge that this drop in mood might occur and that it is normal. It is often at this point that referral to a mental health professional is made.

Though the majority of returned hostages experience little difficulty reintegrating into life at home and work, it is not unusual for them to experience some transitory difficulty reintegrating after separations under life-threatening circumstances (Busuttil & Busuttil, 2001).

Many survivors, families, and others must overcome serious psychological trauma long after the original ordeal is over and are disappointed when things do not immediately "snap back" into ordinary life. Released hostages are often hit right away with a long list of problems. Bills, family disputes, and expectations that family interactions and intimacy will spring right back to prekidnap levels can add up to create additional and unexpected stresses.

Some of the stress and anxiety is the result of the culture shock that comes from being in a hostile environment one minute and sitting with one's family the next. Friends and family may want to talk about the kidnap when the person returning wants to forget. Or conversely, friends and family may not provide an opening for the released hostage who does want to talk. Other pressures, such as second-guessing decisions made while the hostage was away or conflicts over family relationships, can build unless families are made aware of them and manage them proactively.

It is quite normal to experience days or even weeks of mild to moderate symptoms of depression, anxiety, and anger, even if the initial homecoming was full of joy. Disorientation, confusion, feeling sad and depressed are also common experiences for released hostages. Even if there are problems resulting from sustained exposure to hostile environments, stress reactions or fatigue are not necessarily signs of ill health. In fact, they are normal reactions to abnormal situations.

The author's experience has shown that perhaps the most valuable intervention to be made at this time is to reinforce the message that homecoming has its own brand of stress, will probably take longer than families want, and that understanding this fact is the first and perhaps most important step in the process of long-term successful reentry to the family.

In summary, some useful and commonly required clinical family interventions during the first few days of freedom are (1) to guide families through the likely sequence of events of reentry and readjustment; (2) to validate their experience, in other words, to let them know they did well during the incident; (3) normalize their experience by showing them that whatever responses they had to the kidnap and hostage's return home are a normal part of readjusting; (4) provide them with the information and other resources they need to heal themselves; and (5) support and reinforce positive coping behaviors.

Put simply, families often need to know that what is normal is what works for the individual family. There are no standard or conventional stages for reentry. The process varies from person to person and from time to time.

Intermediate Postrelease Issues: Weeks or Months

Some of the effects seen weeks or months after release include:

> Anxiety; tension; sleep difficulties; substance misuse; feeling lonely; headaches; intestinal symptoms; rheumatic complaints; eczema; sexual problems; persisting effects of injuries, e.g., epilepsy or other neurological damage from beatings; persisting infectious diseases; financial changes; marital problems; employment problems; problems with children; difficulties readapting into social conventions; stigmatization or discrimination. (Fletcher, 1996, p. 235)

Late Postrelease Issues: Months or Years

Some additional effects seen months or years after release include diminished optimism; continuing readjustment to both positive and negative changes (Fletcher, 1996, p. 235).

Assessment and Treatment

As noted earlier, the assessment and treatment of kidnap-associated ASD and PTSD is largely similar to that of non–kidnap-associated ASD and PTSD and will therefore not be addressed in detail here. Instead the focus will be on those management and clinical treatment issues that in the opinion of the author are unique to kidnap-associated trauma.

Experience and the literature show that in general, hostages and victims' prekidnap health is the best predictor of postkidnap recovery (Norris, Byrne, Diaz, & Kaniasty, 2005). In other words, people will emerge from their kidnap experience about as well as they originally entered it. Vulnerable individuals, such as those with a previous history of psychological disorder, are at particular risk for the development of PTSD.

Perhaps the single most important intervention that can be made in the management and treatment of victims of kidnap is to validate their experience and their responses to the event. Victims often benefit from knowing that they are having a normal reaction to an abnormal event. It is the experience of the author that virtually all the clients he has treated wanted reassurance that they had done the "right thing" either in captivity, or in managing family and other stressors outside.

Another issue of concern is that many individuals will consult their family doctor shortly after experiencing a trauma, but will not mention the kidnap or any psychological outcomes arising from it. It is not uncommon for individuals to present to their family doctor or emergency room complaining of "unusual" symptoms such as sleep disturbances, unexplained aches and pains, etc., and this is one reason it is crucial that the clinician ensure that the holistic health care needs of the hostage and family are met.

A small number of people will have a delayed reaction to the trauma. While the assessment and treatment of such cases is essentially the same as for nondelayed cases, it is why the early provision of psychoeducation can act as an early warning to the individual(s), reassure them that it is normal, and prompt them to seek treatment in a timely manner.

Though psychoeducation is a key component of many treatment approaches for ASD and PTSD, experience has shown that it takes on an increased relevance and power in the treatment of kidnap victims. It is often said that knowledge is power and that kidnap is the complete and absolute amputation of one's personal power. Psychoeducation aimed at helping clients regain a sense of personal empowerment is one potent and highly effective early intervention in kidnap cases.

Ideally, the delivery of a psychoeducational intervention to the family will begin as soon as possible after the abduction. It is done at this time to (1) reinforce the positive coping skills they already possess; (2) help prevent the development of negative coping skills such as increased alcohol use; (3) provide the clinician with an early opportunity for triage of risk factors; and (4) provide support and any other resources they might need. Psychoeducation can also be delivered with great efficacy to the family at some point prior to or shortly after the hostage's release, but late delivery misses the opportunity to give the family resources and reinforcement they can use during what might turn out be a protracted event.

In this context, psychoeducation has several main aims. The first is to increase family members' understanding and ability to manage their own personal stress and trauma reactions. Clients should be informed about the adaptive nature of stress reactions and about the negatively reinforcing qualities of avoidance. Teaching positive coping strategies and stress management techniques has benefits beyond helping them deal more effectively with stress. Helping family members regain control of their own feelings and health can enhance the sense of personal empowerment, mastery, and safety eroded by the kidnap.

The second aim is to prepare the family for the hostage's return by building awareness of the signs and symptoms he or she might show upon release. This brings the additional benefit of helping to (1) increase empathy and patience for the returned hostage; (2) reduce the stigma of mental injury; (3) increase the family's understanding of the importance of early intervention in the event of psychological distress; (4) increase the family's willingness to participate in any future treatment plans; and (5) improve the family's ability to handle future challenges through the increased knowledge of the supports and resources available to help them cope. Answers to frequently asked questions such as, "What can I do when John is angry or cries or is afraid?" etc., can also be given at this time.

As noted previously, an aim of psychoeducation is to reduce the stigma associated with mental injury. Historically, few people use the mental health services available to them after a kidnap event (Security Consultant E, personal communication, August 10, 2001). Part of the reason for this is that until relatively recently these services were referred to by terms such as *psychiatric care* and *rehabilitation*. These are terribly stigmatizing labels and imply a further reduction in one's level of mastery. Other reasons why people don't get help is that they (1) don't realize there's a problem; (2) don't think they can be cured; (3) think it's a sign of weakness; (4) feel guilty about seeking help for themselves; and (5) feel "psychiatric care" is insulting. Added to these reasons is another one: the relatively small number of mental health professionals available, interested, and knowledgeable in this area.

A further problem faced by traumatized people is that they sometimes feel they have to prove the seriousness of their physical or mental condition to health professionals and others who may be unaware of the cause of the trauma. This struggle is an additional stressor that over time can make symptoms worse. Consequently, an important additional component of the intervention at this time is to validate the clients' experience and reinforce their attempts to advocate for themselves.

Another very effective intervention that has been observed to be particularly useful is that of convening a family meeting to provide the extended family group with security training and information about the psychological consequences of kidnap. This included increasing awareness of the fact that individuals would react differently to stress, that the signs of stress and trauma that might appear should not be thought of as mental illness but rather an understandable reaction to a mental injury.

One family meeting, which the author attended and helped coordinate, included a talk by an expert on forgiveness. It was thought by the family that forgiveness, or at least exploring the possibility of forgiving the kidnappers, would be a good way to move beyond the event and reduce any lingering resentment or fear. Another topic that was addressed during the family meeting was whether to liquidate the family business and emigrate to another country. Though the merits of forgiveness and emigration were strenuously debated, all agreed at the end that the meeting bought the family closer together and strengthened their commitment to each other.

Considerations for the Clinician

Graduates of the Australian Army parachute training school wear a patch that says, "Knowledge Dispels Fear." While this is true not only for parachutists and kidnap victims, it is doubly true for clinicians.

The unique nature of kidnap often demands that clinicians work to resolve issues outside the boundaries of their competence or personal preference and is one reason that many find themselves uncomfortable when working on this kind of case. Those clinicians wishing to work with this population must acquire the education, training, supervised experience, and consultation necessary to reach an appropriate level of competence and confidence.

Because the mental health clinician is often the only available resource possessing the perspective and special knowledge of the various systems affected by kidnap, it sometimes becomes necessary for that person to provide, or at least ensure that others provide, the important management and treatment services needed by recovering hostages and victims. This usually means acting as a case manager and advocate to represent and protect the client's interests.

Though usually requiring the clinician to expand his or her role schema through working at the boundaries of his or her competence and confidence, the author has found that this approach can be as beneficial to the client and rewarding to the clinician as providing the customary services is. Others agree: "It became apparent that successful management depended upon the ability of the treating teams to draw upon a wide range of therapeutic models" (Psychiatric Division, 1993, p. 35).

This approach means that the clinician is not expected to provide all hostage and family care, but rather to act as a case manager who (1) by virtue of experience and local knowledge is in a position to develop a plan that utilizes all available local resources, including hospitals and NGOs such as País Libre in Colombia; (2) coordinates a multidisciplinary team delivering a comprehensive biopsychosocial treatment plan; and (3) advocates on behalf of the client, ensuring that treatment details don't fall through the cracks.

Among the benefits of this approach are:

- Improved continuity and coordination of care can be provided.
- Greater access to data from other providers improves the clinician's ability to monitor and increase adherence to any treatment plan.
- Improved monitoring means that problems can be spotted earlier and changes or interventions applied in a timely manner.
- A multidisciplinary treatment team can provide more coverage than a single clinician can and can develop into a support, consultation, and/or referral network for the clinician.

In short, the clinician working in this context must often be prepared to respond flexibly to the needs of the client and to act outside the customary bounds of his or her training and experience.

Policy Considerations

The management and treatment of returned hostages and their families varies from jurisdiction to jurisdiction. In the United States, for example, the Hostage Relief Act (1980) gives the president considerable latitude to make a cash payment to anyone (or their family dependents) that becomes a captive and provides for the payment of compensation to them for the transportation of dependents, household, personal effects, and other costs, etc. Eligibility for these benefits, though, is limited to civil servants, serving military personnel, federal employees, and those who are "a citizen, national, or resident alien of the United States rendering personal service to the United States similar to the service of an individual in the Civil Service" (Hostage Relief Act, 1980, Section 5561 a1A).

Table 3.1 Summary of Minimum Necessary Support for Kidnap Victims Pre- and Post-Release

Hostage	Spouse and Family
Necessary financial assistance to travel home	Legal advice concerning the hostage
Immediate temporary accommodation	Claims of due benefits payments
Claims of due benefits payments	Psychiatric counselling
Medical examinations	Requests for interviews or publicity from the media
Psychiatric treatment	Claims for compensation against other parties in connection with captivity or imprisonment
Requests for interviews or publicity from the media	Appropriate services which may be available from statutory and non-statutory agencies
Claims for compensation against other parties in connection with captivity or imprisonment	Such other matters as the Secretary of State may provide
Appropriate services which may be available from statutory and non-statutory agencies	
Such other matters as the Secretary of State may provide	
Suggested Additional Support	
Psychoeducation	Practical household help
Treatment if necessary	Psychoeducation
	Treatment if necessary

Summarized from a proposed Hostage Recovery Bill, read before the UK House of Commons by Neil Gerrard, member of Parliament on 13 March 1996

The United Kingdom has also explored provisions for assisting the recovery of hostages and their families. Though never made law, the proposed hostage recovery bill read before the House of Commons in 1996 lists some of the minimum necessary supports that hostages and families need. Table 3.1 contains the proposed bill as well as some additional suggestions.

Conclusion

Kidnap is a growth industry. As long as there continue to be zones of political, social, and economic instability, the crime of kidnap will continue. Even if it were possible to eradicate all the pockets of lawlessness that allow the crime to occur, political, terrorist, and other kinds of kidnap would continue to plague us.

Though of questionable value from a military perspective, kidnap, suicide, and other kinds of terrorist attacks are extremely valuable from a psychological perspective. One writer notes that suicide attack in particular is designed specifically to "inflict profound fear and anxiety. Its goal is to produce a negative psychological effect on an entire population rather than just the victims of the actual attack" (Schweitzer, 2000, p. 6). Put another way, terrorists and kidnappers do not measure victory by the number of people killed, but rather by the number of people frightened. There is nothing to suggest that sociopolitical unrest and the kidnaps that invariably accompany it will end any time soon.

It is for these reasons that national governments and their respective mental health communities should redouble their efforts to promote, understand, and increase the effectiveness of treatments for mental injuries arising from terror events like kidnaps.

Acknowledgments

It may be a cliché, but stress does tend to bring out the best and worst in people.

First, my deepest and most heartfelt gratitude goes to those former hostages and their families who trusted me with their stories and allowed me to "practice" on them. Through many kidnap and other difficult, sensitive cases, I have had the honor and privilege of working with many talented law enforcement and security professionals who, without asking for anything in return, unstintingly gave me the help, support, guidance, friendship, and tolerance that made this chapter possible.

I thank those dedicated professionals who cannot be named for reasons of confidentiality and security for all that they have given to our shared discipline and for allowing me to contribute to it in whatever small way I can. You know who you are. Don't ever stop. The world is a safer place because of what you do. In writing this chapter I depended on their hundreds of years of accumulated experience and wisdom, but any flaws, mistakes, or inaccuracies herein are entirely mine.

Special thanks go to the person who read this chapter first and gave generously of his wisdom and masterful command of the English language. As you can see, I've used some of your lines.

Finally, this work, like so much else, is for Giulia and Livia.

Note

1. Excerpts from "The Management of Released Hostages" by Keron Fletcher, published in *Advances in Psychiatric Treatment* Volume 2 (1996): 232–240. Reprinted with permission.

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CHAPTER 4

WORKPLACE VIOLENCE AND PSYCHOLOGICAL TRAUMA

Jakob Steinberg

Every morning, millions of people across the United States perform their daily routine to get to work and support themselves and their families. Most employees reach their work destinations and feel that they are then safe, out of harm's way, and motivated to put in another day of productive work. However, the news often carries work-related stories of traumatic incidents. One day, it may be a bank robbery or convenience store shooting; the next day, a sexual assault in a company parking lot. We hear about disgruntled employees holding managers and workers hostage, a student attacking a principal, or other students shot in a school setting.

Not surprisingly, the incidents of workplace violence that make the news are only the tip of the iceberg, because so many go unreported. What the victims all have in common is that they were at work, going about the business of earning a living, assuming their employer ensures a safe worksite. However, something about their workplace environment—frequently something foreseeable and preventable—exposed them to attack by a customer, a co-worker, an acquaintance, or even a complete stranger.

On the morning of April 19, 1995, a bomb exploded, ripping through the Alfred P. Murrah Federal Building in Oklahoma City, Oklahoma. At that time, it was the worst terrorist attack ever on American soil, killing 168 people—19 of them children—and injuring hundreds of other innocent victims. The attack was planned by people with antigovernment sentiment, targeting this building because it represented a symbol of the Federal Government in that community. In the building that day, along with other civilians, were hundreds of employees working at their regular jobs and totally unaware of any danger they might face (CNN Interactive, 1996).

On the morning of September 11, 2001, at 8:45 A.M., a series of coordinated terrorist homicide attacks started, predominantly targeting civilians at their workplace. Nineteen terrorists hijacked four commercial passenger airplanes and crashed two of the airliners (United Airlines Flight 175 and American Airlines Flight 11) into the World Trade Center towers in New York City, collapsing both towers within two hours. A third airliner, American Airlines Flight 77, was crashed into the Pentagon in Arlington County, Virginia. Passengers and members of the flight crew on the fourth airplane (United Airlines Flight 93) attempted to retake control of their plane from the hijackers; that plane crashed into a field near the town of Shanksville, Pennsylvania. In addition to the 19 hijackers, over 2,700 people were killed; another 24 are missing and presumed dead. Although New York City, the region, and the country experienced a horrific international terrorist attack on symbols of the United States of America, the people who worked in those buildings and on those airplanes were innocent victims of workplace violence, at their regular jobs, and totally unaware of any danger they might face (September 11 News Archives, 2001).

These incidents of terrorism have changed our country and broadened the definition of what have traditionally been considered workplace violence events. Although not all episodes of violence in the workplace are as severe as these incidents, violence in the workplace is still, and always will be, a serious safety and health problem.

According to the Federal Bureau of Investigation (FBI), workplace violence is now recognized as a specific category of violent crime (U.S. Department of Justice, 2004). The FBI's National Center for the Analysis of Violent Crime (NCAVC), part of the Critical Incident Response Group (CIRG), consists of FBI Special Agents and professional staff who provide operational support in the areas of crime, counterterrorism, and threat assessment. Typical cases cover a wide range, including assessment of dangerousness in such matters as workplace violence, school violence, domestic violence, and stalking.

From June 10 to 14, 2002, the NCAVC hosted a Violence in the Workplace Symposium in Leesburg, Virginia. A collaborative effort, representatives from law enforcement, private industry, government, law, labor, professional organizations, victim services, the military, academia, mental health, and members of the NCAVC and CIRG's Crisis Negotiation Unit all came together to share their expertise on this significant issue. The result was an interesting and valuable monograph titled, "Workplace Violence: Issues in Response" (U.S. Department of Justice, 2004).

Definitions of Workplace Violence

Because this is still a relatively new area of interest, there is a variety of terms and definitions to categorize the wide range of behaviors that encompass violence in the workplace. In the broadest terms, any incident of violence that impacts an individual while working or on duty could be considered workplace violence. Such incidents include physical assaults, homicide, rape, robbery, theft, verbal and psychological abuse, harassment, stalking, and terrorism. Not all incidents are necessarily related to the work environment or the job itself, but the workplace provides the setting. As telecommuting becomes more prevalent, these crimes also may occur in the home where an employee may be working on a particular day.

The National Institute of Occupational Safety and Health (NIOSH, 1996) defines workplace violence as any violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty. The examples of violence included are threats or the expression of intent to cause harm, verbal threats, threatening body language, and written threats; and physical assaults ranging from slapping or beating to rape, homicide, and the use of weapons such as firearms, bombs, or knives, and aggravated assaults, usually conducted by surprise and with intent to rob:

> Defining workplace violence has generated considerable discussion. Some would include in the definition any language or actions that make one person uncomfortable in the workplace; others would include threats and harassment; and all would include any bodily injury inflicted by one person on another. Thus the spectrum of workplace violence ranges from offensive language to homicide, and a reasonable working definition of workplace violence is as follows*: violent acts, including physical assaults and threats of assault, directed toward persons at work or on duty.* (p. 6)

The Occupational Safety and Health Administration (OSHA), a Department of Labor Federal agency with the purpose of protecting the nation's employee health and safety, defines workplace violence as violence or the threat of violence against workers. It can occur at or outside the workplace and can range from threats and verbal abuse to physical assaults and homicide, one of the leading causes of job-related deaths (OSHA, 2002).

Folger and Baron (1996) define workplace violence as any behavior intending to harm current or previous co-workers or their organization, from physical assault to withholding information.

Buss (1961) categorized forms of aggression along three dimensions: The first dimension includes physical versus verbal aggression. The second dimension comprises active aggression, involving infliction of harm through performance of an action, versus passive aggression that involves withholding some action to inflict harm. The third and last dimension consists of direct aggression, including harmful actions aimed expressly at an intended target, versus indirect aggression, harm caused through an intermediary or by attacking something the target values.

Robinson and Bennett (1995) propose a typology of deviant behavior in four categories: (1) property deviance that includes sabotaging equipment or stealing from the company; (2) production deviance, including intentionally working slowly or wasting company resources; (3) political deviance, including showing favoritism, gossiping about or blaming co-workers; and finally, (4) personal aggression, which includes sexually harassing actions, verbal abuse, and behaviors that endanger other employees.

According to the FBI report (U.S. Department of Justice, 2004), with the growing complexity of this problem, occupational safety and other specialists agree that responding to workplace violence requires attention to more than just an actual physical attack. Homicide and other types of assaults are on a continuum of behaviors, including domestic violence, stalking, threats, harassment, bullying, emotional abuse, intimidation, and other forms of conduct that contribute to experiences of anxiety, fear, and an overall climate of distrust in the workplace.

These are all part of the workplace violence problem and often affect many employees beyond the target alone. Prevention programs that do not consider harassment in all its varied forms and threats are unlikely to be effective. While agreeing on that broader definition of the problem, specialists have also come to a consensus that workplace violence falls into four broad categories.

According to the FBI monograph (U.S. Department of Justice, 2004), most incidents fall into one of these categories:

> Type I: Criminal Intent: The perpetrator has no legitimate relationship to the business or its employees, and is usually committing a crime in conjunction with the violence. These crimes can include robbery, shoplifting, and trespassing. The vast majority of workplace homicides (85%) fall into this category.
>
> Type II: Customer/Client: The perpetrator has a legitimate relationship with the business and becomes violent while being served by the business. This category includes customers, clients, patients, students, inmates, and any other group for which the business provides services. It is believed that a large proportion of customer/client incidents occur in the health care industry, in settings such as nursing homes or psychiatric facilities; the victims are often patient caregivers. Police officers, prison staff, flight attendants, and teachers are some other examples of workers who may be exposed to this kind of workplace violence.
>
> Type III: Worker-on-Worker: The perpetrator is an employee or past employee of the business who attacks or threatens another employee(s) or past employee(s) in the workplace. Worker-on-worker fatalities account for approximately 7% of all workplace violence homicides.
>
> Type IV: Personal Relationship: The perpetrator usually does not have a relationship with the business but has a personal relationship with the intended victim. This category includes victims of domestic violence assaulted or threatened while at work. Battered women also fall into this category because they may be "hiding out" somewhere from the person perpetrating the abuse, but they must show up for work at a location known to the abuser. (p. 13)

These categories can be very helpful in the design of strategies to prevent workplace violence, as each type of violence requires a different approach for prevention, and some workplaces may be at higher risk for certain types of violence.

Incidence and Prevalence of Workplace Violence

Workplace violence has been receiving increased attention thanks to a growing awareness of the toll that violence takes on workers and workplaces. Despite existing research, there remain significant gaps in our knowledge of its causes and potential solutions. Even the extent of violence in the workplace and the number of victims are not well documented or understood (U.S. Department of Justice, 2004).

In 1999, the Bureau of Labor Statistics recorded 645 homicides in workplaces in the United States. Although this figure represents a decline from a high of 1,080 in 1994, homicide remains the third leading cause of fatal occupational injuries for all workers and the second leading cause of fatal occupational injuries for women. The number of nonfatal assaults is less clear. The National Crime Victimization Survey, a weighted annual survey of 46,000 households, estimates that an additional 2 million people are victims of nonfatal injuries because of violence while they are at work. Addressing this problem is complicated, because workplace violence occurs in many forms with many different causes and sources (U.S. Department of Justice, 2001).

In April 2000, the University of Iowa Injury Prevention Research Center took an important first step to meet the need for better understanding by sponsoring the Workplace Violence Intervention Research Workshop in Washington, DC. The goal of this workshop was to examine issues related to violence in the workplace and to develop recommended research strategies to address this public health problem.

In the report issued by the University of Iowa's Injury Prevention Research Center, its specialists acknowledged that data on the exact extent of workplace violence "are scattered and sketchy" (University of Iowa Injury Prevention Research Center, 2001). Drawing on responses to the National Crime Victimization Survey, a Justice Department report estimated that an average of 1.7 million "violent victimizations," 95 percent of them simple or aggravated assaults, occurred in the workplace each year from 1993 through 1999. Estimates of the costs, from lost work time and wages, reduced productivity, medical costs, workers' compensation payments, and legal and security expenses, are even less exact, but clearly run into many billions of dollars (University of Iowa Injury Prevention Research Center).

An essential problem with efforts to reduce workplace violence is that the data are not reliable, making it very difficult to study what works and what doesn't work to reduce violence in the workplace. The best data available cover fatal events because these are required to be documented and reported. There is less reliable information available concerning injuries from nonfatal events, the economic impact on businesses affected, lost productivity that may continue long after the event is resolved, and other costs. Various data collection systems have different ways of defining "at work," especially when there are ambiguities such as commuting and travel away from the worksite, volunteers or student interns in a workplace, or workplaces that are also residences, such as farms or home offices.

Sources of information such as police, physicians, workers' compensation records, or employee reports may capture only one element—the violent incident, or the injury, the lost work time, or the setting where the event happened but not the whole picture of the trauma resulting from the violence in the workplace. Finally, many nonfatal incidents, especially threats, just go unreported, because there is typically no coordinated data-collection system to process this information and no requirements for reporting (University of Iowa Injury Prevention Research Center, 2001).

Data from the Bureau of Justice Statistics (BJS) indicate an average of 1.7 million people were victims of violent crime while working in the United States each year from 1993 to 1999. An estimated 1.3 million (75%) of these incidents were simple assaults while an additional 19 percent were aggravated assaults. These figures are believed to be underestimated as not all workplace victimizations are reported (U.S. Department of Justice, 2001).

According to the American Federation of State, County and Municipal Employees (AFSCME), a half-million employees miss 1.8 million days of work each year, resulting in more than $55 million in lost wages, not including days covered by sick and annual leave. Workplace violence accounts for 16 percent of the more than 6.5 million acts of violence experienced by individuals age 12 and over (AFSCME, 2006).

In November 1994, the Society for Human Resource Management (SHRM, 1994) issued a white paper on workplace violence, indicating that this problem has most recently been associated with the cost of doing business in more demanding economic times:

> Indeed, the fastest growing form of homicide is workplace murder. Homicide is the third most common cause of on the job death for men; it is the leading cause of on the job death for women. Recent studies conducted by criminologists show that workers are killing bosses at twice the rate of a decade ago. Countless other employees are being damaged, physically and psychologically. The problem is serious and the burden of intervention is increasingly being placed on the company. Human resource professionals often must assume the role of a risk manager, and proactively develop a number of practices to address this problem.

However it manifests itself, workplace violence is a growing concern for employers and employees nationwide.

At-Risk Jobs

The Web site of the School of Criminal Justice at Rutgers University provides statistics from the National Crime Victimization Survey indicating the risk of being a victim of violence varies in different occupations. According to its data, police officers are at the highest risk, followed by private security guards, taxi drivers, prison guards, bartenders, mental health professionals, and gas station attendants. Although these are jobs with higher exposure to disturbed individuals, teachers also made the list as "at risk." In any environment where there is human interaction, there is a possibility for violence (Rutgers University, 2006).

According to OSHA reports, some 2 million American workers are victims of workplace violence each year. Among the workers at greatest risk are those who exchange money with the public; those who deliver passengers, goods, or services; those who work alone or in small groups, during late night or early morning hours, in high-crime areas, or in community settings and homes where they have extensive contact with the public. These include health care and social service workers such as visiting nurses, psychiatric evaluators, and probation officers; community workers such as gas and water utility employees; phone and cable TV installers; letter carriers; retail workers; and taxi drivers (OSHA, 2002).

AFSCME similarly advises that employees are at risk who work in home settings or in the community; people who regularly handle money; those employed in social service agencies, or institutions for the mentally ill; health care workers; mental health workers; and those staffing hospital admissions or emergency rooms. Also at risk are those people who deal with customer complaints, child welfare, and unemployment workers; and workers who have the power to act against the public, such as those who inspect premises or housing inspectors and those who enforce construction code laws. Finally, occupations including law enforcement or corrections officers, security guards, those people working alone, custodians, public park workers, parking meter attendants, people working late hours, and workers in homeless shelters all are at greater risk for workplace violence events (AFSCME, 2006).

Types of Victims

Victims also fall into three categories based on their proximity to or level of contact with the violence itself. *Primary victims* are those individuals or groups who are the direct victims or witnesses of powerful or traumatic events. *Secondary victims* are those individuals or groups who are not directly affected by or exposed to violent, graphic, or threatening events, but by virtue of their presence at or near the site of an incident or, by virtue of their job functions, are exposed. Finally, *tertiary victims* are those individuals or groups related via family, friendship, or business associations to the primary or secondary victims, and who themselves have disturbing responses related to an event. It is clear that the different levels of exposure to any event in the three levels of victimization would most likely develop different levels of symptom impact. In most instances primary victims would be most impacted by their exposure and likely suffer the most significant effects while tertiary victims would be the least likely affected.

Common Traits for Violent Workers

Much research has been devoted to understanding the violent perpetrator. The following characteristics are the most common in those who commit workplace violence:

- Middle-aged white male
- A history of violent behavior, including involvement with the criminal justice system

- Upset with only having low-level tasks to do
- Bitter and unhappy
- No job security
- Problems growing up, including bad grades in school, abusive parents, etc.
- Substance abuse, including taking heavy medication (Rutgers University, 2006)

A more complex analysis (Reese, 1999) of the personality traits and characteristics of violent offender identifies someone with extremely low-frustration tolerance. This is an individual who reacts to stress in self-defeating ways. Unable to effectively cope with anxiety, this personality acts out in response to frustration and this often leads to aggression. Characteristically impulsive, such a personality is also quick to act, wants immediate satisfaction with little or no consideration for the consequences, and is emotionally labile with rapid mood swings, moving from being quick-tempered, short-fused, and hot-headed to moody, sullen, and irritable. Lacking insight, the offender often exhibits poor judgment with limited or impaired cognitive filters.

They are often victims of childhood neglect, having suffered sexual and/or physical abuse, maternal or paternal deprivation, rejection, and abandonment. Often they were exposed to violent role models in the home. Frequently loners, they are isolated or withdrawn with poor interpersonal relations, no empathy for others, and lacking feelings of guilt or remorse. These individuals are found to be hypersensitive to criticism or to any slights, real or perceived. They are suspicious, fearful, and distrustful bordering on paranoid.

They suffer alterations of consciousness or blackouts with experiences of derealization, depersonalization, impaired reality testing, and hallucinations. They describe thoughts of violence toward self and others that may be either direct or veiled. They tend to blame and project blame onto others. With a fatalistic external locus of control, these individuals typically avoid taking personal responsibility for any behavior. They tend to view themselves as "victims," are self-centered, and feel entitled. These are common traits of an antisocial personality disorder.

Frequently they are substance abusers who are using alcohol, opiates, amphetamines, crack, and hallucinogens. Often referred to as the typical "angry drunk," these are individuals who exhibit dramatic personality and significant mood changes when under the influence. They are highly aggressive when using alcohol or other substances. Also, they often have significant financial problems because of or aggravated by substance abuse.

They often suffer mental health problems, at times with in-patient hospitalization. Frequently a history of violence toward self and others can be documented with actual physical force used to injure, harm, or damage. The greater the incidence of prior violent behaviors exhibited, the greater the chance of future problems occurring. A history of family violence may qualify as a warning sign of potential danger.

They regularly display lack of control, often speaking without thinking, and are emotionally volatile with temper tantrums and sudden physical violence. This personality has a preoccupation with violence, follows violent events, continually speaks about violent acts of others, and is fascinated with all types of violence (e.g., movies, books, television, newspapers, music, weapons, and Nazi or racist propaganda) (Reese, 1999).

Typical of the authoritarian personality (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950), these perpetrators hold odd or bizarre beliefs about reality with superstitious and magical thinking, themes often involving religiosity, sexuality, and violent fantasies (especially when violence is eroticized). It is not unusual for these individuals to have physical problems, congenital defects, severe acne, or scars. There may also be a history of brain damage, head trauma, or neurological problems.

Because many of these factors may contribute to low self-esteem, and subsequent withdrawal and isolation, it would be reasonable to observe efforts to compensate for these perceived inadequacies with power-oriented alternatives. So, having strong interests in weaponry is common. These individuals frequently have gun collections, read and display magazines, such as *Soldier of Fortune*, typically carry weapons, display their proficiency with weapons of all kinds, and talk of their power.

It is common that major life event changes predate the violent actions in the workplace. Events such as divorce, financial problems, death in the family, change or loss of occupation, downsizing, firing, or other problems related to work or job may have occurred.

Still, with all the warning signs and personality factors that may help to predict, prevent, and prepare for such events, it is still a complicated situation to establish who may act out, where, when, and how such an event may develop. In its report "White Paper: Workplace Violence," the Society for Human Resources Management (1994) states:

> Although the "profile" can be helpful, it is important to be aware that any employee, at any level, can become violent if a triggering event precipitates too much stress. This stress of course is both perceived and measured in the mind of the individual involved. Crisis occurs when a person faces an obstacle to an important life goal that is, for at least a time, insurmountable with the use of customary methods of problem solving. In a situational crisis such as job loss, there is a sudden threat to the supply of basic resources. In an attempt to maintain homeostasis, the person tries to avoid facing the new role because it threatens his/her security. Danger occurs when an unacceptable change is forced on an individual who has no hope to escape.

When a person feels humiliated, trapped, or helpless, that may be when he or she would retaliate and act out against the source of the stressor or against someone he or she feels comfortable being able to victimize, like a supervisor or another employee.

A classic example of many of these factors can be offered here. This event happened in a small distribution company in a relatively rural area. The company had been acquired, not long before the incident, by a much larger, national organization with a subsequent significant increase in the volume of production and demand of what had been a small, local business. The culture of the organization was actively changing as well as some of the positions and management personnel.

Working in this company, on the loading dock, was a man who had recently gone through the difficult end to a volatile marriage with an even more volatile divorce. He was angry about what he felt was an unfair property settlement, loss of his home, and some personal possessions as well as a requirement for alimony payments he did not want to pay. He had also lost a bitter custody fight for the only child of this unfortunate marriage, a 14-year-old son.

When he came to work that day, he was already in a foul mood and was reprimanded for coming in late. Before the acquisition of this company, coming in a little late was ignored or forgiven. Now with the increased demands of new business for this company and changed corporate policy, the behavior was met with disapproval and a warning from the supervisor. The employee's response was confrontational and an argument ensued. The supervisor left the loading dock and went to the human resources manager, describing the incident.

The human resources manager met with the chief operating officer of the plant, and the employee was called to the personnel office for a meeting. When he arrived, he was brought into the office to face the three officials in charge: the human resources manager, the chief operating officer, and the supervisor of the loading dock.

Although he was offered a seat, he chose to stand in a corner of the room next to the door he had just entered. The HR manager reviewed the problem of the employee's tardiness and his argumentative response. During the course of the meeting, the man moved gradually from a standing position to crouching on the floor as if ready to attack. He was told that he would have to go home for the rest of the day and would be penalized a day's pay for his problem behavior. He could come back to work the next day but was cautioned that this behavior would lead to suspension for a longer period or dismissal if he was not compliant. They thought it odd that his response, as he stood to leave the room, was a defiant: "You may have won this battle, but you won't win the war," and he left the office and the building.

The HR manager knew this man for the number of years of his employment with the company. He knew the problems the man was having in his personal life and also knew the man was a Vietnam war veteran who carried a rifle on the gun rack in his pickup truck. He had often proudly displayed the weapon to anyone who would give him the opportunity in the parking lot where he parked his truck every day. Uneasy with the way the meeting ended, after the employee left, the manager approached the receptionist who sat at her desk in the lobby entrance of the main building. He told her he was concerned about the man and asked her to make sure that if she saw him return to the building, she should immediately call the police and report it as an emergency. She was watchful for a time, but soon became involved in other work she needed to do and was not paying attention as the man did return with his rifle.

He waited for an opportunity when the receptionist was turned around and entered the building, walked down the hallway to the office he had recently left, and opened fire on the managers, killing one and critically injuring the two others. As he exited the building, he continued to shoot randomly at various other employees, injuring a number of them as he fled. By this time, the receptionist, realizing her worst fears, did call the police, who confronted the perpetrator in the parking lot. The man turned the rifle on himself and committed suicide.

For some time as the event developed, many of the employees in various departments of the company who heard the gunshots hid in their offices or fled out the back doors of the building in terror. They were fearful that they might be victims of the gunfire, not really knowing what had happened or why, and hid anywhere they could while waiting for the situation to stabilize. The police also were unaware of what had happened when they arrived and did not know if there was only one perpetrator or still more at large inside the building. All of the employees were possible accomplices and until the situation was clarified and settled, they were treated as dangerous as well. Held at gunpoint until the police could determine what had happened, they were victimized again.

This was a complicated intervention to address. There were employees who witnessed the shooting and had seen their friends killed or critically wounded. Some were targets themselves. Some had heard the gunshots and were hiding for a time, unsure if they would be victims, and all were victimized until the crime scene could be stabilized by the police. In the immediate aftermath, until ambulances arrived, there were bodies and blood everywhere, people screaming, and a generally chaotic situation continued for what seemed like an eternity.

Individual crisis intervention was provided for the managers and the staff that were most directly affected. Also, crisis intervention was provided for the families of the victims killed or critically injured. Group interventions were provided for the other employees over the days that followed until the situation was stabilized and work returned back to routine for the organization.

It was interesting to discover during the interventions that followed the shooting that there had been many warning signs in the days that led up to this tragic event, including multiple fights the perpetrator had with different individuals in the company. Unfortunately, these separate incidents were not reported to one designated company official. There was no workplace violence policy in the company, no way of tracking and reporting the employee problem behaviors and the various incidents that had taken place before the shooting, and no way of handling problems in the workforce. One of the most important interventions was the development of a workplace violence plan that could improve the sense of safety for the employees in the future.

During the group interventions, the employees complained of the changes in the corporate culture. Although they were angry with the man for what he did, they also expressed some sympathy for him, considering the problems he had suffered in his personal life. They also identified with the changes that had been happening in the work environment with increasing demands on all of them since the company was acquired and the impersonal nature of the new management style. They were also angry that the sense of safety and security in their jobs was compromised and expressed concerns that they might never feel comfortable at work again. They were angry that the company was not prepared to handle this type of problem.

This is the description of a unique workplace event, which can be classified as Domestic Violence. The setting was a relatively small printing company, employing approximately 75 employees. The manager of the print shop is married and the father of two children. He was known to commonly engage in inappropriate contact with staff members and had an intimate relationship with one of the employees he directly supervised. The employees often joked about his blatant conduct and questioned why no disciplinary action was ever taken. Subsequent to the involvement ending, much to the dismay of the woman, the manager started a workplace relationship with another woman, who became pregnant.

A few months later, the rejected girlfriend meets the current girlfriend (who seemed to be flaunting her pregnancy), in the small kitchen area at work. The former girlfriend, who had just boiled water to make tea, turned to see her rival standing in front of her. Impulsively, she grabs the pot of boiling water and throws it in the face of the pregnant woman. She screams at her target: "You don't deserve to carry his child … it should be me!"

The victim sustained serious burn injuries to her face, neck, and chest and was taken to the hospital by EMS. The perpetrator was arrested, taken to police headquarters, and processed for aggravated assault. For days after, the employees were totally consumed with talk about this horrible event in their place of work. In response to this disturbance, an intervention was set up with the goal to stabilize the workplace and return to productive work. To accomplish this purpose, a series of debriefings was structured to provide the employees opportunities to talk. This helped to deal with the aftermath of this workplace violence event productively.

This was a relatively small company where everyone basically knew everyone else as most of them had worked together for many years. The event reverberated throughout the community of employees. They were particularly angry at the manager who had been inappropriately involved with the two employees. They were even angrier that such a blatant situation was tolerated by the owners of the company. Everyone knew these relationships were going on and believed the manager had no right taking advantage of women who worked directly under his supervision. The employees agreed it was predictable that sooner or later something bad was going to happen.

One woman was seriously injured, the other arrested, and yet the man whose reckless behavior contributed to the event escaped direct impact. The employees all expressed the opinion that this man should have been fired. They asked for new policies to be written and implemented. The hope was to deter future improper relationships and sexual harassment in their workplace. These were among the recommendations provided to the owners of the company. In the aftermath of the traumatic event, the interventions did stabilize the workforce and "business as usual" was restored.

The value of describing this scenario is that it illustrates a different type of violent event at work. Although an important enough life event for those involved, this is not on par with the level of catastrophe previously described. This scenario provides an illustration that workplace violence does not always present as a disgruntled employee with a gun or a bomb. It can be the result of poor management practices or opportunistic individuals, policies not implemented or lax supervision that may lead to catastrophic events.

Events that culminate in dramatic and violent incidents take root in the culture of an organization. Workplace violence events may be the result of the way a company operates within the common business practices of that specific industry. There is an apparent difference in the work environment of construction sites or government offices. How people speak and what are acceptable behaviors may vary in employment settings. Programs or policies that may seem unrelated like sexual harassment or employee benefits (e.g., how sick leave is handled) can lead to significant frustration in a community of workers. This may contribute to explosive workplace violence events. How can this be avoided? It is important to understand that a workplace violence policy must take into consideration a broad range of factors to effectively handle the scope of this problem.

The last scenarios are a composite of incidents in the hospital and health care industry. Mental health workers deal with individuals that are volatile and dangerous on a regular basis. One of the most important assessments required in the first contact a mental health worker has with a client or patient is to determine the presence of possible dangerousness the patient exhibits, to self or others. We assume that we are not going to be the victims of our patients' anger. Yet that is quite common in work with substance abusers, and always a risk for therapists working with repeat sex offenders, even inside correctional facilities.

The first such scenario occurred in a hospital in-patient facility for substance abuse. The patient was participating in a therapy session in the office of the social worker, expecting to be released from the hospital that day. The social worker informed the patient that the psychiatrist for the unit was not there that day and the hospital would not be able to release the patient until the doctor would return, three days later. In frustration and anger the patient jumped from his seat and started to destroy the office, including furniture, books, and patient files. When the social worker tried to calm him, he assaulted her. He caused her significant injuries that required hospitalization and led to her permanent disability from her job.

The second scenario is from a correctional facility for repeat sex offenders. During a therapy session in an open treatment room, with corrections officers available on the periphery of the room, an inmate grabbed the female therapist's throat by reaching across the table where they were sitting. The inmate's sentence was for life and he believed he had nothing to lose acting out. By dragging her to a nearby cell, he held her hostage, threatening to kill her if anyone intervened. He repeatedly raped her until the Emergency Response Team and Tactical Unit could stabilize the situation and rescue the therapist from her captor.

In both of these events, during the debriefings, the mental health workers addressed the lack of protection they had in dealing with such dangerous individuals. Even inside the protected environments of hospitals or correctional facilities, there are still jobs that entail significant risk to employees. They work without effective security or immediate access to crisis response. Also, the therapists complain about their own lack of training to work with such violent individuals. These are mental health specialties that encompass very complex problems that are typically longstanding in nature. Those patients potentially endanger the lives of the clinicians who work with them. Providing workers with not only clinical skills, but also skills for self-protection and self-defense would be valuable advantages for controlling the workplace violence in these settings.

Impact on Victims

Most of the attention in the literature on workplace violence has been focused on the violent events and how those could be deterred. Much attention has been focused on the perpetrators with an effort to understanding their personalities and behaviors and also to predict and prevent these events from happening. More attention has been paid to identifying environments at risk, work practices, and management strategies, all for the purpose of planning and preparedness to avert violence in the future. Although some attention has been provided to postincident procedures, most serve the purpose of restoring the workplace to its function and the return to business as usual.

Little if any attention has been directed toward the victims of such catastrophic actions. Often the experience of victims has been ignored because their problems are not important to the continuity of the organization. In most instances, because the victims are either physically injured, emotionally damaged, or both, they often have to leave their jobs to go out on disability leave. They use medical services and receive workers compensation benefits. If they are victims of harassment or other psychological violence, they may be participating in treatment and are out of the organization for varying lengths of time. In some instances, their responsibilities may be assumed by other employees, or in other instances, they are replaced in their jobs, and the victims are left on their own to manage while the company goes back to business as usual. Relatively little research has been designed around the impact of work violence on the victims. A proposal for the future would be to get a better understanding of the effects of the psychological impact of workplace violence on the victims.

In addition to physical injuries, violent, abusive, or threatening workplace incidents often result in serious and disabling psychological damage. Victims of workplace violence are at increased risk of various psychological problems, including adjustment reactions or anxiety disorders that may include panic reactions or phobia and depression. One of the more predictable symptom patterns, a disorder common to individuals who experience or witness traumatic incidents, may be posttraumatic stress disorder (PTSD).

Posttraumatic stress disorder as defined by the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)* is an anxiety disorder that develops after exposure "to an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others. The person's response involved intense fear, helplessness or horror" (American Psychiatric Association [APA], 2000, p. 467).

With the rise in violent crimes in the workplace, many of those events would meet the criteria as traumatic incidents. The resulting symptoms are persistently reexperienced in one or more ways, including recurrent, distressing recollections of the events, nightmares, flashbacks, or intense physiological or psychological distress with exposure to cues that symbolize or resemble an aspect of the traumatic event. Intrusive thoughts that are unwelcome, uncomfortable, or unbearable but uncontrollable for the individual with ruminations that are unrelenting are also common complaints of victims.

The individual must also experience persistent avoidance of stimuli associated with the trauma. Victims try to blot out the event from their minds. They try to avoid thinking or talking about the traumatic event, as well as avoiding items in newspapers, conversations, or TV shows that may be reminders of the incident. Part of this is deliberate, a conscious effort to avoid trauma-triggers; part involves involuntary psychic numbing that blunts potentially threatening stimuli. To stay away from discussion of the event, the victim avoids friends, workmates, and family members. Withdrawal is common, often resulting in resentment and counteravoidance of co-workers, friends and family of the victim, sometimes leading to eventual social exclusion from the support systems that may be the most important to recovery.

The victims experience persistent symptoms of increased arousal. These could include heightened startle reactions, palpitations and elevations in blood pressure, or other heightened symptoms of sympathetic nervous system reactivity. Those affected describe a continuous state of anxiety, with hypervigilance, scanning the environment for possible threats of danger, accompanied by panic attacks that may be occasional or frequent. The nervous system is on continual alert, leading to increased bodily tension in the form of muscle tightness, twitching and tremors, restlessness, fatigue, heart palpitations, elevations in blood pressure, breathing difficulties, dizziness, headaches, or other physical symptoms. Often there is a constant feeling of edginess, impatience with others, loss of humor, and frustration leading to quick-tempered anger and little tolerance for everyday concerns.

Cognitive symptoms are typical, including impaired concentration and memory. Problems with judgment and decision making are common and notable to family and friends. On the job, supervisors may observe deterioration of work performance. Social, recreational, and work functioning may be impaired because of difficulties remembering names, losing track of conversations, or trouble with focusing on work assignments or schedules.

Behavioral symptoms may include substance abuse, coming to work late or not at all, acting out, or an increase in risky activities. Changes in work, diet, exercise, use of drugs or alcohol, sleeping habits, and leisure activities may be evident. There is also concern with possible presence of suicidal, homicidal, or other aggressive acts that may follow trauma exposure.

The duration of the disturbance is more than one month and interferes with important areas of functioning, including occupational impairment. The term *acute* is applied to the disorder when the symptoms persist for less than three months; *chronic* refers to symptoms continuing more than six months after trauma exposure; and *delayed onset* is classified any time PTSD symptoms appear more than six months after experiencing a trauma (APA, 2000).

Additionally, emotional problems resulting from violent incidents can include self-doubt, depression, fear, loss of feelings of trust and safety, disturbed relationships with family, friends, and co-workers, decreased ability to function at work, and increased absenteeism. Workers often blame themselves when they are injured in an assault, and management often encourages this self-blame (AFSCME, 2006). It is important to note that major distress may occur even though not all the criteria for a traumatic stress disorder are met.

Individuals affected by workplace traumatic events may include injured employees or eyewitnesses; employees remote from the scene but that know or identify with the victims; bystander or customer witnesses; first responders such as police or paramedics; family members; medical and mental health clinicians; stakeholders such as suppliers, clients, or customers that knew the victims; former employees; or any other persons directly or vicariously connected to the trauma.

In recent years there has been a trend to providing crisis intervention at or close to the scene immediately or soon after the incident. It has become common in industry, corporations, schools, and other community settings to bring crisis counselors or grief counselors to provide interventions to the survivors and witnesses of extreme catastrophic experiences. However, according to the AFSCME Fact Sheet (2006), it is rare that these issues can be dealt with effectively in the short term. This organization, dedicated to the best interests of public service employees, suggests there is increasing evidence that victims and witnesses of violent incidents need long-term treatment to fully overcome these problems (AFSCME).

Workplace Violence and PTSD

When the traumatic event happens in the workplace, that environment itself becomes part of the pathological experience of victims' symptoms of PTSD. It is typical of the primary symptom pattern for victims to reexperience some aspects of the traumatic event. Such intrusive thoughts or sensations may be triggered directly by specific aspects of the work environment and are difficult for the individual to control. These experiences of reliving the trauma may make it impossible for the individual to tolerate being in the work environment or returning to the normal job functions if those functions are now embedded in the traumatic experience. Intrusive experiences such as flashbacks of the incident may increase anxiety symptoms that would directly affect work performance.

Avoidance, the next symptom specific to PTSD, will also cause problems at work. Whether these are efforts to avoid thoughts of the event or people associated with what happened, work activities and specific places that trigger traumatic recollections will also interfere with efforts to fulfill job responsibilities effectively. When the avoidance is manifested in emotional detachment from others, maintaining productive relationships with co-workers will suffer.

The symptoms of increased arousal that accompany PTSD may have a more dangerous effect on work performance. Common symptoms such as disturbed sleep, difficulty concentrating, hypervigilance, and irritability may make it difficult if not impossible to perform effectively at work. Jobs that involve driving or the use of heavy machinery, that require judgment or making quick decisions, may not be possible with heightened arousal. High arousal may also diminish work performance and may be perceived by co-workers or supervisors as problems with competence or lack of motivation. True symptoms of PTSD that result from workplace violence could make it impossible for an individual to return to his or her former work function or place of employment.

Since the introduction of the diagnostic specifier of posttraumatic stress disorder in 1980, there has been a tremendous growth in the interest and understanding of this relatively new disorder. The National Center for Posttraumatic Stress Disorder was created in 1989 within the Veteran's Administration to better address the needs of veterans of war. Over the years, there has been a changing understanding that there are significant issues of civilian victims of PTSD, and these needs have expanded the efforts and utility of the center to many nonmilitary applications.

Penk, Drebing, and Schutt (2003) make the point that most of the research on PTSD has been focused on the manifestation of this disorder in victims of combat, crime, accidents, and disaster but little attention has been addressed to PTSD resulting from incidents in the workplace (p. 217). At the same time, the criteria for PTSD specify that the survivor must experience significant distress in social and occupational function (APA, 2000), making the workplace a setting in which these symptoms may be "manifested, exacerbated, or even caused" (Penk et al., 2003, p. 217). They call for a "psychology of PTSD in the workplace, one that orients clinicians and managers to workplace and worker interactions, and that highlights ways in which work and workers interact to cause, exacerbate, or resolve PTSD" (p. 217).

Indeed, the argument can be made that the same proportion of the general population that suffers PTSD symptoms is also represented in the work environment. Therefore, "We can infer that unacknowledged and untreated PTSD is a hidden disorder in the American workforce that affects productivity negatively" (Penk et al., 2003, p. 215). These authors go on to propose that we need to study the problem of PTSD in the workplace in a more systematic manner and call for the creation of work environments that address psychological needs and safety as well as the physical safety needs of the workforce (p. 215). This is a need that must be addressed in light of the reality we face as a nation because of the increased risk in the workplace owing to terrorism and bioterrorism dangers (Steinberg, 2004).

> Also needed are practices that respond to the residuals of trauma that occur at work, such as violence between employees, terrorist attacks, or exposure to biological toxins. Mental health services must address the unique problems of employees when the risk of stress and trauma, such as through exposure to toxins and industrial accidents, or when dangers are experienced in the line of duty (e.g. police, firefighters, mental health workers). And finally, workplaces need to be prepared for those unfortunate times when natural and human disasters strike the workplace and the workforce. (Penk et al., 2003, p. 217)

The need for improved assessment and treatment of this disorder in the workplace is indeed clear and the failure to provide these services may increase the cost of doing business dramatically.

The effects of such an event do not disappear after the violent act is over but may continue to affect the victims for a long time afterward. Also, the harm is not only to the persons directly affected, but it may have an effect on many other employees in the workplace. Any workplace violence prevention program should take into account that other employees, not just the victim, may be impacted and may benefit from intervention services after a violent event and that healing may come more easily if psychological support is part of the company's crisis response planning from the beginning.

Intervention

In the aftermath of traumatic events in the workplace, the resulting emotional distress may become contagious, and feelings of danger may become exaggerated throughout the organization. This was clearly evident in the workplace shooting incident described earlier in this chapter. When management shows less regard for the well-being of the workers, the resulting impact on the morale of the organization may inflate the problem to greater proportions, which may then be sustained for a much longer time.

Timely and responsive intervention can slow or prevent such contagion. In the immediate aftermath of a crime, disaster, or any other critical incident, emergent psychological intervention may provide victims and co-workers consolation, information, support, and help with immediate functional needs. It can also identify those who may have been more affected and may require more intensive psychological treatment in follow-up.

OSHA guidelines provide clear recommendations that all workplace violence programs should provide comprehensive treatment for victimized employees, including those who may have been traumatized by witnessing a violent incident. Affected employees should receive immediate treatment and psychological evaluation whenever an assault occurs, regardless of the severity (OSHA, 1998).

There is a variety of interventions that may be incorporated into the postincident response. Some of the useful strategies are trauma-crisis counseling, critical incident stress debriefing, or specialized employee assistance program services that may be provided for the victims. Certified employee assistance professionals, psychologists, psychiatrists, clinical nurse specialists, or social workers could provide counseling, or the employer can refer to an outside expert specialized in treatment of workplace violence problems. When appropriate and practical, with the advice of specialists in this field, peer-counseling or support groups may be established.

Most important, counselors must be experienced, well trained with appropriate understanding of the consequences of assaults and other aggressive or violent behaviors as they impact victims, and qualified to provide appropriate interventions. Such interventions properly directed will serve to reduce the likelihood of acute psychological trauma and heightened stress levels among victims and coworkers. These interventions also provide important educational opportunities regarding the impact of such events and may help to reduce the trauma associated with any future incidents through training skills for management.

The victims of workplace violence also suffer additional consequences beyond their actual physical injuries. These consequences may include short- and long-term psychological trauma, fear of returning to work, changes in relationships with co-workers and family, feelings of incompetence, guilt, powerlessness, and fear of criticism by supervisors or managers. Consequently, a strong follow-up program for these employees will not only help them to deal with these problems but also help prepare them to confront or prevent future incidents of violence (OSHA, 1998).

Crisis intervention as well as trauma counseling should be provided in a specialized manner, avoiding a single service that attempts to apply to all victims and all their needs. Each individual may have a unique psychological reaction and may have specific needs, even if his or her exposure experience has been the same. Some individuals may be more resilient and may have resources and coping systems that serve their own purpose. Some may have support systems that will be useful and important for their recovery. Services should not be imposed on employees in ways that may exaggerate identifying them as damaged victims. Rather, postcrisis psychological support should employ a variety of strategies, including allowing those who may not want or need any intervention to make the decision on their own.

Drawing on many years of experience with crisis intervention and trauma counseling, the author believes that timely intervention is crucial to an effective resolution of traumatic exposure. Also, the availability of support is one of the most significant factors in determining whether a traumatic experience will resolve successfully or, when support is not available, that significant psychological impairment will result. When victims have access to appropriate resources and the environment is accepting and understanding of the impact of the traumatic exposure, there is a higher likelihood of a return to effective and competent function.

In the case of workplace violence, that means the organization or company where the individual worked must be responsive to the needs of those affected. Specifically, that means recognition of the seriousness of the event and its subsequent psychological impact. When companies minimize the event or ignore the victims, not only do the effects have more impact, but there is a higher likelihood of litigation against the company for any damages and the perceived injustice suffered.

It is most important that organizations have disaster recovery systems and contingency plans for events that occur in the workplace, especially for the impact on the employees working in those environments. According to Penk et al. (2003), it is good business for employers to prepare for managing traumatic exposure:

> Why should employers be concerned about untreated trauma and the possibilities of exposure to trauma in the workplace? The basic answer is that "caring" work environments, those that invest in human capital, are associated with higher productivity. Conversely, work environments that do not care about the adjustment of employees are associated with dysfunctional circumstances that interfere with productivity. Simply put, it is important to prepare for and treat trauma so that the workforce remains physically and psychologically healthy, allowing workers to achieve the mission of the organization. Not providing a safe and secure work environment leads to distress in the employee, which, in turn, may lead to poorer productivity (Flannery, 1995, 2001; Van den Bos & Bulatao, 1996). (p. 218)

Although many different intervention strategies have been used working with traumatized individuals, among the most effective are those that fall into the category of cognitive or cognitive behavioral psychotherapies that have been found to be very effective in facilitating a resolution of trauma symptoms in significant numbers of affected individuals (Hamblen, 2005).

Individuals more deeply impacted by the traumatic event may need individual treatment. Cognitive behavioral psychotherapy is useful in crisis intervention and treatment of trauma. This approach works to help clients develop the skills to effect change in their belief systems and behaviors and thereby cope more effectively with the symptoms. In many instances, developing these skills may also be useful in making other psychological changes, and the traumatic exposure, in the best of circumstances, becomes an opportunity for growth and productive adjustment in individuals' lives. Trauma often impacts individuals' schemas about themselves, their worldview, and their sense of personal safety, trust, and relating to others in their lives. A therapist using cognitive behavioral techniques can work to target the specific issues impacted by the workplace event and help the client build coping skills that will also be useful for him or her in the future.

One such treatment strategy, cognitive processing therapy (Resick, 2001), is a program that has been found effective for treatment of posttraumatic stress disorder and depression with individuals impacted by a traumatic event. This method involves a 12-session therapy model based on the social cognitive theory of PTSD with a focus on how the traumatic event is interpreted. It helps to develop the coping strategies of the person trying to regain a sense of mastery and control in his or her life. The sessions follow a specific procedure, starting with an educational component on PTSD. Subsequent sessions involve the client in processing the event with complete homework assignments to teach cognitive therapy skills and addressing issues specific to the impact of the event in the person's life.

Another such treatment model offered by the National Center for Posttraumatic Stress Disorder was initially developed following the terrorist attacks of September 11, 2001. With experience from that event and other disasters, an understanding of how people recover from major traumas led to the development of an effective treatment approach using cognitive behavioral techniques with a focus on teaching cognitive restructuring and enhancing clients' abilities to work independently to reinforce the skills learned in the program (Hamblen, 2005).

It has now become common for group interventions to be offered to individuals after exposure to large-scale catastrophic events. Major national disaster response agencies in every community offer mental health interventions along with other services they provide. Local agencies or hospitals similarly provide crisis intervention or grief counseling to citizens in many communities following critical incidents such as school emergencies. Formal group crisis intervention processes for victims of traumatic incidents, such as workplace violence, have been used by employers and recommended by mental health professionals for years. It is now very common with a breaking news story to hear that "crisis counselors are on the scene." With workplace violence, when a number of individuals are exposed to an event (e.g., a workplace shooting), providing the opportunity for a group process facilitated by a qualified mental health clinician may help individuals to process that experience more effectively and with better outcomes.

It is certainly important to allow individuals to use or develop their own strategies for resilience and coping; however, that may be most effectively accomplished within the workplace and most naturally within a work group. In most intervention models, an educational component is used to normalize symptoms that might present with traumatic exposure. When a process allows for natural disclosure of the impact of an event among those affected and learning skills for management, this sharing helps to bond the group together and provides social support for the participants, which also facilitates healing and the recovery process. Those employees who may be experiencing more extreme reactions can be identified and referred for follow-up as necessary.

Management Interventions

When management of an organization is prepared with appropriate actions to take after a workplace violence incident and concerned about the affected employees' well-being, there is a greater likelihood that both the individuals affected and the company overall will recover more quickly and return to function. This process is common across a wide range of catastrophic effects: The better the support systems, the more readily available, the more easily accessible they are, the greater the chance of recovery of an individual or a community. Preparedness is always the key to recovery. Contingency planning for disaster is among the most important resources in every community, agency, organization, company, or family.

The U.S. Office of Personnel Management (OPM) is that Federal agency whose task and purpose is to address the human capital issues and policies of all Federal agencies and is committed to safeguarding the health, security, and well-being of all Americans. The Federal Government recognizes the importance of work/life policies, programs, and practices because these make good business sense. In its handbook *Dealing with Workplace Violence: A Guide for Agency Planners*, the OPM suggests steps that management can take to respond after an incident of workplace violence (U.S. OPM, February 1998).

After a critical incident, it is most important that there are officials representing the management of the organization present at the worksite and able to spend time with employees. After any event, employees will have questions or need reassurance depending on the incident. Typically, management becomes busy with writing lengthy reports or preparing elaborate briefings. This handbook suggests that a more concerned and connected management presence is important for employees after a crisis.

Another critical step after any workplace event is to share information with employees. Employees often have questions about aspects of an event that they did not participate in directly but that may impact their work function (e.g., the health status of an injured supervisor or co-worker, access to or availability of a work area). Because information changes rapidly during and following a crisis, having a central dissemination strategy is helpful to lower apprehension and anxiety among employees.

As was pointed out at the National Center for the Analysis of Violent Crime (NCAVC) symposium, information is crucial in controlling emotional distress during a crisis. When people don't know what is happening, they feel helpless and when there is no solid news, rumors that may be frightening will fill the gap. Crisis managers need reliable information to make decisions. It is just as important for managers to share the information with the rest of the workplace community as rapidly and honestly as possible, so that false reports and irrational fears do not spread and make the crisis worse (U.S. Department of Justice, 2001).

After the terrorist attacks of September 11, 2001, many New York–based companies used a telephone call-in system to keep employees informed of the status of their facility and injured co-workers. Employees knew that if they wanted information, they could easily dial in to get updated status reports. Other suggestions from the U.S. Office of Personnel Management include posting a notice board at a central location, such as an elevator, or including union leadership in the effort to get information to employees.

The OPM recommends that management provide crisis response professionals as soon as possible to offer useful crisis services, including debriefings (used as a generic term representing a group counseling process rather than endorsing any specific model), defusings (again, used as a generic term for a short-term intervention rather than endorsing any specific model), informal counseling, and to support and encourage the use of those services.

Employees often need time to process the event, talk with other employees, and return to their work effort in a supportive environment. It may be helpful, for a period of time after an event, for management to offer more flexibility and encourage opportunities for employees to care for one another as might be reasonable in a specific setting or work function. OPM recommends management keep work groups together as much as possible and not to isolate employees from their natural or traditional support systems.

Another important function for management is the appropriate effort to handle critical sites with respect and care. If there was a violent incident, there may be blood stains on carpeting or walls of the work setting. It is important to protect employees from being retraumatized by those images, but at the same time, remaining sensitive not to pretend that nothing happened. Allowing an appropriate, culturally sensitive grief process if someone died or finding a way to memorialize the lost individual would be important for recovery of the organization. In one specific event that involved the death of a worker in a warehouse, employees were unwilling to return to their work until a priest was called to bless the worksite. Only then did they feel safe to resume their work.

When necessary and appropriate, managing the media and the messages provided about the victims, the company, and other employees is always a critical issue. The U.S. Office of Personnel Management suggests the need to buffer those affected from postevent stresses by effectively coordinating with the media and disseminating timely information. It also recommends that a company assist with benefits and other administrative support to reduce the burden on survivor victims and their families when possible.

It is important to help employees face feared places or activities by doing whatever possible to make it more comfortable for their return to the original home office location. Suggestions include having a friend or loved one along, or being supported by close work associates. After the terror attacks on 9/11, in working with displaced Manhattan-based companies, one organization that temporarily located offsite offered a bus trip to allow employees to visit their NYC worksite prior to returning officially for work. The company made the experience as comfortable as possible in the effort to desensitize apprehension and anxiety symptoms and allowed employees the support of co-workers, along with crisis counselors, rather than leave them on their own for the first time in returning to their headquarters building. Before the bus trip, experts provided educational information on typical reactions to trauma and stress management education along with specific strategies for management of possible reactions. These services made the return to business as usual in the NYC offices more effective and resulted in a successful transition for the employees and the company. All employees returned to their jobs.

Finally, helping employees to get back to a normal work routine and continuing postevent is an important part of the healing process. The U.S. Office of Personnel Management cautions that the return to work must be managed in a way that conveys appropriate respect for the deceased, the injured, and the traumatized, keeping proper cultural sensitivity the priority.

Another source of comprehensive recommendations following work-related violent events is offered by the FBI (U.S. Department of Justice, 2004). Its recommendations include the development and provision of content programs and strategies to educate the general public as well as employees in their place of work in order to address the issue of workplace violence in its broader context—the community.

Its practical guide incorporates creating a national public awareness campaign to increase knowledge concerning workplace violence and personal safety issues through an educational effort by government agencies, major corporations, unions, and advocacy groups. Efforts could include educating policymakers about the scope and costs of workplace violence, encouraging employers to have violence prevention policies and plans, and advocating for laws and funding for workplace violence programs. Essentially, the goal is to make the scope of the problem known and addressed on a larger scale by everyone, including lawmakers.

Workplace Violence Policies

It is most important that companies adopt clear policies for zero tolerance of any threats or violence with a focus on prevention and preparedness. Violence-prevention policies and planning are instrumental for employers to help meet legal and ethical obligations to provide a safe environment for their workers. Among the best plans are those based on a multidisciplinary model, drawing on the expertise of security officers, human resources managers, lawyers, mental health professionals, and others.

When a workplace violence program is implemented, it is important to issue a written policy statement. This informs employees of the details of the policy and what inappropriate behaviors are covered. Such a written policy encourages employees to report incidents when they happen and informs employees whom to notify and how to report anonymously. This helps demonstrate the commitment of management to dealing with reported incidents and centralizes the flow of information. Experience suggests assigning one individual to coordinate the violence reporting services and setting up a system to report any disruptive behavior is most important.

When a plan is adopted, employers must communicate the policy to employees at all levels of the company. It is useful for every company to encourage employees to identify any knowledge they have of the incidence of violence in the workplace, possible risks, and possible preventive measures. In this way, with their inclusion in the process, the company can gain employee involvement and commitment to the program.

Corporations need to support violence-prevention measures; provide violence-prevention training for managers, supervisors, and employees; and practice or drill their plan on a regular basis. As part of every plan, the company must establish relations with local police and other first responder agencies, social service and mental health providers, as well as other government and private agencies that can assist in threat assessment, threat management, and crisis management. Plans need to be developed and in place before any event impacts the organization.

Domestic violence policies should be incorporated into workplace violence plans, as the majority of battered partners, most often women, may be stalked and harassed at their place of work by abusive husbands, partners, and boyfriends. These incidents are high-security problems, and on the extreme end, have the potential to escalate into homicides. Training should include sensitivity to domestic violence issues and supporting employees who may be experiencing harassment. For example, in these situations companies should inquire whether employees have filed orders of protection against family or others. This step is helpful for security purposes and may also serve as a deterrent as the violence-prone individual will know he will be arrested should he show up at his spouse's or significant other's place of work (Carll, 1999).

The FBI experts recommend expanding awareness in the community by educating businesses through local chambers of commerce, industry and trade associations, and other employer organizations. These experts also recognize that companies will be most successful if they create an atmosphere of fairness, trust, and cooperation between employees and management.

Summary and Recommendations

Understanding the prevalence of workplace violence events, it is clear that relying on prevention will not be sufficient. Whatever the efforts, there will undoubtedly be incidents that could never be predicted or prevented successfully. Even when events can be contained, there still may be emotional effects that will impact individuals, and as an extension, the whole organization. The key to managing this problem still remains preparedness and the development of improved response capabilities for effective resolution of work-related traumatic events.

After an event, employees may experience the effects in different ways. One group may include individuals who are by their nature resilient and or have effective support systems that would facilitate successful resolution of any symptoms they might experience. These individuals may not require services other than a crisis intervention soon after exposure and will recover quickly. A second group may refuse services and appear to be managing effectively, but these may suffer quietly with some deterioration of their function eventually in secondary effects of performance problems, marital or family distress, or substance abuse. The third group can benefit from short-term crisis or trauma counseling and will recover their previous level of function. The last group may develop serious psychological disability requiring extensive psychological care. They may not ever be able to return to the workplace. Competent services need to be provided for all of these groups.

Traumatic stress disorders are among few diagnoses in the *Diagnostic and Statistical Manual (DSM IV-TR)* that are clearly the result of specific life experiences. An individual may have no prior psychological symptoms, may never have been hospitalized or otherwise treated for emotional problems, and could still, with a single exposure, suffer acute stress or posttraumatic stress disorder. If an experience can be so powerful as to have such a significant impact, it would be reasonable to expect that an experiential process, such as counseling or psychotherapy, could be an important strategy for recovery of these same effects. When the intervention facilitates development of skills that improve management of the specific cognitive, affective, behavioral, and physical symptoms that are the result of trauma exposure, these skills may restore important needs to recover a sense of stability and control in an individual's life.

Further, providing opportunities for employees to develop other skills such as training in conflict resolution, dealing with hostile people, personal anger management, relaxation and stress management strategies, stress inoculation, and coping skills training would be beneficial, as these all would be important capabilities for employees or anyone else to learn and use. These are among many resources that companies could offer to help reduce the possibility of future events and would assure employees of the serious concern and commitment of the company to their safety and well-being. This could only be accomplished through a cooperative effort of both the organization and all of those who work there. Whatever efforts are made to prevent such events, preparedness for an effective response is still crucial to recovery of all those affected.

Although no single strategy applies universally or will be appropriate for all work environments, it will be increasingly important to reduce the risks of violent behaviors in the workplace. Understanding better the potential dangers and providing more effective approaches to identifying possible perpetrators and providing them mental health services before explosive events impact the workplace is an essential goal for the future in this field. Also, developing and delivering better strategies for intervention after critical events would be an advantage to maintaining the workforce and the companies that depend on them.

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CHAPTER 5

STALKING: PREVENTION AND INTERVENTION

Robert J. Martin

When Robert Bardo fired two bullets into Rebecca Schaeffer's chest, killing her, he also catapulted the word *stalking* into the American consciousness. Before 1989, *stalking* was not a word that was commonly used in America, and when it was used it didn't cause fear and anxiety. All that changed on July 18, 1989, when Rebecca was murdered. She was the co-star of the television sitcom *My Sister Sam*, and most of the nation felt like they lost a little sister when she died.

This chapter begins with a brief historical perspective of stalking, then explores problems with its definition and describes our current understanding of the topic. A section on the psychological impact on the victim will be followed by concepts related to prevention and intervention. Finally, recommendations will be offered.

After Rebecca Schaeffer was murdered, many in the Hollywood entertainment industry were afraid, angry, and frustrated. Many celebrities had endured inappropriate fan behavior for years but were unaware of how to manage these unpleasant, and sometimes hazardous, situations. In response to Rebecca's murder, the Conference of Personal Managers hosted a panel discussion to address personal safety issues in September 1989. The invited panelists were Gavin de Becker,[1] the Federal Bureau of Investigation (FBI), and the Los Angeles Police Department (LAPD). The LAPD and FBI positions were simple: They both agreed that the behaviors that stalkers exhibited were annoying but they were not illegal. Their combined presentations took less than 20 minutes.

Gavin de Becker spoke for an hour and a half and described concepts and strategies that his office had been using for years to keep clients safe. Throughout his presentation and the following question-and-answer period, it was clear that effective strategies existed and that law enforcement was unaware of them. That meeting gave birth to the Los Angeles Police Department's (1989) Threat Management Unit (TMU). This was the first unit of its kind in the country, but it did not take long for the idea to catch on.

The key idea behind the TMU was to create an investigative unit that would take seriously behavior that wasn't criminal on its own, but that was threatening when taken in context. The unit was developed in such a way that a victim did not need to tell her story over again each time she reported a new incident—usually to a different police officer each time. Unfortunately, at that time there really was very little that the police could do in the traditional sense. Another reality was that domestic violence situations were not considered stalking. In fact, the initial LAPD guidelines on when to refer a case to the TMU specifically excluded domestic violence cases.

That would soon change.

In addition to the intense interest of the influential entertainment industry and the formation of the TMU, there were two other existing groups that were just coming into their own: the Los Angeles Police Department's Mental Evaluation Unit (MEU) and the Los Angeles County's Psychiatric Emergency Coordinating Committee (PECC). Both were formed in response to an incident involving a mentally ill person shooting children in a schoolyard.

On February 25, 1984, Tyrone Mitchell, a mentally ill person who was known to the Los Angeles Police Department and the community, fired a number of rifle shots into the play yard of the elementary school across the street from his apartment. One 10-year-old girl died and at least 11 others were injured. Because the police department and the school were aware of Mitchell and his mental state, the chief of police convened a board of inquiry to look at the issue. The board of inquiry determined that the police had acted properly and had followed all existing policies and guidelines. Nonetheless, the chief believed that they could do better in the future. As a result, he directed that a unit be formed for the sole purpose of dealing with mentally ill people who came to the attention of the police so that they could be diverted out of the criminal justice system and into the mental health system when appropriate.

At the same time, Los Angeles County formed the Psychiatric Emergency Coordinating Committee (PECC). It established an interagency agreement with law enforcement, mental health, and health service entities to facilitate community response to psychiatric emergencies that were beyond the ability of any one agency to manage. Among those who came to the attention of the MEU and the PECC was a small, but very identifiable, group of obsessive people that would soon become known as "stalkers."

Advocates for antistalking laws began to emerge as reports of noncelebrities being stalked started appearing in the media. Efforts to link stalking behaviors with severe violence and even death attracted a lot of media attention, but stalking had not yet been institutionalized as a serious crime that affected large numbers of potential victims. The murder of Rebecca Schaeffer certainly shone a spotlight on the subject, but not in such a way that it resonated for the average person. As with many social changes, there was still needed a dramatic moment that would redefine the issue to capture a broader national audience. The "battered women's movement," as it was then known, provided that definition:

> Linking its cause with the visible problem of stalking gave the battered women's movement a fresh look. Coupling long-standing complaints about ineffective restraining orders to the lethal menace of stalking turned a tired topic into a hot issue.
>
> Claims that many stalkers were former boyfriends or husbands cast virtually all women as potential victims. (Best, 1999, p. 54)

That movement, coupled with the buildup of concerns previously noted, brought society to that moment. The name given to that one dramatic moment in time when everything can change all at once is the "Tipping Point" (Gladwell, 2000).

Stalking had passed the Tipping Point.

It was then that politicians picked up the gauntlet. With lightening speed (in legislative terms), every state soon had a law making stalking a crime.

What Is Stalking?

> What's in a name? That which we call a rose *By any other word would smell as sweet.*
>
> —*William Shakespeare, Romeo and Juliet*

"What's in a name?" For Romeo, that wasn't a particularly difficult a question. But, answering the question "What is stalking?" is not that simple. Even among so-called experts, you will get significantly different answers depending on the specialty of the expert. Part of the reason stems from the fact that early research did not differentiate the dynamics that existed based on the nature of the relationship between the victim and the pursuer. In the first known research done by the LAPD Threat Management Unit (Zona, 1993), there were only 29 cases studied and they were all cases involving the pursuit of a public figure.

From a practical perspective, a major challenge exists in current attempts to define *stalking* because those trying to define it are trying to apply the same definition to very dissimilar behaviors in very different contexts. A parallel issue is that almost all of the research done on stalking has been directed at categorizing the stalker, and there have been more than a dozen such research projects. Volumes have been written about the typologies of stalkers, with each researcher presenting his or her spin on the groupings. What is lacking is research on the process that moves a relationship (including one that exists only in the mind of the stalker) from appropriate to unwanted to inappropriate to hazardous to lethal.

How stalking is defined is important because it frames people's expectations, and that in turn affects how they cope with the situation. Probably the most important question to ask prior to defining stalking is "what purpose will this definition serve?" If the purpose of the definition is to create a criminal statute that will withstand constitutional challenges and punish offenders, you will get a totally different definition than if you seek to define the predatory process an assassin follows up to and including the actual attack. If the purpose of the definition is to educate possible victims on the warning signs, you will get a different definition than if you are defining it as part of a grant-funded, statistically valid research project.

Unfortunately, in the absence of any other functional definition of stalking, people will naturally tend to use the legal definitions created by state and federal statutes, such as the state of California's, which will be described below. What this means is that in many cases the default definition of stalking is the prevailing statute. Existing antistalking laws have limited applicability, but we are better served having them than not. We would be served even better if we reserved the word *stalking* to refer only to a particular statute that defines it as a legal concept. Even narrowing the definition that much has significant practical problems. Behaviors that lead up to the crime of stalking need their own conceptual framework because "when all you have is a hammer, all problems start to look like nails" (Mark Twain, year unknown).

> The definition of stalking depends on what kinds of behavior or circumstances one is trying to describe. With that in mind, law enforcement, mental health professionals and service providers should be very clear about the nature of the situation they are considering. In retrospect, when the Los Angeles Police Department first formed its Threat Management Unit, in the days prior to legislation defining stalking, the idea of "stalking" was only one of the criteria used to determine if a case was appropriate to be handled by the unit. In the early days, the Unit handled cases where "an individual demonstrates an abnormal fixation and generates a long-term pattern of harassment, threats, stalking, or unsolicited acts of visitation or telephonic or written communications in an annoying or threatening manner towards another person." (Gross, 1994, p. 200)

The Law's the Limit

Drafting the first stalking laws presented unique challenges because those writing them sought to create a crime out of behavior that is usually legal in another context. Nonetheless, in less than four years, every state had its own version of an antistalking law.

Because California had the first antistalking law, it seems appropriate to use it as a benchmark:

> California Penal Code Section 646.9: Any person who willfully, maliciously, and repeatedly follows or willfully and maliciously harasses another person and who makes a credible threat with the intent to place that person in reasonable fear for his or her safety, or the safety of his or her immediate family is guilty of the crime of stalking.

When a stalking victim's fear, anger, or frustration level gets to a certain point, and the person has "had enough," he or she often views the police as the court of last resort. Unfortunately, most victims do so with the expectation that the police will just make it go away and the problem will be over. They, the victims, will have nothing more to do, and they can go back to living their lives normally. This is a fantasy that rarely comes true.

When a victim reports that he or she is being followed or harassed, the first thing that the police officer taking the report will do is compare the story to the statute. If there is sufficient belief that the statute has been violated, the officer will take a crime report with no further action, rarely giving the victim any useful information relative to future safety. Therefore, it is instructive to look more closely at the statute because it contains significant problems.

The opening sentence of the stature establishes the criteria that the offender must willfully, maliciously, and repeatedly follow or willfully and maliciously harass the victim. This clearly implies that the victim needs to be aware of the stalker's activities. In other words, there must have been some communications or overt, observable behavior. Unfortunately, many times the behavior is not done maliciously. It is done out of love or affection or a sincere desire to help the victim to "come to her senses."

"Credible threat" suggests a degree of, well, credibility. Do we believe him? Should we believe him? Why? It goes on to say: "*It is not necessary to prove that the defendant had the intent to actually carry out the threat.*" This means that what the statute makes a crime *is scaring people—not* putting them at risk. Whether a victim is actually at risk is not addressed.

From the Stalker's Viewpoint

As imperfect as stalking statutes may be, they serve a purpose. In some cases an arrest and prosecution is an excellent case management strategy. Unfortunately, in some cases, it is not. In some cases a successful prosecution, if not accompanied with continued incarceration for a significant amount of time, can enrage the pursuer and escalate the likelihood of violence. If a successful prosecution results only in a sentence of probation, the pursuer may view it as a victory. After all, the victim used the biggest gun in her arsenal (the police and prosecutor) and nothing really bad happened—in his mind. In some cases the experience is extremely rewarding for the pursuer because he got to spend time with the victim in court every day for the duration of the trial. If there was ever any doubt about whether they had some sort of relationship in the past, there is no doubt now.

When the definition of stalking is a statute, all other forms of inappropriate pursuit, many that may escalate to violence, are generally ignored by law enforcement and the criminal justice system. However, that is not to say that there are not many other options available. If an intrusive intervention is called for, other laws may apply, such as harassment, criminal threats, trespass, and stay-away orders, to name a few. Many victims, and many police officers, think that they need to apply the antistalking statute, and that is not the case. Thinking creatively and being willing to be flexible can go a long way toward serving the goal of safety.

The Importance of Risk Assessment

In some stalking cases, even when victims do everything that the system demands, it is not enough. In addition to the steps taken by the criminal justice system, victims need to be educated in ways to reduce their vulnerability.

Maria Navarro called 911 and reported that her estranged husband had just threatened to kill her and was on the way to her house. Despite the fact that he'd been arrested more than once for battery, police declined to dispatch officers to her home because her restraining order had expired. Maria and three others were dead within 15 minutes, murdered by the man who kept his promise to kill. Had the police assessed her risk instead of her legal status, things might have been different.

Betsy Murray's husband violated his TRO (Temporary Restraining Order) 13 times. He reacted to her divorce petition by telling her, "Marriage is for life and the only way out is death." When nothing else worked, Betsy went into hiding, and even after police assured her that her husband had fled the country to avoid being arrested again, she still kept her new address a secret. When she stopped by her old apartment one day to collect mail a neighbor had been holding, her estranged husband killed her and then himself. He had been stalking her for more than six months (de Becker, 1997).

In the Navarro and Murray cases, the victims, their friends and relatives, the police, and the courts were all aware of the pursuer's intent to do harm, but they died anyway.

Some stalking cases fester and build under the surface for quite some time and erupt with violence before the victim is even aware of being stalked. Statues aside, any indications of inappropriate pursuit should cause law enforcement and service providers to take a much closer and more serious look at the situation. Even when the first information is not, in isolation or another context, cause for alarm. This is especially true in non–public figure cases.

"I am just going to have to kill her." The words themselves were not as chilling as the resolve with which they were spoken by Ricardo Lopez shortly before he blew his own brains out in 1996. He was referring to the Icelandic rock star Bjork with whom he had become obsessed. "Bjork has been an incredible part of my mind since 1993. It started out as a crush and became an obsession." As obsessed as Lopez was with Bjork, he had no intentions of harming her. He idolized her, and she was totally unaware of his existence.

An article in *Entertainment Weekly* magazine changed that overnight. Through that article, Lopez learned that Bjork was involved in an interracial relationship. His response was simple and matter of fact: "That is unacceptable. I am just going to have to kill her."

Totally out of touch with reality, Lopez, then 21 years old, videotaped the last 18 hours of his short life. He explained how he was going to, and in fact did, build an acid-spraying bomb and disguise it as promotional material. His plan was for the bomb to kill Bjork, then he would kill himself, and they would be together in heaven. Fortunately, Lopez miscalculated how long it would take the bomb to be delivered, and he killed himself prematurely. The police who responded to his suicide found the videotape and learned of his plan in time to intercept the package before it reached Bjork.

An old Zen question asks: "If a tree falls in the forest and there is no one there to hear it, does it make a sound?" Similarly, if someone is being stalked and he or she doesn't know it, is the person being stalked? Not legally.

Because she was unaware of his existence, and therefore not in fear, Bjork was not a victim of stalking by the legal definition. The Lopez case is extreme, an excellent example of a case in which the person being pursued is at great risk, yet is completely unaware of the situation. Because this case went unnoticed until Lopez committed suicide and it didn't violate a stalking law, it raises an interesting question: When did the inappropriate pursuit begin? When Lopez realized he had a crush on Bjork? When he realized he was obsessed with her? When he learned of her interracial relationship? When he decided to kill her? When he built the bomb? When he sent the bomb?

Violence Is a Process

Violence is almost never a spontaneous act that occurs "out of the blue." It generally begins with behavior that is appropriate but somewhere along the line becomes inappropriate. This can occur very quickly over a few seconds or progress slowly over a period of years.

Regardless of how it is defined, stalking starts with a real or imagined relationship. The stalker's consuming obsession with his victim is never created by a lightening bolt from the heavens. All of us are involved in many relationships, some are more rewarding than others, and some are downright annoying—but not necessarily inappropriate. However, when violence becomes an option for negotiating the relationship, it crosses a line that is almost universally considered inappropriate.

Relationships involve compromise. Not wanting to let go of a relationship, real or imagined, is a relatively normal reaction. Refusing to let go is one of the hallmarks of an inappropriate relationship.

Who Is a Stalker?

According to the National Stalking Resource Center, "anyone can be a stalker." While it is technically true that anyone *can* be a stalker, the reality is that only an incredibly small number of people actually *are* stalkers, legally. According to the National Stalking Resource Center, 1,006,970 women are stalked every year using a definition much broader than any of the existing statutes. If only 12 percent of these are prosecuted as stalkers (Mohandie et al., 2006), then only a very small percentage meet the legal definition. However, when pursued by someone intent on causing them harm (mental or physical), victims don't care what the odds are. They want and need help.

Unfortunately, if only 12 percent of stalking cases are prosecuted, that means that the overwhelming number of stalking victims are out there on their own, literally, when it comes to providing for their personal safety. However, for purposes of safety planning and identifying situations that could escalate, inappropriate pursuers are easily identifiable. They call attention to themselves, and when they do, the threshold issue is to decide to what extent the victim will allow the pursuer to affect his or her safety or peace of mind. The victim needs to reach a "decision point."

Decision Points

The following two-pronged test can assist in determining whether a particular relationship needs to be scrutinized more closely:

- Has anyone interjected themselves into your life in a manner other than you inviting them, or
- Has anyone currently in your life (including relatives) begun to interact with you in ways that make you uncomfortable?

The overwhelming majority of people in either category will have no sinister intent but this can only be determined from closer examination. When the answer to either question is "yes," a decision needs to be made about whether to continue the relationship, and if so, under what conditions. Every time you experience hesitation, doubt, curiosity, fear, anxiety, or any other warning, no matter how faint, you are at a decision point. A useful question to ask at this point is: "Will the decision I am about to make move me closer to or further away from the goal of safety?" This is an important question because many stalking cases involve what would be fairly innocuous behavior in another context, such as letter writing, unsolicited phone calls, conducting research on a victim, or visiting locations the victim frequents.

Examination, Diagnosis, and Prescription

The place to begin is accepting that there are people in your life, or who will interject themselves into your life, who would harm you.

The medical world provides some excellent analogies specifically relevant to interpersonal safety. People go to see a doctor because they are experiencing some sort of discomfort that they need help to alleviate. This can range from a mild ache to a catastrophic injury or illness. There is a universal process all doctors go through when they see any patient: Examination, Diagnosis, and

Treatment/prescription—in that specific order. A competent doctor will not recommend a treatment without a thorough examination and a diagnosis. The same strategy needs to be followed in assessing stalking situations.

Unfortunately, in cases of inappropriate pursuit, the most important questions are frequently not asked at all: "Is the victim at risk," and if so, "how much risk?" The answer to these questions (even if a stalking law has not been violated) can determine what kind of team needs to be assembled, what technologies are available to protect the intended victim, and how quickly they must be deployed.

Physicians always measure vital signs to conduct an independent examination in order to assess the scope of the problem and consider a number of risk factors. The same process works well in stalking situations. The first step is to conduct the examination, whether by a police officer, mental health professional, or other service provider. When a victim of any crime intimates in any way that stalking is on the agenda, it is important to make a full inquiry. It is an easy trap to fall into to focus on the crime originally being reported and seek only to learn those facts that establish that specific crime has been committed.

There Is Rarely Just One Issue

In medicine, the initial examination phase is conducted by making observations and asking a series of questions regarding symptoms. The physician then determines whether a symptom exists and to what degree. One symptom, like a cough, may be a factor in many maladies, such as bronchitis, upper respiratory infection, tuberculosis, or a common cold. It is only after considering this one symptom in context with all of the other symptoms that a diagnosis is made, and a course of action recommended. The patient then must decide whether to follow the doctor's recommendations.

All too often, in some instances, people responsible for assisting victims of inappropriate pursuit or stalking are in a position to help but may skip over the examination and go directly to the prescription. "Well, it sure looks like you are being stalked, what you need to do first is go get a restraining order." There is no substitute for having an organized, systematic method for examining a situation that exhibits "warning signs." In our office we refer to these warning signs as Pre-incident Indicators (PINS).

By their very nature, cases involving inappropriate pursuit are fraught with pitfalls and challenges, not only for the subject of the pursuit, but also for those associated with the subject. When initial warning signs are faint, there is an almost irresistible urge to shrug them off with a comment like: "It's probably nothing," or, "Just because he has a drinking problem doesn't mean he will kill people," and that is generally true. But, drawing another medical analogy, any doctor will tell you that having a symptom is always worse than not having one. Even if there is only one symptom, we begin forming opinions.

Once our opinion is formed, whether accurate or not, psychologically and emotionally we go to great lengths to ensure that we only see evidence that confirms our point of view. This is known as “confirmation bias” and it is very powerful. A wiser strategy is to look for evidence to prove our theories wrong. This is easier said than done because it is contrary to human nature. The most powerful antidote for confirmation bias is a threat assessment and management team. For stalking cases, the single best model that I am aware of is the San Diego Stalking Strike Force. When stalking cases arise, they bring together police officers, prosecutors, probation officers, clinical psychologists, and anyone else who may have an expertise relevant to the current case. As a group, they work with the person assigned the case to assess the level of risk and to develop multidisciplinary strategies for the safety of the victim. They also assist the case manager in interpreting the facts. While such a resource is not universally available, seeking input from at least two other experienced people can contribute significantly to the case management plan.

The Facts Aren’t Facts Until We Interpret Them

“Just the facts, ma’am! Just the facts!”

Joe Friday of *Dragnet* fame made this term famous in the 1950s. His stern “just the facts” persona came to define the image of the “new” LAPD for many years to come.

We all like to think that we are rational, logical people who can make wise decisions if we have the “facts.” This is easier said than done, because the facts aren’t the facts until we interpret them. And how we interpret facts greatly influences how we behave and what we recommend.

In situations involving inappropriate pursuit, it is common for the victim to interpret the pursuer’s motivations quite differently from the pursuer. The police taking the crime report will have their own interpretation of the “facts” and their subsequent follow-up investigation will reflect that interpretation. The courts have yet another way of interpreting the facts. They even determine what facts are permitted to be considered. Based on my observations, there is also a distinct gender difference in the way men and women deal with the possibility of interpersonal violence. While there are exceptions, women tend to live in a more heightened state of awareness of their personal physical safety than do men. To make this point in presentations, I often ask the men in the room to think about a mental image of the last time they were afraid for their personal physical safety. From my vantage point in the front of the room, I can see the eyes roll back and faces grimace while trying to think of one. When asked to describe it, the event is usually something really bizarre: “Well, it was when my car went off the road in the mountains and the safety rail caught the rear tires so I was just hanging over the cliff and I had to climb up to safety.” When I ask women the same question, they have no trouble at all, and it was usually within the last 48 hours: “It was when I went to the mall and had to park farther from the door than usual and I had to walk through an unlighted area.”

Seeking out different points of view on the same "facts" contributes significantly to making better safety plans. At the same time, it is important to assess the situation and make a determination as to the level of risk involved for the victim. In making this determination in cases involving a domestic violence situation, the answers to the following questions will provide insight:

- How did the suspect respond to or react to the ending of the relationship or to efforts to end or resist a relationship?
- What were the pursuer's personal expectations for the relationship? (If no actual relationship ever existed, what were the suspect's projected expectations? His expectations may have changed since being told the relationship is unwanted, but the highest expectations he had for the relationship are relevant.)
- If the victim has tried to get out of the relationship, how many of these strategies have been applied? Tried to "let him down easy"; negotiated the end of the relationship; got drawn into discussions about the past; agreed to talk or have contact; continued to have contact with his friends, family, associates; initiated confrontational interventions (court orders, police warnings, threats/counterthreats, etc.); sent others to "talk some sense into him" or warn him to stop; suggested counseling.
- At what pace did the relationship develop? Did either person try to push the relationship at an unnatural or uncomfortable pace?
- Does the suspect use alcohol or drugs? To what extent?
- What is his history of criminal behavior or contact with the police? (Honor unconfirmed information.)
- What is the suspect's history of compliance with court orders? (Court orders include restraining orders, temporary restraining orders, verbal orders of the court, emergency protective orders, criminal stay-away orders, conditions of bail, notices to appear, traffic violation notices to appear, routine or scheduled court dates, etc.)
- If there is a prior history of violence toward the victim, how frequently did it occur?
- Do the suspect and victim live together or share personal possessions?
- What is the current status of the relationship?
- Has the suspect contacted others as part of his efforts to control, research, influence, learn about, communicate with, harass, intimidate, manipulate, locate, or stalk the victim?
- Does the couple share formal or informal custody of children?
- To what extent, if at all, does the suspect's social world rely upon the relationship?
- What interventions have been applied to get him to stop his abusive or inappropriate behavior?
- Has the suspect shown up uninvited, followed, surveiled, or undertaken destructive acts?
- Does the suspect have a special interest in, or fascination with, themes of violence, power, revenge, militarism, or workplace violence incidents?
- Does the suspect own weapons?
- Has the victim expressed fear of being killed by the suspect? (Indications that a victim fears being killed include making arrangements for after death,

such as who will care for children, or sending evidence to relatives, or hiding documents in a safe place, keeping a diary for evidence purposes, etc.)

Note that these questions have little to do with establishing the elements of a crime. Rather, they focus on the nature of the relationship. Unfortunately, this aspect is often overlooked in favor of focusing on the victim or the suspect. Law enforcement is generally most focused on gathering enough evidence against a suspect to sustain a criminal prosecution and conviction. Mental health professionals, when they are retained, may represent the victim's interests or the suspect's interests, but certainly not both.

> Neither the mental health system nor the law enforcement system can manage mental health crises in the community effectively without help from the other. If the collaboration between the two systems is to be successful, police and mental health professionals need to remember who they are. It is important that police officers be aware that their primary role remains that of law enforcement, even though they may have specialized mental health training. For instance, in one program in which police officers and mental health professionals work closely together in teams, the police officers' primary role is described clearly as providing security that reduces the threat of harm to persons with mental illness and to others as well as providing transportation to the most appropriate treatment center.
>
> Likewise, it is important that mental health professionals who are members of mobile crisis teams not view themselves as or try to function as police officers. Mental health professionals may unwittingly identify with the power and authority conferred by society on the police officers with whom they collaborate, but they too need to remember who they are and why they are there. They need to understand law enforcement and what it entails while retaining and understanding that their primary role in dealing with psychiatric emergencies is assessment, crisis resolution, and appropriate disposition. (Lamb, DeCuir, & Weinberger, 2002, p. 1270)

If the process is not handled appropriately, the victim may feel further victimized by the adversarial nature of the entire judicial process. Understanding the nature of the situation can go a long way in helping a victim deal with the uncertainty of the process, and interdisciplinary teams are an important part of the process of understanding. The issue of certainty will be discussed more fully in a later section.

If the stalking victim is a public figure, very different areas of inquiry need to be explored. Some of the relevant but seldom asked questions include:

- How does the pursuer project or portray the victim in the communication? The victim might be portrayed as a member of a group, as an individual, or in some delusional way (as a spouse, relative, enemy, associate, demon, religious figure, etc.).
- How many efforts to communicate did the pursuer make and were they insistent, urgent, or demanding? Has the form of the communications changed?
- Is the meaning or intent of the communication discoverable only by knowledge of "ROMANS"? (ROMANS is an acronym that stands for religions, occult, mythology, astrology, numerology, and symbolism.)
- What is the pursuer's location in relation to the principal? Some pursuers happen to live in the same city as the victim or happen to live in a city visited

by the victim. This might be important information in terms of managing security, but it is not necessarily indicative of the focus or intent of the pursuer. Conversely, when a pursuer is in close proximity to a victim by design, this is an important indicator.
- Has the pursuer ever stalked the principal or undertaken research in furtherance of an encounter? Prior visits to the victim for inappropriate reasons represent an important pre-incident indicator. Pursuers who have visited in the past are more likely to visit again. Stalking behavior includes research, planning, surveillance, and other efforts that might likely precede visits.
- Is the pursuer familiar with the target environment (home, workplace, etc., where the victim might be)? This would include location, routing, security systems, procedures, room numbers, gates, etc. This inquiry seeks to measure factors about the pursuer's knowledge of the target sites, which would increase the likelihood of successfully gaining access or having an encounter with the victim.

Understanding the situation is critical in helping a victim navigate both real and imagined perils—and stay safe.

Prevention Concepts

We all seek to be happy, or at least comfortable, in our relationships, and we generally accept the fact that sometimes they don't work out. However, the more we have invested in a relationship, the more we may seek to preserve it—even when there is overwhelming evidence that it has deteriorated to an unhealthy state. Logic may take a back seat to denial and confirmation bias (and any number of other mental manipulations). From a safety point of view (both physical and emotional), the single most effective prevention strategy is to be open to the idea that as a relationship changes, so can your opinion of it and your commitment to it.

There are three key areas of change that impact a relationship. Those areas are:

- Changes in the victim,
- Changes in the pursuer, and
- Changes in the situation.

When change is noticed in any one or all of these areas, asking if this change made the situation better or worse provides a benchmark from which to measure the nature of the overall relationship. A key follow-up question then arises: "How willing am I to tolerate the change?" All healthy relationships include negotiating boundaries. Almost all cases of inappropriate pursuit involve violating existing boundaries or unilaterally demanding new ones.

To date, almost all of the research that has been done relative to stalking has focused on the pursuer or on ways to classify the pursuit. A seldom asked question, however, is "What is the purpose of this research?" It is hoped that the answer would be that the researchers were looking for ways to make intended victims safer. In an ideal world, research would assist case managers and victims by providing them with a means to develop personal safety strategies when they are at risk, and ways to reduce their vulnerability. So far, this does not seem to be the case. A review of the best-known research suggests that we have tended to focus more on research that is easy to conduct, rather than meaningful to safety planning.

The single most pressing question to which victims want the answer is: "Is he/she dangerous?" Underlying this question is the unspoken assumption that "dangerousness" is a permanent state of being, or an attribute of a person. It is not. Dangerousness depends on the situation. A more productive discussion would center on the likelihood that the situation between the victim and the pursuer will escalate, possibly to violence, because dangerousness itself is the sum total of many variables. This leads to two important axioms:

- **No one is dangerous to everybody all of the time.** Male batterers don't beat their female co-workers or women on the bus. They beat their wives/domestic partners, and not all of the time. Even the worst sociopaths with very violent pasts spend most of their day *not* being violent.
- **Everyone is capable of violence given sufficient provocation and an absence of inhibitors** (de Becker, 1994a, p. 24). Inhibitors are factors that generally act to reduce the likelihood of violence. They include, but are not limited to, a calm or reasonable disposition, steady employment, honor or favorable reputation, support system of family or friends, interests and hobbies outside of work, stable routine, and dignity. One must be careful not to confuse the potential to do harm with the intent to do harm.

Accepting these concepts makes it almost impossible to ever say again: "He would never do that." Being aware of changes in the situation is critical to safety planning.

Not long ago, the following headline appeared in *The Los Angeles Times:* "Senior Accused of Manslaughter in Movie Ticket Line Altercation." In the story we learned that a 68-year-old man had been charged with manslaughter for punching an even older man as they stood in a line for movie tickets. The victim hit his head on the sidewalk and died. The man's attorney described him as a "decent, nonviolent man who's terribly broken up … as a result of this unfortunate incident." As with "dangerousness," nonviolence is not a permanent state of being either. In most situations, I am sure that describing this man as nonviolent would have been appropriate, but there was something about this particular situation that changed his behavior.

Understanding the full range of human interactions from appropriate to inappropriate to hazardous is important to the concept of prevention.

Intervention Concepts

When a victim reports being stalked to the police, the unspoken assumption is that an arrest and prosecution will occur and this will make the problem go away. That is rarely the case.

> The majority of our subjects were either charged with or convicted of an offense.... However, intervention did not deter in the majority of cases; and the most frequent behavioral pattern was to re-contact the target within one day of any intervention. (Mohandie et al., 2006, p. 152)

> Whether or not to apply preemptive interventions to persons who inappropriately pursue others is one of the most complicated and challenging questions that case managers and victims face. But still, lawyers recommend restraining orders, private detectives recommend surveillance, bullies recommend intimidation, psychologists recommend treatment. In fact, any of these, combination of these, all of these, or none of these might be the best management plan for a given case. There is no ONE answer to stalking cases.... It's dangerous to promote a treatment without first diagnosing the problem in the individual case. (de Becker, 1994a, p. 16)

In his report, de Becker notes that it is important to define what is meant by the term *intervention* and goes on to discuss the interventions intended to force or convince an unwanted pursuer to stop the pursuit. There are many management responses or interventions that are possible in situations involving unwanted pursuit. Not all are necessarily applicable, practical, or appropriate for every case, and some carry the risk of worsening the situation. Some of them include:

- Direct confrontation to dissuade further contact;
- Contact with parents or other relatives;
- A civil court action to seek a temporary restraining order;
- Negotiation with mental health institutions or therapists such that the victim is notified of changes in status of the pursuer and other safety-relevant information;
- Prewarning required for trespass arrest (Penal Code 602 in California, or equivalent);
- Arrest for trespassing (when appropriate), followed by negotiation for specific court-ordered probationary terms;
- Prosecution for threats (Penal Code 422 in California, or equivalent);
- Prosecution for telephone harassment (Penal Code 653-M in California, or equivalent);
- Request that police interview the pursuer and try to discourage further communications;
- Responding to the individual in writing;
- Return mail unopened;
- Prosecution for U.S. Postal Service violations;
- Seeking a court-ordered peace bond or protection order;
- Prosecution under a threat-trespass law (Penal Code 603 in California, or equivalent);
- Prosecution under a stalking law. (Penal Code 649.1 in California, or equivalent)

With that said, there is a step that precedes applying any particular intervention, and that is deciding which intervention to apply. To that end, there are three cardinal rules for making intervention decisions:

- Rule 1: Each case is different and there are multiple options for managing each,
- Rule 2: If the goal is long-term safety and detachment, start with the least intrusive options, and
- Rule 3: Understand the pros and cons of each option *before* deciding which to employ.

Among the least intrusive strategies would be avoiding contact, not returning phone calls or packages, documenting and reviewing all new information, moving, improving personal security, and documenting encounters. Among the more intrusive strategies would be filing criminal charges (for stalking or another appropriate charge), obtaining a restraining order, sending cease-and-desist letters, and seeking mental health commitments. The primary goal of any intervention strategy should be to seek detachment, not engagement; this is because most pursuers transfer their attention if not engaged. In those cases where engagement is recommended, the desired outcome should be very clear. For instance, one of the most frequent concerns of victims regarding inappropriate communications is that they want the communications to stop. Helping victims understand that communications, in and of themselves, are not dangerous and can provide valuable information can be an important part of the safety process. It is also important to note that any assessment of risk is just a snapshot in time, and that as new information becomes available, a new snapshot needs to be taken.

Twice a year Gavin de Becker & Associates hosts the Advanced Threat Assessment and Management Academy in Lake Arrowhead, California. It is specifically designed for those people who are directly involved in the decision-making process regarding violently inclined situations, almost all of which involve some sort of inappropriate pursuit. The goal is that when the participants leave they will take with them four important concepts:

- Safety first—peace of mind second,
- A case is never over,
- Intrusive strategies will always be available, but they cannot be reversed if they are used and the situation escalates, and
- Manage and lessen the victim's fear, do not contribute to it.

Managing a victim's fear needs some further discussion because it is as important as managing actual safety. Sometimes, it is more important.

Earlier, I spent some time moving away from the idea that fear has a direct correlation to hazard because there are many victims of inappropriate pursuit who are not the least bit afraid, but ought to be. There are others who are extremely fearful far beyond what most others in a similar situation would experience. How a case is managed can significantly affect the level of fear a victim experiences. This, in turn, can affect how well safety plans are carried out. The insidious thing about stalking, and now we can use a definition similar to the statutes, is that it is never over. If your house is burglarized, the suspect takes your personal possessions and goes away. While there is often an almost overwhelming feeling of being violated, recovery can begin immediately. With stalking, the recovery process has to wait for it to "be over," and many times it is never over.

When stalking first came to national attention, the most publicized cases involved celebrities. When domestic violence cases were added to the mix, the public figure pursuer research findings were transferred over and applied to them. Unfortunately, in many ways the nature of the cases was quite different, and it quickly became apparent that some case management strategies that worked in one arena did not work in another. In choosing intervention strategies, it is very helpful to know if the case involves a public figure, a judicial official, an intimate partner, or a casual acquaintance. While there are many differences, the psychological and emotional impact on the victim is more similar than different. The similarities are the focus of what follows.

Impact on the Victim

Over the course of human history our survival brilliance was fine-tuned along with our ability to detect the presence of predators that would harm us, including other humans. When a predator is detected and the fear response kicks in, the body undergoes instantaneous physiological changes to prepare for fight, flight, submission, or posturing. For instance, an increase in adrenaline causes one's heart and breathing to accelerate, muscles to tighten, and sweat glands to activate; it also triggers a release of stored sugar, increased metabolic rate, and inhibited digestion. While these and other responses evolved to protect us, most humans rarely encounter emergencies that require physical effort, yet our biology still provides for them. What it did not provide for was sustaining this response over time. And, we know that inappropriate pursuit can go on for extended periods. In these situations, the effects can be devastating. Some of these effects include:

- Posttraumatic stress disorder
- Flashbacks and intrusive recollections
- Nightmares, appetite disturbance
- Depressed mood and suicidal thoughts
- Increased anxiety and arousal
- Chronic sleep disturbance
- Appetite disturbance
- Excessive tiredness, weakness, or headaches
- Nausea before going to places outside of the home or office
- Increased alcohol or cigarette use

Other factors can have negative consequences. Confirmation bias is now working overtime looking for evidence of the presence of the pursuer. Normal patterns of perception and attention are disrupted, and sights, sounds, and other stimuli that normally would go unnoticed now take on new meaning. Planning for the future takes a back seat to safety concerns over something as simple as going to work or the market.

> Stalking is like a long rape. The stalker's objective is to force someone into surrender. Victims respond not with a single reaction but with a progression of emotions akin to Elizabeth Kubler-Ross's five stages of loss: denial, bargaining, guilt, anger, and then acceptance. But they also experience depression, anxiety, and fear. (Gross, 1994, p. 62)

It should be clear that helping victims manage their fear serves them well. It has been our experience that there are four important elements to managing fear and reducing it. We call them the Four Cs of Fear Management, and they apply to a variety of specialists who may be involved with a person who is being stalked.

- *Care:* Victims want to know if you care about them personally, or are they just another case for you? Find ways to show them you care.
- *Confidence:* Victims want to know if they can invest their confidence in you. Do you have the qualifications and interest to help them?
- *Certainty:* Victims are seeking certainty. Generally this means they want to be certain that everything will work out favorably for them. While that certainty can't be promised, you can tell them many things you can or can't do with certainty. You can tell them with certainty what the law is, what the policy is, what the process is, and what steps you are taking. Any certainty will be helpful.
- *Communication:* Stay in touch with the victims. Even when there is nothing new to report, tell them there is nothing to report. It shows caring, adds to the victims'confidence and contributes to the certainty you are working on their behalf.

Safety Is a Process

As violence is a process, so is safety. Safety isn't a place you arrive at and stay. When victims go to the police, a consultant, a private detective, or a therapist, they want them to make the problem go away, to help them find that safe place. They are looking for "The Answer," and in this context, it doesn't exist.

Scanning one's environment for hazards and making adjustments to avoid them is a process that we all engage in all of the time. Fortunately, for most of us, the hazards are so small and easily managed that we barely notice them. Occasionally, we experience some that are alarming, and we manage them and move on. Sometimes we may misjudge and we pay a price. A key element of these events is that they occur quickly and they are over quickly. The recovery may take some time, but the event is over.

In cases of inappropriate pursuit, there is not just one event, there are many and they occur over a period of time. It is like a chess game with no time clock. One of the most difficult parts of the game for victims is that there are occasions where there is nothing to do except wait, and waiting is not something we do well when at risk. One of the key elements of the game is that the victim is playing, too. This aspect is often purposely avoided because it is not politically correct to even hint at anything that can possibly be construed as "victim blaming," but like it or not, they are in the game. The victim is a participant because what the pursuer does next depends on the behavior of the victim. For instance, when you enter a friend's house and encounter the family dog, you react to his presence. If he comes at you barking and snarling, you react one way. If he comes toward you with his tail between his legs and rolls over on his back in front of you, you react another way. When the dog rolls on his back, before he does anything else, he waits to see what you are going to do. If you kick the dog, he will react differently than if you pet him gently. The whole process becomes a give-and-take exchange with each participant affecting the outcome.

Waiting to see what happens next can be difficult and cause anxiety, much like waiting for the "other shoe to drop." By their very nature, in cases of inappropriate pursuit, almost all of the victim's time is spent waiting. The unwanted phone call that causes alarm takes only seconds. Then the waiting starts, waiting to see how the pursuer responds to the fact that he was ignored, or yelled at, or hung up on. Among the strategies to help victims is to teach them to compartmentalize the risk and to focus their thinking on the times when they are safe, which is most of the time. An effective use of this time is to reduce the victim's vulnerability.

There are some almost universally applicable strategies in managing cases of inappropriate pursuit that we call "Best Medicine." Did you ever notice that whenever you go to the doctor, for any reason, he or she will always advise you to not smoke, limit fatty foods, and exercise regularly? This is Best Medicine.

In considering the value of a threat or hazard, we do not weigh characteristics of the intended victim. Those factors are considered in what we call the "Vulnerability" measurement. The Vulnerability measurement is a key part of designing efforts to reduce hazard. Reducing Vulnerability is a Best Medicine or best practices concept:

- The first measure of Vulnerability is *Accessibility:* Can the potential victim be located? Are there advantages in place to reduce that likelihood? Are likely locations for the potential victim predictable?
- The second measure of Vulnerability is *Early Detection* and *Notification:* Are there strategies in place to detect surveillance, stalking, or lying-in-wait? Are people aware that the victim wishes to be notified, and how to notify the victim or an assigned designate? This involves informing the appropriate people of the situation. Others should be aware of these efforts to be sure if the pursuer does attempt an encounter, the victim will have a higher likelihood of knowing about it.
- The final measure of Vulnerability is *Response* in the event there is an encounter: Are there advantages in place to manage an attempted or successful encounter? Most notably, this includes security at home and at predictable worksites. Simple cautions like not being alone while walking to the car at predictable locations go a long way toward reducing the likelihood of an encounter influencing the measure of vulnerability. Maintaining vulnerability at an acceptable level is a key part of safety, privacy, and well-being for victims of inappropriate pursuit.

Conclusion

There are nearly an unlimited number of ways that pursuers may be grouped and categorized, with some having no relationship to safety. Because every case is different, the case management strategies available to victims are also nearly limitless. Nonetheless, there are some Best Medicine concepts that can be applied to nearly every case:

- Each case is unique; avoid "cookie-cutter" thinking.
- Define your desired outcome. If you don't know where you are going, you won't know when you get there.
- Seek detachment, not engagement, with the stalker: start with the least intrusive intervention strategies. Even intrusive strategies should seek to avoid engagement whenever possible.
- Be prepared for any outcome: consider that even the best-laid plans fail. What if it does?
- Be in a position to detect Pre-incident Indicators (PINs). Help the victim understand what to look for and to report.
- Be aware of the potential danger. While most cases resolve themselves favorably, some can have devastating effects if not handled properly—situations can change quickly.
- Be flexible—that's what works.
- Don't be limited by the rules. When safety is the issue, avoid letting the rules be the limiting factor.

We have come a long way from the lessons learned from Rebecca Schaeffer's murder. Most police agencies now have someone on board, if not a whole unit, with some degree of expertise in stalking. There are laws that specifically address stalking cases; and, prosecutors who know how to prosecute them. The Association of Threat Assessment Professionals that grew out of LAPD's Threat Management Unit has grown and has international influence. The Advanced Threat Assessment and Management Academy has trained private sector and law enforcement professionals from nine countries on five continents.

For cases involving domestic violence, San Diego is setting the international standard. More than 18,000 domestic violence victims and their children have come to the San Diego Family Justice Center looking for help, safety, and healing since the doors first opened in 2002. The most astonishing statistic, however, is that not one of those who sought help at the Family Justice Center has died.

Recommendations

Law enforcement, mental health professionals, and service providers should be very specific in defining the nature of the "stalking" situation they are evaluating. Specifying the type of stalking would reduce misunderstanding and add clarity to case management recommendations; for example, specifying whether judicial stalking, public figure stalking, intimate acquaintance stalking, etc.

Statues aside, any indications of inappropriate pursuit should cause law enforcement and service providers to take a much closer and more serious look at the situation, even when initially the information may not be, in isolation or another context, cause for alarm. This is especially true in non–public figure cases.

In addition to the steps taken by the criminal justice system, victims need to be educated as to how to reduce their own vulnerability. In some stalking cases, even when victims do everything that the system demands, it is not enough. Public funds should be made available to assist victims.

Stalking victims should have access to specially trained mental health professionals to learn to manage fear and stress related to being stalked, especially in long-term situations.

Legislative changes need to be made to allow stalking and domestic violence victims to assume untraceable new identities. This should include exempting them from jury duty.

Every law enforcement agency and prosecutor's office responsible for the handling of stalking cases should have at least one person, if not a whole unit, with sufficient expertise to manage a victim's safety as well as the prosecution of the case.

Note

1. Gavin de Becker is widely regarded as the nation's best-known expert on the prediction and management of violence. His work has earned him three presidential appointments and a position on a congressional committee. He is a Senior Fellow at the UCLA School of Public Affairs and a Senior Advisor to the Rand Corporation on public safety and justice matters.

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CHAPTER 6

KILLING AS TRAUMA

Rachel M. MacNair

The first requirement for posttraumatic stress disorder (PTSD) is at least one event that people would generally regard as traumatic. Does this require that individuals be entirely victimized or otherwise compelled to witness repulsive scenes caused by others? Can one be truly traumatized if the scene is of one's own making?

As early as World War I, Jane Addams interviewed hospitalized soldiers and described symptoms of what was later called PTSD. She attributed these symptoms to their acts of killing (Johnson, 1960, p. 273). As the concept of PTSD has developed and become defined, there is evidence that being active in causing trauma can cause PTSD symptoms. This form is called perpetration-induced traumatic stress (PITS) and is found quantitatively and in case studies of a variety of groups that have engaged in killing of others, often socially approved (MacNair, 2002).

For those that look at the question, there is general agreement that PTSD symptoms not only can result from acts of killing, but may be more severe under that circumstance (Green, 1990; Grossman, 1995; Hendin & Haas, 1984; Laufer, Gallops, & Frey-Wouters, 1984; Strayer & Ellenhorn, 1975; Yager, Laufer, & Gallops, 1984). A large stratified random sample of combat veterans from the American war in Vietnam also shows this. Called the National Vietnam Veterans Readjustment Study (NVVRS), it was collected by the U.S. government in the 1980s. The NVVRS included 1,638 veterans who were in Vietnam. For those who answered "yes" to the question of whether they killed or think they killed anyone in Vietnam, the PTSD score was 93.4 as opposed to 71.9 for those who answered "no" ($p = .000$); how large the difference was, measured by Cohen's d, was .97—almost a full standard deviation, and a very large effect size in social science.

This is oversimplified, because some of those who answered no were not necessarily subjected to traumatic situations of any kind, making their lower scores unremarkable. Other questions asked whether the veteran was "directly involved" or "only saw" killings of civilians and prisoners. For those two categories, the comparison is between people who have all witnessed traumatic events. In that case, those who were directly involved had PTSD scores of 105.6 versus 79.4 for those who only saw (p = .000). The size of the difference was a Cohen's d of .86, still quite large. Note that the score of those who answered yes to killing is higher than the score of those who "only saw" killing, 93.4 versus 79.4.

Another way of addressing whether those who did not kill were in situations that were otherwise traumatizing is their self-rating of the level of combat in which they participated. This is also important for those who answered yes on killing, inasmuch as we would need to know if this was nothing more than a measure of how heavy the combat was. After all, we would expect to find that more killing might occur in heavier combat and less would happen in lighter combat. That could mean that saying yes on killing is nothing more than a marker that one was in heavier combat. This would be expected to be more highly traumatic and therefore to elevate the PTSD scores.

The data in the NVVRS do not support this, however. Scores on the PTSD scale do, as expected, rise as the level of perceived battle intensity went up. Yet for the heaviest combat, the highest score for those who said no to the question of whether they had killed anyone in Vietnam was nevertheless lower than the lowest scores for those who answered yes to killing. Put another way, when battle intensity was controlled for, there was still plenty of correlation left between killing and PTSD scores (MacNair, 2002).

As for the combat veterans of the post–September 11 American wars in Afghanistan and Iraq, preliminary results show that PTSD was beginning an appearance in a portion of returning veterans as early as December 2003 (Hoge et al., 2004). Because a delayed reaction is common, it will be some time before we know the full extent of the damage to U.S. veterans from these wars alone; studies of Afghan and Iraqi veterans may well not occur. It has been reported that World War II veterans who have shown little sign of PTSD symptomatology over their working lives have started showing signs of it at retirement (Sleek, 1998). Delayed reactions are part of the definition of PTSD in both the *DSM-IV* and *ICD-10*.

Researchers asked veterans questions as to whether they were responsible for the death of an enemy combatant or noncombatant. There are some preliminary steps of acknowledging these acts as traumas causing PTSD. Still, in the first published study the answers were not yet compared on severity or prevalence of symptoms (Hoge et al., 2004).

Pattern Differences in Those Who Kill

I did more analysis on the government's data in the National Vietnam Veterans Readjustment Study (NVVRS), which was large and representative enough to discern patterns. The statistic designed to find them, discriminant function analysis, is a way of reporting which items tended to be stronger in one group and which were stronger in the other group. Veterans were divided into two groups: "perpetration" and "nonperpetration." For one analysis, that meant those who answered yes to having killed as opposed those who answered no. For the second analysis, it mean those who were "directly involved" as opposed to those who "only saw."

Intrusive imagery—nightmares, flashbacks, and unwanted thoughts that refuse to go away—always appeared especially high as a way of distinguishing the perpetration groups. So did violent outbursts, as reported by the veterans themselves. The ratings of their friends and families about the level of temper problems or upsurges of rage were not included in the data.

Also commonly appearing on the perpetration groups, but not as strongly, were hypervigilance, alienation, and survivor guilt. The issue of justified guilt or any other form of guilt feelings was not covered. Only a reverse-scored item on not feeling guilt was included. When tried, it never entered in the analysis. We have no way of knowing whether veterans answer a question about "not" feeling something differently than they would answer a question about feeling it, especially in a list of things that is otherwise about feelings they do have.

Avoidance items were less consistent, sometimes appearing for perpetration and sometimes for nonperpetration, but usually not entering the results at all. In this study, the same veterans were asked in another section about how they coped in Vietnam, and an analysis of their answers showed that avoidance was a coping mechanism more for those who did not kill than for those who did. There is some sense to the idea that avoidance behavior would be more characteristic of those who avoided killing. Therefore, those who kill may already be at a lower level of behavior of avoiding as a personality disposition. This helps account for the inconsistency on these items. Perhaps those in the perpetration groups require a greater level of avoidant symptomatology to surpass a group that started off with more than they had.

A surprising finding was that concentration and memory problems consistently appeared on the side of the nonperpetration groups. This was a strong finding, and not predicted ahead of time. This could have implications for uncovering the physical and psychological causality of individual symptoms. If the more active are less inclined toward concentration or memory problems, and the more passive are more so inclined, then the search for the underlying causal mechanisms can be directed along more fruitful avenues. Of course, the causality could be in the opposite direction—already having concentration and memory problems may interfere with getting into situations in which one kills. It is also possible that the symptom of hypervigilance, noted as being stronger in the perpetration group, somewhat counteracts concentration and memory problems; this idea occurred to me as I watched the movie *Munich* by Steven Spielberg, as the dynamic of how hypervigilance might be experienced by those who have killed was portrayed.

Another item that often appeared on the side of those who said they did not kill was the tendency to have suicidal thoughts. This appeared weakly, with the size of the effect being so small, and the number who reported the problem at all being such a small portion, that from a purely statistical point of view it would not receive much attention. However, suicide among veterans is a major problem, and by definition the most severe form of aftermath.

Desiring suicide is peculiar compared with other symptoms, in that the most extreme type could be absent from the data set. Those with the most severe form of this problem have indeed successfully committed suicide. Because of this, they are no longer available to answer questions or be a part of any study. A weaker form of suicidal thought does not lead to actual suicide, keeping it from being represented in the data. Therefore, it could still be that the symptom may follow the pattern of other symptoms and be more severe in those who killed.

One scale had a component labeled disintegration—a sense of unreality, experience of depersonalization, unrealistic distortion of meanings, restlessness or agitation, self-hatred, hostility toward a part of the body, perception of high pressure, panic, and disintegration. This set of symptoms is not normally included in PTSD scales and is not in the official definitions. However, when included in a discriminant function analysis, this factor was second only to the factor on intrusive imagery. This may be a very important problem to those who have killed.

Dreams

Intrusive imagery, and therefore nightmares, is one of the symptoms that seem to be especially strong in perpetration-induced trauma. Does the content of dreams also differ? Because the content of the experience itself differs, it would stand to reason that a symptom that deals so strongly with content could be affected.

Glover (1985) and Lifton (1990) report from their clinical experience with veterans several dreams explicitly linked to having killed in Vietnam. Some of these do seem to be the kinds of PTSD dreams common to victims of trauma—replays of the original event. Yet there is also a different form: "Men who suffer with guilt because they killed out of error or fear frequently dream of the incident, hoping somehow to undo the event. Those who willfully killed, but now suffer misgivings and conflict, frequently dream of seeing themselves killed in battle. Sometimes the veterans dream of being unable to defend themselves because they have a faulty weapon or because they are physically unable to respond" (Glover, 1985, p. 17). Lifton gives the words of one veteran: "I was riding on some kind of vehicle—a bus, I think—down Fifth Avenue. Somehow it turned into a military truck—and the truck got bigger and bigger, until it reached an enormous size. I was a soldier on the truck—and I fell off … and was killed. [In another dream] I was riding on a subway—underground—and somehow [along the course of the ride] I seemed to turn into a soldier in uniform…. There was a lot of confusion and then there was a battle with the police … in which I was killed" (p. 427). Another veteran reported a dream in which an enemy soldier who had shot him in the leg and whom he had apparently killed kept showing up vividly in a recurrent dream, with a face as clear as it had been in the original incident. The recurrent dream seemed to be a replay of the event, with the major difference that in the dream, the veteran himself was killed by his antagonist (p. 429).

Something similar is reported in the case of a police officer who was diagnosed with PTSD resulting from his having shot someone: "over and over, in his dreams, Sal faced a man with a knife. In one dream, he faced him alone. In another, alone and unarmed. And in the worst of all, alone, stark naked and terrified" (Dateline NBC, 2000).

There are additional forms the content of dreams of those who killed are reported to take. Glover (1988) cites a case in which the veteran "frequently hears the voices of the Vietnamese women and children he killed, accusing him (in English) of killing them or demanding of him the explanation of why he killed them. The voices warn him that bad things will happen to himself and his family" (p. 70). Lifton (1990) recounts a veteran offering this dream: "I was arguing with myself. Then there were two separate selves, and one of them finally shot the other, so that I shot myself" (p. 429). This motif of the double, whereby the personality splits in two, is one that Lifton develops in various places, including his book on the Nazi doctors at Auschwitz. In this case, the veteran is killer and killed at the same time, killed in his dream but killed by himself.

Addiction to Trauma

Some researchers have suggested there may be an actual addiction to committing violence. Can killing be traumatic in its long-term effects on the mind, and still have the immediate effect of exhilaration, a sense of the thrill of the kill, a combat high?

There is a possible biochemical explanation. High-stress situations can cause an upsurge of natural opioids inside the body to kill pain (van der Kolk, Greenberg, Boyd, & Krystal, 1985; Southwick, Yehuda, & Morgan, 1995). Ordinarily, this is adaptive in dealing well with danger. In terms of artificial drugs, natural opioids are related to cocaine, morphine, and heroine. This could help account for addiction, for a postfight calm, and for later distress, as with a hangover.

Grossman (1995) quotes a Rhodesian veteran to show the similarities to artificial drug addiction: "Combat addiction … is caused when … the body releases a large amount of adrenaline into your system and you get what is referred to as a 'combat high.' This combat high is like getting an injection of morphine—you float around, laughing, joking, having a great time, totally oblivious to the dangers around you.… Problems arise when you begin to want another fix of combat, and another, and another, and, before you know it, you're hooked. As with heroin or cocaine addiction, combat addiction will surely get you killed. And like any addict, you get desperate and will do anything to get your fix" (p. 234).

Grossman, himself an army officer, believes this sense of exhilaration is a common part of killing. It may be less commonly admitted to in situations where people are being killed, but it may underlie the idea that someone is "bloodthirsty." It may help explain the carnival atmosphere historically seen at many executions and lynchings.

Several clinicians have found this connection in their case studies. Solursh (1988) reports a combat veteran who says: "It's hard to duplicate this high with drugs, except the only drug I know is cocaine, that would reproduce this high for you, the same type of high of killing." This and a second paper (Solursh, 1989) make it clear this "rush" does not protect against getting severe PTSD symptoms—indeed, it may help aggravate them. Nadelson (1992) reports combat veterans who had an "attachment to killing" and similarly finds them making analogies to a high from drugs. Wikler (1980) was told by veteran clients that there were soldiers who were referred to as the "killer types," those who "seemed to enjoy their work, getting 'kicks' or 'highs' from killing" (p. 98).

In killing animals, where it may be more readily admitted, blood sports such as hunting and bullfighting have led to signs of euphoria that go beyond the satisfaction of a game. Hunting and similar activities can even be a continual socially accepted means of reexperiencing the trauma of killing people as a substitute for flashbacks, nightmares, and other intrusive thoughts, serving a similar function. An American bullfighter in Spain said: "When you come out of this experience and—you appreciate everything you have around you; the skies look bluer, the birds sound better, the food tastes better.... I mean, if I could tell you what it was, maybe we could bottle it and sell it and save a lot of people—you know, if we could bottle the adrenaline, if we could bottle that feeling a matador has after a fight and sell—and it'll be wonderful—manic—manic depressants and people. Be a wonderful thing." (*60 Minutes*, air date January 11, 1998). When the feeling is in fact put in a bottle, a syringe, or a powder, it is a drug that can easily lead to an addiction.

This means that we can reasonably see a reaction of euphoria, even though this initially sounds puzzling, as a reaction to trauma. Withdrawal symptoms follow immediately, and posttrauma symptoms commonly follow in the long term.

Biology

Biological areas, in addition to the opioids in the brain already mentioned as a possible underpinning of addiction, include considering the distinction of perpetration-induced rather than victimization-induced traumas in all forms of the biology of PTSD. If there are differences in symptom patterns, there may also be important variations in matters such as the role of the hippocampus and the stress hormones involved. As van der Kolk has said about the biological impact of PTSD, "the body keeps the score." Does the body register any pattern differences depending on the type of the trauma?

Additionally, outside of trauma studies, there has been much work recently on "mirror neurons" in the brain that help account for our imitative and empathetic behavior. It would stand to reason that a situation of killing may impact mirror neurons in such a way as to cause, exacerbate, or somehow modify the psychological aftermath when compared to other traumatizing situations. What are those impacts?

Attitudes on Killing

When dealing with veterans and similar groups of people who have been expected to kill, how should questions on guilt be worded? If there were different kinds of wording, including such terms as occasional *ethical concerns* and *moral qualms*, these might get a fuller picture and arouse less defensiveness. This is all the more important in dealing with groups other than veterans, especially with groups whose actions are controversial.

A belligerent attitude of justification can be even harder to study or otherwise deal with than guilt. A mental strategy of denying the discord of one's actions with one's own moral code is often accompanied by vehemence. To propose this denial even exists suggests a possible bias in favor of the idea that the action was in fact not justified. Yet the assertion that it does not exist is also a bias in favor of the idea that the action was justified. If people admit guilt, then therapists, researchers, and friends can deal with those feelings without making their own judgments. If they do not admit guilt, this does not mean the absence of unconscious feelings. Yet these are much more tricky to handle.

When killing is repugnant to the society as a whole, as with criminal homicide, or current attitudes toward Nazis, or torture of political prisoners that is kept hidden, then many will feel a repugnance toward the idea that such people are in need of healing. Perpetrators are perceived rather as being monsters who should simply be locked away. Some believe that discussing such aftermath can be a play for undeserved sympathy. They hold that sympathy should be reserved for the victims alone.

When there is sympathy for those who did the killing, as with the soldiers on one's own side during a war, there is a different reason to avoid seeing damaging psychological aftermath. Any harm caused to the soldier would be seen as something done by the enemy, rather than a natural consequence of the soldier's own actions. The society that sent the soldier into the war bears more responsibility for the soldier's current condition if the society expected or mandated the killing behavior.

When killing is done in ways that are socially approved by some and opposed by others, then the study of psychological aftermath to the practice for participants can be viewed by proponents as a propaganda ploy by opponents. To illustrate with a variety of views, there are two examples of practices regarded as unjustified killing from opposite ends of the political spectrum: the death penalty and abortion. Will proponents of capital punishment see the study of those who carry out executions as an antiexecution trick? Will those who believe it important that abortion be available see the study of abortion doctors as an antiabortion ruse?

There are those that favor both the death penalty and the availability of abortion who might be suspicious of studies applied to both these issues, and those who oppose both the death penalty and abortion who find the study of both to be of keen interest—making others all the more suspicious. The very concept of PTSD, while it was first being established in the professional literature, was greeted by many as a sinister plot by those who were against the war in Vietnam. Members of groups such as Veterans of Foreign Wars saw it as an antiwar propaganda subterfuge. It took some time to be established in a more scientific setting.

Yet in scientific terms it would only be a propaganda ploy if researchers took the approach of being determined to find that there were PITS symptoms resulting from the practice. With the hypothesis that there may be such symptoms, and with the hypothesis set up in a strictly defined way that can be falsified, a hypothesis that can be statistically rejected based on observation, then science should have only the level of controversy that would normally arise from various aspects of the psychological study of violence.

In most cases, there has been a blind spot in the military professionals in charge of considering the psychological aftermath of battle. The original U.S. government study of its veterans of Vietnam, the National Vietnam Veterans Readjustment Study (NVVRS), contained deep study of the various aspects of PTSD. Yet the official report (Kulka et al., 1990) did not discuss the aspect of PTSD resulting from killing. The one question in the data whereby the entire group could be divided for comparison was "Did you kill, or think that you killed, any one in Vietnam?" Those answering yes and no allowed for a rudimentary division into groups, but information was entirely lost on how frequent killing might have been or all the nuances that could come with varying circumstances—self-defense as opposed to rage, one enemy soldier as opposed to one child with a grenade, mistakes, airplane bombing as opposed to hand-to-hand combat, and so on.

Dan Baum, a reporter with *The New Yorker*, asked several military officers why the question of having killed was not covered. He found that most of them either regarded it as irrelevant because killing may feel bad but would not be a trauma, or indicated a belief that soldiers would resent and not answer the question (personal communication, April 9, 2004). This is in line with the sentiments of Zahava Solomon (1993), a psychiatrist in charge of care for Israeli soldiers through their several wars. She said that they had no reason to feel guilty because they had followed the proper rules of war. Separate from the question of whether Palestinians and others would agree with her assessment, she did not consider the possibility that killing even under circumstances the military regards as justifiable might nevertheless be traumatic.

It is at least commonly recognized as such with police who shoot in the line of duty (Carson, 1982; Loo, 1986; Mann & Neece, 1990; Manolias & Hyatt-Williams, 1993; Martin, McKean, & Vetkamp, 1986; Neilson, 1981; Stratton, Parker, & Snibbe, 1984). This is the exception that proves the rule. The shooting is commonly regarded as the criminal's fault, rather than that of the defending police officer. That the officer may have a traumatized aftermath, despite the justifiability determined for the action, can be the mark of an upright officer. There is a different attitude toward soldiers.

Therapy

Therapists need to understand differences in what constitutes effective treatment. They need to know the features in the psychological aftermath especially common to this form of trauma—violent outbursts, intrusive imagery, perhaps a sense of disintegration.

Some therapies that work well for other groups may be counterindicated in PITS. For example, Foa and Meadows (1997) relate: "In particular, PTSD sufferers whose traumatic memories are about being perpetrators rather than victims may not benefit from [Prolonged Exposure as a treatment] and perhaps will even deteriorate from such treatment" (p. 475). Prolonged Exposure, also called the flooding technique, exposes the client to intense reminders of the trauma. This is supposed to bring about a desensitization to trauma. In a set of six case studies, participation in abusive violence was one case where the technique was clearly counterproductive (Pitman et al., 1991). On the other hand, Kruppa (1991) cites an individual case in which she used flooding therapy with a person who had committed a criminal homicide for the specific purpose of treating the symptom of flashbacks. The treatment was successful for that specific symptom, though it had no effect on the patient's symptom of remorse or disgust over the act. Kruppa also notes the risks of the therapy, including higher risk of the patient dropping out or having a violent incident in reaction. Whether undoing an aversion to an act is an ethical course when the act is homicide would also be a question for therapy here, which is not as common a problem for other forms of therapy.

How would the therapeutic technique of Eye-Movement Desensitization and Reprocessing (Shapiro, 1995) work for those who get PTSD symptoms from killing as opposed to being victims? Would there be pharmaceutical drugs that would be different, or would they be the same? For these and various other approaches to treatment, we still need more research. That research will be more effective and helpful with the understanding of PITS as a form of PTSD that may require different approaches. In other cases, it may require some fine-tuning of the approaches that work on victims of trauma.

When therapists consider the implications of this idea, it is not uncommon that traditional religious concepts of dealing with wrongdoing arise. Foa and Meadows (1997) suggest that when guilt is justified, "alternative strategies … [include] exploring ways of making reparations and bearing witness" (p. 475). Experienced therapists have suggested atonement, repentance and forgiveness, bearing witness, and reidentifying one's self as a different person than the one who did the killing, as in being "born again." This has been one of the responses of the human community in diverse cultures and through many historical periods to the common phenomenon of dealing with killing. They have remained because of extensive historical experience that they do indeed help.

If there are people who have an addiction, either biochemical or behavioral, which causes continuing activity or continuing mental reenactment of the trauma—that is, intrusive imagery—then therapy needs to be altered accordingly. As one discussion of this aspect put it, "a therapeutic approach based on the assumption that the PTSD symptomatology was aversive to the veterans would be unlikely to be successful" (Hodge, 1997, p. 96). Because there are clearly times when the symptoms are aversive, therapists must make a clear distinction. Nor does the lack of aversion mean that the symptoms require no treatment, as with any addiction. The dangers to other people in failing to treat someone with an addiction to violence are also a major concern.

A common and major part of therapy is the use of talking through a difficulty. Yet as long ago as the era of the American war in Vietnam, Haley (1974) and Shatan (1978) reported that when combat veterans reported having committed atrocities, their therapists had more trouble listening to them. Killing that does not fit the category of atrocities may well have the same problem. Repulsive events are more of a problem when one is trying to be sympathetic to a patient.

This problem also showed up in the NVVRS study. Along with the intrusive imagery and violent outbursts, another item that appeared very high for the perpetration groups was that of never telling anyone about something that was done in the military. The very use of the word *atrocity* for this behavior in the scholarly literature, in which nomenclature is usually more subdued, shows why participants might feel this way. It may be that the lack of expression contributes to the presence of the nightmares especially and to other severity of symptoms as well.

Pennebaker (1990), whose research focus is primarily on the benefits of expression, disclosure, and reflection, reports that "among Vietnam veterans, one of the most successful treatments to cure the unwanted flashbacks of battle is to encourage the veterans to talk about and relive their wartime experiences" (p. 79). He does not report if he differentiated between those who killed and those who did not, or whether both found this helpful. Yet it is possible that for those who killed, the same problems as the flooding technique would arise. It is also possible that part or all of the difference in severity for those who killed involves having more trouble in having people listen to them talk of the experience, or that they themselves do not wish to do so. Pennebaker may then be quite right that the most important thing is to break through this reticence and encourage reflective disclosure. We need more research with the victim or rescuer/perpetrator distinction in mind to know if this is helpful therapeutically. There may also be further factors to be uncovered that would make it more therapeutic for some and not for others.

Victims of trauma are often reluctant to discuss details, but those who have killed tend to be far more reluctant. Families and friends of veterans discourage them from discussing the horrors of war, especially any acts they may have committed themselves. Nor is such discussion encouraged by other veterans. As previously stated, even therapists may be loathe to hear the details. There are few occasions to bring up one's own problems with nightmares, flashbacks, deadened emotions, hyperarousal, temper outbursts, and so on. If these symptoms do not break down to the level of a disorder that requires hospitalization, there would be a strong motivation not to bring them up at all. They are seen as private. There is a fear of judgment by other people, which would be more intense when the trauma arose from killing than it would be when one was a helpless victim of the trauma. There is also a worry that the experiences mean that the person having them is perceived as crazy.

As long as the symptoms are generally absent from conversation and from the war portrayals of novels and motion pictures, then the very absence makes some veterans think that their experiences are peculiar. When they avoid talking about it themselves, this contributes to the absence of it being discussed. The same is true of groups other than combat veterans that may engage in socially approved killing, such as people who carry out executions.

All these social considerations are compounded by the use of avoidance of reminders of the trauma as one of the very symptoms of the condition. The same is true for emotional numbing, and the sense of detachment from other people.

There is also the level to which the people suffering are unwilling to admit problems even to themselves. There is a self-esteem component involved. Some will forthrightly defend their own original actions. They feel that if these were justified, that would make a negative psychological aftermath for those actions impossible.

There are also veterans as identified by Glover (1985): "The experience of having wielded considerable fire power in the Vietnam War has had a major impact on the lives of these men, [giving] exhilaration and sense of power…. Among this group of veterans are those who openly regard civilian life with contempt and think of it as being mundane and inconsequential. Not surprisingly, these individuals are most unlikely to come to the attention of psychiatrists except in acute situational crises" (p. 17). These are men with an impatience toward solving problems, because from their viewpoint, problems got solved quickly with firepower. This was a view formed during late adolescence at a highly formative time of their lives. They do not see their explosive temper when they do not get their way as anything other than justified. They would resent the suggestion that it is a "symptom" that flows from their experience. Those who are defensive, those maintaining a self-image, and the contemptuous would meet with hostility the very suggestion by others of their feelings as being anything out of the ordinary. This can be true not only for combat veterans, but any other group involved in socially approved violence.

Thus, providing therapy for those who wish it may be the easy part. What of those who refuse to believe they need treatment, or resent the very suggestion? In those cases, healing may be needed for future violence prevention, yet it is resisted. We need innovative strategies for dealing with this problem.

Expressions in literature have actually been a method whereby symptoms have been explored and dealt with; from Shakespeare's *Macbeth* to classics such as *All Quiet on the Western Front* and *Catch-22*, reading with the understanding of PTSD symptoms in mind suggests that some people may work through therapeutic expressions in ways other than their own admissions.

For a dreamlike example, consider the possibility of the original movie *King Kong*. The director, C. Merriam Cooper, had killed during combat and prison escape. He both identified with his monster and literally put himself in the scene of being in the airplane and shooting the giant ape at the end. This dual role is similar to the actual dreams of those who have killed. How much was he working through his own feelings of coming back to civilization? The final words in the movie were that it was beauty that killed the beast.

As Cooper is not available for direct interview on this, these observations move into the realm of speculation. The problem is that much of what can be done for therapy is also still in the realm of speculation. While the practice of what is already well known in therapy is the obvious place to start, there is at present an insufficient amount of knowledge to make recommendations about specific adaptations required for this specific set of people. It is hoped greater understanding of the nature of the problem will bring about more clear recommendations in the near future.

Public Policy

More understanding of PITS could cause improvements in the bureaucracies that deal with veterans and police so as to truly fill their treatment needs. When the bureaucracy for both police and veterans has an interest in saving money by not recognizing killing as being traumatic, it is crucial that they understand the evidence that it can be. The idea that men and women who take these jobs are "tough" and therefore are not really bothered by such things does not hold up under scientific scrutiny. Bureaucrats could learn not to turn applicants for aid or compensation down on the misunderstanding that doing the shooting would not bring about PTSD symptoms.

A news broadcast story detailed a case in which a police officer from New York was diagnosed by several psychologists as clearly having PTSD resulting from having shot a man dead. The shooting was legally ruled justified. Despite the strong evidence, the officer was nevertheless denied the compensation he was entitled to on the grounds that an ex-Marine could not be that bothered by having killed. As a result of this continued rejection after appeals, the police officer committed suicide (Dateline NBC, 2000).

Broader public education on this point to all sectors of society is another of the solutions. Those who have sympathy for veterans can understand that they are not insulting but helping veterans by acknowledging PITS, just as they initially had to do with PTSD. For veterans of the other side in a war, or cases of criminal homicide, an understanding of how PITS may result will not increase sympathy for the perpetrators, but may lead to more healing responses for the sake of preventing further violence (Kruppa, 1991; Pollock, 1999) . It may be helpful to postwar or postdictatorship societal reconciliation efforts.

Those suffering from PITS symptoms are often eager to be aware that their symptoms are not a sign of craziness but a common reaction to their experiences. With more widespread knowledge, they may be more inclined to seek the needed help when the symptoms are sufficiently severe. When symptoms are not up to the level of a disorder but still present, knowledge that they share a common reaction to their experiences can be consoling.

Jobs that require perpetration and therefore obligate workers to be at risk for a mental disorder, or for subclinical levels of a disorder, should at the very least include informed consent as a minimal ethical standard. Just as people involved in emergency rescue work require extra attention to possible posttrauma reactions, so might those involved in killing work such as executions or slaughterhouses. The legal case for avoiding a requirement to participate on the basis of conscience is strengthened with this additional consideration.

This information could add valuable insight into public policy debates over whether such socially sanctioned violence should be a public practice at all. For the death penalty, for example, many of the arguments offered never take into account the effect of the executions on those who carry them out. If the information about PITS is valid and if it applies to those who carry out executions, then the execution punishes far more than the condemned and his or her family and friends. It also punishes the people who had no part in the decision-making process that certain individuals would be executed, but who nevertheless are expected to carry out the sentence. With this added information, many will still favor the death penalty. Nevertheless, this information should be available. The discipline of psychology is responsible for the information, while conclusions and the relevance of the ramifications are considered by the public and other policy decision makers.

Violence Prevention

The National Vietnam Veteran Readjustment Study found that combat veterans with PTSD reported an average of 13.3 acts of violence for the preceding year, while those without PTSD had an average of 3.5 acts (Kulka et al., 1990). If posttrauma symptoms make people more likely to engage in violence, in the form of domestic abuse, street crime, or further participation in the original combat or massacre or torture activity, then therapy of those individuals may not merely be good for those individuals, but for prevention efforts for society as well. Public policy can take PITS into account and not treat those that are expected to carry out killing as unfeeling automata or as people simply doing unpleasant jobs.

The NVVRS data showed the symptom of "irritability or outbursts of anger" to be especially high as a matter of pattern among those who say that they killed. Hendin and Haas (1984) and Glover (1985) also suggest on the basis of their own clinical observations that those who had killed were especially characterized by violent outbursts. In the forensic literature on crime prevention, violence that results from such outbursts has been called "Mood Lability Associated Violence" (Silva, Derecho, Leong, Weinstock, & Ferrari, 2001).

The symptom of emotional numbing and a sense of detachment or estrangement from other people can cause or exacerbate the use of violence. Unplanned violence can come from flashbacks and other forms of dissociation. When flashbacks seem quite real, as if they were dreams happening while the person is awake, they can be severe enough to lead to a loss of ordinary understanding of reality. Fights have resulted, as people misidentify current people as their old enemies or misperceive the actions of others as threatening (Silva et al., 2001). Other forms of dissociation and problems with memory can also lead to confusion that contributes to violent events. Excessive use of intoxicants, commonly associated with having PTSD symptoms, is long established as underpinning violent behavior.

Any mental strategy that puts a mental distance between the doer and the deed can include numbing and the sense of detachment or estrangement from other people. When PITS precedes the violent action, and includes this numbing, then the existence of PITS can help facilitate violent action, and therefore contribute to the causation of such action. Other aspects of the environment will also be necessary, but when those circumstances do exist, the existence of PITS can mean that more violence then occurs than would otherwise take place, whether street crime, domestic violence, further wars, or prison supervision.

Conclusion

Many ideologies throughout history have asserted that humans are naturally inclined to kill. Violence is seen as a "killer instinct" derived from an animal past, a part of human nature, and inevitable. Yet even advocates of one of those ideologies, the Nazis, have shown as a group that PITS symptoms arose in their adherents who followed their lead in killing (MacNair, 2002, chap. 4).

Psychologists as long ago as World War II have opposed the idea in great numbers. A statement entitled "Human Nature and Peace: A Statement by Psychologists" had 2,038 signatures, and a mailing to all members of the American Psychological Association yielded a 50 percent response rate with 99 percent agreement to several propositions. The first was that war is not inevitable. It is not a part of human nature (Murphy, 1945).

It is not merely that killing is not an instinct, a fact already established by the observation that the vast majority of human beings have never killed another. If further studies and experience with therapists further confirms and elucidates killing as traumatic, then this goes far beyond the assertion that committing violence is not an inevitable part of human nature. The phenomenon means that violence is rather *against* human nature.

The human mind is not well suited to killing. Killing tends to make the mind sick.

We can feel distressed at the hellish aspects of this condition, and feel motivated to alleviate it. We know that it has been prevalent throughout history and is still prevalent throughout the world. Yet the knowledge that it is contrary to how our minds were put together is a more optimistic understanding of the human race.

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CHAPTER 7

THE 2004 MADRID TERRORIST ATTACK: ORGANIZING A LARGE-SCALE PSYCHOLOGICAL RESPONSE

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On March 11, 2004, at 7:39 A.M., in the heart of the rush hour, three bombs exploded on a commuter train 500 meters (0.310 miles) outside Atocha train station, the busiest in Madrid. A few seconds later, four more explosive devices destroyed another train that had entered the station. Some minutes later another two explosions rocked Pozo del Tío Raimundostation, while a further bomb destroyed yet another train at Santa Eugenia station. In less than three minutes, a total of 10 backpack bombs had caused unprecedented destruction and panic in Madrid. All this occurred in the rush hour, when the four commuter trains were loaded with hundreds of workers and students who made the same trip daily.

In all, 191 persons were killed, and approximately 1,500 were wounded.

Once the victims were transported to health centers, Madrid local government put out a call for psychologists and psychiatrists to assist victims, family members, and emergency workers because the public health system was overwhelmed by the vast demand for psychological services, such as delivery of bad news, control of panic attacks, and so on, which had been generated in such a short span of time.

After the terrorist attack in Madrid, 948 volunteer psychologists, coordinated by the Association of Psychologists of Madrid (Colegio Oficial de Psicólogos de Madrid, COP-M), together with more than 100 psychologists employed by the local and regional governments of Madrid, as well as by the Ministry of the Interior and by the Red Cross, attended to the wounded, families of victims, and emergency workers (police, firefighters, medical staff), with the global aim of preventing psychological repercussions due to exposure to a traumatic event. More than 5,000 interventions of direct attention, 13,500 telephone calls, and 183 home visits were carried out to attend to psychological emergencies such as panic attacks, irritability, anger and resentment, irrational fears, obsessional thoughts, self-destructive behavior, difficulty making decisions, and so on.

This was quite probably the largest deployment of psychological services in Europe and one of the largest in the world.

In this chapter we intend to answer the following questions:

1. How were these resources organized?
2. What factors made this massive psychological intervention possible?
3. How could such a broad-ranging rapid response team be set up so quickly?
4. What did the psychological intervention immediately after the attacks consist of?
5. What kinds of intervention were carried out?

We principally describe the intervention of the psychologists who acted as volunteers via the Association of Psychologists of Madrid (COP-M) and coordinated with the professional psychologists employed by the regional and local governments of Madrid. The COP-M is a professional body representing more than 9,500 registered psychologists. It is one of the largest national professional psychologists' associations in the world.

First, we will briefly describe how the health services are organized in Spain, to aid understanding of the text. The Spanish National Health Service (SNS) is a public system to provide health services. Every Spanish citizen and Spanish resident has a right to public health care services (although, of course, they have the option to pay for additional private health care). The Central Administration (analogous to the U.S. Federal Government) guarantees the availability of health services, and partly finances the SNS, although the management of health centers, staff, and other aspects are financed by the regional governments (known as Autonomous Communities, similar to the concept of state in the United States). Health care is structured in three levels:

- Primary health care centers include general medical services and pediatrics. Each family is assigned a general practitioner and a pediatrician if they have children under 14.
- Specialist medical centers provide specialist health services such as dermatology, traumatology, neurology, etc. Mental health services (e.g., psychiatry, clinical psychology) are provided at specific centers called mental health centers. Patients can only visit these centers if they are referred by the primary health care center.
- Hospitals also include accident and emergency units. Patients only have access to hospitals if they are referred by the primary health care or specialist medical centers, or in an emergency.

In addition to these three levels of care, there are rapid response emergency services that provide urgent home or outdoor assistance in the case of serious illness or accidents. These services are administered by the regional governments. In the Madrid region this service is provided by SUMMA (Madrid Medical Emergency Service), but some large cities like the city of Madrid have its own additional rapid response emergency services. In Madrid this service is called SAMUR (Local Urgent Attention Service) .

The Madrid Regional Government also has an emergency coordination center (Madrid-112), which manages phone calls made to 112, the Europe-wide emergency number. In emergency situations this center coordinates the activities of the organizations responsible for meeting emergency health care needs, providing assistance and rescue, or resolving situations where citizens are at risk. Faced with an emergency of any kind (accident, grave illness, fire, assault, flooding, etc.), the victim or any bystander can call this number, and the center will then activate the appropriate services: police, firefighters, or emergency medical teams (SUMMA or SAMUR).

Organizational Conditions for the Psychological Intervention

The Madrid bombing experience showed that at least four conditions are necessary to quickly mobilize the almost 1,000 volunteer psychologists from COP-M:

1. The existence of a small group of professionals who are experts in emergencies and catastrophes to coordinate deployment of resources and delivery of services.
2. The existence of a broader group of professionals trained specifically in emergency intervention, or at least in clinical psychology.
3. The existence of policies and procedures for coordinating with public services for emergency intervention.
4. The existence of an organizational structure that permits:
    - The receipt and organization of requests for help and characteristics of the psychological services required,
    - The receipt of offers of help from psychologists,
    - The establishment of a system for recruiting psychologists according to their specialty and availability,
    - The process of dispatching selected psychologists to the requested location with accurate information about the characteristics of the required intervention, and
    - The coordination of the psychologists' interventions in different scenarios (hospitals, morgues, venue for the identification of victims' bodies, emergency centers, cemeteries, etc.).

In the following section we will provide some historical context and describe how these four conditions were met in the interventions offered immediately after the bombing.

On August 7, 1996, torrential rainfall ravaged a campground in Biescas, a small town in a mountainous area of northern Spain. Eighty-seven people died, buried alive by water and mud, and 480 others were injured. This tragedy served as a benchmark for the provision of psychological intervention at disasters in Spain.

It was the first time there had been psychological intervention at a disaster in Spain, although it was carried out largely by volunteer psychologists who came to the site spontaneously (Aranda, 1997; Duch, Fortuño, & Lacambra, 1997). The demand for these psychological services expressed by the victims, their family members, and the media, and their impact and the attention they received in the media highlighted for the first time the need for many institutions such as emergency services, the Spanish Red Cross, psychologists' associations, and nongovernmental organizations to establish standard operating procedures and teams for deployment to provide intervention in disasters.

In response, the Spanish Red Cross created the Teams for Psychosocial Intervention in Emergencies following the disaster in Biescas. The professional psychological associations in the majority of the regions created groups of experts in trauma, crisis, emergency, and disaster psychology. Although these groups are independent of one another, they maintain informal contact and attend joint training activities. In 1999, a work group was created within the Association of Psychologists of Madrid (COP-M). Similarly, in 2003, the first Psychological Unit for Assistance with Grief was created, and specialized training in this area was organized by COP-M for any psychologist interested in specializing in this area.

The COP-M Work Team for Psychological Intervention in Emergencies and Catastrophes organized a specialized training program from 1999 onward, divided into two levels:

- Basic training, consisting of the "Postgraduate Course in Psychology in Emergencies," which had been offered 10 times between 1999 and 2004.
- Advanced training, consisting of the "Specialist Course in Emergencies and Catastrophes," which included more than 200 hours of theory and practice.

This training structure made it possible for more than 200 psychologists to be trained in this area between 1999 and 2004. Both training courses included practical placements carried out in various emergency services settings in the Region of Madrid, principally in the Madrid Emergency Coordination Center (Madrid-112), which like 911 in the United States, coordinates and dispatches emergency services such as police, firefighters, and emergency medical services (SUMMA and SAMUR). Over the years, these practical placements created opportunities for personal and professional interaction between the emergency services of the Madrid Regional Government and the COP-M Team for Intervention in Emergencies. As of March 11, there existed no formal protocol for coordination between Madrid-112 and the COP-M, but the network of informal relationships established over the years constituted an essential element in effective coordination of the interventions.

Finally, of the 9,500 COP-M members, more than 1,400 called the headquarters of the COP-M and volunteered to deliver services in psychological intervention. Without this altruistic offer, it would have been impossible to deliver such a response. Furthermore, more than 20 employees of the COP-M worked around the clock during the days following March 11, including weekends, to coordinate available psychologists and the emerging demand for psychological assistance. Thanks to their efforts, the COP-M was able to stay open from 8:00 A.M. to midnight between March 11 and 17, and keep the volunteer force working until operations ceased on March 22.

Organization of the Psychological Response

Coordination Centers

Television. and radio news began to report on the attacks only a few minutes after they occurred. Initially, the reported numbers of victims were low because of the difficulty accessing the inside of the trains, although speculation about the large number of victims was alarming for everybody. The first television pictures showed people running everywhere, confused, crying, and yelling; some of the trains broke in two pieces and there were bodies lying on the floor.

Approximately one hour after the attacks, television and radio news reported 50 people killed. The president of COP-M calculated that this number of victims would overwhelm the mental health resources of the regional and local governments of Madrid and that help from other psychologists might be necessary. At approximately 8:45 A.M., he instructed the coordinator of the Work Team for Psychological Intervention in Emergencies and Catastrophes to contact Madrid Regional Government's Emergency Services Administration to offer the services of COP-M psychologists. This offer was accepted by Madrid-112 and by SUMMA.

COP-M established two coordination offices, one at COP-M headquarters and another in the offices of SUMMA. The coordination office at COP-M consisted of 4 coordinators, 2 team leaders, and 10 professionals, including psychologists and other COP-M staff. The coordination office at SUMMA consisted of 2 coordinators in each of the three shifts set up.

Initially, COP-M deployed the members of the emergency intervention work team, as they had specific training and experience in the field. Over the course of the day, it became apparent that there were not enough professionals to meet the demand. Simultaneously, the COP-M began to receive calls from psychologists volunteering their services to the victims. Eight telephone lines were set up and a team of 20 people worked in three shifts around the clock.

The psychologists who volunteered were selected and deployed if they met the following criteria:

1. COP-M registered psychologists with specific training and experience in psychological intervention in emergencies and catastrophes.
2. COP-M registered psychologists with professional experience in emergency or catastrophe situations, but without specific training. Approximately 200 professionals met either criterion 1 or 2 and nearly all of these were activated and deployed to different intervention scenarios by 2:00 P.M. on March 11. Because of the high demand, it was deemed necessary by the board of directors of COP-M to broaden the selection criteria to include criterion 3.
3. Psychologists with training and experience in clinical psychology.

Any psychologist calling that did not meet the criteria was not added to the database. A computer database was set up and the following information was entered:

- Name of the psychologist calling,
- COP-M registration number,
- Home and mobile phone numbers,
- Level of training and experience in emergency psychology,
- Level of training and experience in clinical psychology,
- Availability.

Despite establishing these criteria, and mainly because of the urgency of the demand for psychological care and the large number of volunteer psychologists, it is possible that other professionals may have provided services without having met the criteria.

One of the eight telephone lines and the mobile phones belonging to COP-M and administrators from the Work Team for Psychological Intervention in Emergencies and Catastrophes were set aside to handle calls from the various emergency services and the SUMMA coordination office. This was done to ensure fluid communications.

Once a specific request for psychological services was received (e.g., six psychologists needed to deliver bad news on the afternoon shift), the COP-M contacted psychologists on the database who had previously volunteered and who met the criteria. After establishing their current availability and whether they had delivered services recently, the psychologists were dispatched to the requested location.

This process proved to be very effective, as the emergency services had only to request the number of psychologists needed in any one situation, and the COP-M selected, contacted, and dispatched psychologists to the required location. The COP-M did not finish its daily activity until the night shift at all the locations in which psychologists were intervening had been organized, which on the first days after the bombings involved working until well after midnight.

The coordination center established at SUMMA operated 24 hours a day from March 11 to 22. These were staffed by two coordinators during the first few days. This coordination center received requests for psychological services from the Public Health and Emergency Services (SUMMA, hospitals, SAMUR, and Madrid-112), and also from sites where psychological intervention (IFEMA Convention Center, morgues, and cemeteries) was being delivered, and dispatched the necessary psychologists via the COP-M.

Psychological Intervention Delivery Settings

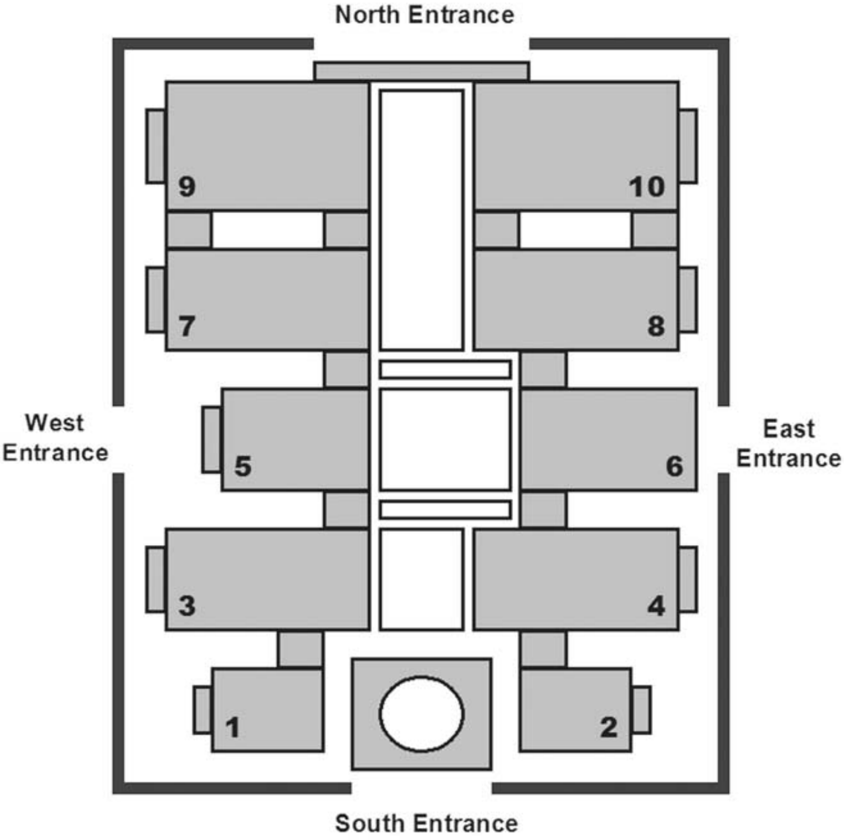
In this section we briefly describe each of the locations where psychologists from COP-M were involved. The 948 psychologists coordinated and dispatched by the COP-M delivered services in the following settings.

1. IFEMA Madrid Convention Center: Victim Identification

Though normally used as a venue for exhibitions and conventions, the department of civil protection decided to use the Madrid Convention Center

(IFEMA) as the venue for the identification of victims' bodies. One of the problems common to all catastrophes with large numbers of victims is the question of where to locate the bodies for identification. Because cold helps preserve bodies and the large open space can accommodate large numbers of people, ice rinks are often used for this purpose. Nonetheless, there is no ice rink in Madrid large enough to store 191 bodies, their families, and supporting professionals. Victims' bodies were moved to the ground floor of Pavilion 6 at IFEMA, where forensic experts and scientific police were already waiting, while families waiting to identify and the professionals attending to them were located on the first floors of Pavilions 7, 8, 9, and 10 (see figure 7.1). It was calculated by the regional government that at one point in the afternoon of March 11 there were more than 3,000 family members of victims in Pavilions 7, 8, 9, and 10 of IFEMA. This venue was open from Thursday morning until 2:00 A.M. on Saturday, March 13. At that time, unidentified bodies were transported to the Almudena Cemetery to carry out DNA testing, and the family members were lodged in local hotels. Some families waited at IFEMA for more than 24 hours to identify their family members.

Figure 7.1 IFEMA: Madrid Convention Center



2. *Madrid Convention Center: Retrieval of Belongings*

Starting Saturday, March 13, once the majority of bodies had been identified and families had taken custody of the bodies and organized the burials, a number of families returned to IFEMA to identify and collect personal belongings found at the site of the attacks. Teams consisting of two coordinators and up to 30 psychologists were formed to receive the families and to accompany and support the closest relatives as they identified and retrieved belongings. This center operated until March 17.

3. *Emergency Coordination Center (Madrid-112), for Calls to 112*

At this location, psychologists delivered injury or death notifications via telephone. An emergency services operator received the call and determined whether the person sought by the caller was on the list of wounded or confirmed deceased. If so, the operator transferred the call to a psychologist who then communicated any bad news. This arrangement freed up emergency services operators to handle ongoing emergency calls, and ensured that more time could be spent with the caller and that the call focused on the caller's psychological needs. This task was carried out on each shift (three shifts of eight hours each day around the clock) by one coordinator and six psychologists until March 15.

4. *Madrid Medical Emergency Services (SUMMA)*

Normally, SUMMA delivers emergency medical services by phone, and if necessary by home visits, in the Madrid Region. This resource does not include specialized mental health services and therefore it has no mental health professionals on its payroll. Not surprisingly though, in the days following the attacks, SUMMA saw an increase in the number of requests for psychological services for problems such as anxiety of victims' family members, witnesses to the attacks, emergency workers, persons with previous mental health problems, etc. To cover these needs, COP-M dispatched a team consisting of one coordinator and 10 psychologists to SUMMA. This resource remained operational until March 22, though with reduced staffing levels reflecting reduced demand. The majority of services were delivered by telephone, although on 183 separate occasions psychologists were dispatched in SUMMA vehicles to carry out home interventions, accompanied by a nurse and a driver.

5. *Hospitals*

For the most part, psychological services for the wounded and their families were delivered by hospital staff psychologists. In some hospitals, though, additional staff was required on the first day. A total of 20 volunteer psychologists was assigned to this task by the COP-M. This number of volunteers is relatively small if we consider that in the city of Madrid there are six public hospitals.

6. *Funeral Homes and Cemeteries*

On March 12, COP-M began coordinating the provision of psychological services to the principal funeral homes and cemeteries of Madrid. Psychologists offered their services and delivered them when requested by the families. These services included emotional ventilation, stress management training, or giving advice about how to break the bad news to relatives and children. Psychologists were also dispatched to cemeteries for scheduled cremations.

Groups Assisted

In the different settings previously described, services were provided to various groups of persons:

- Families of the deceased,
- The wounded,
- Families of the wounded,
- Affected others: residents of the attacked areas, friends of victims, persons who helped at the site,
- Emergency workers or professionals in action during the catastrophe: police, firefighters, doctors, psychologists, psychiatrists, nurses, social workers, etc.
- General population. From March 11, the Unit of Clinical and Health Psychology of the Department of Personality Psychology, Treatment and Assessment at Madrid's Complutense University began to draw up "Self-Help Guides" (Unit of Clinical and Health Psychology, 2004). These guides were made available to the general public via the COP-M Web site on the morning of March 12, but were especially aimed at the victims, their families, and people connected in some way with the attacks, offering pointers in the form of action guidelines and specific techniques to feel better in this situation.
- At the same time, COP-M asked some professors from Complutense University to develop a guide specifically for parents. (Calonge 2004a, 2004b)

These documents, together with other technical documents offered by psychologists and institutions relating to psychological intervention with disaster victims, were posted and freely available on the COP-M Web site to provide orientation for professionals and the population at large. Between March 11 and 24, 2004, the COP-M Web site received more than 107,000 visits.

Psychological Intervention in the Main Settings

Organization of Psychological Services Delivered to the Families at IFEMA during Identification of the Bodies

Victims' bodies were transported to IFEMA throughout the day of March 11. Large groups of people were also sent there by local authorities and especially by the Madrid-112 service, after having searched unsuccessfully for their missing family member in Madrid's hospitals. Not surprisingly, many of these people were disoriented and painfully uncertain about their loved ones' status.

The rooms prepared to receive the families were large, open spaces with chairs distributed all around and a large table at one end. Each room was occupied by five or six family groups looking expectantly, as if searching for something or someone that would give them some piece of information about their missing family member. The rooms were classified alphabetically by the surname of the possible victim. This organization helped the families to find the appropriate rooms for information to be passed on.

Within a short time, all types of provisions began to arrive: food, water, tissues, blankets, etc.; in general, everything necessary to cover the basic needs of the people there. The psychologists were given a small room close to the rooms where the families were located.

One of the first organizational tasks was the registration and identification of the psychologists who had come to the site to offer help. One of the coordinators of the COP-M took responsibility for establishing a specific room, called "data collection," equipped with a computer, in which the psychologists, in addition to registering, could enter information to build up a more detailed picture of the missing persons. Information was collected to aid identification. This information was used by the forensic police to develop antemortem questionnaires, in which all information provided by family and friends was collected and compared to postmortem questionnaires completed on the autopsy table.

Between March 11 and 12, more than 200 psychologists, 23 psychiatrists, 32 social workers, and nearly 100 other volunteer professionals (nurses, translators, etc.) were registered on the database.

The number of families, professionals, and volunteers increased quickly over the course of the first day, and among them appeared curious passersby and journalists who wanted to directly contact the families. It then became necessary to restrict access to the site to protect families' privacy and to carry out the process in the most organized manner possible. The local police and IFEMA personnel were assigned to this task.

As the bodies were identified and death certificates signed by a judge who was on site, the psychologists assisting the families were informed and instructed to convey the news of the death and of the identification procedure to the families. The psychologists were also instructed to accompany the families to identify the bodies on the lower floor and to make funeral arrangements.

This was the system established in the first instance by SAMUR, which was responsible for the overall organization at IFEMA. However, by the afternoon of March 12, numerous identification procedures had been concluded and between 7:00 P.M. and 10:00 P.M. it was necessary to conduct the majority of the death notifications and to accompany the families in the identification. The unidentified bodies were to be transported to the Almudena Cemetery to perform DNA testing. It was necessary for the remaining families to be relocated to their homes or to hotels, to rest and to wait. This created moments of great tension, and SAMUR administrators decided to call families over the public address system. This procedure, though understandable in the context of great confusion, exhaustion, and tension in which it occurred, has been criticized by several groups (Lillo et al., 2004) for having provoked angry outbursts and emotional contagion.

In the difficult resulting situation, the psychologists acted by mitigating the negative effects of the procedure, and by making sure that the previous system of personalized communication was reverted to within 30 minutes. Finally, the psychologists accompanied the families who decided to relocate to hotels. The last people to leave IFEMA were a psychologist and the coordinator of COP-M, who did not do so until 2:00 A.M. on March 13, once all families had left the venue.

From noon on March 11, there were 20 volunteer psychologists coordinated by the COP-M at IFEMA, although this number increased gradually over the course of the day. Together with other psychologists from SAMUR and the Madrid Regional Government's Mental Health Network, they accompanied the families of victims at all times. Coordination meetings were organized by the psychologist in charge of SAMUR, and included the coordinators from the different institutions that supplied psychologists to the team (psychologists of the COP-M, the Red Cross, Madrid Regional Government's Mental Health Network, the Army, etc.). These coordination meetings were held frequently when new information and action guidelines were disseminated.

Although every case was different, there were some common symptoms among the families of the missing people. The following example reflects the complexity and dramatic reality. A woman, whose 18-year-old son was on one of the trains on the way to the University, was looking for her son in the waiting room, and wouldn't be seated, as she didn't understand instructions. Her family was very anxious, watching and following her and asking her to calm down and to take a seat. Her breathing was rapid and she was repeatedly yelling, "Where is he? Why doesn't he call me? Why don't you call him?" We tried to calm her and the family members and to have them sit with her in a quiet place. We attempted to gain her attention and asked practical questions about her family and also gave information about the identification procedure. We made suggestions as to the use of calming breathing to help support her through the difficult process of thinking about facts to identify her son, which understandably resulted in tears.

When approaching family members, the psychologists introduced themselves in a standard manner by explaining that their purpose was to help in whatever way was necessary and to transmit new information to the family as it became known. After the establishment of rapport, one of the first tasks of the professionals entrusted to attend to the families was to collect information about the missing person, which facilitated the work of the coroners as they identified bodies. Psychologists also collected information about the family, such as who was present, what type of relationship they had with the victim, what level of support might be necessary, who would need further psychological support, etc.

While accompanying the families, the psychologists transmitted new information about the work of the forensic police as it became available, such as information about the list of wounded or the new procedures to be followed. Common questions from the families included a strong desire to find out what had happened and how long it would take for the police, the coroners, and judges to do their jobs. The task of containing families' anxieties was difficult, given that the identification process was lengthy and the accumulated tension, exhaustion, and hopelessness added to the suffering of the closest family members.

Specifically, the expression of emotions experienced during the event and retelling of the events were encouraged by the psychologists. Cognitive distortions such as, "If only I had gotten up early;" "I wish I had known … ," etc., lead to a stress answer that psychologist tried to control by asking, never judging. For example, we never said: "It is impossible you knew …" Instead we asked: "Could you really know what was going to happen?" His or her answer was always more convincing to change thoughts. Direct questions were like a "reality test" and allowed the person to have a real point of view of the situation and not an unreal situation based on denial. At all times an attempt was made to normalize and validate the symptoms shown by those most affected.

When the worst fears were confirmed and the death certificate was signed by the judge, the psychologist was to communicate the news of death to the family. Using empathy and self-control, the psychologist looked for an appropriate place to give the news; somewhere quiet, where the family could sit without interruptions and be guaranteed privacy. The full name of the person was read and the cause of death was reported briefly, simply, and concisely. If this information was not available, the family was told that the coroner would provide it later. Any other information requested by the family was given. In many cases it was necessary to repeat the cause of death and to guarantee that the victim had received all the medical attention possible. Immediately afterward, the family was prepared for identification of the body by being told what they were going to see in a very detailed and realistic way, as a technique that served to confront the situation before it happened.

Many families wished to see the victim, to be able to say goodbye, to make sure that it was their loved one, and to begin the grief process. With deep sadness and pain, the closest family members (usually two persons) were accompanied by the psychologist to Pavilion 6. The rest of the family stayed in the waiting room or accompanied those who were to identify the body to the entrance of the pavilion.

There was a police cordon about 10 meters from the entrance of the pavilion. The families showed the death certificate. Once admitted, they presented the same document and were escorted to the identification room. They were received by the coroner who, after verifying the name of the victim, explained briefly and concisely what they could expect to see and the cause of death. The coroner accompanied the family to the coffin along with medical staff, and the coffin was opened.

Reactions were varied, but the majority spent time verifying that this was the missing person, to identify the features of the face, the color of the hair. They often asked how he or she died, if the victim had suffered, if he or she died instantly or on the way to hospital, if the victim was missing body parts, etc. They often repeated the name, asked why, or talked about what they had done before leaving the house that morning. Between tears, they kissed the face of the victim, they searched for the hands to hold them (normally they were only shown the face, the rest of the body remaining covered). After a short time, usually about 5 minutes, they were asked to say goodbye and to move on to the funeral services room, to make funeral arrangements. These funeral services were paid in advance by the families, who were reimbursed later through grants given to victims of the terrorist attack and regulated by Spanish law. If a family had insufficient economic resources, community services would take care of the expenses and in the case of foreigners, their respective embassies paid the bill. Figure 7.2 illustrates the layout of the identification room.

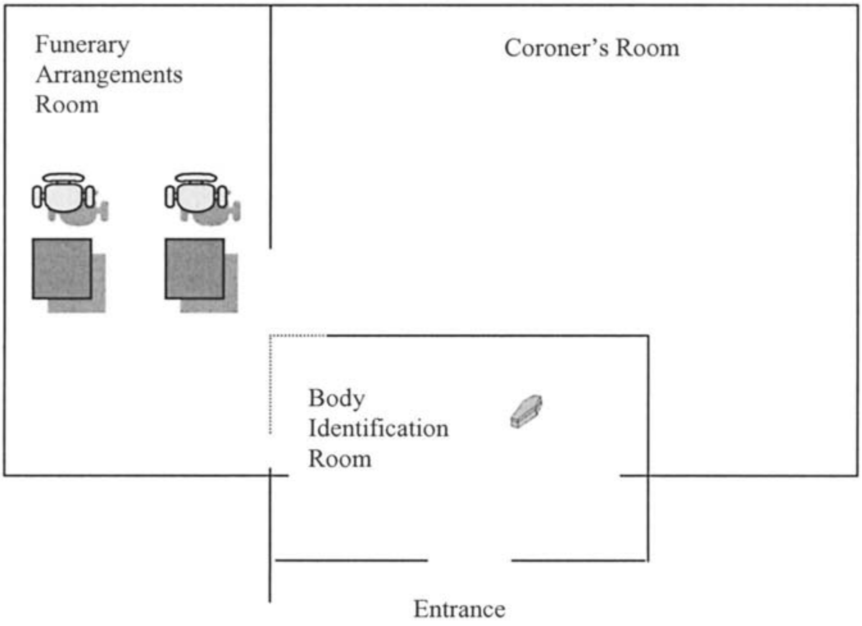
Once the body was identified, the family could arrange private commercial burial services with the burial service representatives on hand, who would take possession of the body from that point on.

The intervention of the psychologists continued with the families whose missing member was not identified by the night of March 13, and who had been instructed to leave IFEMA to rest at a hotel—where free rooms had been made available to them by the hotels themselves—or in their homes. Resistance to leave the site was high, not only on the part of the families, but by the professionals as well. It was as if leaving that place meant giving up hope of finding the missing spouse, child, parent, or friend.

The next day, March 14, the focus of activities turned to the east gate of Pavilion 6, where the families and forensic police could identify personal objects.

Finally, psychological intervention for the professionals who intervened at IFEMA was organized on March 11, and was maintained until March 13. A team of psychologists from Complutense University of Madrid, coordinated by the COP-M, carried out defusing tasks with all professionals leaving for home after finishing their shifts.

Figure 7.2 Body Identification Room, IFEMA Pavilion 6



Organization of Psychological Support Service for Victims at IFEMA during the Identification of Personal Belongings

From Saturday, March 13 until March 17, the forensic police established a depot for the identification of victims' personal belongings, so that victims or families of victims could collect anything they had lost on the day of the attacks. The forensic police requested that psychologists accompany these people during the identification process, to prevent and to manage possible anxiety crises or panic attacks.

March 13 and 14 were the busiest days, and psychologists from SAMUR, the Regional Government's Mental Health Network, the Red Cross, and the COP-M provided services. From March 15 to 17, the Red Cross took over the entire task.

The depot was located in Pavilion 6 of IFEMA, in a large space of 10,800m^2 and a height of 9.9 meters. The personal belongings identification room was the same one used for the work of the coroners and identification of bodies the previous day, and it was therefore essential to rearrange the space for its new purpose. In consultation with an IFEMA administrator, it was decided by COP-M how to organize the space to accommodate a waiting room for the families; a medical attention room; and a room for mental health professionals, translators, mediators, and social workers, equipped with telephone lines and a computer. The IFEMA personnel very quickly rearranged the space to make it comfortable and operational, using room dividers, chairs, tables, and carpeting (see figure 7.3). The object display area was separated from the area where the public was received by panels approximately 3 meters high with curtains as openings, such that it was not possible to see the area where the objects were.

Each victim's personal effects were placed on the floor in spaces about 1 meter square, marked by tape, in four rows approximately 40 meters long, corresponding to the train in which they were found. Each of the spaces containing personal objects included a folder in which the objects were inventoried and the victim's name if a driver's license or other form of identification was found with the objects. There were approximately 400 groups and 4,000 objects in total. The objects were diverse: purses, backpacks, wallets, key chains, cellular phones, books, notes, glasses, cards, jackets, combs, handkerchiefs, photos, watches, diaries, lighters, pens, etc.

In one section, the National Identity Documents (issued by the Interior Ministry, serving as official ID for Spanish citizens inside the country) not matched to remains were displayed. On the morning of March 13, there were still 50 persons unaccounted for. Identification of these objects by families was carried out to learn if any of their owners were victims of the attacks, so that DNA could be collected from the family to facilitate identification of unrecognizable remains. To carry out this task the police used the list of families who still had members missing, which had been drawn up during the body identification phase. These families were telephoned to advise them of the identification of objects and to facilitate DNA testing to clarify the status of the missing person. Next came the families for whom the death of the victim had been confirmed, and lastly the families of the wounded were called. A specific protocol was developed for each type of call, establishing a conversation script and the key phrases to use. It was organized using specific briefings of psychologists and authorities to standardize the content of each type of call.

Police crowd control considerations dictated that no more than 10 families should enter the identification area at any one time. The family was called forward in the order they arrived, and was directed to the entrance point (point 3 in figure 7.3) accompanied by a psychologist. After passing behind the curtain, a police officer asked for the full name of the person whose objects were to be identified. That name was noted and the identification was begun. A police officer, a psychologist, and the person identifying walked along the rows of objects and reported anything they identified as belonging to their family member to the police. If the object was identified as belonging to a victim, it was collected and after completing the identification, the identifying person was escorted to a table where legal identification and return documents were completed and signed.

The forensic police kept numerous objects separately; those that were found so far from the bodies that it was impossible to place them, or those that were found in other locations (ambulances, hospitals, etc.). The families or the wounded were asked to look through this set of objects to identify any others belonging to them or to their dead or wounded family member.

During March 12 and 13, a total of 672 persons attended this depot, looking for the personal belongings of 226 persons.

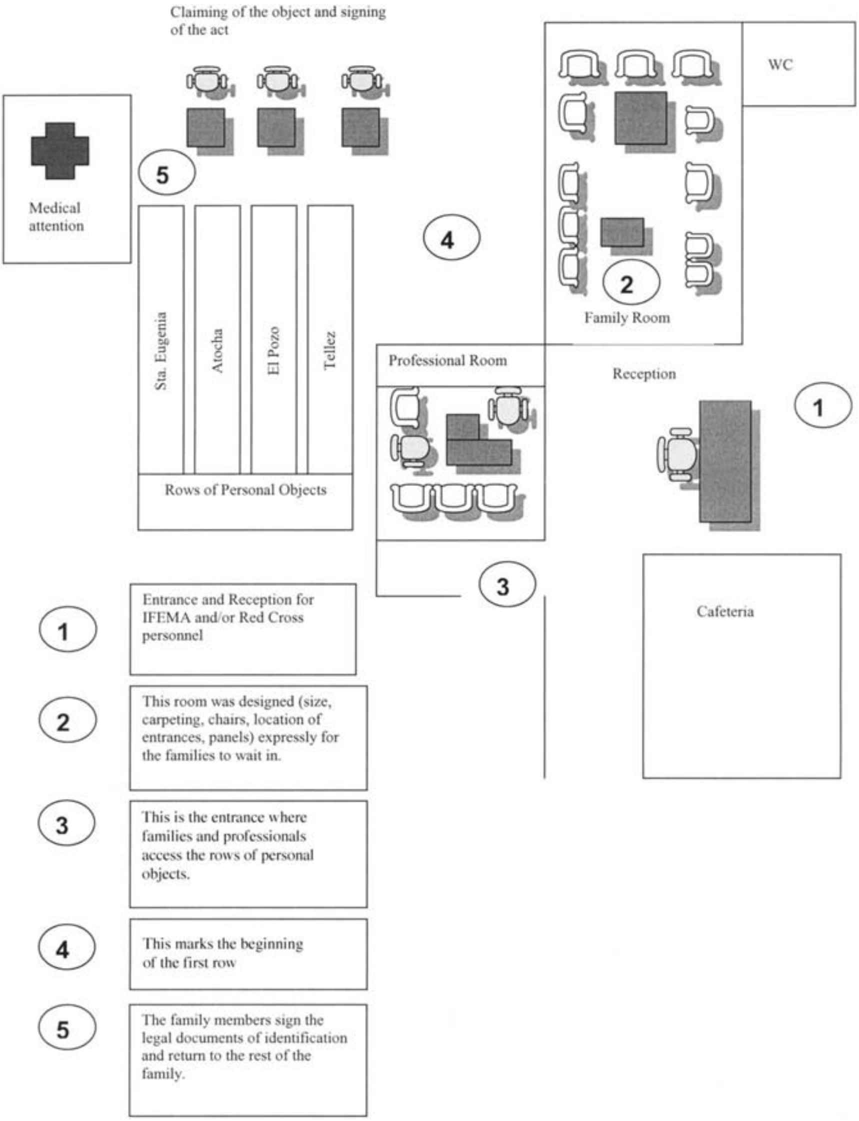
Before the psychologists began their work, the coordinators from each institution held a briefing meeting in which they were informed of the task. They were also given guidelines for action or information about how the recognition procedure was organized and which specific situations they should be prepared for, and they were also provided with the same guides published on the COP-M Web site. In addition, they were given a tour of the depot to learn how it was laid out, so they could better prepare the families for what they were about to see. Furthermore, this tour served as psychological preparation for the professionals, and helped them to better cope with the intervention by exposing them to what the families would see as well as giving them a chance to familiarize themselves with the scenario and anticipate problematic situations that they might have to deal with. In this meeting the psychologists were given documents lists and facts that might be of interest to the families. Specifically, the psychologists were given information about:

- Current lists of deceased and wounded,
- Lists of names associated with the place where an object was found,
- Information about DNA testing,
- Lists of psychological centers where the family could seek psychological support and information,
- Information from the Ministry of the Interior with several sources to repatriate corpse, obtain economical indemnity, etc.,
- Informative brochures about grief,

- Information about the complementary cafeteria service,
- Access to telephones to make arrangements, search for information, etc.

The persons attending the identification of objects depot were received at the entrance to Pavilion 6 by IFEMA personnel who put them in contact with a psychologist (generally a team coordinator). The psychologist then gave them

Figure 7.3 Spatial Layout for the Identification of Objects



general information about such things as the procedure to be followed or waiting times, and in turn put them in contact with a pair of psychologists who would take care of their specific needs, and who accompanied the family throughout the process. At the end of each of the two shifts, defusing sessions were carried out with the psychologists. Two psychologists attended to each family. One psychologist from each pair was expected to have knowledge and experience in the management of critical situations.

On March 14 there were general elections in Spain. Most police resources were assigned to security tasks related to the elections and to prevent any further terrorist attacks. As a consequence, the number of policemen assigned to the recognition of objects was limited, and families had to wait for long periods before starting the recognition process. Because of this situation, psychologists performed psychological *triage* to establish the access order. People with acute signs of stress or foreign families that had already arranged the transport of the body to their countries had priority in beginning the recognition of objects.

In the waiting room, psychologists explained to the family how the object identification depot was organized. Giving families forewarning about what they were about to see was found to be a powerful way of reducing the impact of the negative experience. The psychologists explained to the family what they were about to see and trained them in positive adaptive responses, correcting negative or false expectations such as the fact that they were going to see blood or human remains. The psychologists had to adapt their interventions according to the results of the search for the family member, that is, whether they were still missing, deceased, or wounded.

The initiation of the identification process often reactivated waves of pain and suffering for the families who had lost someone or whose missing member had not yet been identified. In some cases it was necessary to stop the identification and resume it when the person was ready to do so.

For many, finding an object reconfirmed the reality of the death and added a new piece of information incompatible with denial, which is a step forward in the grief process, based on reality and not on denial of the loss. Frequently they looked at the object, reviewed the documentation, decided what to keep as a keepsake, asked the police questions (e.g., if the person had died in the act, the location of death, if there had been arrests), or expressed emotions or attempted to rationalize (cursing the attackers, asking why, commenting on their future plans, on their present life). After signing the judicial act (an official document that lists the personal belongings from the victim given to the family), they were accompanied to the family room, where they could share their experience with the rest of the family or friends and show them the objects.

The principal functions carried out by psychologists during the recognition of objects were the following:

- Assessment of the psychosocial needs of the family group for possible referral to the appropriate resource: psychological centers, immigration centers, community centers, mental health centers, etc. Mental health centers belong

to the public health network and psychological service centers are private consulting rooms or services offered by NGOs.
- Providing direct psychological services to the victims and families, including normalization and validation of their feelings, help in assimilating the death, normalizing the reactions they were experiencing, reduction of feelings of guilt, coping with episodes of aggression, how to explain the events to a child, etc.
- Mediation in family conflict. In some families there were discrepancies relating to living arrangements or relating to whether to report the news to certain other family members (children, grandparents, etc.) and in what way.
- Information about the grief process.
- To facilitate interaction between people with a high level of anxiety and the police, forensic doctors, IFEMA staff, etc.
- Collaboration and provision of advice in the arrangement of meeting and waiting areas for families and professionals, such that the arrangement of space and furniture could facilitate their privacy and security.

Psychological Services at the Madrid-112 Emergency Center: Communication of Bad News

From March 11 to March 22, in addition to the psychosocial intervention in person carried out at IFEMA, hospitals, funeral homes, and cemeteries, more than 13,500 telephone interventions were made from the Madrid-112 emergency center and SUMMA offices. This included immediate psychological intervention by telephone to mitigate the negative consequences of the stressful life event and to help the person to take concrete measures toward coping with the crisis, including managing feelings or subjective elements of the situation and the initiation of the problem-solving process.

Two main types of interventions were carried out at the Madrid-112 Emergency Center.

1. Immediately after the attacks there was only a list of wounded that was updated with information from health centers as it became available. This list contained the full name of the wounded victim and the name of the hospital where the person was being treated. In these cases, calls from families and friends were answered by a regular staff operator from the center. When a missing person's name did not appear on the list, the caller was invited to call back as often as he or she felt necessary, as the lists were constantly updated.
2. Afterward, as new bodies were identified, the list of confirmed deceased was added to the list of wounded. At this point, the procedure was modified. Incoming calls were answered by a regular staff operator, who then referred the call to the psychologists coordinated by the COP-M, so that they could inform the callers. Three possibilities existed. These were:
   1. The missing person was on the list of wounded. In this case, the caller was informed of the hospital in which the person was located.
   2. The name of the missing person did not appear on either list, in which case the caller was informed that he or she would be contacted as soon as information was available. The caller was asked to provide a telephone number and relationship to the victim.

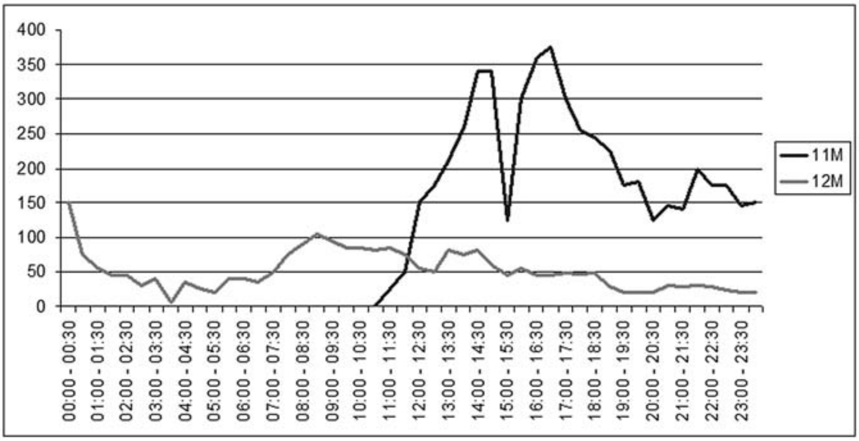
3. The name of the missing person appeared on the list of confirmed deceased. In these cases the bad news was delivered according to the following criteria established by the COP-M:
    - Before giving the news, the caller was asked his or her name, relationship to the deceased, where he or she was, and who he or she was with. When possible, it was intended to communicate the bad news when the caller was with other family members, so the caller would not be alone after the call.
    - Bad news was only communicated to those adults who were identified as direct family of the deceased (parents, siblings, spouse, children).
    - As it was important to convey professionalism and to reduce uncertainty about the future, the aim was to take a calm and controlled approach and to deliver the information accurately, concisely, and in an undiluted manner. The truth was never concealed.
    - If the victim had received medical treatment, details were given clearly, with staff trying to describe each step of the process in a very detailed way, and making sure the caller understood that all professionals involved in the process did everything they could before the victim passed away.
    - The caller was informed of the availability of resources to support him or her psychologically and with any practical problems that might arise.
    - Special attention was given to verbal and nonverbal aspects that showed anxiety such as quivering voice, repeating words, screams, etc., to assess the seriousness of the situation and the action plan.
    - When the Madrid-112 Emergency Center initiated the call in response to a previous call, the staff advised the family that the information they were about to give had arrived just at that moment.
    - Finally, any additional information such as where the deceased was located, how to get there via public transportation, and telephone numbers of medical and psychological services was offered.

As shown in Figure 7.4, the stream of incoming attack-related calls to the Madrid-112 Emergency Center began at 11:00 A.M. on March 11 with two significant peaks, one from 2:00 P.M.–2:30 P.M., in which 350 calls were received, and another between 5:00 P.M.–5:30 P.M., in which 370 calls were received. From 5:30 P.M. the number of calls gradually decreased. On March 12, the number of calls was significantly lower, with less than 100 calls received at the peak time, between 8:00 A.M.–8:30 A.M.

There were 5,661 calls received on March 11, and 2,466 on March 12. The total number of attack-related calls received by the Madrid-112 Emergency Center from March 11 to 15 was 8,786. On March 11 up to nine psychological service stations were simultaneously active. Six were active on March 12, and three were active until March 15, at which time the service was closed.

The mean duration of the calls increased daily, from 1.28 minutes on March 11 to 3.13 minutes on March 13, and 3.51 minutes on March 14. This is probably because of two factors:

Figure 7.4 Frequency of Calls Received by the Madrid-112 Emergency Center on March 11 and 12



1. The lower number of total calls allowed more time for each call.
2. Calls on March 11 were primarily about delivering specific information, whereas the number of requests for psychological intervention started to increase on March 12.

Characteristics of the Psychological Intervention at the SUMMA Coordination Center

Telephone Intervention

As noted previously, SUMMA is the emergency medical service of the Madrid Regional Government. This service responds to calls from citizens, principally by telephone but also by home visit in the appropriate health services vehicle (ambulance, mobile intensive care unit, etc.). No psychologists or psychiatrists are employed by SUMMA. After the March 11 attacks, the increased number of requests for mental health services (mostly anxiety-related) made it such that teams of volunteer psychologists were dispatched to the SUMMA offices and were active until March 22, at which time 35 psychiatrists and 15 clinical psychologists were contracted by the Regional Government's Department of Health to reinforce the network of public mental health centers and to directly respond to victims' requests.

The telephone intervention procedure during this time went as follows. When a call was received, it was answered by a regular SUMMA. If the caller presented with mental health problems or requests related to the attacks, the call was transferred to one of the COP-M psychologists. In the event that all the lines were busy, the operator collected the name, number, and reason for the call so that the team of psychologists could call back when possible.

The most frequently reported symptoms of the callers were the following:

- Recurrent and intrusive memories of the events that caused distress,
- A sense of reexperiencing the event,
- Intense distress when presented with reminders of a particular aspect of the event,
- Avoidance of stimuli associated with the event such as phobia of trains, mobile phones, suitcases or rucksacks, as if they might contain explosives,
- Difficulty falling asleep or sleep disturbances,
- Irritability,
- Difficulty concentrating,
- Loss of appetite, and
- Feelings of guilt.

The intervention of the psychologist was in accordance with the following procedure:

1. Introduction and identification. Once the call was transferred, the psychologist identified and introduced himself or herself. The name of the caller and reason for calling was then requested.
2. Expression of what had happened. The psychologist's intention was that the caller describe what had happened and what he or she was feeling. The psychologist attempted to clarify the situation by asking questions about what events and emotions the caller had experienced. The caller was asked to try to remember in detail the sequence of events, from beginning to end. Specifically, the caller was asked these questions: How would you describe what happened? Where were you at the time? With whom? What did you do at the time? What did you feel? What did you feel when they rescued you? (in the case of someone wounded in the attacks). What thoughts did you have? What did you feel after it was all over? How do you feel right now? The caller was encouraged to use verbal expression and narrative, as thinking and verbalizing are considered to be important in assimilating and integrating negative life experiences (Smyth & Pennebaker, 1999). In this phase it was also essential that the person felt he or she was being listened to, accepted, and valued. To that end, the psychologist was to use a wide repertoire of active listening skills to facilitate verbal and emotional expression and to empathize. They never judged what the callers said or their feelings. They were to tolerate moments of silence, to speak accurately and in a calm tone of voice, intending to convey to the caller that the psychologist had all the time necessary to help the person. In cases where Spanish was not the caller's native language, the psychologists tried to speak slowly, using a simpler vocabulary and ensuring that the caller understood what the psychologist said by expressly asking for feedback. It was also considered extremely important to engender feelings of security and calm in the caller by pointing out that the traumatic event had passed and informing the caller of normal and abnormal reactions to stress. Debriefing (Mitchell & Dyregrov, 1993) itself was not used by psychologists throughout this process, but some of its techniques were utilized.
3. Instructions and guidelines for symptom reduction. The psychologist assessed the problems presented and assigned them to one of two categories: One was

problems requiring immediate treatment, and the second was problems not requiring immediate treatment (Slaikieu, 1995). Callers with problems in the first category were given instructions and guidelines. The ones in the second category were referred to health centers or mental health centers. The following were the most frequent:

- Training in relaxation techniques, usually simple breathing techniques,
- Cognitive restructuring of distortions and reassessment of the feelings of guilt,
- Normalization and/or validation of their reactions,
- Mobilization of informal social support network. They were encouraged to ask those close to them to exchange information, make plans, accompany them, and so on.
- Thought stopping and covert assertion to overcome intrusive thoughts (McKay, Davis, & Fanning, 1995),
- The importance/value of resuming everyday activities, if possible,
- In those cases where it was deemed necessary (based on verbal and nonverbal symptoms), the caller was informed of the social and health resources in his or her area, or a home visit was made.

4. Follow-up. At least one telephone call was made afterward to follow-up on the case (people in the first category only). The objectives of the follow-up were first to reassess the person's state of mind and the results of the intervention, centering on whether the crisis that had provoked the call for help was adequately managed (Folkman & Lazarus, 1980), and second, to introduce new interventions, if required.

The largest number of calls handled by volunteer psychologists at SUMMA occurred between March 15 and 18, and not in the first few days as expected. This pattern may be explained by the reaction to stressful situations: Initially, activation is produced to overcome the immediate problem, and when that level of activation diminishes, or the resources required to maintain that activation run dry, symptoms of psychological distress appear.

Psychological Home Visits from SUMMA

SUMMA administrators decided to deliver services to the caller's home based on the psychologist's telephone assessment. Three considerations influenced the decision to provide home services:

- The presence of special circumstances such as the severity of symptoms and/or difficulty establishing a therapeutic relationship or other communication problems.
- If a telephone intervention was not possible because the affected person refused to speak to a psychologist.
- The expressed desire of the caller.

SUMMA made a driver, nurse, and rapid intervention vehicle available to the COP-M psychologists to make home visits. When one of the psychologists determined that a home visit was necessary, he or she advised the SUMMA resource coordinator. Both then assessed the case and made the decision to make the home visit or to continue telephone intervention only. The coordinator and the psychologist involved in the telephone intervention then decided which of the professionals should make the visit, taking into account the professional experience and capacities of the psychologists who were on that shift. Before being dispatched, the psychologist was given at least the following information:

- Name, age, sex, relationship to the victim, etc.,
- Relevant symptoms,
- Presence/absence of previous pathologies (if known),
- Level and quality of social support at home (e.g., family, neighbors, other professionals),
- Reason for visit (express request).

Once at the home, the following procedure for intervention was applied:

1. Review available information about the context of intervention:
    - Review the information that the psychologist has about the person and verify its accuracy.
    - Determine which coping strategies have been used until now.
    - Determine which types of help they have previously sought or received.
    - Check if they have had previous home attention from this resource.
    - Assess current presenting problem(s) and symptoms.
2. Evaluate the social and family environment:
    - Evaluate the magnitude and strength of social family and friends support network.
    - Assess immediate risks (e.g., medical problems, history of suicidal ideation or attempts, the presence of current suicidal ideation and lethality of plans and means, if present).
    - Assess the physical context (locate the closest appropriate place for the intervention that is sufficiently comfortable and isolated from interruptions, providing a confidential space for the victim).
3. Approaching the victim:
    - Demonstrate empathy and positive regard to the victim.
    - Use active listening techniques.
    - Allow the free expression of emotions (crying or other emotional discharge).
    - Ask and listen without interrupting, accepting the expressed emotions.
    - Normalize the person's experience, explaining that his or her reaction is normal in this situation.
    - Promote safety, controlling excessive agitation and behaviors that may be dangerous to the victim and to others (keep dangerous objects out of reach, employ relaxation techniques, stimulation control, and emotional ventilation).
    - Use nonverbal communication, speak slowly in a soft tone of voice, make eye contact, and work with the silence, respecting the victim's silence without breaking it too quickly.

    - Introduce guidelines for relaxation through abdominal breathing (deep and prolonged breathing).
    - Resolve doubts and offer alternatives, always give accurate information, speak positively (answer any question referring to victim's symptoms, the treatment used up until this moment, how the problem has evolved, etc.).
    - Assess the capacity to receive bad news and follow the recommendation for giving bad news summarized by Muñoz, Fernández de Liger, Parada, Martínez de Aramayona, & García (2001).
4. Providing information:
    - Explain to those family members who are coping better what feelings, thoughts, etc., they can expect to experience over the next few days.
    - Describe the usual course of any symptoms, their expected course, and what may cause concern.
    - Inform them of the availability and accessibility of long-term resources such as doctors, psychologists, lawyers, social workers, and others.
    - Provide guidelines for giving information to children and the elderly.
5. Termination of the intervention:
    - Reduce the level of anxiety by introducing techniques that help to achieve low-anxiety levels over the following days such as focusing on short-term goals like planning out the day's activities, anticipation of stressful events, emotional control strategies, and so on.
    - Ensure that the guidelines, guidance, and instructions are understood and accepted.
    - At the end of the visit reassure them of the permanent availability of the service by telephone, reinforcing decision making, normalizing, and offering coping strategies.
    - Summarize the session.
6. Assessing the follow-up:
    - Review the intervention and assess whether it is necessary to make a follow-up telephone call. The need for a second visit will be considered in this follow-up telephone call.
7. Reporting the case to the coordinator: the psychological service providers report the victims' emotional needs and:
    - Inform the resource coordinator of what happened during the intervention.
    - Communicate any decisions taken.
    - Review the process and assess the action.
    - Close the case and return to telephone assistance.

In total, 183 home visits were made. The population requiring assistance was heterogeneous with regard to age, sex, nationality, and relationship to the attacks. Four major groups were detected:

1. Family of the deceased.
2. Direct victims without wounds requiring hospitalization.
3. Witnesses.
4. Persons with histories of prior pathology exacerbated by the attacks.

An initial medical evaluation is made during the first call, but sometimes during the visit the psychologist was able to see new symptoms that required medical intervention. For example, in case of finding symptoms that could have an organic origin rather than only a psychological one, SUMMA was advised to send a medical unit.

After the intervention, follow-ups were made to prevent the development of ongoing pathologies, to check the evolution of the disorder and refer the case, if necessary, to mental health centers.

Psychological Intervention with the Professionals at the Madrid-112 Emergency Center and SUMMA: Psychological Debriefing

The emergency medical services delivered from March 11 at Ground Zero by SAMUR staff, as well as the telephone services offered by Madrid-112 and SUMMA operators, put those professionals involved in a situation of high emotional impact. Because of the nature of their profession, emergency professionals are more likely than the general public to be exposed to critical situations (Alexander, 1993; Al-Naser and Everly, 1999; De Angelis, 1995; McCammon, 1996; Mitchell, & Dyregrov, 1993; Wagner, Heinrichs, & Ehlert, 1998). SUMMA and Madrid-112 administrators asked COP-M to provide psychological services to those professionals who requested them, with the aim of reducing or preventing negative effects of the emotional impact caused by witnessing the tragedy.

In addition to the aforementioned public resources, SUMMA and Madrid-112 administrators decided to make psychological debriefing sessions (Everly, Boyle, & Lating, 1999; Everly, Flannery, & Mitchell, 2000) available to emergency services staff.

In the days following the attacks many heath workers continued working in situations closely related to the attacks, for example, assisting at funeral homes, cemeteries, and so on. Also, SUMMA and Madrid-112 operators continued to receive calls from people in extreme states such as acute stress or panic attacks. Psychological debriefings were conducted until March 22.

The group psychological intervention delivered was based on critical incident stress debriefing (CISD) (Armstrong, O'Callahan, & Marmar, 1991; Dyregrov, 1989; Mitchell, 1983; Raphael, 1986). This is a highly structured intervention designed principally for emergency service professionals. Debriefing is a secondary prevention strategy whose aim is to alleviate the stress produced by critical situations, to prevent the development of posttraumatic stress disorder, and to mobilize the individual's natural coping resources. Of the several models for debriefing that exist, the best-known is Critical Incident Stress Debriefing (CISD) (Mitchell, 1983; Mitchell & Everly, 1996). Another model often employed with disaster workers is Armstong's Multiple Stressor Debriefing Model (Armstrong et al., 1991). In Europe, the Parkinson (1997) Three-Stage Revised Debriefing Model has been developed, and more recently, the Dyregrov (2003) Psychological Debriefing Model.

Mitchell (1983) recommends that the debriefing take place 48 to 72 hours after the critical event, but that did not happen in all cases because of the necessity to finish the tasks.

The general principles of debriefing are summarized as follows (Armstrong et al., 1991; Dyregrov, 1989; Mitchell, 1983; Raphael, 1986):

- Debriefing intends to accelerate the natural recovery processes of normal people.
- Debriefing is not psychotherapy, nor is it a substitute for psychotherapy.
- Debriefing is based on principles of crisis intervention and psychoeducation, rather than on principles of psychotherapy.
- Voluntary participation is preferable.
- Debriefing is not intended to solve problems related to the incident, but to mitigate them and to mobilize and support adaptive coping.
- It is sometimes necessary to offer additional psychological services to those participants of the debriefing identified by the clinician as needing them.
- It is preferable if the clinician does not have a close relationship with the participants.

Some studies have questioned the utility of this technique to achieve the proposed objectives (Bisson & Deahl, 1994; Rose, Berwin, Andrews, & Kirk, 1999; Rose & Bisson, 1998; Rose, Bisson, & Wessely, 2002; Van Emmerik, Kamphuis, Hulsbosch, & Emmelkamp, 2002). It has also been suggested that participation in debriefing may retraumatize (Kenardy, 2000). Other studies suggest that negative outcomes might be the result of clinician error or poor research designs (Everly et al., 1999; Everly et al., 2000; Everly & Mitchell, 2000; Foa, Keane, & Friedman, 2000; Mitchell, 2002, 2003a, 2003b). Meta-analyses show that debriefing serves to reduce manifestations of stress after a crisis (Everly et al., 1999; Mitchell & Everly, 1996).

The interventions carried out with Madrid-112 and SUMMA personnel used an adaptation of the Mitchell model, introducing the "sensory impressions" phase by Dyregrov, resulting in the following basic structure:

1. Introductory Phase

- Introductions of the facilitators,
- Introductions of group members (first name only),
- Empathizing of monitors with the group. They showed empathy for the difficult situation of group members.
- Presentation of the objectives of the session,
- Establishing the rules of the meeting.

2. Events Phase

In this phase, each participant describes his or her role in the critical situation. The facilitators pose open and closed-ended questions to ensure that the group obtains a broad and detailed picture of the critical situation.

3. Thinking Phase (Cognitive)

During this phase the debriefing centers on the thoughts and evaluations of the participants during and with reference to the critical situation. After this phase, the coordinator of the COP-M Emergencies and Catastrophes Unit took the decision to include Dyregrov's (2003) sensory impressions phase in the model. In this phase the facilitators encourage the participants to verbalize the sensory aspects (visual, auditory, olfactory, etc.) of stimuli that stood out because of their impact or that may be reexperienced.

4. Reaction Phase

This is the most emotional phase. Feelings such as rage, fear, frustration, guilt, and loss may be expressed and recognized by the facilitator.

5. Symptoms Phase

This phase returns to a more descriptive, and therefore more cognitive, task. Participants' manifestations of stress during and after the event and at the current time are described.

6. Teaching Phase (Educational)

This phase begins by summarizing the manifestations expressed by the participants and has as its objective the mobilization of natural coping skills to manage any signs or symptoms identified by the participants or proposed by the monitors.

7. Reentry Phase

This final phase presents the opportunity to ask questions, express doubts, or address any relevant aspects of the debriefing.

Forty-one people (56% male and 44% female) from the SUMMA and Madrid-112 staff participated in the debriefing sessions conducted by COP-M members. Six groups were established with the same or similar job status. The mean number of participants per group was 7, with a minimum of 6, and maximum of 10.

After the debriefing, the participants completed a questionnaire evaluating the technique using a 4-point Likert-type scale (0 to 3). The results indicate a high level of global satisfaction with the technique (mean = 1.95). Specifically, the participants highlighted the positive impact of the technique, reporting that they felt less anxiety, had less sleeping problems, saw the establishment of a clearer "big picture" of the actions undertaken by the organization during the incident, and had a clearer knowledge of the feelings of the rest of the group. The technique was rated higher by the lower job status groups (telephone operators, drivers, and guards) than by doctors, although the difference was not significant.

Psychological Intervention at Funeral Homes

During the days following March 11, groups of psychologists mobilized by the COP-M were dispatched to the principal funeral homes in Madrid involved in the final arrangements of the victims of the attacks. These professionals circulated through several visitation rooms, introducing themselves, and offering their services to the families. In most cases, any interventions were conducted at the request of a family member.

The professionals who provided services in this setting applied their knowledge of the phases of grief. A common intervention was to reassure families that their responses were normal human reactions to a painful experience. As Montoya (2001) affirmed, grief is a universal human experience that affects the person psychologically, emotionally, cognitively, socially, physically, and spiritually. The main stages are:

- Acute Affliction: incredulity, agitation, waves of acute distress, obsessive thoughts, and some physical symptoms.
- Conscience of Loss: separation anxiety, prolonged stress, guilt, rage, aggression, searching behavior and feeling the presence of the deceased, fantasy, other reactions (incredulity and negation, frustration, sleep disturbances, alleviation, fear of death, inability to cry, crying).
- Conservation-Isolation: isolation, fatigue and weakness, obsessive review, diminished social support, need for sleep, hopelessness, helplessness, and impotence.
- Healing: reconstruction of the personality, regaining control over one's own life, abandonment of previous roles, search for meaning, closing the circle, forgiving and forgetting, other reactions (gradual diminishing of the effects of prolonged stress and an increase in physical and emotional energy, recuperation of normal sleep pattern).
- Renewal: living for life, learning to live without anniversary reactions.

Families were offered a space and time to express their emotions and were helped to identify their feelings and to clarify their doubts about the different phases of grief. They were advised to seek support in friends and family and were informed about the resources available in terms of mental health, legal advice, social and spiritual centers, and so on.

As a variety of nationalities and cultures were involved, including Latin Americans, Moroccans, and Central Europeans, it was necessary to be sensitive to and respectful of cultural differences in families' visitation, mourning, and burial customs.

Although there is no single, universally accepted model of crisis intervention, listening to victims' versions of events, reflecting their feelings, and facilitating social support are common and useful strategies for stabilizing the situation, reducing levels of physiological arousal, consoling and comforting the victim, and mobilizing the resources necessary to respond in an adaptive way (Everly et al., 2000). This, in general, was the approach taken by the nearly 1,000 psychologists who intervened during those difficult days.

Conclusion

Despite the enormous tragedy of the terrorist attacks of March 11 in Madrid, there still appeared signs of the good in human beings. The reaction of the families of the victims, of the wounded, of the emergency workers, of civil protection, and of the general population of Madrid was an example of how catastrophic situations can be confronted by everyone. The reaction of the population, their support for each other, their professional help, and their sense of community reduced the debilitating effects of the crisis, and in many cases fostered personal growth following adversity.

The job done by the COP-M in the days following the terrorist attacks was widely commended. Specifically, it received the following recognition:

- Gold Medal from the Spanish Red Cross,
- Medal of Honor of the City of Madrid, and
- Commemorative Distinction from the Comunidad de Madrid Region.

As psychologists, it was gratifying to see how thousands of professionals and volunteers took the decision to help the victims and their families, to accompany them, and to show affection and solidarity.

Despite the inhumanity of the bombings, the demonstration of these qualities is the very highest example of humanity. The words in this document are but a small gesture of the authors' thanks to all those who helped, and a monument to the victims and their families.

Yet, for all the professional and volunteer psychologists who intervened after the March 11 terrorist attacks, the greatest recognition was the appreciation of the victims and their families, who allowed us to accompany them in all those tragic moments.

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CHAPTER 8

THE PSYCHOLOGICAL EFFECTS OF WAR ON CHILDREN: A PSYCHOSOCIAL APPROACH

Martha Bragin

> Ultimately, human suffering is not always synonymous with psychological trauma and discerning the delicate balance between therapeutic intervention and therapeutic witnessing is not easy. If the homecoming pursuit is not only retrospective but also prospective, then therapeutic care for refugees has the potentiality of helping them to gain much more than they already deserve.
>
> —*Papadopoulos (2002a, p. 39)*

How do you survive a war that has gone on for 10 years before your birth, and already exhausted your parents? You hear that there were cities once, but without books or media, there is little to tell you what a city might be—or a cinema. School is an exciting new event—every moment on the floor of the unheated classroom to be cherished—.

I was sitting on the floor of one such unheated schoolroom on a chilly April day in 2002, having a chat with a group of former child soldiers from northern Afghanistan. The province that we were in had been called the "frontline" because it had been the scene of fighting throughout the 23 years of war. This particular city only fell to the Taliban in 2000, followed by expulsion of the population and continued fighting in the East. First, the Soviet tanks came from the North (these children lived very close to that border), then, when the Soviets were defeated (they were very young), came the almost random destructiveness by the various factions as they fought for power, then the united front against the Taliban, with the front often breaking into fragments, then the American bombing, which left only a few hundred dead and some children paralyzed. Unexploded ordinance and landmine removal was underway, but children were still frequently at risk for blowing up or losing a leg. Schools had just reopened after being closed following the fall of the pro-Soviet government in 1992.

These particular boys had been fighting with various factions during the last few years. The oldest boy in a family might be conscripted by one side to fight in a particular town, and he would bring along his younger brothers if there was no one else to look after them. If the town that they were holding fell, the boys would start home only to be captured by another commander's men. They fought for individual warlords, the Taliban, and the Northern Alliance. Because they were under age these boys were rarely asked to participate in direct fighting. Instead they would dig trenches, carry ammunition, gather fuel for cooking, and bury the dead. A particularly important task was to collect body parts of the dead on the battlefield and prepare them for proper burial.

I sat with two Afghan medical colleagues who translated. I was covered from head to toe in traditional Afghan garments that friends had made for me, with some sweaters underneath, and was grateful for the woolen scarf that covered my hair, as well as for the hot, sweet tea that we were all drinking.

I started by introducing myself and my colleagues and asking the boys to name something that they really liked.

"Peace we like peace."

"What do you like about peace?"

"School and kite flying."

"And what's best about kite flying?"

"Making a special kite with your family and flying it faster than anybody ... "

"Is there anything that you don't like?"

"Jiang," they answered in Dari and even I knew what jiang meant: fighting.

(When I asked about the fighting I learned about their wartime occupations.)

"Now that the fighting is over is there anything that you don't like?"

"We don't like dogs—especially mad dogs—and bits of broken house that could fall on you."

The boys talk among themselves—One of the boys I noticed had a multicolored handmade cap on his head and red, chubby cheeks.... He answered next ...

"When I go to get fuel the mad dogs are there."

Then the others began to chime in, larger ones taking the lead each time.... "Where I go there are dogs but I am not scared of them, no, it is the wolves that scare me." "Oh no stupid, we can manage the wolves—we just shoot them—we were fighters you know ... but—what's really scary is the lion."

"What lion? There's no lion."

"For sure there is a lion! I've SEEN the lion!"

A taller, more grown-up–looking boy chimed in forcefully: "Oh that is true, there is a lion. I've seen him too! And a lion can definitely eat a person, gun or no gun."

We then got into a more detailed discussion about the lion, with a group of younger boys describing him quite carefully, length of mane, paws, tail, etc. The boys also discussed whether the lion was Muslim, because if he were a Muslim he should not eat people, because eating people is unclean according to Holy Koran. It emerged at the end of the discussion that while the lion may have been a Muslim, he was ignorant and could not read and so he simply ate people up without checking. "That is why we like to go to school. If someone is illiterate he might not know what is actually written in Holy Koran and then, because he is ignorant, he could do anything."

This mythical lion was their way of tying together their fears and worries in the uncertain present, with their incipient understanding of the random violence perpetrated by the ostensibly religious warlords that they had served before.

I asked the boys about the afterlife, and none felt sure that his entrance into heaven was assured. They said that they were probably bad boys because they had lived through drought and terrible sorts of things. They had seen very bad things on the battlefield and now they saw those bad things in their minds. They don't only see them when they are dreaming—but sometimes when awake. Sometimes they can't help the bad things they see, the bad thoughts they have, and the feelings that they are as mad as some of those dogs that they denied being "really" afraid of.

Introduction

KEY FACTS

Almost all conflicts are now fought by armed groups within national boundaries and almost 90 percent of the casualties are civilians, mainly women and children. In the last decade an estimated 20 million children worldwide have been forced to flee their homes because of conflict and more than 2 million children have died as a direct result of armed conflict. At least 6 million children have been permanently disabled or seriously injured. Between 8,000 and 10,000 children are killed or maimed by landmines every year. The recruitment of children into armies and militias has become a new phenomenon. There are reportedly 300,000 child soldiers in more than 30 countries around the world.

It has not been possible to get an accurate count of the number of children separated from family care as a result of war.

Source: United Nations, *Security Council Report. Profile: Children and Armed Conflict,* July 12, 2006.

With such dramatic statistics, the question of how children are affected by armed conflict assumes great importance. Because wars take place all over the world, in cultures that are as divergent from one another as they are from that of the West, is there anything we can say that we know about children affected by armed conflict?

Childhood itself is a cultural construct, defined differently in different parts of the world. UNICEF, the United Nations Children's Fund, considers childhood to begin at birth and end at age 18. However, new research tells us that the prefrontal cortex, the part of the brain implicated in judgment, organization, planning, and complex decision making, is not completely formed until age 25! But what children do and what childhood means may be as different as there are places in the world.

All children are engaged in a dynamic process of development in which body and mind change and interact with one another. The schedule of development is genetically programmed to be influenced by culture and the quality of human interaction. Every culture in the world has its own way of helping children's development along.

Psychosocial development is defined as the gradual psychological and social changes children make as they as they mature. It consists of the psychological elements—the capacity to perceive/emote/analyze/learn/remember—as well as the social ones, that is, the ability to form and maintain social relationships, to follow the social codes, and to live and function in the external world (UNICEF, 1997).

When we think of psychological trauma and how it might affect children, we often think of discrete events that rupture a child's life, changing the way that child sees the world forever. When we recommend treatment, it is to restore the flow of development to children so that they can continue the process of growing up, free from psychological impediment. That is true of wars as well. But wars are different in that they are not single events. War comes to children as a pervasive change in the world, affecting every aspect of life. Restoring the flow of children's development during and after war is a complex process that includes physical, cultural, psychological, and social elements.

Because human beings are adaptable, not everything that happens to children in war is negative. Children use every opportunity to grow and develop well. However, there can be no doubt that war has negative consequences in children's development. Those negative consequences can be divided into two broad categories: loss and exposure to extreme violence.

Loss

What Do Children Lose in War?

Children in war lose so much that often the experience of life itself becomes that of overwhelming deprivation. Types of loss range from loss of material goods and all that the material loss can signify through loss of quality of life and cultural experience to the loss of people, from friends and siblings and extended family to parents.

Losing Possessions

At the very least children in war lose possessions. Sometimes they move from relative physical comfort to poverty and deprivation. Sometimes homes are destroyed and toys, pets, and familiar surroundings are rendered unfamiliar. Then children also lose the feeling of comfort that being in familiar surroundings brings.

Losing Cultural Continuity

Child development specialists tell us that it is not only the fact of loving care, but the way it is delivered, that make us who we are as human beings. War affects the fabric of social life. Parents may be there to comfort a child, or provide important rituals such as birthday and holiday celebrations. But the meaning and feeling surrounding the rituals of life are changed by parents' worry and fear. Sometimes, but not always, things get so bad that people no longer even bother with the ceremonies, as birthdays and holidays are forgotten. After some time, growing up on its most basic level does not feel like growing up did for the children who came before. Sometimes, wars go on for generations, and then the childhood rituals may have been completely streamlined and transformed so that they are no longer remembered.

Losing Place and Language

Sometimes children lose place, language, and country as family members succeed in fleeing to safety in a foreign land at the price of everything that they have known before.

Losing the People That One Loves

Sometimes children lose people that they love as one or another family member is killed in the conflict. Often children lose at least one parent, one or more siblings, and one or more members of their extended family.

In some situations, especially when families are fleeing for their lives, they get lost or separated from the people closest to them and have to struggle on alone, hoping against hope that they will be found by someone who loves them.

Sometimes children get lost when well-meaning people put them ahead of lines in transport, or when a parent doesn't have proper documents and they are sent somewhere without them. Sometimes they are at school or otherwise not at home when the family is forced to flee in a hurry. Sometimes they have been entrusted to a stranger for safety during a violent attack.

In addition, sometimes conditions of life simply overtake the family's capacity for coping. Sometimes, they were set down briefly while a parent searched for food or water. Sometimes their caregivers have succumbed to illness, been killed, or been taken far away or into enemy territory. Sometimes a caregiver has too much to carry and lets go of a small hand or urges a child to run ahead when they fear capture or death.

What Are the Effects of Loss on Children?

Anna Freud and Dorothy Burlingame (1943) studied children during World War II London and discovered that children's emotional well-being during war was most closely related to the proximity and well-being of their caregivers, to adequate physical comfort and familiar surroundings. John Bowlby (1973) formally documented the strong and powerful attachment bond that infants form with their caregivers in the earliest months of life. Previously, it had somehow been assumed that babies cared only for the people who fed and cared for them, but Bowlby's work showed that the ever-growing bond between infants and the people in their lives transcended physical care. Research based on Bowlby's work has linked baby's secure attachment to the development of the neural networks that increase intellectual capacity.

In his book *Attachment and Loss* (1980) Bowlby documented the sadness and despair of children separated from their caregivers who come to know that they are lost. Graça Machel (1996)[1] in her landmark UN study of children in war worldwide found that those children who can be maintained in familiar surroundings, with any of the people who love them, went on to live happier and more successful lives than those who were taken away to safety and material comfort at the expense of the care of the people they love.

Children become sad and even a bit disoriented when they lose all of their things; they may become clingy and regressed as they sense danger and lose place and custom, but they are most inconsolable or prone to negative behavior when they are separated from or lose the people whom they love.

Stages of Grief and Mourning

While all children are different, clinicians have come to understand and recognize some stages of grief and mourning common among adults and children alike.[2] They can be applied to all of children's many losses, but again are particularly acute regarding people whom they love. The stages are listed below.

Denial

This implies inability to believe that the person is really gone.

Anger/Protest

The sense that they have been abandoned or that someone has done this to them can pervade children who have lost a loved person. Very young children simply respond with anger and protest, while older ones may not associate their angry feelings with their loss, as they "know" that these feelings are unacceptable.

Bargaining

The hope that if a child is very good, the lost person can be returned.

Depression

This overwhelming sadness is often intensified as children realize that they did not say goodbye, or that they had even quarreled prior to the death, or that if they stop being sad they will forget the person that they loved and be left even more lonely and bereft.

Acceptance

The realization that it is possible to go on living without the person that one has lost.

Children's Understanding and Response to Death by Age and Stage of Development

Because children in war are exposed to a great deal of death, and it is through death that many of their losses occur, it is important to understand how children understand death by age and stage of development. Children come to understand death as their cognitive capacity grows.[3]

Infants, Toddlers, and Death

For the first 18 months of life, children do not understand ideas about things; they experience life through their senses. This is called the sensorimotor stage of cognitive development. Infants long for the return of the people that they love, and wait for them, often crying inconsolably. Their experience of loss is physical. They are best comforted by continuing physical care by someone else who is known to them. Toddlers will be able to ask for the person that they love, but will not really understand what death means. Toddlers are frightened for their future: if one person can disappear, will disappearances continue? Is there anybody that they can count on? "Death" or an end to life is still too abstract a concept for them to understand. They will come to understand and continue to ask questions until they are much older. Participation in rituals surrounding death, and being told about the sadness of adults, helps them to put the experience into context, but they will repeat their questions over time, as they grow.

Young Children and Death

Children from three to about five years old think that dead people still need to eat and drink. They also believe that the dead will return to us. They are most helped by any customs and traditions that address these issues, whether spiritually or symbolically. They will feel sad about the death and loss at one moment, then return to play the next. But they will continue to wait for the person to return. They may be most concerned that the person is hot, cold, hungry or thirsty, and may want to ensure that they are properly cared for.

School-Aged Children and Death

School-aged children from 5 to 11 years old respect existing cultural beliefs about death being permanent. They will also know that dead people don't need to eat and drink in this world. They will be both sad and worried about their future. They need to be reassured that they will be protected and can go on living, while at the same time be allowed to suffer over the loss and fear. They should never be told that things are fine when they are not, or that they should not be sad, frightened, or angry. Rather, they should be told that this is a sad and frightening time, but that the adults around are trying to solve the problems. Their questions, fears, and worries will recur, and children should be told the true story of what happened, over and over.

Cultural issues come to the forefront of children's thinking at this age, often in a very literal way. For instance, Sri Lankan children knew that adults who died in the tsunami had been reborn into another life, while those in Beslan Russia thought that parents had gone to Heaven. Some children worry that their parents may be suffering in the next life because rituals of burial or absolution may not have been possible in time of war. It is important that whenever possible, children are able to participate in rituals surrounding death, and that they see them performed.

Adolescents and Death

Adolescents, ages 12 to 18. are entering a phase where both their bodies and their brains are developing rapidly. Their capacity for complex thought is in the process of development due to changes occurring in the brain. Therefore, they are often trying to understand the larger meaning of death. They know that the dead will not return to them in this form and in this life (their beliefs about the return of the dead are dictated by local cultural understanding), but they may question the culturally prescribed meaning. Further, the violent death of innocent people may seem to be a violation of their moral understanding. Adolescents need time and space to talk through their experience and to plan memorials. Sometimes, they may feel that they must take revenge. In that case, it is important to give them opportunities to participate in some activity that memorializes the dead, or allows them to plan or to do something positive to prevent further deaths.

Categorizing Separated and Unaccompanied Children

It is so common for children to get lost during wars that special technical language is used to talk about it.

- Some children become separated from the families who have usually been taking care of them—either their parents, close relatives, or other persons designated by law or custom. These children are called separated children.
- Other children may be living or traveling with a group of other children, their underage siblings, or just by themselves. Sometimes they have been collected and put in an institution or have been taken in by adult strangers. These are called unaccompanied children.

These definitions become critical when we think about how important it is for children to find their families and the people who love them. If these children are mistakenly called orphans, they may be sent far away from their families and lose what is most precious to them.

The Long Way Home: A Little Girl's Heroism

We were sitting under a tree in the "interim care center," a group home funded by UNICEF to house "unaccompanied" children whose families came from the eastern part of Sierra Leone that was still disputed territory. The hope was that some of the children would find extended family members who might be located in the crowded camps for internally displaced persons and refugees.

Eight-year-old Precious looked up at me with eyes wide and brow furrowed. Her baby brother Joseph was on her lap. He seemed huge seated there, contentedly chewing on a bit of sugar came and snuggling close to his sister, who petted and rocked him.... "We won't find mommy here ... no, I don't think so.... She's already dead or she would have come for us by now.... I know she would have.... Mommy would never leave us this long ... she must be dead.... " "I'll bet she's out there looking every day, Precious ... ," the social worker said, "maybe she's just stuck behind that 'blue line'[4] we can't cross and she'll walk out of the bush any day coming here to find you.... Won't she be proud of what a good job you do taking care of Joseph.... We're going to look for her too ... but we need to know more.... Could you tell us how you got lost, baby girl?"

"I don't remember exactly.... Everyone was running from the rebels ... they were coming and the last time they had killed my daddy, but first they had chopped some people's hands and arms off, and then when my daddy tried to talk sense to them they just chopped him all up right then and there ... and then burned everything with gasoline.... The goats were screaming when they couldn't get away.... So they were coming again and this time we ran away as soon as we heard about it.... Mommy she had the new baby with her and all of our things on her head and she stumbled and let go my hand.... She said, 'Run baby run, I'll catch you in a minute, I just have to set my foot to rights ... run, run, run ... ,' so I let go of her hand and ran as fast as I could and then when we got to the river I couldn't see her and I couldn't see anyone that I knew and I was scared and the lady she was there she said you got to get that baby across the river so I did that and then I walked and walked and walked and they said this was Guinea and we got to a big camp there and just waited.... "

Plucky little Precious pushed onward, motivated by the need to get food and water for the baby—and the need to find her mother and other siblings. At the entrance to each camp for internally displaced people were shelters with large poster boards covered with pictures of children. As each person entered the camp, they went searching the faces in the pictures ... hoping that they would soon find the face of a child alive and searching for them. Precious would search for someone searching for her and when she could find no one, she moved on.... She ran in front of any line to talk to any adult who seemed in charge and got herself repatriated to Sierra Leone as soon as the first truce was signed, saying that Mommy was looking for her and she came from C. county. Finally she found the UNICEF people waiting for separated children to arrive and she volunteered to go east so that she could find her family. She was as nice and polite as she could be to everyone, but she wouldn't let anyone take Joseph, not even for a minute.

Wars, when children don't die in them, are perhaps most terrible when children find themselves lost, with parents either dead or missing, trying to survive in a world where no one loves them best of all. To survive, some little girls have to see and sometimes to do some terrible things ... all with a loved baby sibling in their arms....

So we don't really know exactly how Precious survived and fed that baby for such a long time. We didn't press her to tell us either. The goal was to let her tell her story her way, and to help her to find her family and go home.

All of the children at the Center had nightmares, but so did the staff members, who were, after all, also survivors of the same war. A traditional libation was poured for the Children's Center, to cleanse it. The earth had been defiled by war, and no one could sleep well under those circumstances. The libation poured on the earth signified a new beginning. It also gave continuity and meaning to the care that the children received and helped them to connect with the past. The presence of traditional elders to welcome the children to the community and to pray with them that they would be reunited with their parents helped them to begin to feel connected again to "normal life."

The libation was also a beginning opportunity for the children and their caregivers to begin the process of mourning the dead. Precious knew that her father was dead, although it hardly seemed possible for her to have had a chance to begin to understand the impact of missing him. However, she did not know about her mother and siblings and chances were rather good that they would indeed be found after some time. This war had many survivors spread all over the region.

Precious was permitted to sleep next to Joseph, to take him with her to school every day and to do chores like helping to cook and fetch water. After a while she would play games as well, and participated in traditional dance lessons … with Joseph on her back so that she could be sure that she wouldn't lose him! Keeping close to Joseph gave Precious a reason to keep living and made her feel good about herself. Normalizing life by beginning school helped the developmental process to get back into gear. Participating in a dance group helped Precious begin to make connections again; in addition to doing age-appropriate things and having fun, she was doing those things with a larger community.

As life normalized she began to get a bit more hopeful. She went to church in the community and had her picture taken and posted at the internally displaced persons (IDP) camp. At church she sometimes sang and danced with the other girls her age.

Mourning could not begin until Precious knew whether her mother had in fact died. Until that could be verified, no one wanted to take hope away from her. She might begin to sadden and mourn her dad, but that too would probably need to wait until she could be settled into a more permanent home. The libation made a start.

When last I saw Precious she had been found by cousins from her village who were preparing to take her and Joseph home, where they hoped to wait for Mommy … just in case she found her way. If Mommy or her body was found, the relatives informed me that they would do "the needful…"

Exposure to Extreme Violence

During war, children are exposed to violence in three ways: as observers, victims, and perpetrators. Each of these has specific effects on their development and each requires a specific type of attention. During war many children experience loss *and* exposure to extreme violence. Just as children lose things, people, and an entire way of life; they observe violence, are victimized by it, and participate in it in one way or another.

Ways in Which Children Are Exposed to Violence

The Observers

When buildings blow up or shooting occurs, children observe the death and destruction around them. When murder, rape, and torture are widespread, although these activities don't actually target children, they take place in full view of them.

The Victims

Children are sometimes targeted for deliberate harm. In an effort to obliterate a future generation of enemies, or to terrorize them, schools and children's centers are specifically targeted for destruction. Sometimes children are terrorized so that they can be recruited as child soldiers. More often, they are "collateral damage," being in the way of bombs that blow up buildings or cars that are strafed on the road. When there are landmines or cluster bombs, children are the most frequent victims, as it is they who may be attempting to play in the rubble of their former homes following battle. When sexual violence is among the weapons of a war, both boys and girls are vulnerable.

The Perpetrators

The abduction of children into armies is a well-known problem in today's world. However less well-known are the times when children come to local guerrilla forces to protect them and end up participating in the conflict, when children don't know what to do with their anger after the murder of their family members and therefore join up, or when the whole family is fighting with one side or another and they join in with other family members.

How Does Exposure to Extreme Violence Affect Children?

When children are exposed to extremely violent events, their minds cannot accept the information that has been received. Serious reactions may appear even in children who have only witnessed violence, as well as those who have been either victims or perpetrators. The distress of the boys who had served with troops in Afghanistan was exemplary of these.

The process of mental and moral development includes coming to terms with the difference between fact and fantasy, as well as learning to suppress desires and angry feelings for the good of a community. So a two-year-old in a sandbox may go over to a child with a toy she likes, knock the child down, and take the toy. Through the process of love, correction, and maternal care, a three-year-old may want the toy and be angry at the child for not sharing it, but will not hit the other child and take the toy away. When such a thing does happen, the child is immediately corrected. So, while in dreams or fantasies the child can have all of the toys and be strong and powerful and kill all enemies, in real life there is a template for appropriate behavior and the child expects that she and her friends and family will all follow it.

Albert Bandura (1973) studied the effects of observing violence on groups of children. He discovered that children who were exposed to even one incident of extremely violent behavior modeled by an adult tended to imitate that behavior when presented with frustrating events.

But in war, children see violent behavior repeated over and over again. More than that, they see the stuff of nightmares such as mutilated bodies, people and animals burned to death, and explosions that destroy everything enacted not once, but randomly, from time to time.

There seem to be three levels of reaction to the violence, just as there are three levels of violent experience that children have in war.

Denial or Splitting Off the Experience

In this basic and common level, the child's mind retains the information presented by the experience, but only in an unintegrated, unsymbolized form. The events are then repeated over and over in nightmares, night terrors, "flashbacks," or violent games. Some children simply feel sick, reporting headaches, stomachaches, or backaches that won't go away and can't be traced to a physical cause.

Feeling Overwhelmingly Angry

Children who have been victims of violence, like any of the rest of us, may feel extremely angry. The anger that they feel, and the accompanying helplessness, may become frightening and overwhelming. This is an extreme example of the experience common to children, that they are small and helpless and that they must depend on those bigger than they for survival. The rage that they feel at their enemies cannot be discharged, lest they be hurt.

Identifying with the Aggressor

Some children come to feel that these enemies are the only people who understand them, because the "nice" people around them in their communities may not understand how angry they are. They may feel a need to act badly just so that they can be punished. This leads to a common symptom we find among children exposed to extreme violence: breaking the rules of the community. However, research by Garbarino (1991), Winnicott (1956, 1960, 1963), and others suggests that this does not come from a simple imitation of the aggressor as Bandura suggested, but a need to be punished so that they can join in with the community of normal people again.

The Need to Make Reparation

Donald Winnicott (1956, 1960, 1963), a pediatrician who wrote about delinquent children after World War II, discovered that children affected by armed conflict needed to do good things to feel good about themselves again. Honwana (1999) and Monteiro (1996) and other Southern African writers found that purification rituals helped many of these children. However, Bragin (2005b) and Twemlow (2000) found that for children in Western societies where such rituals were lacking, or for those for whom the rituals were simply not enough, opportunities to do good things, and be recognized as good people, were very helpful in allowing children who had been exposed to extreme violence to integrate the mad feelings, the bad feelings, and the parts that were excited by nightmares coming true. By doing good things for others, such children began to believe that they could be united with the good parts of themselves once again.

Deng: A Cattle Herder's Story

Deng lives in a small village in northern Bahr-el-Gazal in the south of the Sudan. His is largely a nomadic herding community that stays in the village during the rainy season and follows the animals to swampy areas during the dry. His people are dedicated animists, who lived until the last few years in harmony with nature and without either money or animal labor. In the 1980s a coup d'état had brought a centralized government to power, replacing a left-leaning coalition. Traditional peoples from around the country rebelled, demanding a return to regional autonomy, a share in the nation's oil wealth to be used for local services like schools and clinics, and equal rights for farming and herding peoples. The government armed local horsemen from a rival tribe, one differing from Deng's in its use of animals for transport to subdue the rebellion.

When Deng was seven, the invading horsemen rode through the village with anger and a battle cry on their lips. Deng remembered that they gathered up the men and brought them to a hut that they set on fire. His father was away that day, and he was staying at the compound of his uncle. Deng was held back by older women and boys while he watched in horror and did nothing. His uncle and several older male family members died in that fire. All of those who died were members of his clan. Deng was haunted by this memory, including the smells and the sounds of the screams and his accompanying sense of guilt at the thought of the excruciating pain his uncle and other family members had suffered, and the fact that he had been unable to do anything. He could neither sleep nor eat. He joined the revolutionary militia as it came through, and committed acts of counterterror with them. When demobilized as part of a program for underage soldiers (stage one of the process that brought peace to that region), he no longer felt well and was haunted by violent images that were sometimes nightmares and sometimes just repetitious, unrelenting daytime memories. I came to know Deng by his frequent visits to the part of the children's center where I held staff meetings. He needed to be reassured that beans were not being stolen from the children's portions, or to question why we kept extra school notebooks in the store, rather than distributing them at once. "Deng, we've locked them up for you so no one can sell them. When you show your teacher a finished notebook, he'll get you, or any boy who needs one, another." But tomorrow, he would come with a new angry protest. We helped him right the possible wrongs at the children's center every day.

By visiting his "classroom" (an area under a tree outfitted with a blackboard and rough-hewn log benches), I came to learn that Deng was unable to sit still in school, where like many of the teens, he was placed in a class for beginning readers and writers. He could not concentrate at all, his mind either alighting on the screams of victims and murderers alike during the past years, or wandering off to the grasslands in a desperate effort to avoid the flashbacks. Remember that when children participate in wars in their homelands, the memory triggers cannot be escaped.

As part of their treatment, a special school program had to be developed for these boys that held them close in concentration, and assisted them to focus through intensive interactive methods.

After-school recreation allowed cultural methods of expression through dance and story. The boys were housed in small groups so that they could be surrounded and supported by the presence of other people that they knew.

However, above all things, Deng, and some of the others who had experienced the more terrible things, needed to be engaged in acts of reparation that could make them feel clean again.

When Deng returned to his village, he became quite ill. It was critical to arrange for treatment by a traditional healer, whose combination of herbs and ceremonies brought some peace. The healer evoked the ancestors in order to forgive him, allowed him to purify himself, and provided for a symbolic reburial of his father in the traditional way.

The traditional cleansing was extremely helpful for Deng; however, in his case it proved insufficient. The healers are experienced men and have seen many such young people in their day.[5] They got the community through many years of war and violence. The healer proposed that Deng also do some good for the community, beyond the value of the symbolic sacrifice that was made in his uncle's honor and given to the community.

He suggested that Deng go to the town council and volunteer his services. Deng continues to fight for a cause; this time to stop that unique combination of corruption and torpor that can overtake a society struggling to rebuild. He works with the District Education Coordinator to see that the public schools outside of the "town" (separated by water in the rainy season, and by difficult passage in the dry) remain open every day. He fetches the teacher and makes sure that parents keep up repairs and school fees. He reminds families to send the children each day by going house to house. He also coaches a football team for younger boys and teaches them to fish in the river during the rains. He wears his UNICEF T-shirt like a uniform, daily, as he makes his rounds.

The PTSD Controversy

The diagnosis of posttraumatic stress disorder (PTSD) formally entered the nomenclature in 1980. Prior to the development of this diagnosis, survivors of extremely violent events, whether rape victims or war veterans, were considered to have a character defect if they reacted with symptomatic behavior to the violence that they had experienced (Herman, 1992; Horowitz, 1986). The new diagnostic category emphasized that strong responses after experiencing violent events were *normal* reactions to events beyond the capacity for the mind to endure them (Herman, 1992; van der Kolk, McFarlane, & Weisaeth, 1996).

An important element of the PTSD diagnosis, and its subsequent study, was the fact that many people who appeared not to have an adverse reaction immediately after the experience of extremely violent events did so later, sometimes after many years. Researchers in this area soon discovered that symptoms suffered by survivors vary not by the nature of the survivor's history, but rather by the severity of what they have suffered, and this has been borne out by subsequent research (Bowman, 1996; Hovens, Falger, Op den Veld, & Shouten, 1992). Another important aspect of this new research was to learn that many people who did not appear affected immediately after the events became symptomatic much later if they did not have the opportunity for treatment (Horowitz, 1986; van der Kolk et al., 1996).

Trauma psychologists working in the PTSD framework brought this understanding to bear on a range of critical problems. The posttrauma concept helped explain and treat the sequelae of repeated and chronic events, ranging from child sexual abuse to incarceration in concentration camps, torture, or the ongoing threat of torture and death that many patients brought to the consulting rooms, and widened the scope and possibility of treatment.

Pynoos and Eth (1985) and Mona Macksoud (1993), along with her colleagues J. Lawrence Aber and Ilene Cohn (1996), were among the first to document the specific reactions that many children exposed to extreme violence experience. These include not speaking, poor sleep, nightmares, night terrors, bed-wetting, "flashbacks," eating disturbances, and repetitive aggressive play. Some children do not participate in the activities expected at their age level. They violate rules of the community, do not pay attention to elders, and may begin drinking and gambling. Some lose all interest in their expected future activities such as getting married or getting started in a family farming or trading business.

Understanding that these symptoms were in fact normal responses, therapists could develop programs to help children to integrate them and to begin to return to normal life. Trauma therapists in Western countries were able to obtain treatment for their young patients without fear of stigmatizing them.

The PTSD paradigm includes both a diagnosis for the percentage of the population who need specialized treatment over time, the only diagnostic framework to do so without pathologizing survivors, and PTS (posttraumatic stress) that includes those symptoms that will subside after a brief period. The paradigm also recognizes "complex trauma" to describe the experience of continuing violence and loss that characterizes war and communal violence.

The PTSD concept allowed the study and understanding the effect of extremely violent experiences on the people who survived them. It also pointed the way to the study of those who appeared more resilient than others, so that the protective factors that made their resilience possible could be replicated for other children, thereby contributing to the psychosocial model of intervention described later in this chapter.

International Criticism of the Concept of Posttraumatic Stress Disorder When Applied to Children in Armed Conflict

This diagnostic category, and the understandings that followed from its development, led to a proliferation of programs around the world that used some version of a Western model to address trauma symptoms to children affected by armed conflict. This application of PTSD theory to children in disparate countries and cultures in the midst of, or immediately following, armed conflict was greeted with dismay by many local experts. This view came from a number of different continents and a number of differing viewpoints.

Among the most common concerns was that any diagnosis, even one designed to do the opposite, might hold the danger of trivializing the severity of the experience of war and genocide. In addition, it could be used to pathologize entire populations as "traumatized."[6] Further, the expression and meaning of psychological distress is culturally constructed and harm can be done by imposing ideas about internal experience from external sources, while ignoring indigenous ones (Loughry & Eyber 2003). Alcinda Honwana (2001), a Mozambican medical anthropologist, pointed out that PTSD was in itself a culturally constructed product, developed to explain the symptoms of U.S. soldiers fighting a war in a foreign country who came home unable to adjust to "normal life," and then applied to children affected by all other forms of violence. Honwana stressed that most children affected by armed conflict around the world live or are fleeing from wars that take place in their homelands and have gone on for most of their lives. Therefore, she argues, ongoing and culturally consonant understandings and interventions are most useful.

Elizabeth Lira (1995) and David Becker (1995) from Argentina added that because such conflicts are ongoing and pervasive, there is neither a "post" nor one specific "trauma" but rather a series of events that change the flow of children's life course and development. The word *stress* minimizes the reaction of someone who has been tortured, and because this is a normal response to abnormal circumstances, the word *disorder* is also inappropriate, at least as applied to survivors of human rights violations in South America.

Further, many international clinicians worried about the technical merits of a medical, symptom-reduction approach to solving problems with serious, long-term causes. Psychological symptoms are defenses, armor, which the mind uses to keep something very painful away. Taking away a symptom then does not solve the problem. It is better to solve the problem first, and allow the symptom to go away.

Because in non–Western countries, people are not "blamed" for having a history, it can be useful to them to discuss that history and use it to help make meaning out of their experience on both a personal and communal basis. Therefore, clinicians working in non–Western countries argued that programs should be developed to connect past and present. It was their view that such programs would best be able to restore the normal flow of development to children deprived of it through war and violence (Becker, 1995; Boyden & Gibbs, 1997; Honwana, 2001; Kos & Derviskadic-Jovanovic, 1998; Lira, 1995; Machel, 1998; Monteiro, 1996; Ressler, Tortorici, & Marcelino, 1993). In this paradigm reactions to war and violence are seen as an active and complex experience, deeply intertwined with cultural memories, social conditions, and the individual, family, and communities' history. Those arguing for this point of view believe that this interplay must be understood in order to restore to survivors a sense of themselves as full and potent human beings (Becker, 1995; Kos & Derviskadic-Jovanovic, 1998; Lira, 1995).

Loughry and Ager (2001) in the online training manual *The Refugee Experience* (http://earlybird.qeh.ox.ac.uk/rfgexp/start.htm) point out that wars are ongoing events changing the fabric of society itself while children are engaged in a dynamic process of development that will not hold still and wait for better times.

Arnston and Knudsen (2004) point out that interventions must comprise broad-based assistance to restore the capacity of communities and families to care properly for their children so that they can grow up well. This cannot be done through individual care alone; rather the provision of services must be to the population as a whole, and include material as well as social and psychological supports.

Toward a Common Understanding

Contemporary trauma theorists fully concur with many of these ideas. Western trauma specialists emphasize in recent writings that all suffering, like all joy, must be understood in cultural context and cannot be separated from the worldview of the survivors. Rather than emphasizing Western models or symptom reduction alone, they too argue for a culturally appropriate, integrated, and sustainable care for children affected by armed conflict (de Jong & Kleber, 2003).

Risk and Resilience: Understanding Protective Factor Research

Certain factors help children, families, and communities to endure in spite of traumatic events and multiple stressors. This endurance, and even favorable growth and development under the worst of circumstances, is known as resilience.

Community Coping Mechanisms: What They Are and How They Mitigate the Psychosocial Effects of Disaster

All communities have mechanisms to maintain stability and manage adversity. When these mechanisms are in place, children are buffered from many of the difficulties of life, and parents are assisted in helping their children overcome stress. Some of these mechanisms are simply the celebrations and rituals of family life that keep people in good spirits or allow for the release of tension in difficult times. In addition there are the special provisions that a society makes for more serious difficulties. Children are protected from developmental disruption in difficult times by these means. To the extent that such mechanisms are in place, the psychosocial needs of children can be met, even in adversity. When these mechanisms are overstressed or have been abandoned, it may be important to assist the community in strengthening or restoring them in order to reestablish coping strategies for children.

Of particular importance in creating resilience in children affected by armed conflict is the way in which families are able to continue to undertake a careful upbringing of children despite hardship and disruption. Hardship and disruption often cause families to go through the motions of child rearing in a more mechanical way than usual. The following are tasks that families can do to ensure that children are brought up well:

- Provide a constant caregiver in early life who considers affection along with feeding.
- Gradually impart the rules of the community and a sense of right and wrong.
- Support the gradual development of those capacities that make a respected adult within culturally defined structures.

Factors That Promote Resilience

The following factors not only can protect children from overwhelming risk, but may even promote prosocial behavior and hopefulness in children:

- A close nurturing connection to a primary caregiver who provides consistent and competent care,
- Connections to competent caring members of their own cultural group outside of the extended family,
- Participation in familiar cultural practices and routines,
- Access to community resources, including effective educational and economic opportunities,
- Connection to religious or other belief-based organization, and
- Opportunities to be an active participant in efforts at change.

By integrating the violent and destructive effects of war on children with the factors that may have made them stronger, we can begin to understand children affected by armed conflict and know how to use their strengths to help them to heal.

Doing Our Best for Children Affected by Armed Conflict

> Every gun that is made, every warship that is launched, every rocket that is fired signifies, in the final sense, a theft from those who hunger and are not fed, those

> who are cold and are not clothed. This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, and the hopes of its children.
>
> —*President Dwight D. Eisenhower, April 16, 1953*

How can we do our best to create situations, in the midst of armed conflict, that minimize developmental risks to children and maximize exposure to those factors that will protect them against harm, creating the conditions that foster resilience? What must we actually do to ensure that the normal flow of development is restored to children whose development is affected?

The vast majority require generalized psychosocial intervention to restore that normal flow of development, with opportunities along the way to understand what they have experienced, mourn their losses, and contribute to solving community problems. However, children do not develop in isolation, but as part of a culture and a community. When the community thrives, they can thrive, when the community is at risk, so too are its children. Best practice dictates that programs be established to help communities to help families to raise their children well. When specialized care is needed, it is important that it be specifically targeted, that it be culturally appropriate, that it be conducted by knowledgeable and competent practitioners, and above all, that it be sustainable over time.

There are two precursors to establishing any psychosocial program to help children during or immediately after war:

- A culture-specific baseline understanding of developmental norms has to be established for the children of the communities targeted for assistance.[7]
- A community participatory assessment of resources and goals for rebuilding needs to be established so that any programs designed to restore children's development can be integrated into whatever plans are being made for the community as a whole.

What to Do in the Midst of Crisis

The psychosocial approach discussed here is not so much an intervention per se, as it is action to support the right of children to a harmonious development. Such action is not only possible in an emergency, it can be critical for children caught up in the midst of conflict, or whose lives are disrupted by ongoing conflict. Once these actions are set in motion, it is possible to turn to identifying and caring for the 10 percent that will need specific clinical intervention.

Promoting Best Practice

To promote best practice, a program should:

- Keep families together and ensure that children stay with their usual caregivers.
- Not further endanger the participants, keeping them as safe as possible.

- Be possible to implement by local participants in the event that outsiders are evacuated.
- Be portable so that it doesn't support continuing life in refuge (a recent newspaper article on returning refugees noted that they had to give up sending children to school; training local teachers among the refugees would have solved that problem).

Keeping Families Together

When families are on the move, fleeing from disaster, the first and most important action to take is the prevention of separation. Simple acts like assigning literate people to tag young children's wrists, or bringing separated children to the front of a convoy, can help to ensure that little ones don't lose their families forever. Quickly assigning school-aged children to collect their younger siblings and babies that they know and ensure that they stay together is one very reliable means of doing this.

Providing material aid in such a way that families are enabled to stay together, avoiding the institutionalization of children in the hope of getting them fed, is another psychosocial intervention that is critical during emergencies.

Often, well-meaning people want to give money to children and that money is used to set up temporary orphanages. These places often provide abundant food, toys, and clothing for children. When parents see such abundance, they may feel that they should abandon their children in such a place, so that the child can be well fed and clothed. This deprives children of the most important assistance of all—that of parental love and care! Even children who've lost parents can often remain with extended family members who know and love them if food, clothing, and other help is provided. This can be done by setting up a center for information that tells families where they can get assistance for their children and making sure that assistance provided to families is of the same or better quality as that provided to institutionalized children.

The most important principle is that parents are able to get food and other necessities for their children at home or at a refugee camp, and that when education is provided, it is provided for all children so that none have to be sent away in order to continue their schooling.

Restoring the Normal Flow of Development

Once we have kept children together with the people who love them, we need to help families and communities help the children to maintain and restore the normal flow of development.

Ensuring the Development and Survival of Babies

Babies are wholly dependent on maternal care for their well-being. Mother's response helps babies to regulate their emotions and feel safe and well, regardless of what is going on around them. In many cultures, babies are tied onto the mother's body, and feel safe that way.

The United Nations Children's Fund designates "child friendly spaces" in beleaguered towns and refugee camps where mothers and other caregivers can gather and get something to drink for themselves, and have volunteers help them to relax and respond to their children.

In time of hunger, feeding centers are often the only way it is possible to keep vulnerable babies and their mothers alive. These are not hostels or orphanages, but centers in a village or refugee camp where therapeutic feeding is provided for mothers and their malnourished babies and small children. Training grandmothers, teenagers, or those who work at the center to encourage mothers' interaction with their young children is a cheap, helpful, and portable intervention.

A tired mother may watch her listless baby and simply provide food, without the usual talking and smiling and playing games that is normally part of maternal care. A trained volunteer can begin to smile and coo to the child until she elicits a smile, while encouraging the mother by telling her what a lovely baby she has. The volunteer may ask the mother to tell her what songs or stories her baby likes best. Because they are of the same culture as the mother, they often know the songs or stories and they can sing or tell them together. With the volunteer encouraging her, the mother can slowly begin to sing and smile at her baby, bringing an unresponsive one back to life.

When the mother or primary caregiver is killed, it is important to help provide babies with substitute care as quickly as possible. Best practice is to support the father or other close family members to care for the baby; or to place the baby with a known and loving caregiver, such as a sibling and send both children to care together. Only as a last resort should an infant be given to a caregiver that they do not know. In that case, someone from their community, whose smell and way of handling children will be familiar, is the best choice. When this is not possible, it is important that the child be put in the care of a family who will provide care on a regular basis. Infants cared for irregularly by differing caregivers in institutions may not survive.

Restoring the Flow of Development to Young Children

Keeping young children together with their caregivers and reassuring them that they are cared for and loved are critical to helping them to begin to feel more secure. Providing a calm, safe, and predictable environment is also very important. Therefore, training and support for parents and caregivers is the best practice intervention.

Young children will be very frightened by the events that they have witnessed, as they have difficulty understanding the difference between reality and fantasy in normal circumstances. They must be helped to understand what has happened and to manage their fears, over and over. Allowing them to express their fears through play and stories is important. So is answering the same questions over and over, patiently, but clearly. Again, if the mother or primary caregiver is killed or missing, keeping the child with family members is best practice, and providing support to others whom they know and love to care for them is next best.

Assuring their continued safety and care among people they know and trust is critical. Preschool children should be kept with family and community members as much as possible. If there is no survivor able to care for them, and they are sent away, new caregivers should connect past to present by talking about the dead family members and assuring the child that it is all right to miss them!

TALKING ABOUT DIFFICULT ISSUES WITH YOUNG CHILDREN

Armed conflict, as stated earlier, exposes children to extremely violent events that they should expect not to see in real life. It also brings death and loss. To help children to manage the emotions that they experience, along with their shock and horror, it is important that adults be prepared to answer their questions and talk with them about what they have seen and experienced. Adults may feel that such topics as violence and death are inappropriate to discuss with small children. However, the children need to try to understand what is happening and will ask about such events as death, particularly the death of young people or children like themselves, the reasons for the violent behavior of people such as soldiers or police who they expect to behave more properly, and any act of violence that they see or experience. Young children's fears and worries will recur, along with misconceptions about what actually occurred. Young children should be told the true story of what happened whenever they ask, no matter how often. Questions are a way to try to master the experience.

The following guidelines may help adults to respond.

- Provide reassurance that they are cared for and protected, over and over again.
- Allow opportunities for children to talk about the event or express their feelings through play, including repetitive dialogue and play.
- Address whatever issues that the children bring.
- Admit when you don't have specific answers.
- Use realistic but simple terms with children when discussing aspects of the events: avoid euphemisms.
- Recognize that children need as much factual information as possible in order to counteract their fears.
- Telling children stories is a good way to address small children's worries and fears when they have been quiet and not expressed them.
- Allow children to discuss their own theories and ideas about what happened, but correct them with facts, so that they can begin to "master" the events.

Restoring the Development of School-Aged Children

Children from 6 to 12 like to learn the rules of the community and follow them. Disruptions from normal activities are particularly upsetting to them, and so is exposure to violence or other rule-breaking by adults. Therefore measures should be taken to keep them safe and make life as normal as possible immediately.

They are very proud of their cognitive abilities: they can easily learn facts and all sorts of concrete things. Most of all they are concerned with having correct information about things and being able to repeat it at school and to one another. If something happens, they want to know why and how and when will it happen again.

They are particularly concerned with routine and the order of things, such as if we go to market on Monday and take the baby to the clinic on Friday—they will want to know these things and remember them. When the world seems unpredictable, we find them doing little imaginary tricks to make it seem predictable. For instance, a child may think, When I see a monkey on the way to school in the morning, I will have a good day.

Children at this age are developing a sense of morals, but still see morality in a black-and-white way. Knowing the rules and following them is most important. That's why they like formal games and sports better than fantasy play. And why they are quick to complain about a classmate who doesn't play by the rules. They often blame themselves for things that happened because they can't understand or accept the complicated nature of life in which the reasons for things are not revealed to us. Blaming themselves feels a lot better than living in a world in which they are completely helpless!

Good interventions can happen at school, but war often causes school to stop or makes it unsafe for children to get there. If there is an emergency school or "child friendly spaces" available, then so much the better. Registering children for some form of informal school or safe place for children is a good way to protect them. Teachers among the affected population can gather them together, feeling useful again. This can be done in a courtyard under curfew or in a refugee camp. Children in emergency school or child friendly spaces can be given messages about hygiene, nutrition, and safety. They can be assisted to process what has happened to them and become involved in preserving those traditions in the community that promote continuity and resilience, through games and stories. If formal school does not start very soon, or if it appears that the children can't get there, they can also begin to try to do their lessons, so that they don't lose time. Children who have been excluded from school but want to learn can begin to get some literacy and numeracy instruction.

School-aged children can helped to find age-appropriate ways to help others. This will make them feel important and more hopeful. It is important that the tasks not be too difficult for them, so that they can feel successful. They can do such activities as playing games with and telling stories to younger children and helping identify lost little ones. They can also help by making art and music projects that parents and others can enjoy.

A Checklist of Actions to Restore the Flow of Development to School-Aged Children

- Make sure that their lives have a predictable routine.
- Make sure that the rules for behavior in school are clear and that everyone knows them.
- Teach children the principles of conflict resolution to help them to feel that they can control their behavior and solve problems among children.

- Gently protect children from all dangerous and danger-seeking behavior and remind them that they are important members of the community.
- Provide opportunities to discuss their feelings and fears, and provide reassurance that they are cared for and protected.
- Make sure that they have access to good, clear factual information and that this information is repeated to the children as often as they need it.
- Play structured games and sports so that they have a chance to have fun in ways that are safe and in which once again, the rules are in place.
- Explain that it is normal to have trouble concentrating during difficult times, and help them to do homework by sitting one on one with a volunteer.
- If children have had strong spiritual beliefs before the war, help them get contact with cultural and spiritual teachers who can guide their understanding.
- Explain that their reactions (poor concentration, worry, psychosomatic symptoms) are related to the stress they experience, and that they will feel better with time. Don't reward psychosomatic complaints by paying too much attention to them, or the child will develop a habit of seeking love and support this way. Instead, provide reassurance and help children with psychosomatic problems to put their worries into words.
- Encourage participation in rituals that help children and families to heal.
- Help them participate in positive solutions to community problems according to their growing ability.[8]

Talking About Difficult Issues with School-Aged Children

- Recognize that school-aged children want and need as much factual information as possible.
- Allow children to discuss their own theories and ideas about what happened so that they can begin to "master" the events.
- Tell children how and where they can obtain information and assistance.
- Initiate group discussions about distressing events that many may—or may not—have experienced, because even those who have not would have heard about them. This will help affected children feel less alone in their suffering.
- If a child brings you a rumor or false alarm, take time to find out what the facts are and inform the child, and remind him or her of accurate sources of information.
- Tell the children that it is okay to feel afraid, confused, angry, and guilty. These are all normal responses to a very abnormal situation.
- Use realistic terms with children: avoid euphemisms.

Involving Adolescents from the Start[9]

Adolescence marks the biggest bodily changes since babyhood. Adolescents' bodies grow as they reach puberty, and so do their brains. Adolescents know that as their bodies and minds are developing, they are being catapulted toward their role as adults. They need to understand and create meaning in the world around them. They want more than anything else to know that there is a way they can be useful in the world that they are growing up into and that they can do things to make them respected by the society in which they live. Those who have been soldiers want to know that they can still have power and importance and that they are not damaged forever by the things that they have seen and done.

Involving them in every aspect of building and program development from the start retains their hopefulness and feeling that they can be of use, as well as supporting reparation, the psychic mechanism by which doing good things helps mitigate the guilt that sometimes follows survival.

Adolescents can and should serve as community volunteers who are praised for activity as they build shelters, find lost children, haul sacks of food, and promote hygienic practices such as trash burning. This can be the basis of more sophisticated programs developed later.

Forming a youth club to do these activities lets adolescents have fun again, while they help others. These youth clubs can sponsor sports matches and begin to manage their anger and distress. Even more important, youth club members can begin to work together to solve the problems that created the war.

To do this they will have to be taught conflict resolution and problem solving skills, as well as methods of analysis.

Special Educational Techniques That Address Learning Difficulties in War-Affected Children and Adolescents

Many children will be too distracted by the violence that they have witnessed or participated in to sit quietly and learn in classrooms. At the same time, those children will feel that their lives are rendered meaningless without education. Therefore creating educational mechanisms to help children and adolescents participate in school is critical. While this is not an exhaustive list, the following approaches may be useful in helping to restore children's capacity to function at school. Functioning at school is a key element in restoring the normal flow of development to school-aged children and those adolescents who are given the opportunity to study.[10]

Setting Up a Decentralized Classroom

In this model, students are placed in small groups, with the teacher teaching a formal lesson to one group of no more than 20 students. The other students are placed in groups doing practice for the lesson, or other activities, led by a senior student or an assistant teacher. Children who were forced to leave high school because of the exigencies of war are often very happy to be recognized for what they know and to participate in this way.

Direct, One-to-One Attention

Research in the United Kingdom and the United States on treating the effects of violence on children has shown that the effects should be mediated through work with a consistent person, who is available to endure the child's expressions of "badness" and even angry feelings over time, without becoming angry or being destroyed. That person can be an elder from the community, or a well-trained volunteer, or a teacher. However, the attention has to be focused on the child in a small enough group for that child's own ideas to be heard.

One-to-one attention, or attention in small groups, helps children to focus attention on the subject at hand. To help children to come out of their daydreams or blank state, one can call their names directly, speaking to them clearly, and looking at them directly in the eye, while gently reminding them that they are now in class, and safe, so they can afford to think about the present.

Permission to Express Unwanted Thoughts

Children should have a special time for expressive activities where all thoughts are acceptable. They can simply say them out loud without being questioned or attacked, and encouraged to refocus attention on the subject at hand. Many local training manuals are available to help teachers and caregivers to know how to respond.

Symbolic Activities

Symbolic activities like art, drama, and dance help children learn to take the stark world in which they live mentally and turn it to symbols. They may start by drawing everyday things and only after time will start to draw or write about their feelings, as they come to know them. Having a trained art assistant in the classroom to meet with the children regularly, for two periods a week, in small groups is very helpful.

Problem Solving

Helping children to think of solutions to practical life problems, as well as the kind of problems that are utilized in math, is useful in helping children to begin to think and reflect. Problem-solving activities should encourage age-appropriate thinking patterns to be established and reinforced.

Utilizing Manipulatives and Movement in the Classroom

Children who are having trouble managing to sort out difficult thoughts and ideas are helped by doing practical things. Locally available learning materials can be used for children to do remedial and practical work so that they understand their lessons better.

By having children stand up and move to another learning area at the end of the lesson, they will have a chance to "wake up" and to refocus attention.

Life Skills Discussions and HIV/AIDS Awareness and Prevention

When children have been overstimulated by violence, they often have difficulty concentrating on abstract subjects. HIV/AIDS materials are body-based. They encourage children to talk about their own bodies, the bodies of others, and realities of their lives. These techniques have been very effective in helping children to concentrate and participate successfully at school. Once they have done this, they are often better able to turn to more abstract lessons. Conversely, many abstract subjects can be taught in the context of the practical and body-based instruction.

Bringing Local Knowledge into Schools

When schools utilize local knowledge and honor respected elders and leaders, they help children to experience continuity from the past to the present. This helps them to remember that they are more than the terrible things that they have experienced—they are part of a valuable tradition that has existed for a long time before them, and will continue somehow into the future.

Helping Children to Cope with Loss, Grief, and Mourning

Because loss is inherent in war, it is important to assist children to mourn those losses: material, social, and familial. Just as the first stage of helping children cope with both loss and violence is to restore the normal flow of development, so too, managing grief and mourning is part of the developmental process. Earlier in this chapter we discussed the significance of loss to children according to their age and stage of development, and the stages of grief and mourning. Here we will learn how to talk to children after the death of a loved person, and about the utilization of culture and ritual in healing, and best practice in the care of children whose parents are lost or dead.

Talking to children after the loss of a loved person

- Always talk to children in context, expressing the continuity of life. Ask children to tell you who they were and what life was like before the loss, and only then listen to what has now happened.
- Reassure grieving children that their feelings, however odd they may seem to you, are valid.
- Help children to perform or participate in whatever rituals are usual. Ask the family what mourning rituals girls and boys can participate in.
- Allow children to know that their survival will be assured by other family or community members.
- If the children believe that they are responsible for the loss, allow them to participate in any ceremony that will purify or absolve them.
- Allow the children to participate in all appropriate community discussions regarding the events. Let them know that their community will endure and that normal life will go on.

The Healing Role of Culture

All cultures have rituals to help people understand and manage death and the loss of loved persons or transition to a new situation. These rituals explain the cultural meaning and understandings of death and loss, as well as help bereaved people to connect the past and present.

Sometimes, during war, those rituals may not be performed. This leaves children distressed and worried. They may be concerned that their loved ones are not able to have a peaceful death without them. They may feel unable to mourn without ceremony. Honoring cultural practices regarding death and mourning goes a long way toward helping children to cope.

Provision of Specialized Psychological Care

Children *should* react with distress to loss and extreme violence (Machel, 1996; Macksoud, 1993; Ressler, Marcelino, & Tortorici, 1993). These are normal responses to abnormal situations (Horowitz, 1986; van der Kolk et al., 1996). In fact, we worry when they don't react! It cannot be emphasized sufficiently that activities designed to restore the normal flow of children's development and support for those social factors that protect children from overwhelming risk are the most important forms of psychosocial care for those affected by armed conflict (Arnston & Knudsen, 2004; de Jong & Kleber, 2003; Machel, 1996; Ressler, Marcelino, & Tortorici, 1993). Activities that support the psychological integration of exposure to violence and the mourning of loss can be integrated into community-based programs, as described earlier (Bragin, 2004, 2005d; de Jong & Kleber, 2003; Kos & Dervishadic-Jovanovic, 1998; Macksoud, 1993).

However, about 10 percent of children will require intensive specialized psychological attention (Cairns, 1996). They can be divided into three groups:

- Those whose life and family situation prior to the conflict created special vulnerability, such as:
  - Abused and neglected children,
  - Children in conflict with the law,
  - Children already separated from parental care,
  - Mentally ill children.
- Children forced to view, experience, or commit acts of extreme violence over a long period of time.
- Children who exhibit the following behaviors *after* family care and safety have been restored:
  - Violate rules of the community,
  - Are silent and withdrawn for long periods of time,
  - Fail to return to the capacity to eat and to sleep after one or two weeks,
  - Those who seem to begin to lose touch with reality.

Where there are qualified child mental health specialists available, children exhibiting any of the symptoms previously described can be referred to them. If not, medical personnel can be called upon to make an assessment and recommend follow-up care.

It is important to note that not all mental health problems that children experience during war are stress responses. The care of mentally ill children, whose conditions may worsen during war, is beyond the scope of this chapter. Here we address those children who are responding to the losses, violence, and disruptions caused by the war itself, whether they are especially vulnerable children or children whose suffering was so long-standing and extreme that it was beyond their capacity to bear. The goal of treatment will not be the removal of response, but rather the integration of their life experience, the facilitation of age-appropriate mourning, and the restoration of the normal flow of development.

Do No Harm: Practices to Avoid

Short-Term Interventions by Strangers

Oftentimes, trauma specialists from around the world want to volunteer short-term assistance to work with "traumatized children." This was of such concern that Graça Machel (1996) specifically mentioned that this was to be avoided in her team's report. The reason is simple. Well-meaning outsiders who swoop in and out of a child's life during or after an armed conflict can do more harm than good by having a child experience yet another loss, or separating that child from the past while they are developing their future. Further, they may disturb the relationship with and teachings of understanding adults in the community who can foster adaptation, over time, in a way consonant with the child's culture and worldview.

Badly Trained Practitioners

Competent practitioners require training, support, and supervision to provide specialized psychological intervention. There is no evidence that one-on-one care provided by lay practitioners given only a few hours of training is effective, and if the practitioners are unable to cope with a child's distress, bad feelings engendered by their experience, or even a child's symptomatic behavior, harm can be done by increasing the child's feeling that he or she is very mad or very bad.

Forcing Children to Participate

When there is a crisis, some well-meaning people believe that "debriefing" or talking about the experience afterward is vital to children's recovery. This has not been borne out by international research (Arnston & Knudsen, 2004; Boyden & Gibbs, 1997; Machel, 1996; Peddle et al., 1999). Children may not wish to speak about their experiences and should be free not to do so. They should be allowed to express themselves in ways comfortable to them, and also to remain silent if they prefer.

Similarly, not all children believe in traditional practices known in the communities in which they live. If the practices are not meaningful to them, they will not be helpful, and, again, their participation must be voluntary.

Activities That Violate Children's Rights or Safety

Some practices, both traditional and Western, may violate children's safety or health. Examples are untested medications and ritual cutting. Learning about them, and avoiding them, can be an important role for child protection agencies.

When There Are Few Trained Clinicians

During armed conflict, many trained professionals are affected themselves and others are forced to flee the violence. Some societies did not have a formal system of psychological care for children before the conflict began. However, care that is both clinically sound and culturally competent can be organized (de Jong & Kleber, 2003; Kos & Dervishadic-Jovanovic, 2001).

Understanding Cultural Concepts of Mental Health Care

Learning which cultural mechanisms are available to address children's mental health issues and how they can be strengthened is the first step in best practice (Bragin, 2005d; de Jong & Kleber, 2003). All cultures have ways of addressing issues of children who are not growing up properly. For instance, when faced with overwhelming problems, working-class people in Argentine cities call on a psychoanalyst, the rural poor in Cambodia consult a *k ru khmer*, and the *zar* is the specialist to see in northern Sudan. In the United States and Western Europe, counseling services are available in schools and health facilities. It is then necessary to learn which treatments were known to be effective.

Many traditional healing practices, both Western and non-Western, utilize techniques designed to facilitate mourning, control aggression, and cleanse those who feel dirty and tainted by the experiences that they have had. Religious healers of all types have often undergone rigorous training from their childhoods. Such well-trained people are far more useful than those who get short-term emergency training to do Western-style counseling in a community where it is not favored as a means of helping children in distress.

Selection, Support, Supervision, and Training

Selecting from among those practitioners, whether traditional or from more established mental health disciplines, who already have experience and training in dealing with children in distress will ensure the program's continuity and help a great deal with quality.

Additional training can be provided through international specialists as long as that training is of sufficient duration (Doctors without Borders recommends three months, but other organizations believe that two weeks can be a sufficient start), is repeated and strengthened by regular follow-up, and supplemented by supervision on a regular basis. The training of trainers is an excellent mechanism, which can be utilized as long as these trainers receive support at regular intervals. Often it is possible for university staff members from the affected population to provide training and supervision on an intermittent basis. This can be true wherever there may be a school of psychology, clinical social work, or psychiatry. (For example, in Angola, during the most intense years of war, Angolan specialists from functioning universities were available to provide training and supervision in the field.)

What Should the Clinician Do?

Specific treatment modalities for children affected by armed conflict are still a subject of some debate. General principles can be more clearly articulated than specific therapies. Formal psychotherapy for war-affected children should be conducted by people who can hear and respond to the violent experiences the child has had, without judging or putting a "lid" on them. Therapists have to be able to know what the child knows about violence and aggression, fear and hate, if they are to be helpful. It is no use to tell a child that he or she is not to blame. Instead, the therapist must be available to assist the child to integrate and symbolize what he or she has seen and experienced into the child's understanding of the world. Further it is helpful to connect the child's prewar life, if there was one, to that which occurred during the violence and help the child to construct a narrative of future.

The use of play, art, games, and group activities are all part of protocols that have been tried and reported upon by programs around the world.

Traditional Treatment

Traditional treatments have been used in many parts of the world to relieve children and adults of specific distress that they report. Like Precious and the other children in Sierra Leone, who wanted a libation poured for them, these children believe that continuity in their lives can be restored through participation in ceremonies that link past to present. In addition, many ceremonies facilitate mourning by allowing for proper care for the dead, or attend to a sense of guilt and pervasive bad feeling that exposure to violence can cause (Bragin, 2005b; Honwana, 1998; Nader, Dubrow, & Stamm, 1999).

It is not surprising that these treatments are successful. Sigmund Freud in his work on understanding aggression and shame found that traditional ceremonies from the South Seas and Sub-Saharan Africa actually embodied the principles that he sought to use to help soldiers return from war. In northern Uganda, Angola, and Mozambique, where children had been abducted as soldiers and forced to commit atrocities over a period of years, traditional healers informed clinicians that no existing ceremonies could help children who had experienced such terrible things. Instead, those healers sat with local psychologists and psychiatrists and constructed special ceremonies that could cleanse the children, using knowledge from the past and linking it to the present (Bragin, 2005d; Honwana, 1998; Peddle et al., 1999). Having traditional practitioners join with local clinicians proved highly effective in those circumstances. An important qualification is that none of these ceremonies is dangerous or harmful to children. Partnerships with health officials and medical personnel have been helpful in addressing this concern.

Summary

Armed conflict does not come to children as a single event, a battle, or even a wound. Rather, it comes as a series of events large and small that influence the fabric of normal life.

The most important care for children affected by armed conflict is the preservation of family life, the restoration of community, and the creative establishment of mechanisms to help restore the flow of development: helping communities to help families to help children to grow up. Beyond that, children exposed to extreme violence will need to symbolize what they have experienced, and be given opportunities to feel and do good things so that they can feel good about themselves and the world again. Children who have lost a great deal, from family routines, to food and shelter, to people that they love, need age-appropriate opportunities to express both sadness and rage and to mourn their losses over time.

In this chapter we met children who lived through wars that lasted for many years. Each of them suffered a great deal. Had we ignored them, they might have continued the wars that they lived through into the next generation. However, with time and care and the guidance of adults in their communities, each of them found ways to transform their experience and contribute to the world around them.

Notes

1. The former first lady of Mozambique, who had lost her husband and child to a lengthy war, was commissioned by the Secretary General of the United Nations to do a comprehensive study of the affects of war on children, and present findings and recommendations to the General Assembly for action. The landmark study took place over 18 months, in five continents, and interviewed experts, teachers, parents, and children themselves. That study is still, 11 years later, a landmark in the field. A Special Representative to the Secretary General monitors the standards set by the report and addresses the General Assembly every year.

2. This material is adapted and applied from Kubler-Ross (1997).

3. The information in this section comes from several sources: Adams and Deveau (1995); Marans, Berkman, and Cohen (1996); Bowlby (1960, 1980); Nader, Dubrow, and Stamm (1998); and Macksoud (1993).

4. The "blue line" was a demarcation between territory patrolled by United Nations peacekeepers and the area still disputed by rebel forces at the time when Precious was found. Subsequently the remainder of Sierra Leone was liberated and a new government established. Precious and Joseph went back to the village with extended family members.

5. For more about traditional healing, see Bragin (2005c); Honwana (2001, 1998b, 1999); Peddle et al. (1999); and Wessells (1999).

6. Becker (1995); Boyden and Gibbs (1997); Bracken and Petty (1997); Honwana (1998); Kos and Derviskadic-Jovanovic (1998); Lira (1995); Machel (1996); Nader, Dubrow, and Stamm (1998); and Ressler, Tortorici, and Marcelino (1993) are among those who write about this issue.

7. The Community Participatory Evaluation Tool (Bragin, 2005a) provides one method for learning this information.

8. These two lists are adapted from IRC Training Manual for Teachers (2003) and the CCF Emergency Manual, Part 3 (2005).

9. This material comes from Women's Commission for Refugee Women and Children (2000) and Winnicott (1984).

10. This section is modified from Bragin (2005d). It is derived from an approach first piloted in northern Uganda with the collaboration of the Basic Education and Policy Support Activity (BEPS) program and U.S. Agency for International Development.

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CHAPTER 9

THE PSYCHOLOGICAL AFTERMATH OF LARGE- AND SMALL-SCALE FIRES

Jeffrey T. Mitchell

> Fire and water, they are good servants but bad masters.
>
> —*Aesop, Greek slave and fable author (620 B.C.—560 B.C.)*

For many thousands of years, the good servant *Fire* has fascinated us, warmed our dwellings, cooked our meals, and brightened our world. It has also transported us and made it possible for us to manufacture the tools and implements of everyday life. Fire is so commonplace in our world today, and we have become so highly dependant on it, in one or more of its many forms, that we pay little attention to it. Yet, a power failure during a storm reminds us how inconvenient and uncomfortable life quickly becomes without fire.

Enemies have long used fire as a weapon against each other. In the form of explosives, fire crumbles even the strongest manmade structures. It indiscriminately kills combatants and noncombatants. Some fire victims die quickly. Other victims die painfully and slowly from the complications of a fire's damage, such as severe infections and fluid-filled lungs. If it does not kill immediately, fire leaves its surviving victims writhing in unimaginable pain for months and even years. Fire may forever change its victims' appearance as well as their ability to function physically and emotionally. It may dramatically alter a person's view of themselves and of their world.

Volcanoes and lightning destroy forests, fields, and manufactured structures. Names like Pompeii, Dresden, Hiroshima, Nagasaki, Chicago, San Francisco, and Halifax remind us that disastrous deliberate, accidental, or naturally generated fires have destroyed entire cities. The power of fire has altered, in some cases, not only individual lives, but also the course of human history (Bird, 1962; Canning, 1976).

The human response to fires will be discussed from a number of perspectives encompassing both large-scale disasters as well as smaller, everyday fires, such as auto accident, business, and house fires. Although they are well outside of the ferocity of warfare or the power of natural or technological disasters, small fires can, just as easily as disasters, destroy our property and they can burn, scar, and mentally haunt us for a lifetime.

Human Attraction to Fire

Many assume that people are naturally repulsed by fire and that they would run far from it and as quickly they could. The facts regarding human behavior in the presence of fire do not support this assumption. The first reaction to fire, more often than not, is to be attracted to it, to look at it, to move toward it with curiosity. Unless people have had a negative experience with fire, they find it hard to believe that fire can quickly become extremely dangerous. If they are naive about fire, it is because they have only witnessed fire when it was contained and helpful to them.

There is no doubt that fire has attractive qualities. It catches a person's attention and draws people to it, especially when it is controlled and perceived to be safe. Children around a campfire, for example, are virtually entranced by fire and seem to lose contact with those around them while they stare at the flickering flames and glowing embers. Many adults and children have experienced the same fascination while sitting comfortably by a glowing fireplace on a cold winter's night. William Cowper, an eighteenth-century English poet (1731–1800), described this human attraction to fire in one of his poems (*Task* [bk. IV, l. 120]). He said:

O Winter! ruler of the inverted year, ...
I crown thee king of intimate delights,
Fireside enjoyments, home-born happiness,
And all the comforts that the lowly roof
Of undisturb'd Retirement, and the hours
Of long uninterrupted evening, know.

The natural attraction toward fire may become the source of additional casualties. In one disastrous fire, several bystanders including two young boys, who had run to see a large fire in a ship tied to a wharf, were all killed when the ship suddenly exploded. For some people, the attraction of fire can grow into dangerous pathological manifestations. Young children and adolescents, when they have been abused, neglected, or otherwise damaged, sometimes move from natural curiosity and fascination with fire to deliberate and destructive fire-setting behaviors. They can make fire victims of other people. Some learn that fire can be used to carry out revenge against those who do not give them what they want. Occasionally the results are catastrophic (Gaynor & Hatcher, 1987).

One young boy, for example, set his home on fire to get back at his parents for some perceived or actual transgression toward him. Other children may have seen the parents' blunder as inconsequential, but this boy, with a long history of emotional distress that had previously manifested itself in fire-setting behaviors, was so enraged he set the house ablaze while the parents were out and a babysitter cared for the children. Two younger sisters were burned to death as a result of his actions against his parents.

The news media often bring to our attention horrific cases that depict emotionally disturbed or even psychopathological adult behavior regarding fire. Some turn fire against themselves in self-destructive behaviors. They bear fire's scars as if they were badges of honor to bring attention to their own internal chaos. Fire certainly has been used as a means to commit suicide. Likewise, it has been employed to demolish another person's property or to torture or murder people. Arsonists have destroyed businesses, homes, and gathering places. Sometimes they burned property as an act of revenge against someone associated with the facility. In other cases, they destroyed things without any motivation other than the attraction of the fire itself (Gaynor & Hatcher, 1987). There are cases in our legal system in which a sleeping spouse was burned to death by a husband or wife. In some particularly awful cases, parents or guardians have killed children under their care by placing them in an oven.

Stress and Crisis Reactions

Even when fire is uncontained, out of control, and potentially dangerous, it paradoxically attracts people to it. In the middle of the night, people leave the warmth of their homes to stand outside and watch a fire burn a neighbor's home. At disaster scenes, many people, sometimes numbering into the thousands, gather to watch as fire wrecks community landmarks. So many thousands of people gathered to watch the burning ship, *Morro Castle*, when it drifted ashore in New Jersey in 1934 that soldiers had to be brought in to control and clear the crowds (Canning, 1976). Indeed, some people thoughtfully help the victims of a fire and occasionally engage in heroic actions to assist the emergency services personnel, but most just stand immobile and watch (Macaluso, 1989).

Once the dangers associated with a fire are recognized, however, a crisis reaction ensues. A crisis is defined as an acute emotional reaction to a powerful stimulus. Crisis reactions are, by their very nature, uncomfortable even though they are typically quite normal and expected in the aftermath of a traumatic exposure, such as a destructive fire. Accompanying the state of crisis are physical, cognitive, and emotional signals that indicate a stress reaction. Stress is defined as a state of intense arousal. The *earliest stress reactions* are useful, adaptive, and life-saving. They help us to focus our attention and to mobilize our physical and psychological capacities to save ourselves and others. We may run or take direct actions to fight against a dangerous fire. As the pioneer stress researcher Hans Selye, pointed out many years ago, stress prompts people to take action (Selye, 1956).

Stress, however, is expensive. It consumes a great deal of emotional and physical energy. Individuals who are stressed by exposure to a dangerous or threatening fire may pay a substantial price for the expenditure of their energy reserves as they attempted to escape or fight for their lives. They may experience fatigue, tachycardia, and shocklike symptoms, such as clammy skin, pallor, and digestive spasms.

Acute stress reactions usually last from about 10 or 15 minutes up to about 6 hours, depending on the circumstances. They terminate with feelings of relief and physical and mental exhaustion. To describe it in simple terms, the stress reaction comes to an end when a person's energy level becomes too low to sustain effective action. If a stress reaction is too intense, prolonged, or repeated, it may exhaust virtually all of one's energy reserves and a person then feels completely overwhelmed. That individual may then experience one or more of the following four conditions:

1. *Inhibition.* There are three categories of inhibition that impact stressed people. (A) *Cognitive inhibition* encompasses problem-solving and decision-making difficulties as well as impairment in all higher intellectual functions such as the ability to deal with abstract thinking and mathematical problems. (B) *Affective inhibition* means that a person feels so drained that he or she is unable to bring up, manage, or express emotions. Many report feeling completely numb when they are in this condition. (C) *Motor inhibition* is the condition in which a person is unable to make meaningful movements or is physically uncoordinated when he or she tries to move, walk, lift, or pull something.
2. *Agitation.* In this condition, a person's speech becomes excited, rapid, slurred, or sporadic. Many times the person is unable to choose the correct words when speaking or jumps quickly from one phrase, question, or expression to another without waiting for a response from other people. Agitation is also manifest in rapid, repetitive movements including swaying, pacing, rocking, fidgeting, wringing hands, and meaningless movements.
3. *Panic.* When a panic condition sets in, a person may exhibit uncontrolled and irrational flight. Some become so threatened or terrified by their experience in a threatening fire that they react with intense anger feelings and bursts of violence that may last for several days.
4. *Automatic behavior.* This means that a person may act in a robotic fashion and, often, only by reflex. Some people have been observed to limit their actions to imitation of the actions of others. (Crocq, 1999)

When the immediate fire danger has been avoided and the life threat recedes, people gradually recover from the physical, emotional, and cognitive stress of the experience, but they begin their postcrisis reactions. The recognition of the danger that they just escaped sets in and fear, anxiety, vulnerability, loss, grief, and depression escalates. It is often after the danger passes that people begin to shake. This is a result of the high level of adrenalin and other stress chemicals in their bloodstream. These feelings and physical reactions are made even more acute if there was an actual loss of personal property or of loved ones in the fire.

Gerald Caplan (1961, 1964) describes four relatively distinct stages of a prolonged crisis reaction, which we might find in the aftermath of a fire.

1. There is an initial rise of tension when a threat, such as a fire loss, is recognized.
2. The individual feels stuck in a crisis state and is unable to find a quick resolution to the crisis. As a result, there is an increased disruption of daily living.
3. Tension then rapidly increases as the individual fails to resolve the crisis through emergency problem-solving methods.
4. The distressed person may either go into a depression or mental collapse or may partially resolve the crisis by using new coping methods.

The Loss of Personal Property

An example of the intensification of a crisis reaction, after the acute stress reaction subsides, can be found in the following case. A man was nearing the completion of his doctoral dissertation in psychology. A fire occurred in his residence and destroyed all of his personal property, including his books, notes, his computer and all of the discs and external drives that contained copies of his dissertation. Because he was not at home when the fire occurred, he did not endure any direct threat of physical harm.

The fire, however, effectively obliterated more than three years of his work on the dissertation project. Within days he began to withdraw from family and friends and expressed a wish to die. His personal hygiene deteriorated, and he shut himself in his new unfurnished apartment. Friends tried to help, but he felt helpless and hopeless and showed no signs of recovery from the loss. These feelings continued for many weeks, even when he received news that his university had substantially extended the deadlines for completion of his dissertation. Additionally, he was not consoled over the loss of his work, although he was informed by his faculty mentor that an earlier version of his dissertation had been located in the faculty member's office. The man's depression became so entrenched that he was brought by concerned friends to the university's counseling center and subsequently accepted a referral to a private therapist for psychotherapy.

Three years elapsed before the man was able to resume his work on his doctoral dissertation. He found it necessary, however, to choose an entirely new research area because he could not directly face the loss of his previous work. A new research project was more palatable for him than a resumption of the original dissertation. He eventually received his degree and entered his chosen profession.

As this case illustrates, the loss of personal property can have severe deleterious effects on an individual's cognitive, affective, and physical functions. It can even alter a personality. It may cause some people to experience a crisis of faith in which they question the existence of a benign God. People often identify with things in their lives and they may suffer a loss of a sense of personal value when the things that are important to them disappear. They are actually dealing with the complexities of a traumatic grief reaction, but may be reluctant to discuss their feelings with anyone because they think, "It was just things and I should not feel this way over things." If their condition does not improve, even a little, in a four- to six-week time frame after a fire-related loss, a referral for further evaluation and possible psychotherapy is indicated.

Loss of a Job

Fires that destroy a workplace generate additional crisis reactions for many people. The destruction of the workplace may mean a temporary or permanent loss of one's livelihood. Without doubt, this situation is perceived to be a grave threat. Fear, anger, frustration, anxiety, worry, and even trepidation may be felt by these fire victims. Some may be mobilized to take action and find new employment, but some become locked in rampant anxiety and are unable to initiate effective action on their own behalf. Without assistance throughout this type of crisis, some people can get caught up in raging fruitlessly against an employer instead of seeking alternatives to their difficult situation. It is easy to lose one's perspective when engulfed in a crisis reaction. Appropriate crisis intervention services may mitigate the loss of perspective in a situation like this. Early psychological support helps people to slow and reduce irrational thinking. It also helps the person in a crisis to problem solve and make decisions. Most important, support reduces the intense feelings of loneliness that can complicate the recovery process.

Loss of a Relative or Friend

The death of a relative or friend in a fire is among the worst psychological insults that people can endure. The situation causes extreme emotional shock. Family members and friends of the deceased may quickly become mentally confused and emotionally overwhelmed. Most people are unable to think clearly and have difficulties making decisions or performing problem-solving tasks. Some appear to be in a state of cognitive stupor. Many suffer physical manifestations of emotional shock, such as fainting, vomiting, hand tremors, racing heart, dry mouth, loss of bladder or bowel control, and slurred speech.

Survivors are faced with a long-term, traumatic grief process, which is the most complicated form of grief. It encompasses all of the difficulties of coping with traumatic stress combined with a potent grief reaction. The fire occurred suddenly and without warning. In the chaos of the fire, one or more people did not get out of the fire or they escaped, but with mortal injuries. In any case, if they were conscious, they died in a most horrific, painful manner and the survivor is usually aware of and further distressed by this fact.

The survivor may feel incredible guilt because he or she has survived and a loved one has not. Some experience intense guilt feelings because they believe that they should have been able to do something to prevent the death. Feelings of helplessness abound. Others may feel guilty because they had recently argued with the loved one and had not yet made amends. They may feel personally responsible for the loss.

All of these feelings are compounded if the survivor was severely threatened during his or her escape from the fire. In such cases, the survivor has to deal with his or her own feelings of vulnerability and human frailty as well as the grief for the loved one.

The most painful fire experience of all is the death of a young child. It is impossible to put into words what the loss of a child is like for parents. Only those who have experienced the personal catastrophe of a child's death can grasp the full meaning of this horrible event. Even parents who have experienced the death of their own child cannot put that loss into words many years after the tragedy.

When a child dies in a fire, entire communities grieve. People identify with the death of the child and visualize their own children as victims of the tragedy. They feel very vulnerable and fear that their own children could meet a similar fate. They often band together to try to honor the child and assist the family. Funds are collected and abundant flowers, teddy bears, and candles are placed in a spot close to where the child died. Sometimes, tragic events involving deaths of children, or in cases where children have been orphaned, have so touched people within and outside of the community that they take extraordinary measures to alleviate current or future suffering. Hospital bills have been paid by strangers and scholarship funds have been established. For example, in the huge explosion and fireball that destroyed almost all of Halifax, Nova Scotia, Canada, in 1917, many children were killed and more than 1,500 children were orphaned. The citizens of the city of Boston, Massachusetts, within a few days, took these children into their homes. Many of the children were raised to adulthood in their adoptive families (Bird, 1962).

The benefits of support services for people who are bereaved or in a state of emotional crisis have been well established in psychosocial literature (Bordow & Porritt, 1979; Bunn & Clark, 1979; Crocq, 1999; Decker & Stubblebine, 1972; Langsley, Machotka, & Flomenhaft, 1971). It is important, however, that those who are assisting grieving survivors be aware of a significant caution. They must keep in mind the concept of psychological readiness for help. When a person is in emotional shock, he or she is not ready for grief counseling or most other types of psychotherapy. Shock starts immediately after the death and is most intense in the first few days. The most acute feelings, for some people, may last up to about three weeks after the death of a loved one. Survivors need information, emotional support, understanding, guidance and nurturing by family, friends, and other caring people. In other words, psychological first aid is what they are usually ready to accept, not psychotherapy. If they are unable to recover over time, they may benefit from some brief grief counseling or longer-term grief-focused psychotherapy.

Loss of a Pet

It would be a serious mistake to underestimate the emotional turmoil produced by the loss of a cherished pet in a fire. This is especially so for children and the elderly or for those living with physical and emotional handicaps. For many people, the pet has literally become one's best friend or a member of the family and the loss is profoundly disturbing. The emotional attachments to the pet are deep, personal, and specific for each person. People who have lost a pet in a fire should be managed with the same type of kindness, understanding, and support that would be afforded to someone who has lost a relative or a human friend. They are grieving and may need guidance and assistance.

Physical Injury

A physical injury sustained during a fire is one of the best predictors of negative psychological outcomes (Tehrani, 1995). This is particularly so if the injury was a burn. Any disfigurement from a burn, especially of the face and hands, sets the stage for deep psychological wounds that may last a lifetime. The pain of a burn is among the very worst of physical pains. Burns are not only painful; they disfigure and they can also become the source of a serious life threat. Burns are such a horrific shock to the body that the immune system becomes impaired. A compromised immune system makes it much harder for the body to ward off "opportunistic" diseases that take advantage of a weakened defense system.

In burns, as in any case of serious physical injury, crisis intervention support services are preferable to psychotherapy in the earliest, most acute stages. Crisis intervention focuses its attention on obtaining basic needs for injured people such as medical treatment, pain relief, shelter, protection, and emotional support. They must have those essentials before they are ready to discuss their psychological trauma and the personal meaning of a traumatic fire.

Psychologically, burns received in a fire can alter the personality of the victim. Many burn victims lose their self-confidence and suffer from a deterioration of self-image. Recovery is difficult work and burn victims often experience frustration, anger, irritability, blaming others, depression, despondent feelings, and even self-destructive thoughts. Some become manipulative of their family members, friends, and caretakers and use their burns to get their way. The potential for posttraumatic stress disorder (PTSD) is increased in burn cases (Miller, 1998).

Large-Scale Fire-Related Disasters

History is replete with examples of disasters involving fires. The Iroquois Theater fire, the Triangle Shirt Waist Company fire, the great Chicago fire, the postearthquake firestorm in San Francisco, the great Connecticut circus fire, the *Hindenberg* fire, the SS *Morro Castle* fire, and the Our Lady of Angels School fire in Chicago are only a very few of the devastating fires that have taken many lives and seared the psyche of survivors, witnesses, and rescuers. Stories abound about those who died or who survived. There are also inspiring stories of impressive civilian and emergency services' heroism and their enormous human sacrifice and personal suffering to save the lives of others (Brandt, 2003; Burton, 1973; Canning, 1976; Cowan & Kuenster, 1996).

One of the great fire-related disasters was studied by Dr. Eric Lindemann (1944)—the Coconut Grove fire in Boston, Massachusetts, which occurred on November 28, 1942. An astounding 433 people were killed by the raging fire. This particular fire is given special attention in this chapter because it represents the first time the psychological effects of a major fire were studied. Survivors and bereaved family members were interviewed and counseled by Dr. Lindemann and several other psychiatrists, including Gerald Caplan, who was the most notable crisis intervention theorist of the twentieth century (Caplan 1961, 1964, 1969). The research was a benchmark project that offered enormous insights into the grief process and also into the coping methods used by the survivors and the bereaved. More important, Lindemann's project solidified the fledging field of crisis intervention, which had begun in 1906 and was applied in both world wars (Mitchell & Mitchell, 2006; Stierlin, 1909). Basic principles of crisis intervention were established in the Coconut Grove recovery project. Those principles are still in use today (Mitchell, 2004; Roberts, 2005).

Large-scale fire-related disasters cause enormous psychological disruption to almost anyone who is touched by them. Victims, survivors, and emergency personnel, from their own points of view, all are distressed by fire disasters (Flynn, 2002; Forester, 1996). If the fires were the result of terrorism, such as the attacks on America on September 11, 2001, the emotions are more complicated and difficult for some people to resolve even with extensive treatment (Braiker, 2002). There is an elevated rate of posttraumatic stress disorder (PTSD) in disaster-related fires (National Institute of Mental Health, 2002; North & Pfefferbaum, 2002; Shuster et al., 2001).

Our concern regarding the psychological effects of disaster is well justified. We should not, however, overlook the fires that disrupt many people simultaneously, but which are not recorded in the history books as a major disaster. For example, when a raging forest fire causes hundreds of people to flee their homes and take shelter in county- or state-provided shelters, they are distressed and in need of some psychological support. Besides food, water, rest, and protection from the elements, evacuees need a great deal more.

First, they need information about what is happening and what the authorities are doing about it. Then they need guidance about actions they may need to take. They will also request from the authorities reasonable time estimates about how long they will be in a shelter or when they might return to their homes. They may require information about the well-being of property and their animals. People in the shelter can benefit from large group informational sessions called Crisis Management Briefings (CMB). These sessions are similar to town meetings. Groups are assembled with as much homogeneity as possible under the circumstances. A crisis response team member coordinates the meeting and introduces officials who can give accurate information to the distressed groups. Then the crisis team member facilitates a brief question-and-answer period. The crisis team member next presents information on the typical stress reactions that are likely to be encountered by the evacuees. The session concludes with practical suggestions about managing their stress and an additional question-and-answer period. The emphasis in the CMB is on the provision of accurate, timely information, rumor control, normalization of reactions, and guidance in managing the situation and one's stress reactions (Everly, 2000).

Firefighter Reactions to Fire

From the tedium of between-call inactivity to the intense stress arousal of searching for a child entrapped in a burning house fire, stresses abound in the fire service. A rested, physically fit firefighter crew is, therefore, vital to the success of the firefighting mission.

When the alarm sounds firefighters have a surge in excitement, controlled fear, elevated anxiety, and focused anticipation. This is a heightened state of stress that makes the firefighters alert and ready for action. Upon arrival at the scene, the excitement, anticipation, and anxiety can be channeled into aggressive action. Controlled fear remains in place and it helps to balance the aggressiveness the firefighter needs for search operations and fire suppression activities. The balance between controlled fear, which keeps firefighters alert to danger, and the aggression that helps them carry out their tasks can be physically and emotionally draining for firefighters. In most cases, with food, fluid, and a brief period of rest, they can return rather quickly to a readiness condition.

Extraordinary circumstances, such as deaths of children, severe personal threats, line-of-duty deaths, and serious injuries to fellow firefighters, can overtax the coping abilities of even the most well-trained and experienced firefighters. These extraordinary events are given the name *critical incidents*, and they produce a normal but uncomfortable stress reaction called *critical incident stress.* If critical incident stress is not reduced or resolved in a reasonable time frame, let's say three weeks, it may turn into one or more serious conditions associated with a traumatic stress exposure. These posttraumatic stress conditions are listed in the section entitled "Psychological Trauma in the Aftermath of Fire."

There are many things that firefighters can do to protect themselves from extraordinary stress or to recover from it once it occurs.

Before the Critical Incident

- Obtain education and information on critical incidents, critical incident stress, and the crisis response. People who are informed are better able to manage critical incident stress when it strikes.
- Make sure policies and procedures for Critical Incident Stress Management (CISM) are in place.
- Establish a well-trained CISM team and make sure that it is trained to provide a variety of services to individuals or to groups under different circumstances.
- Maintain physical conditioning programs to keep fire service personnel physically ready for action and mentally alert.

During the Critical Incident

- Calm yourself before deployment. Try some deep breaths to help to give you a few seconds to think how you are going to approach the situation.
- The action of being involved in a situation can be helpful in channeling stress, but try not become overwhelmed by the intense stimuli of the situation.
- Take frequent breaks. Brief rest periods, some food, and fluids can help to keep you alert during a mission.
- Actual work periods may vary from fire to fire. There are some general rules that can be helpful for supervisors. Typically, a two-hour work period is followed by a half-hour down time. Intense cold or heat or the intensity of the scene itself may cause alterations in the deployment cycles.
- Remind yourself that you have the skills to carry out the mission.
- A sense of humor helps, but be careful not to use humor too much or when it is inappropriate such as in the presence of the actual victims of the fire.
- Do not overcontrol your emotions. A brief and controlled discharge of emotions is healthier than completely suppressing them.
- It is suggested that the use of caffeinated products be limited during prolonged fires and disaster work.
- Alcohol should be avoided altogether as it interferes with Rapid Eye Movement (REM) sleep patterns. REM sleep helps people to mentally process the traumatic events of the last few days.
- Eat when you can, even if you do not feel like it. You need energy.
- Avoid too much sugar, foods high in fat content, processed foods, and white bread.
- Eat balanced meals with some proteins, complex carbohydrates, and some fruits and vegetables.
- In a prolonged incident, 8-hour shifts are preferable; the maximum is 12 hours of work. The alternation of 12 hours on duty, then 12 hours off duty is a good formula to maintain a healthy firefighting force.
- Remind people of the time as they work at the scene of a prolonged event. This helps people to stay oriented and focused.
- No one should get less than 4 hours of sleep in 24 hours. "Four in twenty-four" cannot, however, become the persistent rule. It is an exception to the rule, and it is applied only in unusual circumstances. Prolonged lack of sleep causes health problems. Obviously, 7 to 8 hours of sleep per night is the ideal.
- Limit exposures to gory sights and disturbing sounds and smells.
- Disengage nonessential personnel from the fire scene as soon as possible.
- Rotate personnel to various duties whenever possible.
- When possible, rotate people from high-stress operations to moderately stressful work before moving them to rest areas. Likewise, move operations personnel from rest to moderately stressful work and then onto highly stressful work.
- Handling human remains and personal effects is extremely stressful work, and the people doing that work need frequent breaks and possibly emotional support. Rotate people off these duties to other assignments whenever possible.
- Call in CISM resources to assist one's personnel.

- CISM services need to be low-key and unobtrusive, and they should never interfere with ongoing operations. CISM services in the field should focus on advice to supervisors and assisting individuals who may need support. Sometimes it is necessary to provide direct crisis intervention services to the primary victims and survivors.

After the Critical Incident Fire

- Rest.
- Eat nutritious meals.
- Physical exercise helps to reduce the chemicals of distress. Even walking can be very helpful. Physical exercise is recommended only if people are physically able to do it.
- Attend group support services when they are offered by a trained CISM team. They can take the edge off of a bad incident. They enhance group cohesion and unit performance in small homogeneous groups. Ask for assistance if no one offers it, and you feel you or your unit needs it.
- Restore normal routines as soon as possible.
- Keep yourself active. Do not become bored.
- Talk about a distressing fire to people you trust.
- Dreams and memories of a fire tragedy are common. They generally decrease over several weeks' time, but if they remain intense after three weeks, seek out CISM team members for assistance and/or a referral.
- Do not joke with fellow firefighters about the tragic fire too much. Some people are sensitive about such things.
- Do not engage in unproductive criticism of others. If mistakes occurred during fire operations and corrective action or additional training is required, let it be handled by the fire department's leadership.
- Anger is a frequent emotion after the intensity of a major event. Do not take it personally. It should subside in a reasonable time. If not, the angry person may need some additional assistance to get things back under control.
- Focus on the here and now. Telling old war stories of fires that were worse than the current event is not always helpful.
- Listen to those who want to talk about their experience.
- Shedding tears after a painful event, such as the death of a child, is perfectly normal. However, frequent uncontrolled crying spells, accompanied by sleep disturbance, and an inability to return to normal duties are indications that a person needs assistance from a CISM team or a mental health professional.
- Help each other. Try to understand and care for each other. No one can support you as well as another firefighter. If people are careless, then the opposite rule applies. That is, no one can hurt you more than another firefighter.

Special teams of firefighters and other emergency personnel, who work under the guidance of mental health professionals, have been established in more than 1,000 communities in 28 nations around the world. Called Critical Incident Stress Management (CISM) teams, their primary goals are to reduce the impact of traumatic stress, facilitate recovery processes, and enhance unit cohesion and unit performance. They provide comprehensive, integrated, systematic, and multi-component stress management services to hundreds of thousands of firefighters and other emergency services personnel each year (Everly & Mitchell, 1999; Mitchell & Everly, 2001). Besides individual support services, which comprise the bulk of the services provided, group Critical Incident Stress Debriefings are occasionally provided for small, *homogeneous* groups of firefighters and other groups of emergency workers. Critical Incident Stress Debriefings have been remarkably successful in achieving the goals of reducing distress and restoring unit cohesion and unit performance. This is especially so when a CISD is applied according to standards of practice and by trained teams (Bohl, 1991, 1995; Boscarino, Adams, & Figley, 2005; Campfield & Hills, 2001; Chemtob, Tomas, Law, & Cremniter, 1997; Deahl et al., 2000; Hokanson, 1997; Jenkins, 1996; Nurmi, 1999; Richards, 2001; Watchorn, 2001; Wee, Mills, & Koelher, 1999).

It should be carefully noted that, in the field of CISM, there is a program of follow-up services and that no one service is considered a stand-alone. Every one of the crisis support services is part of an overall program in which all of the many components are blended with and linked to one another (Everly & Mitchell, 1999; Mitchell & Everly, 2001).

Managing Psychological Distress in Fire Victims

There are many ways to reduce psychological distress after a fire and to assist people in their efforts to cope and recover. Crisis intervention is a program of supportive processes that can be very helpful if it is provided by a knowledgeable and skillful crisis team member. Crisis intervention, in this context, is defined as "psychological first aid" or "emotional first aid." It is a *temporary*, but *active* and *supportive* entry into the life of individuals or groups during a period of extreme distress.

The best applications of supportive interventions in the aftermath of a fire depend heavily on developing a working strategy. In a crisis-based strategy we should be clear on such issues as (1) *who needs assistance (and who does not)*, (2) *what type of assistance they need*, (3) *the best time to provide the necessary assistance*, (4) *consideration of any conditions or circumstances that might alter the strategy*, and (5) *which person or people are best to provide the assistance.* Once we are clear on those issues, it becomes easier to choose a package of supportive interventions that will guide those who are distressed through the crisis. The following sections provide many helpful suggestions for short-term (crisis intervention) and long-term interventions (psychotherapy) for fire victims, witnesses, and rescuers.

It is important to keep in mind the goals a potential helper should focus on when providing crisis support. If the goals of a supportive intervention are unclear, almost any effort to assist fire victims will have a greater chance of ending in failure. The main goals of crisis intervention are:

- Mitigate impact of event (lower tension),
- Facilitate normal recovery processes, in normal people who are having normal reactions to abnormal events, and
- Restoration to adaptive function.

As the crisis strategy is developed, all specific crisis intervention techniques should be in concert with the seven principles of crisis intervention. The seven principles are:

- Simplicity—People respond to simple not complex in a crisis.
- Brevity—Minutes up to 1 hour in most cases (3–5 contacts typical).
- Innovation—Providers must be creative to manage new situations.
- Pragmatism—Suggestions must be practical if they are to work.
- Proximity—Most effective contacts are closer to familiar areas.
- Immediacy—A state of crisis demands rapid intervention.
- Expectancy—The crisis intervener works to set up expectations of a reasonable positive outcome.

Immediate Postfire Interventions

- First and foremost, make sure that people are safe from the fire.
- Do not allow anyone to go back in the fire structure for any reason until the fire department has given official approval to do so.
- Next, make sure that everyone is accounted for and be sure to include pets in the count.
- Provide a place of safety, preferably removed from the fire scene.
- Keep victims dry, heated or cooled as the circumstances warrant.
- Provide food, fluids, rest sites, cots, pillows, blankets, etc.
- Do not leave extremely distressed people alone.
- As much as possible regroup families, friends, neighbors, and colleagues together.
- Provide a quick check to make sure that no one has physical injuries.
- Call for medical personnel if someone has been injured in the fire or needs medical care for any reason.
- Ask the fire victims if they will need shelter or if they have family or friends to stay with until the situation resolves.
- Ask the fire victims about basic needs, such as eyeglasses, prescriptions, insurance papers, phone contacts for family and friends. Take notes on their needs, but do not let them return to their homes or business to retrieve the items they may need. Many fire departments have a booklet on these matters, which is distributed to fire victims. The booklets contain a number of helpful suggestions for use after the fire.
- Ask if there is someone they need to call immediately.
- Some people need a clergy person to be with them after a fire. Ask the victims if they know a specific clergy person and would like a clergy response to their location.
- Assist the victims as much as possible in locating and mobilizing the resources they need to manage the immediate, postfire period.
- Mobilize the Red Cross or other disaster services as required.
- Help people to find missing relative and friends.
- Provide accurate, factual, practical, and current information.

Information is a key element in managing distress. People who are in a position to assist others should be aware of as much factual information as possible about the current incident. Verify information and then provide it to the people who need it most—the fire victims. Information tends to lower anxiety and helps people with planning and decision-making functions. Even when news is bad, people generally prefer to know it than to be ignorant of it. Be cautious, however, not to be abrupt, unkind, and insensitive when the news is bad. Make sure people are in a safe, protected place. Give bad news in bite-sized pieces and allow sufficient time between each piece of information so that the person receiving the information has time to absorb the meaning of each message segment. Be prepared to repeat important information. Answer questions as best as you can as they arise (Mitchell, 2005).

There are times when people have a sense that something awful has occurred, but they are desperate for verbal confirmation of the facts. For example, at a major fatality, an auto accident scene involving fire and the destruction of vehicles and bodies, a woman waited on the side of the road. For about 15 minutes, she asked virtually every firefighter who passed by if her husband was okay. Each, in turn, either answered that they did not have any information or that the chief would talk with her about her husband in a few minutes. Several firefighters reported to the chief that the woman did not know that her husband was dead. When the chief came to her a few minutes later, he removed her to the back compartment of an ambulance, brought in a fire service chaplain and a medic, and then gently informed her that her husband was deceased. When she heard the news she surprised everyone by saying, "I knew that already. I knew it from the first moment I arrived here. I knew because none of the firefighters had any sense of urgency around the wreck. They moved slowly and deliberately like there was no one there to save. I just needed to hear somebody tell me the truth. Thank you."

Additional Guidelines for Assisting Victims of Fire

- Protect the victims from further stress such as the press, curiosity seekers, gory sights and sounds, or additional, unnecessary exposures to the horror of the incident.
- Listen carefully to the victims. They need opportunities to express themselves.
- Reassure people as much as possible, but avoid overly optimistic statements.
- Establish private quarters for the victims as soon as possible.
- Provide for medical, social, religious, psychological, shelter, food, and other needs as they arise.
- Do not tell victims that they are "lucky" because "it could have been worse." Those sorts of statements almost never console and usually anger a distressed person.
- Gently touch a distressed person on the shoulder or hand if he or she seems receptive to such contact.
- Keep yourself calm and your voice soothing and reassuring.
- A shocked, very silent, and withdrawn person should be evacuated from the scene immediately. Such a victim should be in the first-priority group for evacuation and intervention.
- Although we tend to pay attention to noisy, hysterical, or acting-out victims, they are actually a secondary priority. It is better that they are expressing themselves than to be extremely silent and withdrawn.
- Those who seem to be doing fine at the scene are the third priority for evacuation. Being a third priority, however, does not imply that they should be ignored. They can get worse if they are unattended.

- Children are the most vulnerable to psychological harm during a school or home fire or a disaster. Special care should be afforded children.
- Honest communication is critical to the management of a fire threat.
- Trust and credibility of emergency operations personnel are important issues.
- Uncertainty is a major cause of distress.
- Perceptions can contribute to increased stress.
- Avoid premature reassurance. It may backfire later if circumstances deteriorate.
- Keep messages clear, simple, precise, and repeated (Mitchell, 2002).

Psychological Trauma in the Aftermath of Fire

Most people who experience a terrible fire will recover from the emotional turmoil. It may take time and it is not necessarily easy, but the vast majority of people, although they have painful memories of the event, are able to adapt to the loss and continue to lead healthy, fulfilling lives. Most burn victims are included among those who adapt well and maintain normal life functions.

Some people, on the other hand, remain stuck in their psychological reactions to the traumatic event and have a very difficult time recovering from a fire tragedy. They may develop one or more disruptive and persistent psychological conditions. The following is a list of some of the more common psychological conditions or disturbances that might impact a fire survivor, witness, or a firefighter/rescuer.

- acute stress disorder (unusually acute stress symptoms)
- critical incident stress (normal reaction to an abnormal event)
- panic disorder
- panic attacks
- major depression
- suicidal ideation
- extreme fear reactions
- feelings of being in a movie or "outside of oneself"
- substance abuse (alcohol and other drugs of abuse)
- brief psychotic reactions
- stress-related physical diseases
- some personality disorders
- posttraumatic stress disorder (PTSD)

Note that PTSD is only one psychological condition among many psychological disturbances that may follow a tragic fire. Most people usually describe it, however, as the worst of the negative outcomes.

Recovery from Fire-Related Psychological Trauma

Best practices in recovery from a traumatic fire are actually a combination of good assessment procedures, a variety of crisis intervention procedures, and linkages to ongoing professional support if such services are required. There is, however, no magic formula for recovering from a tragic fire. It takes time and substantial emotional energy to fully recover. Everyone will find his or her own coping methods and everyone will attempt to recover at his or her own individual pace. Healing cannot be rushed nor can it be placed on some preset schedule. Braiker (2002) suggests seven steps to regaining one's emotional balance after a traumatic experience like the attacks on September 11, 2001, and the terrific fire that ensued. She suggests that people:

1. Take steps to control the images in their mind. One thing that can help is to limit the amount of news coverage one views so as to stop refreshing horrific images.
2. Control negative thoughts. When you have a negative thought, stop it and find something positive to think about.
3. Work to overcome specific fears and anxieties. Try not to let fear interfere with your normal life functions. Push yourself to do things as long as you do not raise the discomfort level too much.
4. Do not let feelings of hopelessness and depression rule your life. Take control and take on challenges.
5. Find your own safe zone where you can be comfortable to tune out reminders of the event.
6. Make and maintain connections with your family and friends and talk to the people you trust.
7. You have to pull up your own courage because none of these steps to recovery are particularly easy. However, they are not impossible either.

After a fire, distress may remain high for several weeks. It gradually subsides and people are able to resume many of their usual life functions. When there is no alleviation of distress over time and when distress from a fire is overpowering all of a person's efforts to recover, it is a sign that further psychological evaluation, and perhaps, therapy, is necessary. Further delay in obtaining help is counterproductive and often leads to additional deterioration and unnecessary pain. Fortunately, psychological trauma treatment has become more sophisticated and far more effective in the last three decades. In many cases, treatment has effects relatively quickly, and people do not need to spend years getting their psychological reactions under control. The hardest part is often overcoming the inertia to make the first call for help.

Besides calling for help, several conditions are crucial for the successful treatment of psychological disruption in the aftermath of a fire. Here are the main conditions:

1. Positive motivation and drive from the person suffering the painful disruption to his or her life.
2. A trained and qualified mental health professional.
3. The right treatment program.

Choosing the right therapist can present a challenge. The most effective treatments are available only from people with appropriate credentials, such as certifications or licenses, in counseling or clinical psychology, social work, or psychiatry. The therapist must be experienced in the treatment of the psychological conditions that can be caused by the experience of a traumatic event like a fire.

Below is a brief summary of some of the psychotherapies that have a proven track record in helping people recover from traumatic events, including the death or serious injury of loved ones or the overwhelming guilt that firefighters sometimes feel when all their attempts to rescue someone fail. This list is not an all-inclusive catalogue of therapies. Other psychotherapies can be helpful in recovery from a traumatic fire. If you or someone you know is having a difficult time recovering from a traumatic fire, please seek help from a competent psychotherapist.

- **Behavior Therapy (aims at recognizing stress reactions in the body and controlling those reactions):**
  1. relaxation training,
  2. biofeedback, and
  3. systematic desensitization (Everly & Lating, 2004).
- **Cognitive Behavioral Therapy (research indicates CBT is among the most effective therapies):**
  1. Helps a person understand the meaning behind the trauma.
  2. Challenges errors in facts and beliefs.
  3. Pairs new thoughts and associations with trauma.
  4. Event feels less upsetting and symptoms decrease.
  5. May be used on a wide range of circumstances besides traumatic events (Rothbaum, Meadows, Resick, & Foy, 2000).
- **Pharmacotherapy:**
  1. Used with people who are overwhelmed with symptoms of distress or who have several simultaneous psychological conditions.
  2. Rarely cures posttrauma conditions, but medications do help to control painful symptoms.
  3. Sometimes used in conjunction with psychotherapy (Friedman, Davidson, Mellman, & Southwick, 2000).

The following nontraditional therapies were developed specifically for people who are dealing with a traumatic experience including fires. It should be noted that experimental research regarding the efficacy of Trauma Incident Reduction (TIR) and Thought Field Therapy (TFT) does not currently exist.

- **Eye Movement Desensitization and Reprocessing (EMDR):**
  1. Developed specifically for trauma treatment.
  2. Therapist guides person through a series of eye movements and discussions.
  3. Biological and intellectual processing of the traumatic event occurs.
  4. Person integrates the traumatic experience into his or her memories.
  5. Relief often occurs in a few sessions.
  6. Research is very strong for positive effects (Shapiro, 1995).
- **Trauma Incident Reduction (TIR):**
  1. The therapist has the person tell the trauma story repeatedly.
  2. Repetition of the traumatic event seems to lessen the emotional intensity of the memories.

   3. May take several sessions to achieve results.
   4. Reports of success are positive (Moore, 1993).

- **Thought Field Therapy (TFT):**
   1. Limited research so far.
   2. Many therapists and clients report success.
   3. The therapy uses a series of self-taps or rubs on the face, hands, chest while thinking of the traumatic event (Callahan & Callahan, 2000).

A good therapist has a number of tools in the therapeutic toolbox. Some therapies work better on some people than on others. If one therapy fails to work, the therapist must move onto another until one therapeutic approach or some combination of interventions is successful. The benefits of any therapy should show up in about three months (Antonellis & Mitchell, 2005).

Best Practices and Applications for Critical Incident Stress Management Programs:

1. Fire, rescue, law enforcement, emergency medical services, and other emergency operations personnel have very different perspectives and more particular needs than do the average citizens in a community. Emergency services personnel, therefore, require special Critical Incident Stress Management (CISM) programs to serve their needs.
2. CISM programs are administered, coordinated, and staffed by specially trained peer support personnel (firefighters, police officers, emergency medical personnel, etc.), who work under the supervision of mental health professionals to assess and respond to the needs of frontline operations personnel.
3. CISM programs do not engage in any form of psychotherapy, nor do they provide any services that can be construed as a substitute for psychotherapy. They only provide support services during times of crisis.
4. All CISM services have limited basic goals. They aim at mitigating the harmful effects of stress, the facilitation of recovery from a traumatic event, and a restoration to normal life functions.
5. CISM is a broad umbrella program encompassing numerous services. The main services are crisis assessment, strategic planning, individual support services, family support services, organizational consultation, large-group interventions, small-group interventions, follow-up programs, and referral services.
6. The supportive interventions that are appropriate with individuals differ from interventions that are appropriate for small, homogeneous groups of emergency operations personnel. The choice of the right crisis intervention tool to match the needs of either individuals or groups is essential. One well-known support service in the field of CISM is the small-group support service known as Critical Incident Stress Debriefing (CISD). A CISD is a specific, seven-phase discussion process designed for a small homogeneous group, which has experienced the same traumatic event during the same time frame.
7. A CISD is typically a voluntary meeting of operations personnel.

8. On rare occasions, an organization's leaders may request that all personnel who were involved in a specific traumatic event attend the small-group CISD. This is done only when an event capable of producing extremely negative outcomes for the organization has occurred. Only five circumstances might warrant a mandatory attendance at a CISD. They are (1) serious injury of an operations person in the performance of his or her duties, (2) line-of-duty death, (3) work at a scene of a multicasualty or mass casualty event, (4) the suicide of a colleague, and (5) an event in which there was extreme danger or overwhelming threat for the operations personnel.
9. Even in cases in which a command officer or a supervisor mandated attendance at a CISD, *no one is ever required to speak under any circumstances.*
10. A CISD is a small-group process, and it is a significant violation of standard procedures and protocols to use it on individuals. It is especially contraindicated for use on an individual basis with people who are injured, ill, mentally disturbed, or victims of fires, burns, violence, sexual assaults, problematic pregnancies, auto accidents, falls, industrial accidents, or dog bites. It may be used with small groups such as traumatized families if the CISD leaders are appropriately trained and experienced mental health professionals.
11. CISD is but one technique within a broader range of services. It should never be utilized as a stand-alone intervention. Instead, it is only to be used in conjunction with a variety of other supportive interventions within the CISM field.
12. CISD is not psychotherapy in any form and should never be applied as psychotherapy or as a substitute for psychotherapy. All CISM services focus on supporting people through a crisis situation by providing information, guidance, and practical assistance with everyday functions until the person or group is able to manage their own responsibilities.
13. CISD is not intended to be used as prevention, treatment, or a cure for posttraumatic stress disorder; it should never be used as such. It is simply a support service to restore a small homogeneous group's *unit cohesion and unit performance.*
14. CISM teams should work closely with community-based crisis support programs to avoid conflicts, misunderstandings, and crossovers into each other's areas of responsibility.
15. Efforts should be made to qualitatively and quantitatively evaluate the value and effectiveness of community-based crisis support programs and CISM teams. Evaluation should look at sick time utilization, return to work, reduction in disability claims, etc. These factors are more important than PTSD issues that typically arise well after crisis services have been completed and are associated with traumatic insults of such severity that they require specialized psychological services beyond initial CISM services.

Public Policy Recommendations:

1. Fire, rescue, emergency medical, and law enforcement personnel should be trained before emergencies occur to provide crisis intervention services to fire and disaster victims until other resources can be mobilized.
2. Before a fire strikes, communities should have in place comprehensive, integrated, systematic, and multicomponent programs for crisis intervention

services (crisis support services) with linkages to appropriate mental health therapies when those are necessary.

3. Crisis support services, which are also called psychological first aid, emotional first aid, or early psychological intervention programs, should be available to every member of the community who suffers from the impact of a fire or a disaster.
4. The community crisis support services should be developed in concert with the county community mental health center.
5. Policies should be in place for the notification, mobilization, response, and utilization of the community crisis support program.
6. Community support services require effective leadership and endorsement by the political jurisdictions in which they function.
7. Community-based crisis support services should be linked to or at least coordinated with the American Red Cross, the Salvation Army, the National Organization for Victim's Assistance, and the International Critical Incident Stress Foundation, and other disaster relief organizations so that they do not work at cross purposes with each other.
8. Community crisis support services should be incorporated into the emergency planning processes of jurisdictions so they are readily included, mobilized, and deployed during emergencies.
9. Community support services should require adequate training for all personnel, whether paid or volunteer.

Summary

This chapter explored some important elements of human behavior and the common psychological reactions to fire tragedies. The facts are that most people recover from a fire with only a limited amount of support and a few may need psychotherapy to assist them in the recovery process.

Fires can fascinate and entertain, but, when they are out of control, they can destroy property and lives and cause incredible human suffering. It is hoped that the remarks made in this chapter will be helpful for fire victims and firefighters alike as they attempt to regain their perspective and recover their emotional and physical well-being in the aftermath of a destructive fire.

If a proactive stance on traumatic stress management is taken by community leaders, and if the public policy recommendations and guidelines presented in this chapter are followed, fire victims, witnesses, and emergency operations personnel will have the best chance to recover from the emotional wounds of fire tragedies and return to normal, healthy life functions. The recovery of our communities from the aftermath of fires is worth the investment of energy it takes to set up community-based crisis support programs and CISM teams.

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CHAPTER 10

ONLINE PSYCHOTRAUMA INTERVENTION IN THE AFTERMATH OF THE TSUNAMI: A COMMUNITY-BUILDING EFFORT

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The earthquake that occurred in the Indian Ocean in the early hours of December 26, 2004, had an unprecedented impact. The quake pushed up part of the sea bed by 30 to 45 feet, displacing huge amounts of water and resulting in a major tsunami spreading in different directions across the Indian Ocean. Within one hour of the quake the tsunami had already reached the coast of the Indonesian island of Sumatra and the Andaman and Nicobar Islands. Two and a half hours after scientists at the Pacific Tsunami Warning Center (PTWC) in Hawaii announced that there had been a quake, giant waves that measured more than 100 feet in height had already reached the coast of the Thai holiday resorts. Another half an hour later, tidal waves reached the coast of Sri Lanka and the southeastern coast of India, continuing toward the Maldives, reaching the coast of East Africa six to seven hours after the earthquake. The rapid, and in many locations forceful, influx of water onto the coastline left numerous victims in its wake. Many were surprised by the water. Others tried to escape by climbing to high altitudes (e.g., rooftops, trees, mountains). The frightening situation lasted for many hours.

Although the world had known previous large-scale disasters, the tsunami of December 26, 2004, was in many ways unprecedented. Its immediately destructive effects, the enormous toll, and the large-scale grief and despair at a time when the world woke up to celebrate Christmas Day challenged the world in many ways. The romantic paradise beaches of Thailand, India, Indonesia, and Sri Lanka changed in a few hours to a landscape that was flushed and left with destruction and uncountable dead bodies. In the midst of Christmas, not only the hundreds of thousands of affected survivors, but the whole world was faced with a natural disaster of enormous magnitude and struggled to find meaning in the tragedy that could help them assimilate the experience into a personal narrative.

The Cry for Help

The tsunami had a massive toll and left hundred of thousands of people in despair, intense fear, and faced with unfathomable grief and mourning. By the close of December 26, the first casualty numbers were reported at 12,000. The official death toll was eventually placed at 290,000, with 55,000 people missing and 30,000 injured survivors (News 24, 2006). Approximately 2 million people had lost family, neighborhood, or community. They had been in a life-threatening situation, exposed to horrible death, bodily injury, and the visceral experience of seeing dead bodies. They had seen extreme environmental destruction, lost their homes or valued possessions, lost communication with or support from important people in their lives. They were under intense emotional demands. Several national and international initiatives were undertaken to provide shelter, food, and medical care. Several governments worldwide quickly organized airlifts to evacuate injured citizens from the disaster area, repatriating numerous injured survivors from countries worldwide to their home countries.

Most affected countries in terms of deaths were Indonesia with 131,029 deaths, Sri Lanka (31,229), India (10,749), Thailand (5,395), Malaysia (74), Maldives (108), Myanmar (90), and Somalia (176). Among the victims were large numbers of people who were not native citizens of the affected regions, but who were working in the area or there on holiday. People from all over the world were in the affected area. The affected countries in terms of deaths from other countries were the Scandinavian countries, including Denmark (851), Germany (552), Great Britain (150), Switzerland (112), France (95), Austria (86), Italy (40), Hong Kong (38), Japan (37), the Netherlands (36), the United States (33), and Australia (26) (United Nations [UN], 2006).

The aftermath of this and other large-scale disastrous events has resulted in a spate of mental health issues arising worldwide. In these circumstances many questions are formulated, such as the following. How and when do we utilize early interventions to help prevent chronic problems? How do we facilitate trauma survivors seeking help, if needed, after traumatic events? What is the purpose of building a community of victims and how can this best be achieved? What sorts of services and interventions are preferred? How do we reach a community that is affected in more than one country and one nation with different languages? How do we best enhance access to services in remote locations where helping professionals are rare? How do we best train providers of mental health services to provide quality, state-of-the-art care? (see Chatterjee, 2005).

Approximately 500 Dutch citizens were in the area where 36 did not survive. Early in the morning on January 1, 2005, 23 survivors with major injuries were flown into the Major Incident Hospital/UMC Utrecht in the Netherlands. Most of them had lost touch with others who had been in equal despair. They had lost communication with loved ones, especially with others who had been through the same situation. Upon repatriation many asked for information, a sort of communication platform, beyond the numerous Web-based blogs and local initiatives that in the first few days were posted online. The requests of these patients was the basis for our initiative, which we designed analogous to an earlier program of a group at Stanford University (Butler et al., 2002). In the first days after 9/11, they had launched an online Web survey to assess the emotional impact of the event. This initiative served as an example for our group in the Netherlands to set up a similar program. A Web site was devoted specifically to the tsunami to assess its emotional impact worldwide (Tsunami International Survey on Emotional Impact, TISEI), and perhaps more important, to facilitate building of a community for victims. The project group was formed as a multidisciplinary team, which included psychiatrists, ICT specialists, psychologists, and a surgeon. On January 6, 2005, the chairman of the Institutional Review Board of the University Medical Center Utrecht granted support to develop the project.

Background Information and Development of ICT Application

Within three weeks after the tsunami, a Web-based online service (www.tisei.org) was built to foster community support in the aftermath of the disaster. It was intended for tsunami survivors and their loved ones. This initiative, which focused on building a support community for survivors and their families and friends through a Web-based service, was a project of ECHOES ONLINE, a not-for-profit nongovernmental organization, and was launched from the Netherlands. In order to reach the broad and diverse group of tsunami survivors, it was necessary to translate the TISEI Web site into several languages. The Web site was accessible in 15 languages, including English, French, Spanish, German, Italian, Russian, Dutch, Danish, Finnish, Thai, Czech, Indonesian, Swedish, Turkish, and Korean. This would potentially open it to people from countries affected by the tsunami but also to people who were visitors and returned to their homelands, as well as interested people from other countries. The TISEI environment was designed as a language-independent and region-independent Web platform for online support and research in the aftermath of the tsunami. The initiative received much media exposure and was broadcast in many countries. The International Society for Traumatic Stress Studies (Vermetten, Groenendijk, & Taal, 2005) also publicized the TISEI Web portal on its own Web site. Because of the largely tourist nature of the disaster region, visitors to the Web portal came from all over the world.

A basic assumption in the development of the Web service was the acknowledgment that people who had the misfortune to experience a disaster, such as the tsunami, have a deep need to know they are not alone. Earlier studies had already demonstrated that knowing there are other survivors can reduce feelings of isolation and have a preventive effect on psychological problems (Leon, 2004). In addition, fellow survivors could provide mutual support in ways that could be perceived as more meaningful than outside assistance. As such, an online support service was proposed to make an important contribution to community building (Caplan & Killelea, 1976; Katz & Bender, 1976; Samarel, Fawcett, & Tulman, 1997; Taylor, Falke, Shoptaw, & Lichtman, 1986). It was felt that an appropriately designed interactive Web site could provide victims with information tailored to meet a group's phase-specific psychological needs (National Mental Health Information Center [NMHIC], 2005). Such a Web site could also play a significant role in the coordination of psychological help after a catastrophe, just as was the case for the survivors of the tsunami. For instance, with the help of a secure forum and multimedia tools, relief workers were able to provide support without delay, as had been also learned from the SARS epidemic (Bui & Sankaran, 2001; Christensen & Griffiths, 2003; Goddard, Delpech, Watson, Regan, & Nicoll, 2006; Latifi, Muja, Bekteshi, & Merrell, 2006; Rizo et al., 2005; Ybarra & Eaton, 2005; Young, 2005). Lastly, a secure forum could also enable the online exchange of information between survivors and their loved ones. This would be particularly important when they are at a medical facility at some distance from friends and family. The use of the Internet can also offer the added advantage of prompt referral in case there is need of additional services.

Several publications advocated the need for psychological support for different target groups (De Silva, 2002; Harris Cheng, 2006; Kostelny & Wessells, 2005; Long, 2001; McCurry, 2005; Yamada et al., 2006, de Wolfe, 2006).

This chapter focuses on the necessity, development, utilization, and evaluation of such a Web service.

The TISEI Web service enabled survivors, via the Internet, to:

1. Establish contact with other survivors worldwide via an online forum to help cope with the impact of a disaster and help foster resilience;
2. Participate in standardized questionnaires on the emotional impact of the disaster (e.g., collecting information on demographics and situational variables, and utilizing standardized trauma scales 24–26 assessing symptoms such as anxiety, dissociation, depression, sleep, grief/mourning), to facilitate confidential self-assessment;
3. Seek help in their geographic region (Center for Mental Health Services, 2006; Silove & Zwi, 2005); and
4. Find information on relevant news items (e.g., Reuters or CNN, local media) to obtain knowledge about trauma in general and the disaster they have experienced, relaying information through the Web.

Visitors could share their experiences with other survivors, relatives, or loved ones via the e-forums, and could request a consultation with a counselor online. Within 24 hours a question would be answered by a counselor. The aim of this module of the TISEI environment was to offer easily accessible advice to survivors relating to general questions on symptoms and options for entering a counseling network. By answering online questionnaires, Web visitors could obtain a reasonably reliable recommendation as to whether there is a need to seek psychological help. Visitors could print out the results of the online Web survey and take it with them to a counselor, if desired. As a result, this module offered people a tool for the assessment of their own mental health. Online consultation is important, as many may not seek help because of stigma or lack of information.

The underlying structure of the Web portal could also be fully geared to the needs of the scientific community. The Web site offered extensive reporting facilities that provided researchers with an insight into the emotional state of the users of the Web site, while simultaneously ensuring anonymity to the users of the Web site.

Vignettes and Brief Case Histories of People Using the Platform and Its Benefits

The Web service ran, and to date still runs, successfully from the Netherlands, and is visited by several countries outside of Europe. Interestingly, the cross-sectional analysis of data indicated that the mental health problems were fairly consistent in the first 10 months, and occurred in the areas of concentration problems, irritability, sleeping problems, and nightmares (Vermetten 2005a, 2005b; Taal, Leenen, & Vermetten, in review). Approximately 30 percent of respondents to the online questionnaires reported that they often experienced the symptoms outlined in the areas on the site. Experience from previous disasters has shown that long-term aid is essential, particularly during and around the anniversary of an event, and needs to be extended past the first year (Bryant, 2006; Dorn, Yzermans, Kerssens, Spreeuwenberg, & Van der Zee, 2006; Huizink et al., 2006).

Sometimes the individual expressions, emotions, and meanings get lost in such large-scale initiatives. In this chapter we articulate several individual responses in snapshots of some of the narrative reports that were expressed on the Web site. These vignettes are part of the stories Dutch survivors and other visitors placed on the e-forum. They described different experiences of the hours before and after the tidal waves, the emotional impact afterward, experiences with institutions, and of a meeting day that was organized half a year after the tsunami in the Netherlands. When reading the narratives it becomes clear that the e-forum served as a place of mutual support and help. People described their experiences and emotions, some explicitly asking advice from other visitors; others indicating the weight of their emotions, more implicitly seeking support or help. Some reactions were of direct support to a specific person; others seemed to say “you’re not alone in this situation.” The narratives also illustrate that using the e-forum helps people in processing their own emotions and experiences.

Lastly, these narratives can be seen as a collective history of the disaster, as these are descriptions of people’s unique trauma experiences, which are publicly accessible.

Tsunami Experiences on December 26, 2004

In the first few days and weeks, a myriad of feelings of unreality were expressed (Sharon), disbelief, fear (Petra), and powerlessness (Joke, Dolf). Several reports also contain other dissociative features (Gerdien and Martin), and distorted time perception and amnesia (Wendeline), or a lack of feeling or emotions (Angela).

Sometimes, a response was provided by someone who read the narrative. This response typically served the function of a sounding board, in which the affective impact was echoed back (see Rianne). Typical also was the anonymous response of guilt and the desire to go back to find closure (Anonymous).

SHARON (AGE 14)

We just sat there a bit overwhelmed by everything which had taken place and not knowing what to say or do. A Norwegian woman who had lost her two daughters sat quietly weeping. A man from Denmark who lost his wife stared off in silence. I saw so much pain and suffering and even death all around me but I tried to find the courage to convince myself that everything would be OK and that this was simply a nightmare or something. But it wasn't, and I didn't wake up, so it must be real. (...) Their very last possessions they gave away. I was choked up by it. I mean I don't cry and certainly am not easily impressed, but that was so kind and moving.

JOKE (AGE 54)

By the exit there were large boxes filled with warm clothing for those who lost everything from the disaster. There were people asking us how we were doing. It didn't sink in. Everything seemed to pass by me in a cloud. I seemed numbed. I only wanted to go home. Oh no, I really wanted to go back. to do something. I feel so incredibly helpless. Empty. Scared. Is it possible that SO MANY people are dead? And what about all the people we've meet? I fear the worst.

WENDELINE (AGE 23)

When I first heard the "crack" in the wall, I didn't remember exactly what happened. I think I let myself fall forward. The next moment I hung 1/2 a meter lower on the edge of the road.

RIANNE (AGE 25)

I read your story and it was difficult for me to concentrate. I recognized your feelings so well, the fear of death and the helplessness. Get out get out he screamed in panic to Nadja and me.... In fear, we flew from one end of the hall to the other ... from the moment I suddenly awoke, I felt a strange, numb feeling in my chest. I really thought that we would die. It was a pure fear of death. I now know how that feels, at a certain point you just give up. Just allow it to happen, this is it.

ANGELA (SHARON'S MOTHER, AGE 36)

There was an English lady sitting up higher from me, and she gave me her hand to come up there with her. When I sat with her on top of some rubbish I discovered a strange bump in my swimsuit. I didn't see blood and very carefully pulled the leg of the swimsuit up. It was a large, black snake with bright yellow stripes. Without thinking, a reflex, I pulled it off and threw it away and it disappeared in the rubbish, back in the water. Then I realized that I was sitting there alone, where were Frank and the children? I screamed as hard as I could. Almost immediately Frank answered, he was on a mountain opposite me. But he had lost Sharon. Again I screamed as hard as I could for Sharon and again I got an answer … she was also on a mountain only a bit further than her father and little brother.

We heard that we should climb higher because another wave was coming and this one could be higher than the first. Two Thai boys brought water and canned drinks up, they also had a sheet that we put over our heads because the sun was beating down on us. It was honestly unbelievable, we tourists were completely bewildered with what was happening to us and they were busy organising everything so that we were taken care of.

DOLF (AGE 52)

The misery and destruction that we saw is forever in our memory. Also the helplessness and the shame of wanting to help but being unable to do so.

PETRA (AGE 31)

And the fear…. We had a radio and continually heard weather rapports [*sic*]. It will return in an hour and will be even worse. Then you sit there scared to death, because if it's worse then we're not safe here, but it's not safe to go anywhere. When the hour has passed and nothing happens, we hear that the next news isn't until 12:00 and this is how it goes. We sit there just sitting, very apathetic.

GERDIEN (AGE 39) AND MARTIN (AGE 44)

The road was one huge ravage, honestly terrible to see. You also saw the pictures. Walking there has the same unreal, disconnected feeling. As if you're not really there.

ANONYMOUS

When we returned home we were overwhelmed by concerned people. It felt good to hear from people, that they had thought of you and sympathized with you. Even today I still cannot sleep well; I cannot get the images out of my mind. It will take a while before the images begin to fade. I feel guilty that I couldn't help people even though I know that I shouldn't. I hope that the local people have my things because they have nothing left. If that's not the case, whoever has them can choke on them. I will definitely go back to that island to have some sort of closure for myself.

Emotional Impact

The narrative reports inform about the function of the Web site. Some reported that it served well to express feelings; children responded to the stories of other children (e.g., Marre), who seem to provide a framework to relate their experiences to and provide support by expressing their feelings. As Roesan expressed, the Web also served as a means to express emotions in relation to the dissemination of the news on public media. Many had not realized that the tsunami was so massive, and affected such a wide region. Some persons expressed an intensity of their emotions (Joke) and used the portal simply as an outcry.

MARRE (AGE 14)

> I read your story Sharon and began to cry. It was so familiar to me! I was also in Thailand during the Tsunami, I think it's so brave of you to talk about it. I would like to talk about it with people our age, I've been looking for just that and then I found this Website. It's good for me to know that I am not the only one with this awful story, I hope we can e-mail (etc) with each other.

ROESAN (AGE 24)

> When we returned to the Netherlands in May, a lot of what had happened came to a head. First there was a program on Discovery what put tears in my eyes. After that I just heard last Sunday from a friend that an old classmate of mine died on Phi Phi Island. How ironic. Also 24 years old, also on vacation with her boyfriend, also happily lying in the sun.
>
> All the questions have returned. I know that I won't get an answer. It's an effort to remain thankful that I'm still alive. Why 100,000 people dead and not me?

JOKE (AGE 54)

> I can't sleep at night. I walk around the entire night through the water. Searching ... searching ... for what? It's been going downhill the last few weeks especially at night. I walk through the water and search. I can't concentrate, I can't tolerate loud noises, and I feel extremely unsafe and sad. I've had diarrhoea since the 26th of December and am compelled to watch TV the entire day. I MUST see everything. Maybe I'll see someone I know?! Maybe I'll see the places we were.... I have such a burning need to do something, I feel guilty. So guilty ... why are we alive when thousands of innocent people are not. The images I see everyday are tramping all over my battered soul. I've noticed that my husband Ton seems to have an easier time letting go than I do.... Do men experience this differently?

Self-Expression and Self-Understanding

The portal also enabled victims to synthesize their experiences in the aftermath. They could express their symptoms, concerns, and complaints (Petra), and evaluate initiatives that they had undertaken for treatment (Gerdien and Martin, Chantal, Rianne).

PETRA (AGE 31)

After the tsunami I had a lot of difficulties: concentration problems, lots of trouble sleeping, very sensitive and dreams about water and drowning. So I decided that it might be good to go back to Sri Lanka and see everything again. I'm very frightened but I must do it.

GERDIEN (AGE 39) AND MARTIN (AGE 44)

It's now the middle of April, more than 3 months further. We returned to the Netherlands and still had 2 weeks of vacation. After that we went to work. Martin told his story to anyone who would listen. I (Gerdien) wanted to get on with my life and couldn't talk about how I was doing over and over. So I asked people at work to not talk about it. During my first week back at work I kept hearing on the radio that the death count for Atjeh was increased, again. I was in tears and could not stop crying. But I still went on working. An hour later I ran out of a meeting crying. And still I continued working. I thought by working hard I would forget the miserable memories. But the images just kept getting stronger. I had the feeling I was living in two worlds. Part of my head was in Sri Lanka and with the other part I tried to live a normal life. I was dead tired and became emotional at everything. Mainly I became more and more nervous and irritable. Finally I went to my physician. He referred me to a psychologist. He wasn't much help. Finally I contacted DOEN (direct opvang en nazorg—direct help and aftercare). During the intake interview, I heard them say that I had PTSD, a posttraumatic stress disorder. EMDR, which stands for eye movement desensitization and reprocessing, was the best therapy for me. I started therapy and it appears to have been a good choice. My complaints have diminished. At least I no longer have problems with intrusive images and I'm not so frightened. The therapy is not finished. Unfortunately I am still very tired. I sleep about 12 hours a day. I cannot work. As soon as I do too much, my head becomes light and I get dizzy. My concentration is bad. It's getting better but very slowly. Martin's going well. He's gotten on with his life but he worries about me.

CHANTAL (AGE 26)

After a week at home my boyfriend and I both returned to work and that went well. But after a month or two I fell apart, I couldn't sleep, cried a lot, couldn't concentrate and was very stressed. I went to a health psychologist who used EMDR therapy for help (also after hearing stories from the forum on this Web site). After six sessions I felt much better. Things are going well with me and I'm not having any more nightmares. I really want to return to Weligama to look for loved ones and help the Italian couple rebuild the hotel. We have regular contact with them and in the fall a reunion will take place. Then we will be able to find a place for what happened to us in our hearts and go on with our lives.

RIANNE (AGE 25)

> The last few weeks I haven't been able to sleep because I hear earthquakes in my sleep and it feels like my bed is shaking. I wake up suddenly with a shock and thumping in my chest. It's important for me to return, until then I will never have rest.

Evaluation of Local Service and Organizations

Experiences regarding local help, and the role of professional services, was also expressed. For some Dutch victims, the role of the Dutch embassy in Thailand was controversial (Wouter).

WOUTER (AGE 35)

> The cooperation and professionalism of the Dutch embassy is of such a low level it's almost impossible to describe, it's so bad that I had to apologize to the director of the Thai hospital about the arrogant behaviour of embassy personnel toward the hospital's director.

A Day of Reflection

Six months after the tsunami, a day of reflection was planned to enable Dutch victims to meet. The hospital where they had been repatriated was chosen as the location for this event. A day was planned with information, moments for reflection, and opportunities to share stories and pictures. One hundred thirty people registered. On this day a collective painting was made by all the participants. The "evaluation day" was also evaluated on the Web portal.

ANOUK (AGE 17)

> My experiences this day were that when I stood along side people and heard their stories, I wanted to support them when possible. I noticed that I really didn't have any companions and that made me very insecure. I was already so vulnerable and because of that this was a bit annoying: At the end of the day I had the idea that I didn't belong here and my story and experience was not so bad, actually not bad at all. I ended up feeling even more alone than before.

FEMKE (AGE 20)

> The story that you wrote about the Meeting Day is very familiar to me. There were clearly different groups that day. The people mourning, the people who experienced it and the ones who had the misfortune to have both directly experienced the tsunami and were also mourning. It's also difficult for those of us—I didn't lose anyone—we are actually lucky, but still we have experienced something difficult. The feeling is sometimes difficult to place. It's good that you wrote your story, because I think it's unnecessary for you to feel alone.

MARTIN (AGE 44)

Our experiences regarding the Meeting Day were very positive. I (Martin) was asked to talk about something. After hearing other stories, I really can relate to the feeling that your own story is "not good enough." I also found it difficult to feel "as one" with all the people and all of their stories. The photographs of dead children were particularly moving. As was the story of Jan's father, Williem. Still, it was good to be there. Despite everything, for me it was supportive.

As I said that day in my own story, you cannot measure sadness. Of course, one story is more horrible than the other. But at the same time we were all victims of the same violence. I also believe that people who lost a child or a partner or who "only" experienced it and survived, are not to be reproached as to who suffered more. We must try to let go of the bad and attempt to become pure again.

JOKE (AGE 52)

I would like to help you find good support. Could you please tell me what areas you like help in? If you are also looking for psychological help, a good place is e-consult, part of this tisei-site. You get a personal space where no one can go but you and you can ask a therapist of your own choice questions and you will get an answer within 24 hours. I've had positive experiences with this site.

Response to a Book about the Year of the Tsunami

One year following the tsunami, a book was published by two members of the project group and a member of Impact, a Dutch NGO with a focus on psychosocial support in the aftermath of disasters (De Ruyter, van der Schoot, & Vermetten, 2006). The book contains interviews with victims, a journalist, a surgeon, rescue workers, a clinical psychologist, a tourism manager, and letters of support from two local pop stars. It contains no pictures of the affected area, but drawings of children and some pencil-drawn images of one of the victims that he allowed to be shared. It focused on resilience and how people picked up their lives. Some struggled in therapy, coping with bereavement, whereas others reflected signs of growth and had gone through changes that dramatically changed their lives. For them the tsunami was a wake-up call that led to posttraumatic growth (Butler, Garlan, & Spiegel, 2005a). The book, published in Dutch, was provided free to all victims of the tsunami and their loved ones. This effort contributed to putting things in perspective.

GUEST

I received the Tsunami book just before Christmas and sat down on the couch and read the entire book. It was wonderful to read that there were also people who had not been in the water, but were still very affected.

> I keep thinking, why are you complaining, we are still here, especially just before the memorial, everything was back on TV and it was all simply too much for me.

Memorial Archive

The Web site was launched in January 2005, and it is still active. Currently, it serves as a memorial archive for those who want to return and still contribute by writing to the forum.

GUEST

> I am not affected, but visit the site every now and then. I find it impressive to read all of the reactions, and find it helpful. Giving regular people a chance to tell their stories.

Recommendations for Intervention and Best Practices

Automatic tracking of the number of visitors to the Web portal environment enabled us to quantify its usability. For the period of January 14, 2005—January 1, 2007, the total number of visitors was 86,997. The total number of visitors peaked in January 2005 with 11,164 visitors. The average number of visits per month for this period fluctuated between 2,295 and 6,840. To our surprise the first quarter of 2006 displayed an upward trend, in comparison to the preceding 11 months. Since the activation of the Web portal, the number of monthly visitors has always exceeded 2,000, and recently even showed an upward trend. The European countries and the United States together make up 95 percent of all visitors to the site. This information may also serve as an historical archive and a collective memory of the disaster.

Massive disasters like the 2004 tsunami can have an impact that goes far beyond the boundaries of a group of survivors of any one nation. The density and availability of the Internet enables implementation of Web-based services to provide and share information. The use of such a service to assess emotional impact, while at the same time serving as a sounding-board, is new and only recently reported in the literature (Schlenger & Silver, 2006). Our findings indicate that a cost-effective online tsunami psychotrauma information system based on standard technology has the potential for delivering rapid, client-centered emotional care. The alternative method of using an interviewer-administered questionnaire on handheld computers in a multistage, cluster, population-based mental health survey provided better rates of prevalence of mental health problems, but is non–client centered and restricted in its community outreach (van Griensven et al., 2006).

It is important for local medical and research institutions to offer prompt psychological care to disaster survivors who have been admitted. Two additional advantages of this service need to be stressed:

1. An online interdisciplinary consultation form will obviously reach a consultant sooner than its paper equivalent. The fact that the use of such an online facility does not incur any extra costs—as its maintenance has been outsourced—is a major advantage for a health services institution. The automatic storage of secure data in a central database also facilitates the study and evaluation of the care provided.
2. By using a database of registered e-mail addresses, it can be relatively easy for international relief agencies to organize meetings at a local level for interested agencies and individuals. When a site is accessed, both survivors and relief workers can be asked to provide certain profile data (e.g., nature of the problem, type of disaster, etc.). The e-mail address of the visitor can be included in the information solicited at the discretion of the visitor. International relief agencies may then be able to organize meetings with the help of these e-mail addresses. The online system will also permit the rapid mobilization and maximize the use of all available capacity and expertise. The fact that all data, including time and date, were stored in a central database will provide a detailed history and enable the evaluation of individual responses to a catastrophe at a later date.

Interestingly, although the TISEI Web service has been translated into languages such as Thai, Indonesian, and Tamil, findings reveal that relatively few survivors from Thailand, Indonesia, and Sri Lanka visited the site. This finding may be related to a number of factors. First, major global differences in Internet penetration play a role here. In the Netherlands, 78 percent of households have Internet access. Statistics from Internet World Stats (Miniwatts Marketing Group, 2006) reported Internet penetration in the United States in 2006 at 68 percent. The European average penetration was lower, at 36 percent. However, the areas hit by the tsunami had penetration levels of 9.9 percent (Asia) and 2.6 percent (Africa), respectively. It is not surprising, therefore, that the tsunami site, although multilingual, had limited visitors by survivors from Asia or Africa. Second, we believe that the low levels of Internet penetration in Asia and Africa can be ascribed, not just to a lack of computers, but primarily to the destruction by the tsunami of the already limited Internet infrastructure, which is necessary for connectivity.

Third, several local initiatives were launched in the aftermath of the tsunami. The affected community was not prepared for or informed of the services that were made available. Only during the first anniversary of the tsunami was there a plan for implementation of a memorial service based on the Web-service. Therefore, it is important to reach the media to cover and publicize the availability of services such as the one that we provide. Organizations such as the United Nations and the World Health Organization in conjunction with universities of governmental institutions can serve as overarching and research organizations that warrant professional structure and use.

Although there was less utilization of the Web platform by visitors from Asia and Africa because of the aforementioned reasons, given the anticipated rapid growth of the Internet, the development of an online, multilingual psychotrauma information system with multimedia capability holds great promise for the future. As we know, the Internet is only 30 years old. Given the major differences in the rate of socioeconomic development worldwide, it is recognized that a young medium of communication such as the Internet has not yet made significant headway in large parts of the world.

Recent positive developments, however, reflect rapid growth. Of course, many countries took as their own responsibility the requirement to provide service for the emotional needs of the 2004 tsunami survivors and conducted research and have undertaken individual initiatives. However, the trauma surpassed national borders and would it not have been useful to combine these initiatives in a Web-based platform that would facilitate building a community for survivors? This may require collective decision making in cooperation with international organizations such as the Red Cross, World Health Organization, and the United Nations (Saxena, van Ommeren, & Saraceno, 2006; WHO, 2005). The TISEI initiative was recognized by the International Strategy for Disaster Reduction (UN/ISDR) and reflects the future potential for such initiatives.

Building an Online Community: Recommendations for Public Policy

This chapter has focused on the use of a Web portal and provided examples of narratives of the emotional impact and the potential of the portal for research purposes and delivery of low-level services. Analogous to our initiative was a study by Butler, providing a similar service in the aftermath of 9/11 (Butler et al., 2002; Butler et al., 2005a; Butler et al., 2005b). In order to effectively meet the needs of the global community in the twenty-first century, traditional disaster management services will need to be combined with state-of-the-art technological innovations. Utilizing the Internet for the provision of disaster-related services, particularly in the area of psychosocial support, will be essential to maximize resources. The use of so-called patient portals does require an understanding of obstacles that prevent access for those who might benefit most from this technology (Weingart, Rind, Tofias, & Sands, 2006). The use of Internet in this way has therapeutic impact and could be implemented by health care providers as well as consultants (Bloom & Iannacone, 2006; Ybarra & Suman, 2006; Yom & Yee, 2006).

To conclude, we believe the advent of the Internet and communication technologies can provide tools that change the way we deliver care. A secure Web site is a useful means for both building a community of survivors and facilitating scientific research. The methodology has much to offer for the researchers, including rapid response, cost-effectiveness, and global reach. The TISEI site has been shown to be a useful tool that can effectively contribute support in the aftermath of a disaster. With the rapid growth of the Internet we anticipate a rapid increase in sophisticated information systems such as the TISEI environment.

It is also our goal to make multilingual Web-based services widely available to the academic research community to encourage feedback and the exchange of ideas using these types of information systems. The TISEI environment is an example of such an information system, which has proven to serve as a valuable resource for a broad range of intervention and prevention services following disasters and crises, as well as providing an extensive database for future research.

The long-term impact of disasters can be minimized by harnessing the interactive potential of the Internet to provide opportunities for expression, social connection, as well as access to medical and psychological information and the availability of community resources. The narratives presented in this chapter serve as vivid examples of the creativity and response of a community of survivors, which can have important impact on the development of personal meaning and coping strategies.

It is important to emphasize that the media can also play a critical supportive role in ameliorating the effects of disasters by informing the survivors and the public of the availability of such resources in times of crises.

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CHAPTER 11

FIRST RESPONDERS: COPING WITH TRAUMATIC EVENTS

Harvey Schlossberg and
Antoinette Collarini Schlossberg

> It was a hot summer day, 1969, in Brooklyn. The rain was coming down in buckets. I, Police Officer Harvey Schlossberg, was on patrol performing an accident investigation. This meant I responded to a fatal accident in order to investigate the circumstances. I recall getting out of my police car and approaching the first officers at the scene. One was sitting dazed in his car and the other was throwing up. I asked "What's the matter?" and they pointed toward the middle of the street. I had not noticed but now I did; the rain was mixed with blood, and what appeared to be body parts seemed to be blended into this solution. It took several minutes to get a response from these men and for me to restore my own clinical detachment. I could do it because for me nothing was recognizable, so I felt neither an emotional nor physical reaction. It just looked like a big mess. Apparently, the body had been removed to a hospital, leaving no clear identity at the scene. These first officers had seen the full impact of a human being mutilated beyond recognition. Their emotions welled over. They were crying, vomiting, and I am sure they were perspiring but this was disguised by the rain covering their faces.

The questions and issues related to Critical Incident Stress Debriefing (CISD) are discussed in a variety of sources and have generated frequent controversies (Mitchell, and Everly, 1997). The purpose of this chapter is not to resolve these issues but to present an firsthand observation and experiential insights into the actual occurrence of situations and the resulting outcomes over a period of more than 35 years. The perspectives include experiences as first responder with psychological and psychoanalytical training and supervision of first responders, their training and their treatment. It is true that the approaches used to treat first responders have changed over the years and alternate approaches have developed so that CISD for some is seen as a small part of a larger system of critical incident management, which offers a broader psychotherapeutic model that includes long-term psychotherapy and all variations in between.

However, this chapter deals with the immediate, on-the-spot, during-the-crisis intervention, which is ongoing, oftentimes while the first responder is involved in response to victims of both manmade and natural disasters. This in no way negates the use and value of long-term therapy, nor does it proclaim to alleviate all symptoms of acute anxiety; however it has been our experience that failure to recognize the dynamics that are occurring and failure to deal with them most times immediately or with very little time delay may result in some cases in irreversible lifetime posttraumatic stress disorder. The idea that failure to use CISD immediately could result in long-term posttraumatic stress disorder has been criticized, and there may or may not be a relationship.

However, the literature indicates that there are many risk factors. For example, the *Diagnostic and Statistical Manual (DSM–IV)* (American Psychiatric Association [APA], 1994) includes the consideration that it is not only the intensity of a situation in reality, but rather the subjective feelings of those involved in an incident that produce negative responses such as feelings of helplessness, inability to respond, guilt, or degradation that can actually increase the risk of posttraumatic stress disorder (Wong & Cook, 1992). CISD provides immediate exploration of these feelings with feedback from a compassionate source with the goal of restoring equilibrium.

Intervention

In the case described in the opening paragraph, I had a feeling that transcended my psychological training as I attempted to question the officers on the scene. While I proceeded with my photographer and other assistants to map out the scene, I was disturbed by the reactions of the police officers. The scene was already somewhat neutralized, yet their emotional reaction remained just as intense. At first, the officers were reluctant to talk about what they had encountered when they first arrived at the scene. I told them to return to their precinct station house and I would meet them there. A few hours later when I met them in a comfortable, dry room, they were still upset and shaky. When I first questioned them and they spoke about the incident, they were angry. This was quite unusual in my experience, so I continued to probe in spite of their reluctance to talk. Both officers were interviewed at the same time. It is important to keep in mind that these men had nothing to do with the accident, did not witness it, and took no police action other than to call for assistance to remove the victim to a hospital and to await my arrival. For the most part, therefore, they were responding to what they had seen with an impact that surprised me.

The usual image of a police officer is one of an extremely stoic façade, an unemotional response, and as a result, a presence that is always relied on by the public to bring order out of chaos and security out of fear. Once these police officers began talking, it was almost impossible to stop them. They would ping-pong off each other, relating what they felt and what they saw. They were creating and talking about feeling—the feelings that they thought were experienced by the victim and what the driver must have gone through and all the things they were thinking about—including their own mortality, their families, and the risks that they took daily.

Ventilation

In general, first responders deal with extreme crisis, the nature of which places normal individuals in situations that draw upon all of their resources, both physical and mental, to deal with what usually appears to be total chaos and horror. Although at that time I was a student going for my doctorate in psychology, and I was completing my coursework and working on my dissertation, I found that what struck me more than anything else was that these men had a need to appear strong and detached, but they were unable to maintain their detachment. This caused them to be angry at themselves because of their perceived weakness. They felt helpless in dealing with their pervasive feelings. They felt guilt because they could not save the victim, and they were inevitably helpless. They also displaced their anger by placing blame on the rain, the slippery road conditions, and the stupidity of the driver. As they vented their feelings in response to my encouragement and questioning about the incident, their mood started to improve.

After another couple of hours, they were drinking coffee and talking about what they were planning to do when they went home. To the untrained observer there was no sign except for the red eyes that an emotional trauma had occurred. What I had done, although I did not recognize this at the time, was probably one of the first, if not the first, critical incident response.

I was surprised when I met the officers in court some weeks later, for the vehicular homicide hearing where I served as the investigator and witness. They both thanked and praised me for the fact that I had done a wonderful thing for them because they felt much better and in fact had even improved their marital circumstances. It was at this time that I decided that if I were ever in a position to do something to enhance police work, that it would be very important to help officers maintain equilibrium and normality in abnormal situations when dealing with crisis police situations. I believed that police needed a special psychological response to deal with issues created by participation in, or observance of, traumatic events and that this did not only apply to police but to all services of first responders who were exposed to crisis and the underbelly of life.

In general, first responders are those individuals from a variety of services such as fire, EMT, military units in combat, emergency room physicians, and nurses who are the first to encounter or arrive on the scene of violence and disaster generated by both man and nature. These individuals confront the agonies and emotions of victims and subsequently their own mirrored responses that are sympathetic to the victim and generate fear, guilt, sorrow, and anguish in the helper. While their first aid, rescue, and investigation actions are well rehearsed and these first responders are well trained, no training experience is ever quite the same as the stark reality. These special trauma response groups have been studied extensively since this time (Hartsough & Myers, 1985; Karakashian, 1994; Raphael, Wilson, & Wilson, 1994; Waeckerle, 1991).

Some estimates suggest that 5.2 million Americans ranging in age from 18 to 54, or 3.6 percent of people in this age group, in a given year have posttraumatic stress disorder (PTSD) (Mental Health Disorders in America, 1999). Additionally, Kulka et al. (1990) found that 31 percent of male Vietnam War veterans and 27 percent of female Vietnam War veterans experienced PTSD at some point during their lives after the war, and this rate increased as the rate of combat exposure increased. This is significantly higher than the figures for the general population.

It is important to keep in mind in evaluating statistics that both in CISD as an intervention, and in posttraumatic stress disorder, the statistics are often unreliable because they are related to the definitions which have changed significantly over time. The increase in PTSD has often been attributed to the intensity of trauma that veterans faced during their tour of duty. The same intensity is often attributed to first responders so that firefighters, police officers, and emergency medical personnel display higher incidence of posttraumatic stress, more than 65 percent, depending on the category of urban first responders (National Institute of Mental Health [NIMH], 1999). It is our opinion that the use of Critical Incident Stress Management (CISM) as close as possible in proximity to the occurrence of the traumatic incident will help ameliorate the symptoms of distress.

Critical Incident Stress Debriefing (CISD)

Two major issues still remain unanswered without absolute certainty. The first one questions the status of CISD as to whether it is a true therapeutic technique or only the result of a flight into normality that is temporary and in response to what may be seen as the urging of the peer counselor. In some ways one could argue that the pressure caused by forcing a recounting of an incident could actually cause the individual to repress feelings in order to appear okay and in actuality can interfere with subsequent psychotherapeutic resolution of the true traumatic issues. This would have the first responder leaving the scene of a traumatic event with a façade of well-being, while under the surface there remained a foundation of acute anxiety symptomatology. An alternative explanation proposes that debriefing, by recounting traumatic thoughts and feelings, may intensify emotions for some.

The second issue may require extensive research to address the number of CISD sessions that need to be held. There is some dispute among professionals who become active in Critical Incident Stress Debriefings. This dispute states that the initial session is important but should be designed as an activator to get the individual to enter longer-term therapy. On the other hand, there are others who believe that two to three more sessions with no overt signs of symptomatology are actually sufficient with no additional treatment necessary (Burns & Harm, 1993; Clark & Friedman, 1992; Smith & deChesnay, 1994; Spitzer & Burke, 1993).

Our own experience has dictated at least three sessions with a day or two at the most between them seems to be quite adequate. However, a key factor that we found noted in the research seems to indicate that the principal variable for success is contingent not only upon the support group that the first responder has, but more so, on the support group available outside his or her work. In some ways we could call the CISD interventionist part of a support group because he or she encourages a discussion about what happened, accepts feelings without critical evaluation, helps the traumatized person rephrase and organize thoughts so as to confirm that he or she tried his or her best and could not have done anything else even if efforts were unsuccessful, reinforces feelings of competence, and identifies feelings so they can be explored. However, as previously indicated, other support groups unrelated to the work situation, such as family members, friends, neighbors, and spiritual support may duplicate much of what the CISD had accomplished. These other support groups also provide similar support such as accepting the feelings that the first responder displayed at the time of the incident without loss of love, or with blame or guilt (Madakasira & O'Brien, 1987; Norris & Thompson, 1995).

We believe that the first responder's work group permits and supports some expression (although not an extensive period) of anxiety and depression. When a rapid recovery is not clearly visible, other co-workers tend to start rejecting an individual who is seen as a weak link and is no longer trustworthy.

In general, it is fairly safe to say that the more adequate the social support resources of the individual prior to the traumatic event, the more it is likely that the individual will be able to handle the psychological trauma of the event. The real effectiveness in helping an individual to resolve the trauma is rapid response, whether it is one or more sessions. The aim is a return to normality or at least prior level of adjustment before the traumatic event to prevent the development of behaviors, which may have secondary gains or serious negative consequences.

Methods of Critical Incident Stress Management (CISM)

In order to circumvent some of the stress effects, which could result in permanent psychological dysfunction, psychologists, social workers, psychiatric nurses, and peer counselors have been trained to use a system called Critical Incident Stress Management (CISM). There are several models of how this is done. These are more comprehensive and may require additional sessions or a variety of follow-up services, whereas CISD is a specific technique incorporated as part of CISM that is reflective and supportive, permitting an emotional release that is sometimes effective in as little as one brief session, which may suggest and prepare an individual to enter longer-term treatment should it be needed.

If necessary, further assessment, evaluation, and continued intervention in a more traditional therapeutic setting may be required. The purpose of CISM is to attempt to insulate, protect, and reduce the stressors on all emergency services that come to the aid, rescue, or other interaction with the victims of catastrophic events.

Probably the most cited and detailed system is the one developed by Dr. Jeffrey Mitchell. Mitchell states that CISD should not be used as a stand-alone technique but in conjunction with a variety of other supports that may be included in CISM. This is frequently viewed as a more developed and extensive system, which incorporates the use of seven stages. The key steps include the following: assessment and evaluation of impact, review of all the elements, and an attempt to bring closure by ameliorating its emotional impact (Mitchell, 2003, 1988, 1983).

All systems have certain aspects in common, including the one described in this article. The therapist acts as a facilitator to have the emergency responder (or victims) revisit their thoughts, impressions, and feelings that occurred during the situation, and then proceeds to defuse the reaction by exploring and suggesting the type of feelings and thoughts that are currently present and will follow over time. Most common are feelings of confusion and anxiety, often followed by sleep and mood disturbance. By exploring these feelings in advance and confirming that the first responder did his or her job well, the impact may be reduced significantly. If we did not use this technique, the first responder may suffer severe anxiety symptoms or acute stress disorder as defined by the *Diagnostic and Statistical Manual (DSM–IV).* The symptoms may continue to build for about a month (*DSM–IV,* p. 429). The intensity of the symptoms would be centered on depersonalization, increased sensitivity to arousal stimulus, and withdrawal from daily functioning. Untreated, there is a possibility that PTSD could develop, but it is our experience that those first responders that we dealt with, in almost all cases, did not show symptoms of posttraumatic stress disorder and were able to continue full productive employment.

In incidents where CISD was used as a stand-alone treatment for victims of trauma but not first responders, the results may be more questionable, possibly as a result of other life stressors outside of the precipitating event. It is our belief that it is easier for first responders to understand the stressors in relation to their job descriptions, whereas for victims, there is no relationship that justifies their being a victim.

For those who develop symptoms that last for at least one month, the diagnosis would shift to posttraumatic stress disorder (*DSM–IV,* p. 424), which may potentially become a lifelong burden. The primary difference between both diagnoses is that PTSD is more resistant to psychotherapy and the symptoms can reach psychotic proportions with inclusion of flashbacks, delusions, hallucinations, and loss of time and place reality.

It is important to keep in mind that the advantage of CISM, while it is not psychotherapy, is that it may act as a modifier so the symptoms do not get entrenched and set the stage for the possibility of more traditional psychotherapy, should it be needed. In diagnosing posttraumatic stress disorder, the psychologist is always cautioned to be on the alert for malingering or symptom fabrication for secondary gains.

Stress Overload

In the year and a half following the dynamic insight that I had experienced during the 1969 investigation where I saw the dramatic psychological and physical overload that the first responders displayed, I began to think about these issues in great detail. I soon realized that in my many years of street police work, I had seen this same scenario numerous times but failed to recognize its meaning. Probably my own defense mechanisms had been operating to save me from trauma.

In the more than 30 years that have followed my initial recognition of situational stress, it has become very apparent that first responders in any emergency situation experience an overload of emotional, psychological, and physical stress. However, the effects of these stressors can be reduced immediately by professional intervention. Inevitably without some form of psychotherapy, the thoughts and feelings that have been repressed will begin to resurface to a greater or lesser degree, depending on an individual's support system and the avenues the person has for release. In addition, what has also become extremely clear is that the individuals who are being rescued have experienced almost a mirror reflection of the same stressors, in some ways, perhaps, a little less intense because their systems often shut down and their unconscious minds remove them from the situation.

Furthermore, the victim usually suffers the agony one time in his or her life, while first responders are exposed to repeated events throughout their entire work career. Unfortunately, the number of incidents does not insulate the first responder from the full impact and ultimately has a cumulative effect. Our popular belief is that repetition should make it easier for first responders, and so we attempt to accomplish this through role play and dress rehearsal; however, the actual situation should be viewed as an independent event whose intensity and novelty produce trauma equal to the first time. While we speak about CISM for responders and this remains the focus of this chapter, the reader should keep in mind that use of the same system and the same procedure for certain groups of victims is an extremely effective foundation for the beginning of an extended psychotherapy intervention for both responders and victims. Responders have the advantage of support provided by peer group, practice, and ventilation prior to, during, and after response. The victim of an incident, on the other hand, may feel empowered by his or her ability to survive the event and therefore feel powerful and omnipotent, whereas the first responder fails to gain closure and feelings of success as a result of reexperiencing repeated trauma.

Police First Responders

In 1971, when I finally graduated and had been involved in psychoanalytic training, the New York City Police Department assigned me the task of exploring applications of psychology to police work. One of the first things I did was to create a psychological services unit that attempted to address psychological problems of police officers that had not been addressed previously. For a police officer, at that time, to admit psychological problems or an inability to handle some of the worst of life situations that they experience on a daily basis meant a confession of weakness rather than an acknowledgment of stress. While police stress has been explored extensively since that time (McCafferty, McCafferty, & McCafferty, 1992; Reese, Horn, & Dunning, 1991; Smith & deChesnay, 1994), at that point it was clear that police officers had nowhere to turn for therapy because it was necessary to maintain the façade of calm, strength, and reason in the face of sheer panic, fright, and gore. Failure to maintain such a façade would result in personal embarrassment and feelings of betrayal of the police image and the fear that it would be seen as cowardice by co-workers.

Most first responders do not go home and discuss the anguish and horrors that could occur during the day with their spouses or other loved ones in order to spare them the same feelings. Nor could they admit at home that they were experiencing extreme emotional discomfort. Their feeling was, “If I can’t solve my own problems, how can I possibly solve someone else’s problems?” They could not admit this weakness.

For the same reason, I soon discovered that when I attempted to involve external agency psychologists, they were often ignored or angrily responded to by those they were attempting to help. The typical response was one of these: “You are in the way”; “You can’t understand”; “You will get hurt”; “I won’t be responsible for you”; or “I’m fine.” I soon learned that I was very successful in dealing with cops, but did not achieve the same success with the victims of hold-ups or EMT responders. It was as if I were from another planet, merely trying to pry and interfere and expose their weaknesses. Why I was successful with police remained a central question.

In 1974, when I met my soon-to-be wife, Dr. Antoinette Collarini Schlossberg, she was a psychology student; ultimately, she received her doctorate and we have co-worked and spent many hours sharing thoughts on the way approaches and treatments must be tailored to a particular client. One of the issues that eluded me but soon proved to be simple and logical was that the crisis intervention specialist should have similar experiences and even have worked with or come from the same discipline as the first responder he or she was trying to help.

As early as 1972, I had experimented with peer counseling with police officers who had been identified as violent or overreacting in situations. The system of having an opportunity to discuss their reactions with a fellow officer who was trained to facilitate groups and model behaviors while reenacting situations that were similar to the ones that caused the officers’ behaviors, appeared to have therapeutic impact.. The chance to see appropriate behavior and the opportunity to verbalize and discuss responses of appropriate behavior and comparison to inappropriate behavior appeared very effective in the short run. It was clear that no profound change would occur in the long run because the essence of psychotherapy was not present. During this time the ability to openly express feelings and thoughts, in an accepting non threatening situation, permitted a more liberal and accepting attitude toward therapy, if needed. During this time an attempt was made to pair a trained police officer, who had obtained at least a master's degree in psychology with an emphasis on counseling, with a clinical psychologist. This was seen as another advance in the attempt to respond to the overall needs of police in their more sensitive social role as helpers rather than in their role as law enforcement. Sometimes, an insight occurred that was simple yet dynamically powerful when a troubled officer was confronted by a situational truth that he or she could not see.

An example was an incident when a peer counselor was exploring aggressive feelings of an officer who had apparently, according to his spouse, had a personality change following his attempt to deal with trying to breathe life back into a drowned child who had fallen into the river. His wife found that even after CISD, which improved his condition, within a month or two, he became irritable and argumentative with her. In addition, there were at least two complaints by civilians of his excessive use of force—regarding this officer who previously had no such complaint during his prior 10 years of service. During a session with the peer counselor, he got up and at one point became so angry at being questioned that he put his face within inches of the counselor's face and loudly threatened that he planned to push him out the window. Simply being told to "Stop, freeze and tell me what you feel" and "Look around and you can see why we are concerned about you and the very behavior you have displayed here" symbolically pushed him to face reality. While certainly not profound in an everyday sense, on a psychological level, this type of behavior never occurred again with that individual. It seemed clear at that time that the psychotherapy that was required for people who have stress- and crisis-related jobs would have to be ongoing and perhaps on a continuing basis throughout their entire careers. These individuals who are committed to helping and saving others are entitled to and deserve being helped with their problems.

Unique Police Issues

It was a Wednesday morning at about 2 A.M. Four police cars were chasing a car through quiet Brooklyn streets. What led to the chase by police was that they had just received a call that an all-night grocery store had been held up by two men with guns. The first police vehicle that arrived on the scene followed in pursuit of a vehicle that was just pulling away from the store and had no headlights on. Another police officer got information from the store owner who had been fired upon by the hold-up men. They left just before the police arrived at the scene. The car was red and sped away without lights. Apparently the car being pursued fit that description. The chase involved approximately four miles of twists and turns at high speed with the suspect vehicle refusing to stop. En route, three other police vehicles joined the chase. The suspect's car finally hit a lamppost and a fire hydrant and came to a halt. The first pursuing officers stopped behind the wreck. The streetlight was out from having been struck by the suspect. The hydrant sprayed water into the air. The two suspects climbed from the vehicle. They were told "drop to the floor" but one suspect ran, refusing to obey the command. One police officer ran after him into an alley. The alley had no outlet. The suspect turned and the police officer ordered him to go down on the floor. Instead he unleashed a tirade of expletives, and reached into his pocket as he began to run toward the officer. The officer fired, losing count of the number of bullets he fired; in fact, he continued to fire after the gun was empty. He had no idea whether the gun was empty and kept pulling the trigger. The other officers soon arrived, a moment or two behind. What seemed like an eternity lasted only a few seconds. The suspect was dead. The officer who shot him was shaking. In this case, the suspect did have a gun but in similar cases of this nature, sometimes the suspect does not have a gun. In police terms this would be considered a justified shooting.

However, the next day the newspapers carried an article that made the suspect appear to be a promising doctor in the near future, if his career had not been cut short by the police. While he had several prior arrests for armed robbery, his friends and family assured the media that he had changed his life and was studying for college admission. They questioned whether he had been armed because he was not known to own a gun. He was always helpful to neighbors and friends and liked to help neighborhood children play sports. The other suspect who was captured stated that he had just been picked up hitchhiking and had no idea what happened, certainly not a robbery. The official investigation that ultimately cleared the officer and the media coverage lasted for more than a year. The officer continued to have flashbacks and reexperienced the incident to the point that he became unsure about what happened, because of the constant barrage of confusing questions from the investigators and innuendoes from the media. The officer's family lived through similar kinds of stress, his children were ridiculed in school, his wife wanted him to quit the job and described his personality as totally altered, and his life was totally and permanently changed.

Police are unique first responders in that they are the first to arrive at the scenes of crimes where they are not rescuers, but rather in the role of combatants. This unique circumstance had often been neglected and requires a special approach. Police officers are expected to make judgments about situations that tend to be life-and-death-threatening not only to the victim of a crime but to the officers themselves. With limited amount of information, the officer must make a split-second decision concerning both the amount of force that is usable and the justification for its use. The officer's life and others are dependent upon these decisions.

After the trauma is ended, which may be measured in seconds, there is always opportunity for one to second-guess or question his or her actions. Based on our experience, feelings of guilt and inadequacy are often prevalent. The worst part then follows in all such police confrontations. The police department must investigate the incident and in our litigious and socially sensitive society, there is no shortage of controversial witnesses and alternate actions that come forward. The investigation takes a significant period of time and alternatives are examined in a no-stress atmosphere. There is little doubt that many alternative actions present themselves and further impact on the police officer's original behaviors. The result is a second opportunity to reexperience the original situation and all of its real and imagined shortcomings. The rules of CISD follow the guidelines of group psychological intervention pertaining to privilege and confidentiality. Because the original first-response trauma needs to be explored verbally and ventilated, the added tension of testimony from both court and department hearings can interfere with the stress debriefing.

Unfortunately, these types of situations frequently occur, and because of this, need ongoing therapeutic intervention, as the effect of the original intervention is negated by the frequent reproduction of the situation by the investigation, which requires recurrent reporting of all the original images of the recurrent event, thereby not permitting relief of tension.

In evaluating this special situation, it was felt that for police who respond to tense crimes in progress, ongoing therapy would make the most sense. It is the authors' opinion that ideally psychotherapy should continue from the start of a police career until its conclusion—for every police officer on a compulsory basis. However, there are differing opinions on mandating such services as well as limited resources. Our opinion has been bolstered by our experiences with dysfunctional first-responder families whether they are police, fire, or emergency medical technicians. In many instances, even after exposure to CISM and following a short flight to normality, others in the individual's life would often call psychological services to complain about personality changes and a variety of what became known as posttraumatic stress symptoms. The family frequently and most commonly reported marked depression accompanied by anxiety, loss of interest in many of life's pleasures, irritability, loss of libido, and emotional lability.

1993 World Trade Center Bombing

In February 1993, a terrorist attempt to bring down the World Trade Center Tower by exploding a truckload of explosives in the subterranean garage of the World Trade Center took CISD to its outer limits in terms of numbers and first responders whose ability to stand stress was severely tested. This event was an ominous premonition to the events that unfolded on September 11, 2001. In 1993, the Port Authority of New York and New Jersey was the landlord for the two towers. In that capacity it also provided policing and fire safety, in conjunction with the City of New York.

Approximately 5,000 to 6,000 people were affected by smoke, fire, being trapped, and enduring forced rescue evacuation from the buildings. In my capacity as chief psychologist for the Port Authority with offices in the World Trade Center, I ensured that we had set up in the basement of damaged Tower 1, within three hours of the blast, a triage center for medical and psychological ministering for tenants, employees, and first responders. We sought cooperation with the Salvation Army, the American Red Cross, and other community volunteers. They received on-the-spot brief instruction as to how to act as peer counselors during the initial operations. My staff, including psychologists, psychiatrists, and social workers, began CISD and reached out to the community of psychologists and other mental health workers who ultimately volunteered and donated many hours of service to the critical incident counseling service.

Some of the key players included but were not limited to the following: Scott Bergman, Ph.D., psychologist; Maxwell Segal, M.D., psychiatrist; Joseph Hernandez, C.S.W., certified social worker; Kathy Caprioglio, R.N., a psychiatric nurse; Maryann Crowe, RN, a psychiatric nurse; Julie Bell, the Director of Medical Services; and at least a dozen others. The goal was to treat the largest number of people possible and therefore the treatment would have to be done in group process. CISD was generally done with first responders in small groups of two or three individuals who worked in close proximity to each other so they shared a common experience; in this instance, we were confronted with large groups of tenants and civilian victims, and in some cases, as many 15 people would be seen in a group setting. This was a test to see if CISD could be accomplished with such large numbers at one time. The media was fully cooperative and announcements were made frequently in the print media and on radio and television, encouraging all survivors to call any of the community agencies and the many Port Authority emergency numbers that were established. In addition, the large companies that were tenants set up phone numbers for their employees, many of whom had wandered off after the explosion, and efforts were initiated to bring them in as well.

Surprisingly, about 200 people who had no connection to the World Trade Center but were simply in the street near the building and the web of shopping malls within the building when the explosion took place reported severe stress. Some of these victims, including first responders who were victims and then became first responders by virtue of the fact that they were on premises when this attack took place, suffered extreme physical and psychological trauma. The aim of the CISD Team was to reach as many people as it could within the framework of the established CISD timeline of 72 hours. Surprisingly, about 30 percent were reached, and ultimately, the CISD that went beyond the guidelines lasted about three to four months with almost everyone who was involved having been seen. Except for a small number, almost everyone was able to return to work.

The aim of the CISD was to relieve the immediate acute anxiety reaction symptoms through ventilation and support, which allows the recipient to organize his or her thought process and reestablish external perimeters of safety and security. It was hoped that the responders recognized that their work was heroic in nature. It was also important for the responders to realize that what they were experiencing was a normal response to an abnormal situation. The second aim was to encourage people to appreciate that they were able to cope with such a difficult situation. Ultimately, this group would be encouraged to participate in intensive psychotherapy, if needed. The final goal was to be able to have all prior workers in the buildings able to return to their jobs. This process involved desensitization to elevators, height, and enclosed corridors.

In the final analyses, we were impressed that most victims and all first responders, including those who had the dual role of victim and first responder, were able to return to their prior levels of function. A very small number were able to return to their normal function level but were unable to return to the building and did well in jobs outside of New York City. All first responders, including those in dual roles, were able to return to the buildings and resume work. In a very small group, there were victims who refused to do any kind of work, and most of the information we had was ascertained by the fact that they instituted disability lawsuits based on their inability to return to any form of work in any location or in any city.

No first responders, including those in a dual role, displayed any extended symptomatology. Most felt gratified and focused on the fact that they acted as rescuers, helping those who were injured rather than running from the scene. These positive feelings always overshadowed the negative feelings that were displayed during their sessions.

Much of what is reported in general literature seems to hold that those individuals who had good networks and support systems at home or away from the job recovered rapidly. In almost all cases of first responders, the support of their peer counselors and the groups they worked with seemed to be extremely important in overcoming trauma rapidly and maintaining that return to equilibrium.

The issue that remains unresolved is that a significantly large group of people (based on our observation, no statistic available) who did not seek additional psychotherapy but who did seek and did spend at least one session in CISD ultimately showed no later signs of acute anxiety disorder or posttraumatic stress disorder, based on the fact that they returned to work and continued the same level of work that they did prior to the incident. There have always been exceptions of those who were not able to return to work. While we can guess from our experience that the number not returning to work is small for first responders, it is probably higher for actual trauma victims. Again, based on our observation of those involved in the 1993 World Trade Center bombing, the question of effectiveness is then answered, as CISD appeared to be very effective, especially with first responders. However, we do recognize that this was a field observation with no control group, as conducting such research is very difficult due to logistical and ethical issues.

Noteworthy is the fact that victims of a trauma, whether or not they receive CISD, can often adjust by not returning to the same environment that caused severe reaction. First responders, however, while they may return to a different environment, may still experience similar situations in all their interactions on the job, as helping and rescuing are constantly present. This was clearly seen by some police, fire, and EMT workers who responded well to CISD with two or three sessions, but subsequently, in new, unrelated situations, seemed to have a more intense traumatic reaction, and again in our experience, seemed not to benefit from CISD. This was an early indicator to us that CISD needed to continue over a longer period of time and should include additional follow-up supportive sessions for first responders and is now referred to as CISM.

A question that is often raised is whether long-term psychotherapy is required in order to consolidate or maintain any gains achieved by CISD. This is still an unanswered question, but our experience has been that a very large number needed no follow-up therapy. This may be the result of keeping their therapy secret, although this is unlikely because most victims usually seek financial remedy through law.

In police situations, it is our feeling that many times issues such as brutality and even corruption may have their roots in inadequate treatment of the frequent exposure to traumatic incidents. We know that the number of incidents tends to be significant and cumulative in nature. It is very common to see an increase in corruption and brutal behavior during times of poor morale in the police department or dramatic media exposés of police officer misbehavior and bad judgment. These observations are the result of many years of interaction in the broadest police community. We know in psychology that displacement is a frequent way of establishing emotional equilibrium.

The argument then can be made that CISM, especially during traumatic situations, is an excellent investment. It has become clear that CISD is an essential first step in dealing with the stresses of crisis response and provides some immediate relief, but in and of itself cannot be considered psychotherapy. In many ways, it is very much like the need to stop the bleeding of an injury, which in no way deals with issues of infection, scarring, and other complications or permanent damage but may permit the body and mind to cure themselves.

Conclusion

It is our feeling that it makes sense to include as part of the job requirement, certainly for police and probably for all services that deal with crisis trauma, especially firefighters and emergency medical technicians, to have access to a full range of ongoing psychological services in order to have a method of dealing with the stressors of their work. The investment of time and money would certainly yield results that in the long run would pay for themselves. This would create individuals who feel supported and appreciated for what they do and by those they serve.

A system that included ongoing psychological support services as part of the job requirement may not be perceived favorably, especially by individuals concerned with revealing their weaknesses. Similarly, when psychological testing was introduced for safety sensitive occupations, a stir was created by those who saw psychological testing as a violation of their privacy. However, when a technique is introduced that is applied to all members of a group without making prejudgments or on the basis of some prejudice, it can be utilized. While no one could be forced to participate in either psychological screening or psychotherapy, if it were a universal requirement for the position and the person chose not to participate, then he or she would not qualify for the position. This is similar to the public tolerating screening and searches prior to boarding an airplane, as they need to fly.

One criticism often used is the cost factor. This is based on the cost of psychotherapy and the hours lost from actual performance of work during therapy. Yet costs for damages to the public, legal liabilities, mistakes in rescue, misuse of techniques, and psychological breakdown of workers from trauma far exceed, for example, the cost of supervised peer counseling. In addition, the involvement of psychologists as supervisors to peer counselors provides the first responder agency with available psychological expertise for other psychological issues, thereby reducing the potential costs involved. The argument that preemployment psychological screening assures well-adjusted first responders does not take into account the effects of trauma they have encountered after the start of employment. In addition we know that psychological testing, while useful, only reports on the mental status at the time a person took the test.

In setting up the mechanisms to deal with the trauma first responders face in crisis situations, we may ultimately develop a better-functioning agency that the public can depend on along with increased benefits of fewer casualties.

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CHAPTER 12

XENOPHOBIA: A CONSEQUENCE OF POSTTRAUMATIC STRESS DISORDER

Rona M. Fields

Sociological and Historical Examples

Posttraumatic stress syndrome is a diagnosis generally applied to individuals suffering from a set of characteristic symptoms following exposure to an extreme traumatic stressor "involving direct personal experience of an event that involves death, injury or threat to personal integrity … the person's response to the event must involve intense fear, helplessness or horror … ," according to the *Diagnostic and Statistical Manual of Mental Disorders (DSM–IV)* definition of "309.81 Post Traumatic Stress Disorder" (American Psychiatric Association [APA], 1994, p. 424). Among the events listed in the *DSM–IV* are witnessing violent death or injury, personal assault, sexual assault, torture, combat, human or natural disaster. Usually the traumatic stress is long lasting, and the threat may be to oneself, to close family members, or to one's social or identity group. Untreated, of course, PTSD can evolve into the diagnostic category of adjustment disorder (APA, 1994).

Xenophobia itself can instigate and exacerbate trauma and damaging consequences. The story is told that Sodom and Gomorrah were destroyed when the emissaries of the Lord went to those cities to find at least 10 righteous inhabitants, and they were attacked and pilloried because they were strangers. In the end, of course, these xenophobic aggressors were destroyed. Fear of "the other," *xenophobia*, is integral to all of these conditions but particularly to the threat to one's identity group from those who are different. What happens when a social group, society, or nation is riven by intercommunal conflict lasting for generations and that is integrated within the cultural institutions? I suggest that such entities are elaborations of the anomalies and pathology of the individual suffering from adjustment disorder consequent to PTSD. Furthermore, these societies, their prognosis and potential for negotiated conflict resolution have much in common with the individual PTSD survivor. Individuals within such societies are likely to have been traumatized by witnessing or being subjected to torture, violence, wounding, deaths and maiming of loved ones. They seek and cling to those with whom they feel strong affiliation and experience anticipatory dread of those they do not know. At its mildest, the result is prejudice (Allport, 1936). At the most pathological level, the consequence is xenophobia or fear of "the other." But there is a distinction when someone who is a close relative or with whom there has been a close relationship has inflicted the violence or trauma. There is indeed the same fear of intimacy that is characteristic of PTSD generally, and the same sense of helplessness and powerlessness, but there is an additional sense of isolation and alienation—a feeling of being alone in dread. Often this is diagnosed as attachment disorder and behaviorally is manifest in distrust, inability to form close relationships, and too often, inappropriate and damaging attachments.

Sociologically, when one faction contends with another for primacy, the group fractures or polarizes. Dread of "the other" is expanded and exacerbated. In addition, when violence and threat are prolonged, fracturing and polarization increase and unity of purpose—survival—is submerged beneath contending strategies and players.

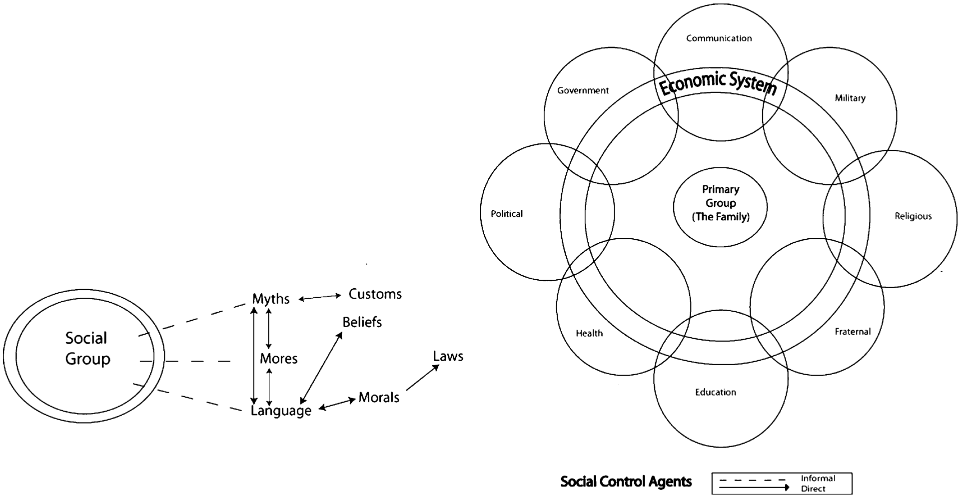
The Cycle of Fear into Hatred into Violence

The fear, anxiety, and defensiveness are directed at "the other" in anticipation of continued animus. This is the beginning of the "we/they" mentality and fear of "the other" (Sanford, 1956).

There are four basic scenarios in which prolonged traumatization generates xenophobia, but each of them contains elements of the others. Fear that generates hatred, which in turn erupts into violence, incorporates similar social and psychological dynamics (Bookbinder, 1973).

The first scenario is a society in which a colonial system has been imposed and one of the indigenous groups is favored over the other for access to jobs, institutions, and resources. A classic example of this dynamic is Northern Ireland. The colonial history of Ireland remains the crux of the argument because it is perceived differently by each of the parties involved—the Irish Catholic Republicans, Irish Protestant Unionists and Loyalists, and the government of the United Kingdom. The history of this particular antagonism between Catholic and Protestant in the UK has roots in the English Reformation. When King Henry VIII established the Church of England and during his reign and those that followed, through Elizabethan times, Catholics were viewed as traitors and subject to extreme persecution in England. While the roots are in the Reformation, the seedlings were planted earlier during the Norman invasion in the eleventh century in the first codified genocidal laws imposed on an occupied people—the

Figure 12.1 Institutions in a Society (Social Control Agencies)



Statutes of Kilkenny. The laws that were imposed in Ireland, the plantation of Protestants, and the exile of Catholics beyond the time of Queen Elizabeth I had severe consequences in the Irish psyche. (For reference to this, please see this author's several books focused on that history and dynamic.) Considering this dynamic in terms of an anthropological genesis (see figure 12.1), it is possible to understand the relationships of individuals to social institutions without becoming bogged down in disparate perceptions of history. Simply put, an informal social group—a culture—includes a common language that expresses its mores, morals, values, and beliefs and coalesces these into a moral code that when formalized becomes a legal code. However, when another, stronger nation-state imposes upon this informal group its own legal system, the social institutions that emanate from it and frame the society are supportive of that legal code and the dominance of that imposing culture.

The major social institution through which the individual passes is the family. The position of the family in relation to the extant institutions can identify the person as part of the society or marginal to it or, as in the case of the Roman Catholic/Republican population of Northern Ireland, developing its own alternative institutions because of exclusion from the mainstream. But psychologically the nonconforming indigenous culture remains "the other" and is of necessity in a defensive stance. Prejudice viewed through this framework is compounded over generations by fear fueled by history lessons reenacted triumphantly in rituals that mark the passage of the seasons. Neighborhoods become ghettos first for safety, defense, and then as fortresses against "the other." The triumphalism of the Protestant Loyalists is reenacted in their Orange Parades through Catholic neighborhoods and became a major issue of contention in the Good Friday Peace Accords process (Fields, 1973).

The second scenario is a society under economic and political stress, an example of which is Germany after World War I, the Weimar Republic. Erich Fromm describes the social psychology of that place and time in his classic work, *Escape from Freedom* (Fromm, 1941). The new social institutions of the nascent democracy were especially fragile and susceptible to the corrosive effects of an economy beset with inflation, high international debt, and a paralysis in manufacturing. Further contributing to this already flammable mixture was the surrounding political/ideological conflicts. The Communist Revolution in Russia threatened to move westward in the form of international political parties representing the working class and threatening the hegemony of the bourgeoisie and aristocrats. The fall of the Kaiser, the last autocratic leader from a line of Prussian royalty, was also the end of boundaries—individual and cultural. The masses had experienced a resounding defeat, including the loss of territories traditionally German in language and culture. People who are betwixt two cultures, with no fixed identity and who see their cultural heritage as denigrated, will run to the defense of that identity. They don't know who they are, but they know that they're despised and marginalized in their home society. Following their defeat in World War I, the Germans looked for scapegoats. What they (re)discovered was their repressed anti-Semitism, which they combined with the newly perceived threat of Communism. The National Socialist Party (Nazi) articulated the we/they ideology through *Mein Kampf,* written by Adolf Hitler when he was jailed for leading riots. Although they lost the election, they engineered the Reichstag fire, blaming it on the enemies of the Reich—Jews and Communists—that fed into the chaos and their own paranoia. The German people, so uncomfortable with their own reality and facing unpleasant choices, were willing to buy into a system that took that responsibility away from them and gave them a plan of action to follow. Within a relatively brief time, they had tangible "enemies" and that villain was *Ausländern*—foreigners in their midst.

The third kind of dynamic is exemplified by Israel and Palestine, in which two disparate identity groups lay claim to the same territory based on historic claims to a homeland. This is also, to a lesser degree, the kind of trauma that gave rise to the Serbian/Kosovar enmity and in fact, to the civil wars that raged within the former Yugoslavia. What makes the Israeli-Palestinian dynamic quite unique is the sense of alienation and victimization suffered by both groups in the past at each other's hands, at the hands of colonial powers, and in the larger world as well. Some social scientists have identified the Israelis hunkering down and segregating as the Holocaust mentality, but in fact, the growing prevalence of anti-Semitism throughout Europe reinforces through reality the psychology of victimization, a bunker-mentality traumatic stress. As for the Palestinians, they've never been popular in the Arab world except as symbols of Western or Christian or Jewish predation on the Arab world. The President of Iran rallies his supporters by proclaiming death and destruction to Israel even when the President of the Palestinian Authority insists that the solution to their plight is a two state, side-by-side solution, not the destruction of one or the other! Al

Qaeda recruits suicide bombers by showing films—not necessarily unstaged—of Israeli soldiers meting out death, destruction, and humiliation to Palestinians. Historically, there are other examples of this kind of contest—two peoples over their claimed homeland. They do not always result in intergenerational violence. In the Israeli-Palestinian instance, the history of colonialism to which the region has been subjected, first by the Ottoman Empire and then by the British Mandate, fueled prejudice and inflamed partisan divides. Not the least fuel for these fires has been neighboring national interests as well as religious extremists. This formulation, combining nationalism, religious antagonisms, and historic legitimacy seems impermeable to most conflict-resolution strategies.

On the other hand, the fourth scenario, South Africa, has the struggle for a homeland, colonization, race (rather than religion) and the institutionalization of race under double colonialism—first Dutch, then British. The government, under a British colonial governor, formulated political parties and a political philosophy emerging from the several hundred-year-old Afrikaner culture and language, and imposed a system of political apartheid. But remarkably, and in contrast with the aforementioned societies that fit figure 12.1, the indigenous informal society did not contest, nor for the most part, come under the umbrella of these institutions because it was separated by its tribal affiliations and finally under apartheid, by race. But viewed in another framework, after the Boer War and the demolition of the Orange Free State, Afrikaners became the White Tribe quite without European allies or supports (De Villiers, 1987). Probably when the British imposed their legal system on South Africa, the dominance of the Boers was buoyed by the subordination of the black tribes—in a way similar to the working-class Protestants in Northern Ireland who valued their ascendancy over the Catholic population and engaged a form of apartheid as well.

Segregation of institutions and housing produces a virtual we/they experience. When "the other" is unknown as an individual person, the entity is readily scapegoated, vilified, and mistreated. "The other" visibly distinguished is always a stranger, feared and then hated. The emotion of hatred has within it all of the factors inherent in prejudice. Prejudice and discrimination facilitate exploitation. But as Gordon Allport so eloquently defined it, prejudice is an antipathy based on a faulty and inflexible generalization. It places the object of the prejudice at a disadvantage, but these generalizations of anticipated evil intent erect a framework of expectations of vengeance, retribution. In a society in which an outgroup is demonized, they cannot but live in fear. Functionally, prejudice is a pattern of hostility. The evolution from avoidance to discrimination is physical attack. As Allport (1936) states, "Under conditions of heightened emotion prejudice may lead to acts of violence … and eventually to Extermination" (pp. 10–11). Viewed in the historical context of Hitler's rise to power, Richard Koenigsberg notes that:

> Metaphorical statements contained within political rhetoric provide clues to the underlying meaning of policy formulations. The "hot button"—that which aroused Hitler and propelled him into action—was his belief that Germany was suffering

> from a potentially fatal disease. Never in the "sluggish days of German bourgeois world-liberalism," Hitler declared, would it have been possible to create in the German people so "gigantic an increase in strength and consciousness of a national mission." Just as the human body develops its strongest hold on life at the moment when it resists a threatening illness, Hitler explained, so peoples are driven to "bring into fullest play the energies slumbering within them only when their existence is threatened or even endangered." "Metaphorical mapping," according to Lakoff, occurs when "slots in the source-domain schema" gets mapped onto "slots in the target domain."

The prejudiced personality is trauma-prone. Ironically, status in relation to the ascendancy for Protestants in Ireland was, in their thinking, through the Orange Order and the subordination of Catholics and Catholicism. This conviction exacerbated the traumatic threat they confronted in the face of demands for equal rights and equal access to housing and jobs.

During the early 1960s the French-Algerian war instigated the migration of Algerians to mainland France. Despite French rhetoric about equality, these migrants were housed in the poor suburbs of Paris and similar locations around the major cities. Algerian nationalists committed acts of terrorism on the Metro and other popular sites in Paris, setting off a police reaction that included nonjudicial assassinations and arrests. Long-lasting prejudice against French Arabs by the law enforcement agents and ordinary citizens became mutual, and as African migration increased, so did accusations of lawlessness against the "street gypsies," as the African street vendors were called. These violent episodes of the early 1960s traumatized both the immigrant population and the French citizenry. As immigration increased, and the insistence of French Arabs on retaining their cultural symbols such as *hijabs* on schoolgirls, skullcaps on men and boys, so alienation and confrontations also increased. Parents, traumatized as children, communicated their prejudices to their children. We/they schemata emerged even while "equality" persisted in the rhetorical sphere. The functional behavior, as ghettoization elaborated, was a well-subsidized underclass of Arab/African generations with admixtures of Palestinian, Iraqi, Iranian, and Afghani refugees. As in the United Kingdom, poverty is relative. The subsidies for the unemployed throughout the EU have been high enough to provide for the necessities, free schools, and medical care, and also allowed a reasonable lifestyle. But the class differences remain visible, distinct, and sufficient to foster a we/they dichotomy along racial lines. As of October 27, 2005, young men and boys, inflamed by the accidental electrocution of two of their peers while running from the police, commenced to burn cars, schools, and community facilities, attacking policemen in some instances and exciting public fear throughout France and into the neighboring European countries. A State of Emergency was declared just as in the early 1960s when their Algerian predecessors had been antagonistic protesters. Government efforts at remediation were set in motion, but countering these scenes of terror in the emotional memory of the larger, European French community will not automatically ensue.

Perhaps the conflict that most closely parallels Northern Ireland is between Sunni and Shia Islam. While organizationally, Shia Islam more closely resembles Byzantine Catholicism (Eastern Rite) with its hierarchical structuring and orthodoxies, in fact it is Sunni Islam that is parallel with the Catholic Church in claiming to be the original Islam as Catholicism is original Christianity. But also parallel is the schism based on differences in hierarchical succession. Each claims to be the "true faith" and rejects the legitimacy of the changes in ritual and theology asserted by the later incarnation. Perhaps because Sunni Islam had historical primacy, its adherents were politically dominant in many of the places where Islam took hold and dominance. Shia Islam, perhaps because of its origins in contest for succession legitimacy, its self-image as the victim of discrimination and degradation, and its practices of dramatic self-flagellation in the martyrdom ethic appealed to the lower classes. Thus the socioeconomic distinctions and segregation in the Arab countries of the Middle East place Shia Muslims a step above Kurds—which is to say, next to the lowest caste.

In Lebanon, the Shia lived in the south, and in Beirut, they lived in the outskirts or shared the slums with the Palestinian camps. Significantly, their early political party was named *Amahl*, or Hope. The militant Hezbollah, which has become the dominant Shia party and a force with which all other parties must reckon, superseded them after the Israeli invasion and occupation of south Lebanon. They've laid claim to driving the Israelis out through their martyrdom strategy of suicide bombings. In Saudi Arabia, Shia attacks on the symbols of the House of Saud preceded the first Gulf War and have persisted even in the face of more virulent attacks by Al Qaeda. The contest is currently played out in bullets and blood in Iraq. The balance of power and population in post–Saddam Iraq has shifted to the Shia, and they've pursued Sunni and foreign Arab insurgents with a vengeance exceeding the British and American military forces. In both Iraq and Afghanistan, where the Iranian Islamic Republic Shia dominates, they have been making political inroads from their fortuitous geographic position. But the anger and vendetta between adherents to these two branches of Islam is fomenting and fueling a mini civil war in Iraq and alienation in Afghanistan in relation to the major Shia province, Herat.

Complicating the psychological dynamic is the social segregation and growing political enmity fostered through the extremist religious elements of both groups. Prolonged violence, during the reign of Saddam Hussein, fostered the divisions with threats of violence against the Shia population in the south—threats too often enacted. Then the violence of the Coalition invasion and occupation, with insurgencies of foreign terrorists combined with Sunni Saddamists in one region and the Shia Mehdi Army in the south, created the prolonged trauma that has culminated in xenophobia. Formerly mixed neighborhoods are rapidly emptying of one or the other sect, often under threat of deadly force. Entire Ministries have become segregated (most often Shia-dominated and exclusively employed). In Iraq it may yet destroy any possibility for a unified democratic Iraq to emerge from the rubble and trauma of years of fascistic rule and occupation. As happened in Northern Ireland, after the troubles started in

1974, Catholic families moved into segregated Catholic enclaves and Protestants left the neighborhoods of mixed housing. Fear of "the other" reversed the small inroads that had been made to break down the hundred-plus-year-old ghettos. In fact, as new housing replaced the old, the new enclaves were designed with walls enclosing them and narrow, very convoluted streets through them. Despite the fact that the houses themselves were "maisonettes" much more attractive than the old row houses and had central heating and indoor plumbing unlike their predecessors, the overall look was reminiscent of the Jewish ghettos of Poland. Residents said they felt much "safer" in these new enclaves and saw nothing ominous or inequitable about them. The several places in Belfast in which there had been mixed housing had been flashpoints. These were the neighborhoods in which sectarian killings and arson signaled the start of the "troubles."

The Psychodynamics of Hatred into Violence

Children and adolescents who have experienced primary or secondary trauma (through vicarious violence) experience both powerlessness and helplessness and perceive the violators as contemptuous of them and those in their identity group. These are the ingredients for truncation of development of moral judgment at the level of vendetta (Piaget, 1932).

Contrary to the hypotheses of those who advocate "preventive detention" and "preventive warfare," such violence instigates anger and motivation for retaliation. This occurs in civil wars, intercommunal intergenerational violence, as well as invasion and occupation. There are many examples, historical and contemporary.

In 1982 I entered the town of Damur, Lebanon, so closely on the heels of the Israeli Defense Forces that family laundry of fleeing Palestinians was still wet on the clotheslines and pans remained on the cookstoves. As I watched, multicolored trucks carrying Lebanese Christian families pulled into the town. Fathers stepping through the remains of "their" homes reiterated to their excited children how some years earlier Damur had been their ancestral village. As they told their children, who had been too young to remember the events of five years ago, in 1978, PLO militants had invaded Damur, killed and driven out residents whose roots in the town went back many generations. The men talked angrily about vengeance. That was in June 1982.

In November 1982, with my Sociology students from the American University of Beirut, I was in Sabra and Shatila interviewing Palestinian adult survivors of the then-recent massacre and testing the children as part of my ongoing research on children and violence. It was then I learned that the members of the Damur Brigade in the Phalange committed many of the murders and destruction. Some inhabitants of Shatila had, not long before, fled there from Damur.

From the Israeli perspective (at least from that of General Ariel Sharon who masterminded the invasion), this was a preemptive war to stop terrorist attacks on Israel by Palestinian guerrillas based in Lebanon. Further, it was intended to put an end to Katyusha rocket attacks on the border cities in northern Israel. In fact, it was a civil war exacerbated by the influx of Palestinians following Israel's Declaration of Independence and additional influx every time Israel won another victory over its Arab neighbors. The fractionation and polarization that had characterized Lebanon from the time of its independence from France had produced a caste-and-class system as well as a political identity formulated on confessional identity. In many parts of Lebanon, the Palestinians tipped the fragile balance of confessional groups because many, if not the majority, were Sunni Muslims and competing for space in the slum areas of the cities and the impoverished countryside with the Shia Lebanese. Several times Lebanese Shia attacked Palestinian enclaves and massacred hundreds, if not thousands. It is impossible to obtain accurate records of the deaths and not always possible to obtain records of the events themselves. But they illustrate the phenomenon of rivalry for scarce resources as the instigation for violence. In some ways this is also the phenomenon of fractionalization that is a critical part of the xenophobic reaction to trauma as threat and a history of victimization. There is no question but that the Palestinians comprised an out-group that was threatening to most, if not all, the Lebanese. In fact, in the delicate web of class, caste, and sectarian politics among the states in the Middle East, incursions of Palestinian refugees posed a problem from 1948 through the present.

While none of these nation-states existed as entities prior to 1918, in the 30 years that followed, they had developed institutions that supported the political economy of each based on the distinctive culture of the place. Palestinians already feeling threatened by Jewish nationhood and without the indigenous institutions that defined their own identity, as a group, resembled individual victims of PTSD. As the Palestine Liberation Organization evolved from guerrilla fighters into a complex structure with a core of militarism and a political economy, its political ideology resembled fascism. They had become for the Arab world the symbolic threat of destabilization (Sayigh, 1994).

Perhaps the first government to recognize this threat was the Jordanian Heshemite Kingdom. It was particularly difficult for Jordanians to distinguish themselves from Palestinians, but in Black September, when the Kingdom violently evicted PLO militants, they initiated a significant pattern. Most recently another variation of that pattern is evidenced in Iraq. Initially, under Saddam Hussein, 15,000 Palestinians were given special welcome and treatment. At the same time, they were not eligible for Iraqi citizenship. Their favored position raised animosity from the Shia population victimized by the minions of the Bathist government. The former have replaced the latter as the dominant political force and are viewing the Palestinian population, now grown to approximately 50,000, as the "foreign fighters in the insurgency." The special privileges have been removed and in many cases that includes their apartments and other personal effects.

Refugees/Immigrants/Migrants: The Threat of a Fifth Column

Fear of "the stranger" is exemplified in the Old Testament Book of Genesis in the story of the children of Israel in Egypt. During their sojourn, while times were good for Egypt, they were welcomed and provided for as promised by Pharaoh to Joseph. But then, we're told, times grew hard. There was a new Pharaoh, and they had many enemies and war threatened. The Israelites had become numerous and the Pharaoh's advisors warned him that in a time of war, they would join with Egypt's enemies and become a dangerous fifth column, or destabilizing factor, within the state. To diminish their numbers edicts were issued that all male children were to be killed at birth. But despite their being put to hard labor as slaves, the Israelites continued to multiply. Finally it was ordered that all male infants were to be drowned in the Nile. This story is ironically parallel with the plight of the contemporary Palestinians dispersed among other Arab states in the region.

After 9/11, the United States admitted fewer refugees from abroad and fewer students from Middle Eastern countries. Dynamic tension is generated between sustaining a free and open society as contrasted with security needs at a time when enemies of that kind of society exploit these values to violently terrorize the symbolic institutions and populace. This illustrates the dynamic of fear into hatred into xenophobia-driven violence. Not surprising then, that mass arrests, surveillance, denial of human rights and justice have become the manifestation of that contemporary fear and the face of xenophobia in the United States today.

A more sophisticated and contemporary version of the Pharaoh's dictum that all the baby boys of the Israelites be killed is the issuance of Removal Orders on immigrants who are found to have some irregularity in their INS proceedings. In many of these cases, the parent or parents of a child born in the United States is threatened with deportation. These children carry a psychological burden of uncertainty even when they are too young to understand the language of the threat hanging over their lives. Unless they can prove extraordinary hardship, one or both parents will have to depart.

The Neuropsychological Dynamics

Traumatic stress has both a physiological and emotional manifestation. The emotional disequalibrium of trauma is described in the *DSM–IV* under acute stress disorder as: "A subjective sense of numbing, detachment or absence of emotional responsiveness, a reduction in awareness of ... surroundings ... depersonalization or dissociative amnesia.... Following the event it is repeatedly experienced" (APA, 1994, pp. 424–430). The *DSM–IV* description continues by saying that the repetition of these symptoms causes significant distress with marked symptoms of anxiety and increased arousal. These symptoms interfere with the individual's pursuit of normal life activities. All of these emotional states have corollary physiological processes and, more specifically, brain activity that over time become corrosive and destructive (APA, 1994). In studies using imaging over a period of time, the kindling effect in the hypothalamus when these experiences or flashbacks occur ultimately results in measurable shrinkage of the brain matter.

During the period of the flashback, all of the psychological and physiological processes reenact with the same damaging effect, becoming an emotional habit. The antagonistic response to a reminiscent stimulus becomes as automatic as the agonistic reaction. There have been many instances of combat veterans experiencing their traumatic images shooting and killing someone who, for that second, is thus imaged.

In 1990 I was asked to examine a 15-year-old Vietnamese refugee boy who was about to be expelled from his Fairfax (Virginia) public high school because he had suddenly attacked a schoolmate with a knife. Especially puzzling was the fact that the boy he attacked was his best friend. Nguyen could not explain why he had done what he did, but there was to be a meeting of the school board to investigate and determine if his actions merited expulsion.

I talked with him about his life in Vietnam, his flight from the reeducation center, and his arrival at the refugee camp in Hong Kong. Any and all of these experiences were traumatic, stressful, and unfortunately, common, for an entire generation of Vietnamese children and youth. It was when we started getting into the details of his life in the camp that I began to recognize some of the connections—the iconographic triggers.

Among the many unaccompanied minors with little or no adult supervision, there was rivalry, anger, and fights over food. As Nguyen started talking about his experiences with peers/friends, his demeanor changed. He suddenly became enraged and then started crying nonstop. His English was insufficient to describe all the memories triggering his tears. Nguyen had been experiencing flashbacks that frightened him. Much of the time he was dissociating and unable to communicate.

Later, I tried to explain his (re)actions to the assembled board. I asked if any of them were combat veterans or had sons who were in combat. Then I asked if any of them had seen *The Deer Hunter*, a film about returned vets who had a difficult time reassimilating in civilian society. The solution for Nguyen was that, besides therapy, his guardians needed to keep all weapons away from him, and he agreed that for his own safety, he would welcome a daily search at home and at school.

Nguyen's PTSD was manifested in his inability to be close to anyone, not an unusual reaction. From that to the paranoia that presages xenophobia is not a very distant stretch. Nguyen was more afraid of people toward whom he felt close affection than of strangers. He felt betrayed by so many close relations. It wouldn't have been surprising if Nguyen had many traumatic encounters with American soldiers that he would have reacted violently to the sudden image of an American face and, in his imagination, dressed that face in a uniform holding a gun at him. It is easier to identify "the other" by race and generalize.

A couple of decades earlier I was asked to be an expert witness in a case in Los Angeles in which a young Mexican-American was on trial for shooting a policeman. The pleading was "diminished capacity." He was neither mentally retarded or mentally ill. However, he was suffering severe posttraumatic stress disorder

(PTSD) consequent to the childhood trauma he endured when uniformed *Migra* (INS police) removed his parents from their home, leaving himself and his six siblings shocked, crying, and unattended by any adult. It would be the better part of a year before their parents were able to return. Added to that trauma were episodic scenes of police shoot-outs in the "hood." When confronted by the uniformed man with his gun drawn, he lunged for the figure, grabbed the gun, and shot him. There is no question that the young man acted in perceived self-defense, but the critical issue is his dissociative state when he was reexperiencing the *Migra* on the doorstep, guns drawn, taking his parents away. Uniforms contraposed with traumatic events instigate stereotypic images or icons coded in the brain as a we/they trauma.

During the late 1960s, antiwar protests swept the campuses of universities all over the United States. Police and military reservists were often called to restore order. At Kent State, students were killed by young reservists in uniform who were ordered to establish order, and viewed their age peers, who tried to put flowers into their gun barrels, as dangerous subversives (Davies, 1973). During this period, classes at California State Universities were brought to a halt and students flooded the open campuses while helicopters hovered overhead and uniformed riot police entered the grounds. After one such day at two Cal State campuses, I went to Pasadena City College to teach a night school class on personality adjustment. About 10 minutes into my lecture, a uniformed, helmeted policeman in boots and gun holster entered. I stood transfixed and the students turned in their seats. The only sound in the classroom was made by his removal of the helmet and seating himself at a desk. We stared at him as he transformed into another student, known to all of us as "Jack." We had moved from fear into recognition—instead of hatred into violence. And that was a lesson in how to interrupt the cycle. Of course, that rarely happens when the we/they dichotomy is perpetuated through violence into stereotypes. These icons that form in the hippocampus stimulate the neural pathways conditioned to respond in the cerebral cortex. That response, not automatic but chosen from a limited repertoire depending on the individual's interpretation of this perceived "other," can be either benign or violent, depending on the associations or icons it evokes (Arnold, 1984).

An Antidote to Xenophobia

It is overly simplistic to suggest that the society that welcomes and integrates the stranger into it does not become xenophobic. There are always and probably will always be in-groups and out-groups, natives and exotics in every social system. But just as the traumatized individual requires treatment to once again see himself or herself as a capable, strong, and self-sufficient survivor instead of a victim, so also the message for the subject society must be one of strength through survival rather than continuing submission through vendetta. Psychologically, the victimizer is continuing to subjugate the victim so long as that individual is limited by the terms of that relationship. Only the individual or society that views itself as the helpless prey of an unreasonable force inherently different from the self will be afraid of that difference, hate the different, and take up violence in self-defense.

Some of the antidotes to this kind of social illness have been incorporated into the Good Friday Accords in Northern Ireland, and others have been attempted in the Truth and Justice Commission proceedings in South Africa. These procedures are intended to provide either a financial or emotional recompense. In Northern Ireland, persons who were direct victims of interrogation torture, detention without trial, wounded, or survivors of those killed by British forces are provided counseling as well as financial damages. In South Africa, those who committed violence, whether government or insurgent, admit and describe the incidents in which they were culpable and show remorse. For some of the survivors, this procedure has been, if not satisfying, able to at least mark an end to their immediate grief. Most important, however, to prevent the unresolved traumatic fear of "the other," the victim must feel "in control." The Truth and Justice proceedings are most successful when the victimizer asks forgiveness from the victim and the victim is then "empowered" to forgive. Ordinary criminal court proceedings cannot operate on these terms, but every so often, a traumatized close relative of a murder victim is asked for forgiveness by the perpetrator.

On the societal or sociopolitical level, policies of impunity are ineffective, and ultimately, corrosive. A major dilemma is racial profiling. In a xenophobic society this practice becomes a matter of course. In a society in which terrorism has become the focus of security as opposed to an external enemy, this is the obvious expression of the fear that becomes endemic. Racial profiling is a grievous offense against civil rights under law, the foundation of liberal democracy.

An Intervention

In figure 12.1, mentioned earlier in this chapter, the schemata of a formal nation-state ("society") indicates how the institutions of that society evolve from the indigenous culture and are supported through the economic system and based in the legal system. The central institution in the society is the family. As the child grows up in this primary group, he or she is impinged by all of the other institutions of the society. The place of the family in relation to those institutions can determine whether the growing child feels an integral part of the society, or marginal or alien to it. If the legal system is foreign to the cultural bases of that family, then the institutions thus established will not be supportive. They will be alienating and exclude this "foreigner."

In a time of trauma and violence, children growing up outside of the supportive institutions who cannot identify themselves as achievers in those institutions may take to the barricades. They are ready recruits to lives of terrorism and criminality and hopelessly stuck in the mire of a we/they vendetta morality. In an earlier work (Fields, 1973), I entitled a chapter, "Bringing an Antidote to the Poison." The program I began with some students from California in the summer of 1972 and continued with students from Clark in 1973–1974 has been carried on in part by local organizations in Belfast and Derry on and off with some interesting results. Finally, it was adopted as part of the healing process incorporated into the Good Friday Accords. By that time, its origins were obscured in the haze of many efforts during 30 years of conflict resolution and mental health programs. It took awhile for mental health professionals in the United Kingdom and especially in Northern Ireland to recognize that there were malign consequences of the violence. Their immediate response was denial. As happened to the returning veterans of the Vietnam War and now to the returning military from Iraq and Afghanistan, denial is the defense mechanism through which the individual (and the larger society) attempts to turn away from pain. But denial doesn't heal the wounds, and again in 2001, after the 9/11 attacks, it was clear that xenophobia concomitant with PTSD would be a looming shadow over recovery. The American Psychological Association ran a Web site "Coping with Terrorism," which I authored:

> Xenophobia–fear or hatred of strangers or foreigners—can be heightened under a terrorist threat and can become a social and psychological danger. The fear generated by terrorism can be exacerbated by a population's diversity if there is distrust between groups, categories and classification of citizens. People need to recognize that diversity in a population is often an opportunity for unity and strength. (2007, 4)

In brief, the remedy, both individual and societal, is based in feelings of efficacy or empowerment. A similar dynamic obtains in the Truth and Justice Commissions. When the frightened or victimized individual is empowered by the victimizer's plea for forgiveness, humanization of the relationship becomes possible. When PTSD treatment is directed to helping the victim get in control of his or her fear and anger and recognize what he or she has done to survive and to help others, there is no longer a need for defensive denial and there is empowerment.

This is crucial in cases of human-made disaster, but it can also prevail in natural disasters, as we have all witnessed in the Katrina trauma. Natural forces were out of control and wreaked havoc, death, and destruction. But the failure of support and rescue perceived as the rejection of the poor black population by the agencies of the U.S. government, and the iconographic images of black survivors confronted by armed police preventing their escape into Jefferson Parish contributed to the kind of xenophobia that haunts generations of disadvantaged minority groups in the United States.

It is absolutely essential that mental health and social service programs as well as educational institutions dealing with diverse populations in a time or place of trauma and stress recognize and provide for equity in services, outreach, and quality of treatment. Recognizing that there are differences in health care needs that are frequently consistent with social and economic advantage can facilitate appropriate planning strategies.

Many examples of this lack of sensitivity were evidenced in the aftermath of 9/11 and the anthrax incidents that followed. When the powdery poison was discovered in mail delivered to the Capitol, medical treatment was immediately provided for all workers who may have been in contact with the toxin. Mental health services were also immediately available through onsite employee assistance program counselors and immediate referrals to a list of qualified mental health professionals. The buildings affected were totally detoxified at great expense. At the same time, two postal workers at the Brentwood Postal Service headquarters became ill. They died, not having received appropriate timely treatment for their anthrax poisoning. The decontamination of the Brentwood facility resulted in putting many long-term employees out of their jobs. They lived locally, many married to each other, or in whole families employed at that facility. They were scheduled for moves to Philadelphia, Baltimore, Georgia, Florida, and other distant places. Some had never traveled far outside of the District of Columbia. Their assignments took no notice of their family circumstances. This placed another traumatic stress on an already traumatized population, many of whom had relatives who had been hurt or killed at the Pentagon. They were suffering major stress but were referred by their EAP telephone service for brief treatment rather than regular mental health services from psychologists and psychiatrists with special credentials in PTSD. In fact, the kind of EAP the U.S. Postal Service had contracted for its employees (with Magellan) did not allow them to continue to see the therapist initially consulted but rather to be referred elsewhere and preferably to community public health facilities!

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INDEX

Abortion, 153–154
Acceptance state of grief, 200
Acute stress disorder (ASD), 2, 68, 87–88, 278, 285, 298
Acute stress reactions, 234
Addams, Jane, 147
Addiction, to violence, 151–52, 156
Adjustment disorder, 289–290
Adolescents: restoring the flow of development to in war, 218–19; special educational techniques for learning difficulties during war, 219–21; understanding of death, 202; World Trade Center attack survey of, 7, 8
Adults, World Trade Center attack survey of, 7
Advanced Threat Assessment and Management Academy (Gavin de Becker & Associates), 140, 144
Affective inhibition, 234
Afghanistan, returning soldiers from, 302
Afrikaner culture, 293. *See also* South Africa example of xenophobia
AFSCME. *See* American Federation of State, County, and Municipal Employees
Aggravated assault, 101
Aggression, dimensions of, 99
Agitation, 234
Alfred P. Murrah Federal Building bombing in Oklahoma City, 4, 97
Allport, Gordon, 293
Al Qaeda terrorist conglomerate, 1, 292–93, 295; kidnapping policy, 61. *See also* World Trade Center attack (Sept. 11, 2001)
Al-Zarqawi, Abu Musab, 63
American Federation of State, County, and Municipal Employees (AFSCME): Fact Sheet, 112; statistics on workplace violence, 102
American Red Cross, 10, 14, 251; and September 11 Fund's joint long-term care program, 11–12
Anger management, 122
Anger/protest stage of grief, 200
Anthrax incidents, 303
Anthropological genesis of state, 291, 301
Anti-Semitism, 292
Antisocial personality disorder, 104
Antistalking laws, 126–29
Antiwar protests (1960s), 300
Anxiety disorder, 75

Arousal, heightened, 111, 113
ASD. *See* Acute stress disorder
Asphyxiation, as torture, 36
Association of Psychologists of Madrid (Colegio Oficial de Psicólogos de Madrid, COP-M), 163–91. *See also* Madrid terrorist attack (2004)
Association of Threat Assessment Professionals, 144
Atahuallpa, kidnapped emperor of the Incas, 62
Attachment and Loss (Bowlby), 200
Attachment disorder, 290
Attribution theory, 64
Authoritarian personality, 105
Automatic behavior, 234
Avoidance: of talking about combat, 156–57; of traumatic event, 113, 149

Bardo, Robert, 125
Bargaining stage of grief, 200
Bathist government, 297
Battered women's movement, 127
Beatings, 35
Behavior therapy: for fire victims, 248; for torture victims, 48
Beheadings, 63
Bereavement, 6
Best practices: children and war and, 213–15; evidence informed, 13–14, 24–27; for fire victims, 246–50; for online psychotrauma intervention, 266–68; for stalking victims, 143–44; for torture victims, 47–52
Biochemical threats, 4
Biochemistry, trauma and, 151–53
Biopsychosocial resources, 5, 17
Bjork stalking case, 130–31
Black September, 297
Blindfold's Eyes: My Journey from Torture to Truth (Ortiz), 33
Blood sports, 152
Boer War, 293
Bounded recovery phenomenon, 4
Brutality, police trauma and, 286
Bureau of Justice Statistics, workplace violence and, 102
Burnings, torture and, 36, 233
Burns, 238, 246
Bush, George W., 33

Caplan, Gerald, 239
Captivity, experiencing, 64–74. *See also* Kidnap
Case histories of tsunami victims (online, www.tisei.org), 259–66; a day of reflection, 264–65; emotional impact, 261–62; evaluation of local service and organizations, 264; experiences on December 26, 2004, 259–61; memorial archive, 266; response to a book about the year of the tsunami, 265–66; self-expression and self-understanding, 262–64
Case studies: first responders, 12, 273–75; flashbacks, 299; holistic approach to treating torture victims, 44; intermediate intervention for 9/11 victim, 18–20; justified police shooting, 281–82; kidnap, 71, 73–74; long-term treatment for 9/11 victim, 21–23; loss due to fire, 235; nonverbal treatments of a torture victim, 46; peer counseling (first responders), 281; psychological effects of war on children, 195–97, 202–4, 207–8; psychological first aid (PFA) for 9/11 victim (early intervention), 15–17; stalking, 130–31; workplace violence, 105–10
CBT. *See* Cognitive behavior therapy
Child friendly spaces, war and, 215
Children: death of due to fire, 237; kidnapping effects and, 80–82; World Trade Center attack survey of, 7, 8
Children and war, 195–229; coping with loss, grief, and mourning, 221; defining childhood, 197–98; educational techniques for learning difficulties, 219–21; exposure to extreme violence and, 204–8; key facts about, 197; loss and, 198–204; psychosocial development and, 198, 213–21; PTSD and, 208–11; risk and resilience and, 211–12; separated children, 202; specialized psychological care, 222–25; unaccompanied children, 202;

understanding and response to death by age, 201–2

Child soldiers, 195–197, 205

CISD. *See* Critical Incident Stress Debriefing

CISM. *See* Critical Incident Stress Management

CMB. *See* Crisis Management Briefings

Coconut Grove fire study (Lindemann), 239

Cognitive behavioral therapies (CBT): for fire victims, 248; for workplace violence, 116–17

Cognitive/exposure therapy, 21

Cognitive inhibition, 234

Cognitive therapy (CT), 13; for torture victims, 48

Colegio Oficial de Psicólogos de Madrid. *See* Association of Psychologists of Madrid (COP-M)

Collectivist culture, 52

Color-coding threat system, 22

Combatants, police as, 281–83

Combat high, 151–12

Combat veterans, trauma and, 147–62, 299

Community-based crisis support programs, 250–51

Complicated grief, 6

Concentration problems, 149

Confirmation bias, 134, 141

Conflict resolution, 122, 290, 302

Contingency planning, 118

Coping behaviors, maladaptive, 16

Coping mechanisms, 122, 211–12

"Coping with Terrorism" Web site (Fields), 302

COP-M. *See* Association of Psychologists of Madrid (Colegio Oficial de Psicólogos de Madrid)

Corruption, police trauma and, 286

Costs: of counseling first responders, 287; of torture, 55–56; of worker violence, 101–2

Counselors, for World Trade Center (2001) victims, 10–12

Credible threat, 129

Criminal intent, 100

Crisis Counseling Assistance and Training Program, 11

Crisis intervention: for fires, 243–46; goals of, 243; origin of, 239; seven principles of, 244; for workplace violence, 107, 112, 115

Crisis Management Briefings (CMB), 239–40

Crisis Negotiation Unit (CIRG), 98

Crisis reactions, to fires, 233–35

Crisis support services, 251. *See also* Psychological first aid (PFA)

Critical Incident Response Group (FBI), 98

Critical Incident Stress Debriefing (CISD), 13, 84, 243, 249–50; first responders and, 273–74, 276–77, 283–86; number of sessions for effectiveness, 276–77; vs. CISM, 277–76

Critical Incident Stress Management (CISM), 240–43, 249–51; first responders and, 276–79, 283, 286; origin of, 286; vs. CISD, 277–78

CT. *See* Cognitive therapy

Cultural considerations: children and war and, 224–25; torture victims and, 44–45, 51–52

Culture: in an organization, 109; healing role of, 221

Customer/client violence, 100

Cutting (torture), 36

Dangerousness, stalking and, 138

Dealing with Workplace Violence: A Guide for Agency Planners (OPM), 118–20

Death, children's understanding of by age, 201–2

Death penalty, 153–54, 159

Deaths: of children due to war, 197; tsunami victims, 256

de Becker, Gavin, 125–26, 139–40

Decentralized classrooms, for war-affected children, 219

Declaration of Tokyo. *See* World Medical Association

Decompensation, 49

Degradation, torture and, 37

Delayed reactions, to traumatic stress, 148, 209
Denial of trauma, 206
Denial stage of grief, 200
Depersonalization, 278
Depression: stage of grief, 200; torture and, 40, 42–43
Deprivation, torture and, 38–39
Deviant behavior, categories of, 99
Diagnostic and Statistical Manual of Mental Disorders (DSM), 274; acute stress disorder, 278; anxiety disorder, 75; definition of posttraumatic stress disorder (PTSD), 2, 111, 122, 148, 278, 289
Disaster mental health workers (DMH), 10–12
Disasters: event characteristics of, 3–5: fire-related, 231–32, 238–40; human-caused vs. natural, 3; life cycle of, 5; psychological reactions to, 5–7; risk and resilience factors to, 9–10. *See also* Tsunami International Survey on Emotional Impact; World Trade Center attack (Sept. 11, 2001)
Disintegration, 150
Displacement, 286
Distress, 5
DMH. *See* Disaster mental health workers
Domestic violence: questions for determining, 135–36: San Diego Family Justice Center and, 144; in the workplace, 108–9. *See also* Stalking
Domestic violence policies, workplace and, 121
Do no harm, 223
Dreams, 149–51
DSM. See Diagnostic and Statistical Manual of Mental Disorders
Dutch creation of Tsunami International Survey on Emotional Impact (TISEI) Web site, 256–57

Early interventions, for World Trade Center (9/11) victims, 13–17
ECHOESONLINE, 257
Electrical torture, 36
Embedded messages, 41
EMDR. *See* Eye movement desensitization and reprocessing
Escape from Freedom (Fromm), 292
Evidence informed best practices, for World Trade Center victims (9/11), 13–14, 24–27
Evil Cradling, An (Keenan), 73
Examination, Diagnosis, and Treatment/prescription for stalking, 132–33
Exposure therapy, 21–23; for torture victims, 48
Expressive activities, 220
Extreme violence, exposure of children to in war, 204–8
Eye movement desensitization and reprocessing (EMDR); for fire victims, 248; for killing as trauma, 155

Falanga (bastinade) (beatings to the soles of feet), 35, 44
False statements and confessions, torture and, 37
Families, 291, 301; kidnap and, 74–82; torture and, 55; war and, 214
FBI. *See* Federal Bureau of Investigation
Fear management, 142
Federal Bureau of Investigation (FBI), National Center for the Analysis of Violent Crime (NCAVC), 98
FEMA programs, 11
Fight or flight response, 3, 141
Firefighters, reactions to fire, 240–43
Fires, 231–54; after the critical incident (firefighters), 242; arsonists, 233; before the critical incident (firefighters), 240; best practices in recovery from trauma, 246–50; crisis intervention, 243–46; Critical Incident Stress Debriefing (CISD) and, 243, 249–50; Critical Incident Stress Management (CISM) and, 240–43, 249–50; during the critical incident (firefighters), 241–42; fire-setting behavior, 232–33; human attraction to fire, 232–33; large-scale disasters, 238–40; losses due to, 235–38; physical injuries due to, 238; postcrisis reactions to, 234–35; prolonged crisis reaction

to, 235; public policy recommendations, 250–51; recovery from trauma, 246–50; stress and crisis reactions to, 233–35; suicide and, 233; torture/murder and, 233
Fire-setting behaviors, 232–33
First responders, 1, 5, 8, 10, 273–88; 1993 World Trade Center bombing and, 283–86; Critical Incident Stress Debriefing (CISD) and, 273–74, 276–77, 283–86; Critical Incident Stress Management (CISM) and, 276–79, 283, 286; dual role of, 284–85; ongoing psychological support systems recommendation for, 286–87; police first responders, 273–75, 280–83; PTSD and, 274, 278–79, 285; stress overload and, 279; unique combatant role of police, 281–83
Flashbacks, 41, 155, 156, 160, 206, 298–99
Flooding technique (Prolonged Exposure), 155–56
Flow of development, restoring for children of war, 214–19. *See also* Psychosocial development
Forest fires, 239
Four Cs of Fear Management, 142
French-Algerian example of xenophobia, 294

GAD. *See* Generalized anxiety disorder
Gavin de Becker & Associates, Advanced Threat Assessment and Management Academy, 140, 144
Generalized anxiety disorder (GAD), 7, 8
Genocide, 210
Good Friday Peace Accords (Northern Ireland), 291, 301, 302
Great New Wonderful, The (film), 3
Grief, 6; helping children to cope with, 221; stages of, 200
Ground Zero. *See* World Trade Center attack (Sept. 11, 2001)
Group therapy, 13; for first responders, 283–85; for torture victims, 48–49; for workplace violence, 107–8, 117
Growth, posttraumatic, 6–7
Guilt: dreams and, 150; fires and, 236–37; survivor, 19–20; torture and, 37, 40

Hargrove, Tom, 68
Health and Human Services Office of Refugee Resettlement, estimated number of torture victims in U.S, 34
Hezbollah, 295
Hijabs, 294
Hitler, Adolf, 292, 293–94
HIV/AIDS awareness and prevention, 220
Homicides: fire and, 233; workplace, 101
Hostage/Barricade System database (FBI), 72
Hostages. *See* Kidnap
Human-caused disasters, vs. natural, 3, 64
"Human Nature and Peace: A Statement by Psychologists," 160
Humiliation, torture and, 37
Hurricane Katrina example of xenophobia, 302
Hybrid kidnappers, 63
Hygiene deprivation, 39

ICD-10 phobic anxiety disorders (WHO), 75, 148
IFEMA. *See* Madrid Convention Center
Individualistic culture, 52
Infants: ensuring the development and survival of in war, 214–15; understanding of death, 201
Information, managing distress and, 244–45
Inhibition, 138, 234
Injuries, of children due to war, 197
Injury Prevention Research Center (University of Iowa), 101
Insurgents, in Iraq, 297
Intermediate interventions, for World Trade Center (9/11) victims, 17–20
International Critical Incident Stress Foundation, 251
Internet psychotrauma intervention. *See* Tsunami International Survey on Emotional Impact
Internet World Stats (Miniwatts Marketing Group), 267

Interpreters, torture victim therapy and, 52–53
Interrogation techniques, 33
Intrusive imagery (dreams), 149–51
Iranian Islamic Republic Shia, 295
Iraq: returning soldiers from, 302; Sunni/Shia conflict in, 295
Israeli/Palestinian conflict, 292–93, 296–97
Istanbul Protocol, 40

Jobs, at-risk for violence, 102–3
John Wayne Syndrome, 72
Jordanian Heshemite Kingdom, 297
Justified police shooting, 281–83

K&R. *See* Kidnap for ransom (K&R) and security industry
Kent State student killings, 300
Kidnap, 61–95; advice for hostages during detainment, 65–68; assessment and treatment, 87–89; background and context, 61–64; children and, 80–82; clinician considerations, 89–90; compared to murder, 62; compared to other types of trauma, 69; early captivity (hours to days), 71; estimated number per year, 63; family experience, 74–82; hybrid (for funding political causes), 63; intermediate captivity (weeks to months), 71–72; Latin America as dominant force, 62–64; long-term captivity (months to years), 72–73; negotiation and, 70; planning for release of hostage, 82–84; policy considerations, 90–91; politically motivated, 63; postrelease, 84–87; proof of life and, 70–71; psychological effects of, 68–74; PTSD and, 68–70; for ransom, 63; rescue attempt survival chances, 67–68; statistics on releases of victims, 62; typical conditions of hostages, 64–65; Kidnap "ethic," 63
Kidnap for ransom (K&R) and security industry, 62, 63
"Killer instinct" myth, 160–61
Killing as trauma, 147–62; addiction to trauma and, 151–52; attitudes on killing, 153–55; avoiding talking about the killing, 156–57; biological factors and, 151–53; intrusive imagery (dreams) and, 149–51; National Vietnam Veterans Readjustment Study (NVVRS) and, 147–50, 159; pattern differences in those who kill, 148–50; perpetration-induced stress (PITS), 147, 158–60; public policy and, 158–59; therapy and, 155–58; violence prevention and, 159–60
Killing work, 159. *See also* Killing as trauma

Landmines, 195, 197
LAPD Threat Management Unit, 126–28, 144
Latin America, as dominant force in kidnapping industry, 62–64
Learning difficulties, special educational techniques for during war, 219–21
Lebanon, conflict in, 296–97
Lindemann, Eric, 239
Local Urgent Attention Service (SAMUR), 165–66, 168, 173, 176
Long-term treatment: fires and, 236; for first responders, 277–78, 286; for workplace violence victims, 112; for World Trade Center (9/11) victims, 11–15, 20–23
Lopez, Richard, 130–31
Loss: children and war and, 198–204; due to fires, 235–38; helping children to cope with, 221; stages of, 17; tangible and intangible, 6

Madrid-112 Emergency Center, 165, 167–68, 180–82
Madrid Convention Center (IFEMA), 168–80
Madrid Medical Emergency Service (SUMMA), 164–68, 170, 180, 182, 184–90
Madrid terrorist attack (2004), 163–93; casualties, 163; health care structure in Spain, 164; interventions at funeral homes, 189–90; interventions with emergency professionals, 187–89;

Madrid Convention Center (IFEMA) delivery setting, 168–80; number of emergency interventions, 163–64; organizational conditions for the psychological intervention, 165–67; psychological home visits from Madrid Medical Emergency Service (SUMMA), 184–87; psychological intervention in the main settings, 171–90; telephone intervention by Madrid Medical Emergency Service (SUMMA) and Madrid-112 Emergency Center, 180–84
Major depressive disorder (MDD), 8
Manipulatives, 220
Marriage, kidnapping effects on, 79–80
Maslow's hierarchy of needs, 3
Mass casualty catastrophes: pre-September 11 psychological services and support for, 1–2. *See also* World Trade Center attack (Sept. 11, 2001)
MDD. *See* Major depressive disorder
Media, disasters and, 26
Medical care deprivation, 39
Mein Kampf (Hitler), 292
Memory problems, 149, 160
Memory repression, 42
Migra (Mexican INS police), 300
Military Commissions Act (2006), 33
Military personnel, similarity to hostage victims, 75–76
Mirror neurons, 152–53
Mitchell, Jeffrey, 13
Mitchell, Tyrone, 126
Mixed housing, 295–96
Mock executions, 37
"Mood Liability Associated Violence" (Silva, Derecho, Leong, Weinstock, and Ferrari), 159
Motor inhibition, 234
Mourning, 6; children and, 221

National Center for Posttraumatic Stress Disorder, 113, 117
National Center for the Analysis of Violent Crime (NCAVC) symposium, 118
National Child Traumatic Stress Network and National Center for PTSD, 14
National Crime Victimization Survey, 101, 102
National Institute of Mental Health (NIMH), 14
National Institute of Occupational Safety and Health (NIOSH), definition of workplace violence, 99
National Organization for Victim's Assistance, 251
National security, torture policy and, 33–34, 56
National Socialist Party, 292. *See also* Nazi Germany
National Stalking Resource Center, 131–32
National Vietnam Veterans Readjustment Study (NVVRS), 147–50
Natural disasters, vs. human-caused, 3, 64
Natural recovery, 14
Nazi Germany, xenophobia and, 292–294
NCAVC. *See* National Center for the Analysis of Violent Crime
Near drowning, as torture, 36
Negative affect, 78
Nightmares, 41, 206, 207
NIMH. *See* National Institute of Mental Health
NIOSH. *See* National Institute of Occupational Safety and Health
Nonfatal assaults, in the workplace, 101
Nontraditional therapies, 248–49
Nonverbal techniques, for torture victims, 50
Northern Ireland, xenophobia and, 290–91, 295–96, 301, 302
Nuclear threats, 4
Numbness, 234
Nutritional deprivation, 38
NVVRS. *See* National Vietnam Veterans Readjustment Study

Occupational Safety and Health Administration (OSHA), workplace violence and, 99, 103

Office of Personnel Management (OPM), *Dealing with Workplace Violence: A Guide for Agency Planners*, 118–20
One-to-one attention, 219–20
Online psychotrauma intervention. *See* Tsunami International Survey on Emotional Impact (TISEI)
OPM. *See* Office of Personnel Management
Orange Free State, 293
Orange Parades, 291
OSHA. *See* Occupational Safety and Health Administration

Pacific Tsunami Warning Center, 255
País Libre (Free Country) Foundation, 75
Palestine Liberation Organization (PLO), 296–97
Palestinian/Israeli conflict, 292–93, 296–97
Panic, 234
Panic disorder, 8
Peer counseling, 280–81, 285, 287
Perpetration-induced traumatic stress (PITS), 147, 155, 158, 160. *See also* Killing as trauma
Personal relationships, violence and, 100
PFA. *See* Psychological first aid
Pharmacotherapy, for fire victims, 248
Physical symptoms, of trauma, 111
Physical torture, 35–36
PINS. *See* Pre-incident Indicators
PITS. *See* Perpetration-induced stress
Pizarro, Francisco, conquistador who kidnapped Inca emperor Atahuallpa, 62
PLO. *See* Palestine Liberation Organization
Police officers: brutality and corruption linked to trauma, 286; as first responders, 273–75, 280–83; killing in the line of duty, 154–55; unique role as combatants, 281–83
Policy considerations: for building online communities, 268–69; for fire victims, 250–51; kidnap treatment programs and, 90–91; killing as trauma and, 158–59; for police psychological support, 283, 286–87; torture treatment programs and, 53–55; workplace violence and, 120–21
Political violence, 3
Port Authority of New York and New Jersey, 283–84
Positional torture, 36
Posttraumatic growth, 6–7
Posttraumatic stress (PTS), 209
Posttraumatic stress disorder (PTSD): children and war and, 208–11; combat veterans and, 147–48, 151, 154–55, 159; concurrent disorders, 7; duration of disturbance (acute, chronic, delayed onset), 112; estimated statistics, 276; fires and, 238, 239; first responders and, 274, 278–79, 285; introduction of (*DSM*), 2; kidnapped victims and, 68–70, 75, 87–88; research on, 113; torture and, 40–41; workplace violence and, 111–14. *See also* Perpetration-induced traumatic stress (PITS); Xenophobia, as consequence of posttraumatic stress disorder (PTSD)
Preemptive war, 296–97
Pre-incident Indicators (PINS), 133
Prejudice, 290; defined, 293
Prejudiced personality, 293–94
Preparedness, for disasters, 26–27, 118
Primary victims, 103
Project Liberty, 11
Prolonged crisis reactions, 235
Prolonged Exposure (flooding technique), 155–56
Proof of life, 70–71
Proof of Life (film), 68
Propaganda ploy, 153–54
Prosecuting stalkers, 132
Psychiatric Emergency Coordinating Committee (Los Angeles County), 126
Psychoeducation: for disaster victims, 13–14, 17; for kidnap victims, 88–89; for torture victims, 49–50
Psychological first aid (PFA): fires and, 237–38, 243, 251; World Trade Center (9/11) victims and, 13–17, 21, 24–25
Psychological torture, 36–37
Psychological warfare, 2–3

Psychopharmacological therapy, 13, 155
Psychosocial development: children and war and, 213–21; defined, 198. *See also* Flow of development
PTS. *See* Posttraumatic stress
PTSD. *See* Posttraumatic stress disorder
Public figures, stalking of, 125–127, 130–31, 136–37
Purification rituals, 207

Racial profiling, 301
Ransom, 63. *See also* Kidnap
Rape, as torture, 37, 41–42. *See also* Sexual torture
Raphael, Beverly, 14
Reconnection, for torture victims, 46–47
Reconstruction, for torture victims, 46
Refugee Experience, The (Loughry and Ager), 211
Remote exposure, to disaster, 9
Reparations, 206–7
Research: challenges to effective, 25; for the treatment torture victims, 47
Resiliency factors, 9–10; children and war and, 210–12; torture victims and, 45
Restraining orders, 130, 133
Ripple effect, of disasters, 12
Risk factors, 9–10, 211–12

Saddam Hussein, 295, 297
Safety, stalking and, 140, 142–43
Salvation Army, 251
SAMUR. *See* Local Urgent Attention Service
San Diego Family Justice Center, 144
Schaeffer, Rebecca, murder of, 125, 126
School-aged children: restoring the flow of development to in war, 216–18; talking about difficult issues with, 218; understanding of death, 201–2
Screen and Treat, 20
Screening, for long-term treatment, 20–23
Secondary traumatization, 53, 76
Secondary victims, 103
Segregation, 293
Selye, Hans, 233
Sensory bombardment, 39, 45
Sensory deprivation, 38–39
Separated children, 202
September 11, 2001 terrorist attacks, 98, 119, 239; distinguishing elements from other mass casualty disasters, 3–5; lack of sensitivity after, 303; xenophobia in U.S. after, 298, 302–3. *See also* World Trade Center attack (Sept. 11, 2001)
Serbian/Kosovar conflict, 292
Sexual torture, 38. *See also* Rape
Sharon, Ariel, 296
Shia Mehdi Army, 295
Shia/Sunni conflict, 295, 297
SHRM. *See* Society for Human Resource Management
Simple assault, 101
Sleep deprivation, 38
Sleeping disturbances, 2, 40–42, 77–78
Socially approved violence. *See* Killing as trauma
Social support, 7; negative, 25
Society for Human Resource Management (SHRM), "White Paper: Workplace Violence," 102, 105
Sodom and Gomorrah example of xenophobia, 289
Somatization, 7
Some Other Rainbow (McCarthy and Morrell), 73
South Africa example of xenophobia, 293, 301
Spanish National Health Service, 164
Spiritual care workers, 10
Spiritual therapy, 155
Splitting, 206
Stalking, 125–46; antistalking laws, 126–29; background, 125–27; Best Medicine concepts, 143–44; Conference of Personal Managers and, 125–26; dangerousness and, 138; decision points and, 132; defined, 127–28; examination, diagnosis, prescription for, 132–33; identifying stalkers, 131–32; impact on the victim, 141–42; interpreting facts, 134–37; intervention, 138–41; LAPD Threat Management Unit (TMU) and, 126–28; Pre-Incident Indicators

(PINS), 133; preventing, 137–38; recommendations for, 144–45; risk assessment and, 130–31; safety and, 142–43; stalker's viewpoint, 129–30; victim's fear and, 140–41; violence as a process, 131; vulnerability measurement, 143. *See also* Domestic violence
Stereotypes, 300
Stockdale, James, 73
Stockholm Syndrome, 72
Stress management strategies, 122
Stress overload, 279
Substance abuse: after World Trade Center attack, 7; violence in the workplace and, 104
Suicidal thoughts, 150
Suicide, by fire, 233
SUMMA. *See* Madrid Medical Emergency Service
Sunni Saddamists, 295, 297
Sunni/Shia conflict, 295, 297
Survivor guilt, 19–20
Suspension torture, 36
Symbolic activities, 220
Systemic therapy, 13

Taboos, violating as form of torture, 37
Talk therapy, for soldiers, 156–57
Teléfono (beatings to ears), 35
Temporary Restraining Order (TRO), 130
Terrorism: Alfred P. Murrah Federal Building bombing in Oklahoma City, 4, 97; Algerian attacks in France, 294; defined, 3; psychological consequences of, 2–3; September 11, 2001 attacks, 1–31. *See also* World Trade Center attack (Feb. 1993); World Trade Center attack (Sept.11, 2001)
Tertiary victims, 103
Testimony method (trauma story), for torture victims, 47–48
TFT. *See* Thought field therapy
Thought field therapy (TFT), for fire victims, 249
Threats of death (torture), 37
Tipping Point, 127
TIR. *See* Trauma incident reduction
TISEI. *See* Tsunami International Survey on Emotional Impact
Toddlers, understanding of death, 201
Torture, 33–59; costs to society, 55; estimated number of victims, 34; families and, 43, 55; fire and, 233; generational impact of, 55; goal of, 33; Military Commissions Act (2006, redefining torture), 33; physical torture, 35–36; physiological sequelae, 39–40; prevalence of, 33; psychological sequelae, 40–43; psychological torture, 36–37; refugees as victims of, 34; sexual torture, 37–38; through deprivation, 38–39; "torture sport", 35–36; United Nations definition of, 34; victims of, 34–35; war on terror and, 33–34, 56; World Medical Association's (Declaration of Tokyo) definition of, 34
Torture, treatment for, 43–54; addressing the survivor's urgent needs, 44; behavioral therapy, 48; cognitive therapy, 48; commonalities in different treatment approaches, 50–51; cultural considerations and, 44–45, 51–52; establishing safety, 43–44; group therapy, 48–49; holistic care approach example, 44; interpreters and, 52–53; nonverbal techniques, 50; pace of, 45–46; policy considerations for government sector, 53–54; policy considerations for medical and mental health professionals, 54–55; psychodynamic therapy, 49–50; psychoeducation, 49; reconnection and, 46–47; reconstruction and, 46; survivor's resilience and, 45; testimony method, 47–48
Trauma and Recovery (Herman), 43, 46–47
Trauma counseling, for workplace violence, 115–16
Trauma incident reduction (TIR), for fire victims, 248–49
Traumatic loss, 6
Traumatic stress, 9/11 impact, 23–24
TRO. *See* Temporary Restraining Order
Truth and Justice Commission (South Africa), 301, 302

Tsunami International Survey on Emotional Impact (TISEI) Web site (www.tisei.org), 255–71; background information, 257–58; casualties of the tsunami, 256; course of the tsunami, 255; a day of reflection, 264–65; deaths by country, 256; emotional impact experiences, 261–62; evaluation of local service and organizations, 264; experiences on December 26, 2004, 259–61; Internet penetration rates, 267–68; memorial archive, 266; reasons and goals for TISEI Web service, 258; recommendations for intervention and best practices, 266–68; recommendations for public policy, 268–69; response to a book about the year of the tsunami, 265–66; self-expression and self-understanding experiences, 262–64; visits to site, 266
Twin Towers. *See* World Trade Center attack (Sept.11, 2001)

Unaccompanied children, 202
UNICEF. *See* United Nations Children's Fund
United Nations Children's Fund (UNICEF): child friendly spaces, 215; defining childhood, 197–98
United Nations Convention Against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment, definition of torture, 34

Ventilation, 275–76
Verbal abuse, torture and, 37
Victims, types of, 103
Vietnamese refugees, 299
Vietnam veterans study. *See* National Vietnam Veterans Readjustment Study (NVVRS)
Vietnam veterans with PTSD, 276, 302
Violence, as a process, 131
Violence in the Workplace Symposium, 98
Violent workers, traits of, 103–10
Volunteers, disasters and, 27
Vulnerability measurement, 143

War on terror, torture and, 33–34
Waterboarding torture, 36
Water cell torture, 38–39
Web site for tsunami trauma (December 26, 2004). *See* Tsunami International Survey on Emotional Impact
"We/they" mentality. *See* Xenophobia, as a consequence of posttraumatic stress disorder (PTSD)
"White Paper: Workplace Violence" (Society for Human Resources Management), 102, 105
White Tribe (Afrikaners), 293
Worker-on-worker violence, 100
"Workplace Violence: Issues in Response" (U.S. Department of Justice), 98
Workplace violence, 97–124; at-risk jobs, 102–3; background, 97–98; behavioral symptoms of trauma, 112; categories of (FBI), 100; cognitive behavioral psychotherapy and, 116–17; cognitive systems of trauma, 112; costs of, 101–2; crisis intervention and trauma counseling, 115–16; culture of an organization and, 109; definitions of, 98–100; emotional problems caused by, 112; group interventions, 117; homicides, 101; impact on victims, 110–14; management interventions, 117–20; nonfatal events, 101; physical symptoms of trauma, 111; PTSD and, 111–14; statistics of, 101–3; traits of violent workers, 103–10; types of victims, 103; workplace violence policies, 120–21
Workplace Violence Intervention Research Workshop, 101
World Medical Association (Declaration of Tokyo), definition of torture, 34
World Trade Center attack (Feb., 1993), first responders and, 283–86
World Trade Center attack (Sept. 11, 2001), 1–31; chain of events, 4–5; the clients, 12–13; the counselors, 10–12; disaster workers' trauma and physical maladies, 8, 11–12; disrupted communications and, 5; early interventions, 14–17; event

characteristics and, 3–5; evidence informed best practices, 13–14, 24–27; first responders, 1, 5, 8, 10; impact of traumatic stress, 23–24; intermediate interventions, 17–20; long-term psychological care, 11–15, 20–23; media and, 26; preparedness and, 26–27; Project Liberty (short-term care), 11; psychological first aid (PFA), 13–17; psychological reactions and, 5–10; research findings, 7–9; risk and resilience factors and, 9–10; the settings, 13; short-term psychological care, 11; trauma, terrorism, and the mental health community, 2–3

World War II veterans, delayed reactions, 148

Xenophobia, as consequence of post-traumatic stress disorder (PTSD), 289–305; acute stress disorder (ASD) defined, 298; adjustment disorder and, 289–90; anthrax poisoning and, 303; anthropological genesis of state and, 291, 301; antidote to, 300–301; fear into hatred into violence, 290–96; French-Algerian example, 294; Hurricane Katrina and, 302; intervention, 301–3; Nazi Germany example, 292, 293–94; neuropsychological dynamics and, 298–300; Northern Ireland example, 290–91, 295–96, 301; the Palestinian/Israeli conflict, 292–93, 296–97; prejudice defined, 293; the prejudiced personality, 293–94; psychodynamics of hatred into violence, 296–97; racial profiling and, 301; Sodom and Gomorrah example, 289; South Africa example, 293, 301; the story of the children of Israel in Egypt (Genesis), 297–98; Sunni and Shia Islam example, 295, 297; U.S. in post 9/11 and, 298, 302–3; xenophobia defined, 289, 302

Young children: restoring the flow of development to in war, 215–16; talking about difficult issues with, 216; understanding of death, 201

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Trauma Psychology

TRAUMA PSYCHOLOGY

Issues in Violence, Disaster, Health, and Illness

VOLUME 2: HEALTH AND ILLNESS

Edited by Elizabeth K. Carll

Praeger Perspectives

Contemporary Psychology
Chris E. Stout, Series Editor

PRAEGER
Westport, Connecticut
London

Library of Congress Cataloging-in-Publication Data

Trauma psychology : issues in violence, disaster, health, and illness/ edited by
Elizabeth K. Carll ; foreword by H. E. Khunying Laxanachantorn Laohaphan.
v. ; cm. — (Praeger perspectives) (Contemporary psychology, ISSN 1546–668X)
Includes bibliographical references and index.
ISBN-13: 978–0–275–98525–7 (set : alk. paper)
ISBN-13: 978–0–275–98531–8 (v. 1 : alk. paper)
ISBN-13: 978–0–275–98532–5 (v. 2 : alk. paper)
1. Post-traumatic stress disorder. 2. Psychic trauma. 3. Violence—Psychological aspects. 4. Disasters—Psychological aspects. I. Carll, Elizabeth K. II. Series. III. Series: Contemporary psychology (Praeger Publishers)
[DNLM: 1. Stress Disorders, Traumatic. 2. Crime Victims—psychology. 3. Disasters. 4. Violence. WM 172 T77755 2007]
RC552.P67T552 2007
616.85'21—dc22 2007009459

British Library Cataloguing in Publication Data is available.

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Library of Congress Catalog Card Number: 2007009459
ISBN-13: 978–0–275–98525–7 (set)
ISBN-13: 978–0–275–98531–8 (vol 1)
ISBN-13: 978–0–275–98532–5 (vol 2)
ISSN: 1546–668X

First published in 2007

Praeger Publishers, 88 Post Road West, Westport, CT 06881
An imprint of Greenwood Publishing Group, Inc.
www.praeger.com

Printed in the United States of America

The paper used in this book complies with the
Permanent Paper Standard issued by the National
Information Standards Organization (Z39.48–1984).

10 9 8 7 6 5 4 3 2 1

CONTENTS

Introduction by Elizabeth K. Carll vii

Volume 2: Health and Illness

CHAPTER 1 Motor Vehicle Accidents and Psychological Trauma 1
Edward J. Hickling and Edward B. Blanchard

CHAPTER 2 Traumatic Stress Responses to Medical Illness in Children and Parents 27
Margaret L. Stuber

CHAPTER 3 Trauma and the Treatment of Pain 47
Allen Lebovits

CHAPTER 4 Anesthesia Awareness and Trauma 63
Donald M. Mathews and Michael Wang

CHAPTER 5 AIDS and Trauma in the Twenty-First Century: Implications for Prevention, Treatment, and Policy 79
Cheryl Gore-Felton and Michael DiMarco

CHAPTER 6 Emotional Trauma Following Burn Injury in Children 109
Rhonda S. Robert

CHAPTER 7 The Trauma of Spinal Cord Injury 141
Frank J. Padrone

CHAPTER 8 Disclosure of Trauma in the Medical Setting 169
Ruth Q. Leibowitz

CHAPTER 9 Youth Homelessness and Trauma 203
Sanna J. Thompson

CHAPTER 10 Trauma in the Lives of Homeless Families 231
Kathleen Guarino, Lenore Rubin, and Ellen Bassuk

CHAPTER 11 Traumatic Impact of Violence against Women 259
Anne M. Dietrich

CHAPTER 12 The Integration of Psychopharmacology and Psychotherapy in PTSD Treatment: A Biopsychosocial Model of Care 283
Elaine S. LeVine and Elaine Orabona Mantell

Index 315

About the Editor 327

About the Contributors 329

About the Editorial Advisory Board 337

About the Series 341

INTRODUCTION

Elizabeth K. Carll

Across the last 15 years, there has been a mushrooming interest in the effects of traumatic events on people and societies. The news media report daily occurrences of war atrocities, disasters, violence, and mayhem. Simultaneously, more attention and research is now focused on examining the psychological effects, particularly stress and trauma, of disaster and violence. Close attention is also being paid to psychological responses to chronic and acute health conditions and disease, and how stress and trauma may affect the course of recovery.

The Evolution of Trauma Psychology

Attention has always been focused on various aspects of trauma, whether the traumas were large scale or individual or occurring as a single event or as a series of ongoing repeated events, as for instance, war, domestic violence, or a catastrophic health condition. The study of these various types of events, though, was generally compartmentalized. In the early 1990s, however, a series of large-scale stressful events—the Persian Gulf Crisis, the first World Trade Center bombing, the Long Island Railroad shooting, and finally, in the mid-1990s, the Oklahoma City bombing—shook the security of our nation.

As a result of these high-profile events, the news media began to increasingly cover the human side of disasters, paying special attention to the trauma experienced by both the survivors and the public. This attention at first appeared specific to each event that occurred; yet it soon became obvious that for mental health professionals and the public a broader understanding was necessary to put the events in context and to understand the relationship of short-term intervention to longer-term treatment. Because of the short life of news stories, for example, the global audience gained the impression that a few months after any disaster everyone had recovered and moved on. This was far from reality, however, especially if the trauma involved the loss of one's home or friends and family. It was also important to recognize that trauma is related not only to violence and disaster, but may have a broad range of causes and precipitating events.

This became especially apparent when I was developing the training course for the Disaster/Crisis Response Network (DRN) that I had established in 1990 for the New York State Psychological Association. The DRN was the first statewide volunteer disaster mental health network in the nation, and it focused, in particular, on the needs of the public and the community. Training for volunteers was a priority. Training included a compilation of modalities, including Critical Incident Stress Intervention, which was an adaptation of Jeffrey Mitchell's Critical Incident Stress Management Model, as well as psychological first aid, and the distinction between crisis intervention, onsite intervention services, and long term psychotherapy. In addition, it was important for mental health professionals to put these events in context with longer-term traumatic events as well as relate them to trauma issues presented by clients in their practice.

Since a training course or training manual that included all of these facets did not appear to exist in 1990, I began to develop training modules—including one on *Trauma Psychology*—that were sponsored by the state psychological association and to which experienced volunteer members of the Network contributed information. These training modules covered not only crisis intervention and immediate onsite response, but also looked at the continuum of services necessary to help individuals and communities recover. In addition, the training took into consideration preexisting psychological conditions, both recent and longstanding, and the distinction between the use of emergency psychological first aid, short term psychotherapy, and long term psychotherapy as effective interventions.

These training sessions were attended not only by psychologists but also by other mental health professionals and by first responders from the community, including EMS, law enforcement, criminal justice system personnel, clergy, and various hospital staff. By the mid- to late 1990s, other organizations and hospitals were developing various training courses for their own staffs. Universities began looking into developing courses as the demand for trauma training increased.

In the early 1990s, I was often asked to define the term *trauma psychology.* The term was not familiar to mental health professionals, although some were familiar with terms such as psychological trauma, PTSD, and psychotraumatology. Trauma psychology focuses on studying trauma victims and examining intervention modes for immediate, short-term, and long-term trauma caused by a single episode or by ongoing, longer-term events. It also encompasses possible trauma related to the diversity of individual, family, and community events and experiences. The description or definition of trauma psychology, from my perspective, included a broad spectrum of events, that could range from interpersonal violence, sexual assault, war, motor vehicle accidents, workplace violence, and catastrophic illness to trauma relating to acute and chronic health conditions (e.g., cancer, heart disease, spinal cord injury, and paralysis), as well as other types of accidents violence, and illness. Thus, the concept for the two volumes of *Trauma Psychology: Issues in Violence, Disaster, Health, and Illness* grew out of the need for a reference compendium that reflected a wide variety of trauma-related issues. The need for a recognized body or specialty area of trauma research and knowledge within the discipline of psychology had been growing significantly. For example, the International Society for Traumatic Stress Studies was formed in 1985 and has since grown into the largest international organization devoted to the study of trauma-related issues. In addition, the rapidly growing interest in trauma psychology is evidenced by the recent formation, in 2006, of the new Division of Trauma Psychology of the American Psychological Association.

Given this evolution of trauma psychology, it was important that the volumes include not only the typical types of events associated with trauma but also those underrecognized areas that nonetheless have significant traumatic components. Having such a cross section of trauma issues reflects the broad and diverse field of trauma psychology. The two volumes of *Trauma Psychology: Issues in Violence, Disaster, Health, and Illness* (*Volume 1* and *Volume 2*) are unique, as both volumes include chapters that discuss recognized trauma-related events as well as those underrecognized important areas that reflect the evolving diversity of areas within the specialty of trauma psychology. Volume 1 covers violence and disaster, whereas Volume 2 covers health and medical illness. The chapters in the volumes include a discussion of trauma-related issues and background, along with real-life vignettes and case examples, with recommendations for intervention, treatment, and public policies. The book includes pragmatic information on a broad range of areas related to trauma. *Trauma Psychology: Issues in Violence, Disaster, Health, and Illness* offers chapters discussing well-recognized disasters such as tsunami and fires; accidental disasters such as explosions and transportation accidents; terrorism and violence such as 9/11 and the Madrid terrorist attacks; workplace violence; interpersonal violence; motor vehicle accidents; violence against women; violence and the media; trauma and first responders; the impact of ongoing armed conflict and war on children's development; integrating psychopharmacology into the treatment of PTSD; and the impact of medical illness on children and families.

The volumes also contain often underrecognized trauma-related topics. Included are chapters discussing the impact and effects of politically motivated torture; stalking; kidnapping; the impact of killing on the perpetrator; xenophobia; the effects of homelessness on families and youth; spinal cord injury; burns; AIDS; pain; the difficulty of disclosing trauma in a medical setting; and anesthesia awareness.

The topic of anesthesia awareness, for example, is relatively unknown to many professionals, but it is estimated to occur in one or two of every 1,000 patients who have received general anesthesia and who wake up during surgery because they are underanesthetized. It is estimated that about 50 percent of these patients can hear or feel what is going on but are unable to communicate what is happening because they are temporarily paralyzed, and approximately 30 percent of these patients experience pain. As a result, half of these awareness patients develop significant psychological problems including PTSD.

Defining Trauma

It is important to note, that many people may experience traumatic stress symptoms in the immediate aftermath of crises, but that most do not go on to develop posttraumatic stress disorder. Some people may recover, while others may have lingering and ongoing symptoms, and a still smaller percentage may develop the full syndrome, which can last months, years, and, for a small minority, a lifetime. It is also helpful to keep in mind that individuals may experience a wide variety of traumatic events, but the intensity of a person's responses is a combination of many factors; for instance, the nature of the trauma, its severity, its duration, and, of course, the existence of prior traumatic experiences, as well as what resources and supports are available for dealing with the trauma.

Because the terms *acute stress disorder*, *posttraumatic stress disorder*, and *complex trauma* are mentioned in the various chapters, the following definitions will assist the reader. *Posttraumatic stress disorder (PTSD)* is considered one of the more extreme forms of anxiety disorders. It is distinguished from all other anxiety disorders in that it is caused by an external event. PTSD is often described as a normal response to an abnormal event. Whether the diagnostic label of acute stress disorder (ASD) or PTSD is used is generally determined by the duration of the symptoms. Essentially they are a set of similar symptoms (as defined below). However, ASD describes the experiencing of symptoms of up to one month's duration. If the symptoms continue past one month, the diagnostic label of PTSD applies. PTSD may develop months or even years after having experienced or witnessed a traumatic event.

A traumatic event can lead to PTSD if it threatens one's physical or mental well-being or results in feelings of intense fear, helplessness, or horror. The major symptoms of PTSD include reexperiencing of the traumatic event (i.e., nightmares, intrusive thoughts, or flashbacks); avoiding reminders of the event and numbing (i.e., avoiding thoughts, people, and activities related to the trauma or an inability to recall aspects of the trauma); and also increased arousal (i.e., difficulty concentrating, trouble falling or staying asleep, hypervigilance, and anger outbursts).

When an individual perceives a danger or threat, a biological alarm is raised, adrenalin increases, heart rate increases, breathing becomes rapid, and the body sets itself up for a fight or flight response. In the majority of individuals, this response returns to equilibrium in a relatively short period of time. For the individual with PTSD, the response may endure. One of my clients described his PTSD as being similar to a car being revved up, where the gas pedal is being pressed but the brakes are on and there is nowhere to go, so the motor just continues to spin and churn.

The terms *Complex PTSD* or *Disorders of Extreme Stress Not Otherwise Specified (DESNOS)* have been suggested to describe a set of symptoms associated with prolonged experiences of severe trauma or interpersonal abuse. This term developed because some experts see PTSD as insufficient to describe the experience and impact of ongoing pervasive trauma. This type of trauma may result from experiences such as chronic child sexual or physical abuse, domestic violence, or ongoing war and torture. Ongoing severe trauma may lead to significant impairment in regulating emotions and behavior, and may have an impact on how survivors perceive themselves and their view of the world.

It is also important to keep in mind that the way people experience, perceive, and display distress is culturally determined, as culture cannot be separated from the worldview of an individual. Definitions of trauma and designations of posttraumatic stress need to be sensitive to the cultural context in which traumatic events occur. For example, for those living in a chronic war zone, the issue of "post" as it relates to stress may not be viewed as meaningful. The chapter on children and war highlights the importance of culture and context, and also gives an overview of the controversy about how differently PTSD may be viewed in different parts of the world.

Interventions also need to take into consideration culture and context because what is considered pathological may vary widely across cultures. Culture also influences peoples' styles of coping, and therefore interventions must address the strengths, rituals, and supports within a community. This was evident in the aftermath of the tsunami, where interventions based on Western values of individualism and open talk may not be viewed as effective in an Eastern culture that values community and interconnectedness and a stoic acceptance of life's adversities. Therefore appropriate interventions need to be tailored to the culture and context in which the traumatic events occur.

These two volumes reflect and highlight a cross section of both recognized and often underrecognized areas within trauma psychology, with a variety of descriptive examples, interventions, recommendations, and suggestions for public policy included. As a result of perusing the volumes, it is hoped the reader will gain a better understanding of the diversity and complexity of issues, as well as the diversity of intervention strategies within trauma psychology.

CHAPTER 1

MOTOR VEHICLE ACCIDENTS AND PSYCHOLOGICAL TRAUMA

Edward J. Hickling and Edward B. Blanchard

MICHELLE'S STORY

The day seemed so ordinary. She'd driven the road hundreds of times. The kids were in their car seats in the back seat, and the radio was playing one of her favorite songs. As she entered the intersection, for just an instant she knew something was wrong! The other car came out of nowhere. Just a black blur to her left and then that horrible sound of the crash. Metal crunching and glass shattering. Oh my God!! This can't be happening! The next thing Michelle remembered was yelling for her kids. "Are you all right? Answer me! Please!" Her son Johnny said, "Yes, mommy, but I'm scared!" but Kelly didn't answer. Not a sound. "Kelly!" As Michelle tried to turn around, she found her left leg was twisted at an unnatural angle, and she was pinned in the seat. She couldn't move, and she felt this sickening feeling take over. Something wet was dripping down her face. As she looked up she saw there was someone at the door. "Don't move!" he said. "We've called 911. You had an accident." She felt in a daze, and everything seemed unreal. So this is how I'm going to die! Oh no, not now!

After a while, there was a voice saying, "We've got to cover you with this blanket, so we can cut you out of the car." Then the air became filled with the sound of the saw cutting her out. How could anyone have survived the crash? Where were her kids? What had happened to them?

Motor vehicle accidents (MVAs) are the most common trauma that occurs in westernized countries. The occurrence of MVAs is so widespread that it is likely that most adults will have been in a car crash by the age of 30. While precise data are not available, the U.S. Department of Transportation has collected data on the number of fatalities and personal injuries. In the United States, the numbers of injuries and fatalities have remained fairly high, albeit with a slow decline in the number of personal injury accidents and the total number of crashes reported over the past decade. There continue to be over 6,000,000 motor vehicle accidents per year in the United States, with over 42,000 fatalities and 2,700,000 personal injuries (United States Department of Transportation, 2004).

Our research, clinical practice and the focus of this chapter will be on people who have suffered a serious injury. While there are a number of less severe, fender bender–type accidents that occur daily, our interest and the focus of this review will be on individuals who suffered an injury serious enough in the MVA to seek medical attention, even though we know that in some instances individuals will suffer psychological injuries in the less severe crashes.

Motor vehicle accidents obviously occur with great frequency. Most people in their life will, unfortunately, have a motor vehicle accident. The seriousness of an accident is hard to define. We could not judge in our research an accident's seriousness by the degree of property damage, as this value varies a great deal dependent upon the year, the make, and the model of each automobile involved. If we tried to judge seriousness by the extent of physical injuries, which can be objectively assessed, we would again have difficulty. As we already know, not all physically injured individuals will have psychological injuries, and those without physical injuries should not be excluded from consideration of having psychological injuries. One solution to this concern, and the one we chose for our investigation, was to look at the individuals who had an MVA that led them to seek some medical attention.

Most of the physical injuries people suffer during MVAs are easy to see. These injuries can force us to take time off from work, to take time out of our personal life, and to use time to heal. Employers and family understand and accept this. The accident, and the injuries caused by the accident, affect our loved ones, and how they now deal with us. They may need to provide care, to get medicines, to act as drivers for children who were usually driven by the MVA survivor, and to accommodate to all the other changes that uniquely affect everyone who is impacted by the MVA. Work may be missed, and meetings with doctors, therapists, and lawyers all need to take place. Children and partners are sometimes forced to adjust to a radical change in a loved one, and often that someone is the person the family depended on in a number of critical and important ways. We take for granted the laundry, the food preparation, and the trips to the store. These can all be instantly affected by an injury to the person who was in a motor vehicle accident.

The overall cost of MVAs is exorbitant. If one considers the time lost from work, the cost of the medical injury, and the impact on a particular individual's life, the overall cost is estimated to be in the tens of billions of dollars each year.

The Center for Stress and Anxiety Disorders at the University at Albany has investigated the psychological aftermath of motor vehicle accidents (MVAs) since 1989, with the development of the Albany Motor Vehicle Accident Project. This project began in the late 1980s, investigating the impact of motor vehicle accidents psychologically when individuals seen in a private psychological practice seemed to present with symptoms of anxiety and posttraumatic stress disorder (PTSD). However at that time, the diagnostic criteria for PTSD typically required that the trauma be "outside the range of usual experience." By definition, since most people will in fact experience an MVA in their lifetime, MVAs were not thought to warrant such a diagnosis. In the early 1990s we were able to secure funding from the National Institute of Mental Health (NIMH), which allowed us to begin a systematic investigation of the psychological impact of MVAs. Since 1995, with continued NIMH funding, we have investigated treatment methods for dealing with PTSD and some of the other frequent psychological consequences of car crashes.

This review will include two major sources of information: a selected review of the major assessment and treatment findings from available studies and a summary of the major findings of the Albany MVA Project. Interested readers are referred to our books if more detailed information is desired (Blanchard & Hickling, 1997, 2004; Hickling & Blanchard, 1999, 2006a, 2006b). This review will include the following: a look at MVAs and the traumatic experience that can follow them, epidemiological studies of MVAs and PTSD, risk factors in the development of PTSD following MVAs, the natural history of PTSD in MVA survivors, acute stress disorder, travel anxiety and delayed onset PTSD in MVA survivors, some of the assessment instruments used for MVA-related PTSD, and current treatments for the psychological disorders including PTSD that can follow an MVA.

MVAs and Trauma

What do we mean by trauma? A trauma can be any painful experience, physical and/or emotional, that can pose a threat of injury or death to oneself or others. Traumas can make an individual feel terrified and helpless. This means that there can be at least two parts to the trauma. One is what actually happened, the physical effects of the trauma; the other is the experience that takes place inside an individual, the psychological experience. Any powerful event such as an MVA may or may not turn out to be a traumatic experience for any individual. If an accident disrupts the person's life and causes a significant physical and/or emotional reaction, then it can be called traumatic.

It is important to keep in mind that what is traumatic for one person may not be traumatic for another. How each individual perceives and reacts to an event determines whether an event turns out to be seen as traumatic or not. For example, people who drive professionally may consider car accidents a natural and expected part of their life. They may, therefore, not see the circumstances of some automobile accidents as terribly traumatic. However, watching someone else's car accident, or even worse, the accident of a family member, may turn out to be traumatic to the witness. In some examples, even hearing or learning about a disaster has proven to be traumatic and can cause PTSD. These powerful events carry the threat of death or personal injury, and can leave the individual feeling powerless and terrified at what occurs.

Epidemiological Studies

Estimates of the incidence and prevalence of PTSD in the U.S. population have varied a great deal. Several studies have looked at the occurrence, or epidemiology, of PTSD using very large surveys. Norris (1992) conducted a telephone survey of 1,000 adults in each of four southern cities. Half the people sampled were male and half were female. Half were Caucasians and half were African Americans. The survey assessed the lifetime occurrence of nine different traumatic events, followed by a series of questions to determine if these individuals met the PTSD criteria for that particular trauma. Norris found that there was a lifetime prevalence of 7.4 per 100 for PTSD from all causes. Important for this chapter was the finding that 23.4 percent of those individuals had experienced an MVA during their lifetime, including 2.6 percent in the past year. Overall, 69 percent of the participants had experienced some traumatic event in their lifetime, 21 percent in the past year. Of those individuals who had a serious MVA, 11.5 percent met the criteria for PTSD, and 9.5 percent of the people who had been in an accident within the past year had PTSD. Norris commented that the high rate of PTSD from MVAs was approximately 2.7 per 100 over the lifetime.

In a similar study, Breslau, Davis, Andreski, and Peterson (1991) assessed 1,007 young adults, aged 21 to 50, who were members in a health maintenance organization in Detroit. The assessors were trained to assess the occurrence of eight specific stressors including serious MVAs. Breslau et al. found that 39.1 percent of those sampled had at least one traumatic event and 3.6 percent had three or more traumatic events in their lifetime. Over 9 percent of the sample had developed PTSD. In addition, 9.4 percent had been involved in serious MVAs, with 11.6 percent of those developing PTSD.

Kessler and colleagues (1994) conducted a large national epidemiological study of psychiatric disorders in the United States. In a sample of 8,098 individuals aged 15–54, trained interviewers again asked about mental health and the impact of specific traumatic events. Of interest to us, Kessler, Sonnega, Bromet, Hughes, and Nelson (1995) asked each individual to select the most upsetting traumatic event in his or her life and then asked about the development of PTSD as a result of that event. A large number of individuals acknowledged being in a life-threatening accident (25% of the men and 13.8% of the women). We do not know how many of these life-threatening accidents were MVAs, but we do know most were. For life-threatening accidents, 44.6 percent of the men and 44.5 percent of the women selected these accidents as the most traumatic events that they had ever experienced. About 6.3 percent of the men who had been in a life-threatening accident developed PTSD while 6.8 percent of the women did. However, these values may underestimate the actual numbers because the possibility of developing PTSD from a serious MVA was not assessed if the respondent identified some other trauma as being more serious.

Overall, women who were exposed to any trauma were twice as likely as men to develop PTSD (20.4% for women vs. 8.2% for men). The researchers found that there was a significant advantage in having received mental health treatment for up to about 6 years posttrauma. Beyond that period of time, about 40 percent of the sample continued to have PTSD for as long as 10 years after the trauma.

We believe that the lifetime prevalence values multiplied by the population in the United States for these three studies give us some estimate of the problem. We estimate that there are between 2,500,000 and 7,000,000 cases of PTSD following MVAs in the United States alone. We believe this is a very sizable mental health problem that has been ignored by all too many American researchers and health care providers.

What Portion of MVA Survivors Develop PTSD?

Another way to ask the question is: "What percentage of MVA survivors develop PTSD?" According to the earlier epidemiological studies, about 19.4 percent of Americans (Kessler, 1995) or up to 23.4 percent (Norris, 1992) are involved in a MVA that is described as a serious trauma. We also found that a sizable portion of the individuals in our studies on MVAs developed PTSD.

As part of the Albany Motor Vehicle Accident Project we initially assessed 158 MVA survivors of serious car accidents with a very comprehensive psychological evaluation (Blanchard, Hickling, Taylor, & Loos, 1995; Blanchard, Hickling, Barton, Taylor, et al., 1996). The evaluation included the Clinician Administered PTSD Scale (CAPS; Blake, et al., 1995b) from which the diagnosis for PTSD was strictly determined. We found that 39.2 percent of the survivors of serious MVAs met the criteria for PTSD one to four months following their accident. Another 45 (28.5%) developed what we termed subsyndromal PTSD. We developed the term subsyndromal PTSD to recognize individuals who had symptoms of PTSD following their accident, but not quite enough to reach the full criteria for PTSD (Criterion B was met, and either Criterion C or D). We also found several individuals who were identified as having subsyndromal PTSD initially but who later developed full PTSD, or delayed onset PTSD. Our rate for developing PTSD is higher than that given by several other studies. We believe this is because we sampled people who were injured seriously enough to seek medical attention, not just anyone who was in an accident. Our sample is also somewhat different in that we waited at least one month to speak to people, because of the need for symptoms to persist for 30 days following the MVA to qualify for a diagnosis for PTSD.

Several other studies have investigated the occurrence of MVA-related PTSD. The largest study to date was conducted in Oxford, England, by Ehlers, Mayou, and Bryant (1998). In their study of 888 emergency room attendees who had been in a MVA, they found that about 23 percent had PTSD when they were reassessed at 3 months, while 16.5 percent continued to have PTSD when reassessed at one year.

Based on the studies to date, we estimate that somewhere between 10 and 45 percent of the survivors of personal injury MVAs develop PTSD. We have analyzed the available data and determined that the percentage of PTSD is affected by the number of males in the sample (the more males, the lower the incidence of PTSD), and by whether some of the patients were more seriously injured and admitted to the hospital. Our best estimate is that about a quarter of the people who are in a serious MVA will develop PTSD (Blanchard & Hickling, 2004).

Predictors/Risk Factors in the Development of PTSD

Our studies have found four independent predictors to the question, "Who develops PTSD from an MVA?" (Blanchard, Hickling, Taylor, Loos, & Forneris, 1996). The first was the history of clinical (or major) depression at some point prior to the MVA. The second was the extent of the physical injury. Third, we found that the degree to which individuals feared dying in their MVA predicted whether they developed PTSD or not. Fourth, we also found that whether or not the survivor had initiated litigation was a strong predictor of later PTSD. We are unsure as to why this last-mentioned variable is a predictor. It may be that if you were injured enough to seek litigation (especially in a "No Fault" insurance state such as New York), then you were probably hurt badly enough to need a lawyer. This could mean that the physical symptoms were not remitting, and that the accident tended to be more severe, more fear provoking, and thus more likely to produce PTSD.

Researchers around the world have replicated each of these predictors (e.g., Ehlers et al., 1998). There are other variables that we also found to be predictive of later PTSD. These variables included the occurrence of dissociative symptoms, reexperiencing symptoms, strong avoidance of thoughts or behavioral reminders of the MVA, history of prior PTSD, gender (female gender was a predictor), and whether or not someone had been killed in the MVA. Other researchers have found that horrific and intrusive memories shortly after the accident predicted later PTSD, as did the presence of initial acute stress disorder (ASD; see, e.g., Harvey & Bryant, 1998).

Several studies have also replicated the finding that being female puts one at greater risk for developing PTSD following a serious MVA, and some have focused on the persistence of ongoing pain or anger (e.g., Mayou, Ehlers, & Bryant, 2002). Interestingly, whom one blames for the accident is a significant predictor of both who develops PTSD and how readily the PTSD remits (Hickling, Blanchard, Buckley, & Taylor, 1999). If one blames oneself for the accident, one tends to fare better. However, if one sees someone else as responsible for the accident, then one is more likely to develop PTSD, and one is less likely to improve spontaneously. Risk factors for the development of PTSD can be found in Table 1.1.

Table 1.1 Risk Factors That Increase the Likelihood of Developing PTSD Following an MVA

Risk Variable	Yes	No
Were there dissociative symptoms (out of body experiences, things seemed unreal, time alteration) at the time of the accident or continuing?		
Are there reexperiencing symptoms (intrusive recollections, nightmares, flashbacks or distress) when reminded of the MVA?		
Are there efforts to try to avoid thoughts or real life reminders of the accident?		
Were the physical injuries serious?		
Was extreme fright or terror caused by the prospect of dying during the MVA?		
Was there a history of depression prior to the MVA?		

MVA-Related PTSD or What You Can Expect over Time

Anyone who has a significant reaction to a trauma wants to know how and when he or she will get better. *Remission* (in our definition) means an individual no longer would meet a full diagnostic criterion for PTSD or subsyndromal PTSD. In many studies the reporting of symptoms that have decreased even by one might still be called remission, although the individual is still plagued with symptoms of PTSD. *Recovery* perhaps is an even more important concept; for us it indicates that an individual no longer falls into the category of still having PTSD or subsyndromal PTSD, and feels much as he or she did before the accident.

The Albany MVA Project first studied a large number of individuals who had developed PTSD following their car accident. The initial group of studies followed individuals who had PTSD at a period 1–4 months after the MVA, and then reassessed these same individuals at 6-month periods for up to a year after their accident and some for even longer. These individuals did not receive any specific psychological treatment and represent, we believe, the natural history of recovery following an MVA (see Blanchard & Hickling, 2004, for a more comprehensive review).

The Albany MVA Project conducted two extensive follow-up assessments after the initial assessment, one at 6 months post-MVA and one at 12 months post-MVA (with a more limited assessment at an 18-month assessment of individuals who had initially had PTSD). We retained 91.8 percent of our sample at 6 months, and 84.6 percent at one year. By a 6-month period of time, 54.5 percent had shown some remission of symptoms, 17 of the 55 showed full recovery, while

13 (23.9%) showed improvement to a subsyndromal level of PTSD. Forty-five percent showed no change in symptoms, retaining the diagnosis of full PTSD over the first 6-month period of time.

Individuals who were originally diagnosed with subsyndromal PTSD showed more rapid remission of symptoms than those who had been diagnosed with full PTSD. By the first month of follow-up, the proportion that remitted was significantly more than that of those in the PTSD group (9.3%). At 3 months, 46.5 percent had remitted and by 6 months, 67.4 percent showed noticeable improvement in their symptoms. However, two participants had, in fact, worsened and now met the criterion for delayed onset PTSD.

The one-year follow-up of the MVA survivors was completed on 83.5 percent of our initial group of MVA survivors. The month-by-month diagnostic status for the 48 MVA survivors who were initially diagnosed with PTSD showed that by 6 months the degree of remission had essentially plateaued, showing little change over the next 6 months. The number of people who still met the criteria for full PTSD ranged from 42 percent for months 10, 11, and 12 to 50 percent for month 7. We were also able to follow 35 of those who had initial PTSD out to 18 months. A plateau-like response remained, with very little change occurring. In months 12 to 18, the proportion of the sample that remained at full PTSD ranged from 34.3 percent for months 17 and 18 to 40 percent for months 14 and 15.

Our data show that the majority of MVA survivors who initially develop PTSD do show noticeable spontaneous improvement over the first 6 to 8 months. Approximately one-third will show complete recovery with no intervention. Thereafter, there is a very gradual remission rate, with a 12-month remission rate of about 65 percent showing some improvement. Kessler et al.'s (1995) study noted there was continued gradual improvement as far as 6 years posttrauma in their retrospective study of a large sample of mixed trauma survivors with PTSD.

It is important to remember that improvement in PTSD symptoms is not equal to absence of symptoms. Improvement means that the symptoms decrease, not that the symptoms go away totally. If you are still bothered by nightmares, or startlement, or intrusive thoughts, or difficulty driving, your life can still be quite severely affected by the accident, even though you know you are better than you were in the weeks right after it.

Who Gets Better?

One of the questions we tried to address was whether or not we could predict who would show improvement at the 6- and 12-month period of time. Using regression analyses we were able to predict, with some degree of success, who would continue to have difficulty and who would show improvement.

One of the criteria we used for prediction was the Clinician Administered PTSD Scale (CAPS) score. The CAPS is a structured interview scoring method that measures both the intensity and the frequency of each PTSD symptom. The higher the score on the CAPS, the more frequent and intense were the symptoms of PTSD. We found we could predict the 6-month CAPS score if we knew the following: (1) the degree of physical recovery; (2) whether the individual had major depression at the time of the initial assessment (about 2 months after the MVA); (3) whether there had been pre-MVA major depression or alcohol abuse; (4) how vulnerable the individual felt at the time of the accident; and (5) the quality of the family relationships after the MVA. The better the family relationships, the better the recovery. Looking at PTSD symptoms at one year, we found that the more severe the symptoms of PTSD, the greater the sense of vulnerability in the MVA, and that the presence of alcohol abuse predicted long-term difficulty.

What became clear was that the initial severity of the PTSD symptoms was a major predictor of both short- and longer-term remission. The more severely affected individuals were more likely to continue to be symptomatic at both 6 and 12 months. We also found that the severity of the physical injury and whether the injury healed well or not predicted short-term psychological symptoms (6 months) but did not seem to predict the recovery from PTSD symptoms at a 12-month period of time. Finally, the indicators of chronic psychological problems before the MVA were also associated with a poor recovery. It became apparent that individuals who had not improved by 6 to 8 months after the MVA on their own were unlikely to show much improvement up to 18 months after the accident.

We also examined whether or not symptoms of PTSD remitted over a longer period of time (18–24 months) by using a mail survey. Here, instead of interviewing each MVA survivor, we used the PTSD Check List, the PCL. We also had the MVA survivors fill out other questionnaires, including mood inventories, anxiety inventories, and measures of the impact of the trauma. We received 100 replies from the original 158 survivors, and found that at 24 months after their initial assessment, 23.5 percent of those initially diagnosed with PTSD were still noticeably symptomatic more than two years after their MVA.

In summary, while we found that almost half of those originally diagnosed with PTSD showed remission over the first 6 months, with some slow, gradual improvement over the next 6 months (12-month follow-up), there was almost no remission of symptoms thereafter.

Delayed Onset PTSD

It has long been recognized that some individuals who apparently do fine with the initial reaction to the trauma develop delayed onset PTSD at a later period of time. Unfortunately, very few studies have been able to investigate prospectively why some people develop delayed onset PTSD whereas others will improve over time and recover from their symptoms. Finding out why these cases occur and learning to identify who is at later risk for PTSD has been a concern for a number of years

The MVA Project in Albany identified seven cases (4.4%), out of the initial 158 participants in our study, who appeared to have delayed onset PTSD (Buckley, Blanchard, & Hickling, 1996). We did note several findings that were consistent among these seven individuals. All had been initially diagnosed with subsyndromal PTSD. This is important to recognize because it means that none, in fact, had been symptom free. Each individual who subsequently came to be diagnosed with PTSD had symptoms that had been less than sufficient to reach the diagnosis criteria for PTSD but nevertheless reflected an emotional reaction to the accident.

These seven individuals, on average, tended to have had less social support before the MVA and were more alone in dealing with the accident than other MVA survivors who had also been diagnosed to have a subsyndromal version of PTSD. The seven participants who developed delayed onset PTSD also had relatively more psychological distress than those with subsyndromal PTSD who did not develop delayed onset PTSD.

Finally, an additional stressor, whether another accident, a change in job, a worsening of physical health, or some other factor, was identified in three of the seven cases as a precipitant of the onset of delayed PTSD. It is conjectured that the occurrence of another major stressor "could push the individual over the edge," worsening the symptoms to the point of full PTSD.

The primary lesson from our research is that individuals with some symptoms of PTSD after the MVA, but not enough symptoms to reach diagnosis for a full-blown case of PTSD, are at risk to develop PTSD at a later time. In fact, 15 percent of such subsyndromal PTSD cases do develop PTSD at a later time. Thus, while 65 percent of those with initial subsyndromal PTSD have remitted by six months later, another 15%, almost half of those who have not remitted at six months worsen over the next six months.

Acute Stress Disorder (ASD) and MVAs

In 1980, the American Psychiatric Association reintroduced PTSD as a diagnostic category (American Psychiatric Association, 1980). This allowed professionals to diagnose and code individuals who had been exposed to a traumatic event and who had psychological difficulty with avoidance, numbing, hyperarousal, and reexperiencing of symptoms related to the trauma. In order for PTSD to be diagnosed, it was necessary that the symptoms persisted for at least one month. Prior to that time a trauma victim would only be able to be diagnosed and coded with what was termed an adjustment disorder. This diagnosis was deemed an understatement for rape survivors and others who had been seriously traumatized.

However, in 1994 the fourth edition of the *Diagnostic and Statistical Manual* (American Psychiatric Association, 1994) saw the introduction of the new diagnostic category called acute stress disorder (ASD). This diagnosis, in part, was an attempt to remedy the past diagnostic situation and provide a more meaningful label for the distress trauma survivors were experiencing in the days immediately following a trauma.

Two prominent Australian researchers, Richard Bryant and Allison Harvey, have done a great deal of the work on ASD, especially as it relates to MVAs. Bryant and Harvey (1996) assessed 171 MVA survivors who were acute admissions to a trauma center. Among the 171 MVA survivors, 92 individuals had no head injury and 79 had suffered a head injury resulting in posttraumatic amnesia (ranging from five minutes to 48 hours). Even in those who had amnesia, some were still found to have symptoms of diagnosable ASD. In the non-head-injured group, 13 percent met the full *DSM–IV* criteria for ASD while another 20.7 percent met all but one of the criteria and would therefore be deemed to have subclinical ASD.

For the head-injured group only, 5.1% (4) met the full criteria for ASD while 12.7 percent met the criteria for subclinical ASD. This was an important finding, in that it was once believed that if you were unconscious, then you would not be able to develop PTSD or ASD, as there should not be memories that would haunt you. The work of Bryant and Harvey (1996) and our own work (Hickling, Gillen, Blanchard, Buckley, & Taylor, 1998) has shown that posttraumatic symptoms can occur in a number of different groups, including those with head injuries and amnesia. It is conjectured that there are many levels of consciousness, that memories can be stored in a variety of ways, and that events following the period of unconsciousness can also be traumatic, as can the memories and incidents that may follow the recovery of an MVA survivor. All may be possible paths to the presence of PTSD.

What Do We Know about the Occurrence of ASD?

Harvey and Bryant (1999) followed up on their research participants and reassessed 56 of the original 92 participants (61%) two years later. Seven of the 9 with ASD who met the criteria for PTSD at 6 months were still positive for PTSD at two years, while 7 of the 10 sub-ASD participants were positive for PTSD at two years. Of the 38 who had no diagnosis originally, 4 met the criteria for PTSD two years later, after being without a diagnosis during the 6-month evaluation.

Thus it seems that developing ASD in the month following the MVA puts a person at very high risk to have PTSD at 6 months post-MVA and even two years after the accident. Those with this acute pattern of symptoms clearly need early treatment to prevent later psychological problems. Interested readers are strongly encouraged to read Bryant and Harvey's excellent text on ASD (Bryant and Harvey, 2000).

Travel Anxiety—A Common Aftereffect of MVAs

Following motor vehicle accidents, there are often varying degrees of hesitation or reluctance to drive again. If this hesitation leads to significant avoidance, the terms "driving phobia" or "specific phobia" may be applied. A phobia is a fear that is excessive or unreasonable, brought on by the presence of a specific object or situation. Many survivors of MVAs begin to fear driving.

In the United States and Canada, perhaps more than in any other Western nation, we rely upon our automobiles. Studies in our lab and elsewhere have found very high levels of driving fear and phobia. We have found that up to 77 percent of the individuals who had been in accidents had what could be termed a "driving phobia." Kuch, Swinson, and Kirby (1985) found that 60 percent of the survivors of MVAs studied had a driving phobia. This interference with driving and riding in automobiles on a daily basis can pose significant problems in one's life.

Mayou and Bryant (1994) conducted one of the most detailed examinations of driving phobia. In their one-year prospective study of MVA survivors, 65 percent of the individuals who had been drivers in their accident and 44 percent of the people who had been passengers reported lingering effects of the MVA on their travel behavior. Approximately 19 percent of the survivors at one year still showed phobic avoidance of certain travel behaviors (avoiding certain routes or traveling conditions such as driving at night, or on high speed highways) and would show extreme distress if they had to endure those situations. Mayou and Bryant also found that 42 percent of motorcyclists had stopped riding their motorcycles since their accident. Individuals who had been passengers in the accident experienced greater effects with regard to travel difficulty, with 84 percent having difficulty when riding as passengers one year later. Mayou and Bryant (1994) further found that experiencing phobic travel anxiety was associated with having comorbid diagnoses, being female, and having horrific initial memories of the MVA.

Kuch, Cox, Evans, and Shulan (1994) studied 55 MVA survivors who had very minimal physical injuries but did have persistent, lingering pain. They found that 21 participants met the *DSM–IV* criteria at the time for simple phobia, with regard to driving. Kuch defined "accident phobia" as an intensification of symptoms associated with exposure to driving, fear-related reduction of miles normally traveled, driving restrictions related to certain roads or weather conditions, and excessive cautioning of the driver when the patient was a passenger. Of those individuals with driving phobia, more than one-third met the criteria for PTSD.

Our Albany MVA Project results have also supported the finding of driving phobia and anxiety related to traveling in a car (Blanchard & Hickling, 2004). Technically, it is incorrect to apply a diagnosis of driving phobia to an individual who has PTSD or ASD. The fear of driving is attributed to the MVA and the trauma. However, in the interest of explaining the impact of the accident on an individual, we used the term driving reluctance, which included avoidance of the MVA site, avoidance of MVA-related weather conditions (e.g., snow and rain), avoidance of particular roads, avoidance of particular traffic conditions (e.g., on highways), and avoidance of travel for pleasure when either a driver or a passenger. Individuals that we worked with frequently avoided the trauma situation: some said they had driven miles out of their way and endured all sorts of hardships in terms of extra cost and inconvenience for the sole purpose of avoiding anxiety-provoking situations. Thus, while they were able to drive, they were certainly reluctant and limited as to how or when they drove. We have found this to be very common and important in illustrating how the MVA impacts a survivor's life. A questionnaire entitled "The Travel Anxiety Questionnaire" was subsequently developed to assess these factors, and will be discussed below.

In our sample of individuals who have had PTSD, 93.2 percent of our subjects were found to have travel-limiting anxiety. Seventy-nine percent of those in the subsyndromal PTSD category and even 18 percent of those who did not have a PTSD diagnosis had accident-related driving reluctance. Without question, this change in travel behavior can dramatically affect one's life. This driving difficulty makes it hard to get to a doctor's appointment or to get to work. It becomes hard to live the life that you had prior to your accident if you can't travel as freely as you did before the MVA.

Comorbid Diagnoses

Our own findings on comorbid mood disorders support the frequency of depression for MVA survivors. We found that among MVA survivors who had PTSD, approximately 53.2 percent also had major depression. As mentioned earlier when we discussed risk factors, we also found that MVA survivors who developed PTSD had a more frequent history of major depression than any other group we compared them with. This finding was not surprising to us. We believe that PTSD and depression commonly follow a traumatic injury-producing event. This has been well documented for years in the psychological literature. Breslau et al. (1991) found that 36 percent of the individuals they found to have PTSD also had major depression, while Kessler et al. (1995) found that 48 percent of the individuals they studied had comorbid major depression and PTSD. These values are very similar to ours.

Assessment of PTSD and Related Conditions

A number of instruments have been developed to measure the presence of PTSD. For a comprehensive review, readers are referred to William Koch's excellent book, *Psychological Injuries: Forensic Assessment, Treatment and Law* (2005). Our more limited review here will be on the techniques and instruments we have used and believe are the most relevant to practicing clinicians and researchers in the area of MVAs and trauma.

The Motor Vehicle Accident Interview

The Albany MVA Interview is a structured interview developed to assess the details of an MVA (Blanchard & Hickling, 2004). The interview systematically inquires about immediate physical and medical consequences of the MVA, any treatments undergone as a result of the MVA, subjective reactions to the accident, and impact on subsequent travel behavior. The interview is structured after the fashion of a clinical interview and progresses in a logical fashion, beginning with the survivor of the MVA recounting the details of the MVA, including the circumstances that led up to it. Special attention is paid to the thoughts and feelings related to the MVA in addition to the facts of the accident, in order to obtain information that may be used in later cognitive and exposure-based interventions. Several items from the interview turned out to be important predictors of PTSD, including avoidance of post-MVA travel, fear and belief that the individual involved might die during the MVA, and responsibility for the accident. A copy of the interview can be found in the second edition of *After the Crash* (Blanchard & Hickling, 2004).

In addition to the interview, we believed that a comprehensive evaluation should include a psychosocial history, alcohol and drug history, psychiatric history, and when possible an interview with a collateral source of information.

CAPS: The Clinician Administered PTSD Scale

The Clinician Administered PTSD Scale (CAPS) is a structured interview developed by Blake and colleagues (1995a, 1995b) at the National Center for PTSD to assess the symptoms of PTSD. The test has very good interrater reliability and diagnostic agreement when used for MVA survivors with PTSD (Blanchard, Hickling, Taylor, Forneris, Loos & Jaccard, 1995).

The CAPS is administered with the clinician rating all 17 symptoms of PTSD over the past month (or week) for both frequency (0 = not present; 1 = once or twice, or less than 10% of the time; 2 = once or twice per week, 20–30%; 3 = several times per week, 50–60%; and 4 = daily or almost daily, more than 80%). The severity of each symptom is also rated from 0 to 4. Each symptom has a possible score of 8. A rule of 3 has been determined so that a symptom must have a combined score of 3, composed of at least 1 on either the frequency or severity scale. The use of different scoring rules has been investigated (e.g., Blanchard, Hickling, Taylor, Forneris, Loos, & Jaccard, 1995), and it has been found that those who met the criterion using more stringent CAPS criteria were more distressed on psychological tests.

The SCID

The Structured Clinical Interview for the *DSM–IV* (SCID) is a comprehensive, semistructured interview using *DSM–IV* criteria for diagnosing psychopathology (Spitzer, 1990a). The SCID uses a hierarchical logic to allow the clinician to inquire about a broad range, but not all, of possible *DSM* diagnoses. Interrater reliability for specific diagnoses varies (see Rogers, 2001) and the interview has been found to have moderate test-retest reliability (Williams, et al., 1992). The SCID allows the clinician to assess current and lifetime *DSM–IV* disorders, and a SCID-II version is available to assess Axis II personality disorders (Spitzer et al., 1990b).

The PTSD Check List (PCL)

The PTSD Check List is a self-report measure of PTSD symptoms developed by Weathers, Litz, Herman, Huska, and Keane (1993, 1994). It was restandardized by the Albany MVA Project, and high correlations ($r = 0.929$, $p < .0001$) were found with total CAPS scores and total PCL scores. A score of 44 had the greatest predictive power, yielding a sensitivity of .944 and a specificity of 0.864, and a diagnostic efficiency of 0.900. The PCL provides a useful self-report inventory that complements the information gained by an interview, CAPS, and collateral sources.

The Travel Anxiety Questionnaire (TAQ)

The Travel Anxiety Questionnaire (TAQ) is a self-report questionnaire that looks at specific areas of driving behavior that may have been negatively impacted by an MVA (see Table 1.2). The scores derived on the TAQ are obtained for both the degree of avoidance and the amount of anxiety experienced. There are no critical levels that indicate the presence or absence of travel anxiety. In fact, some items are geographically dependent (e.g., driving in snow), as some areas never or only rarely have certain weather conditions. So, while the score does not produce a critical level, the more items endorsed and the higher the level at which they produce avoidance and anxiety, the more they show problem areas and show how negatively driving has been impacted. The areas of difficulty may suggest specific areas for targeted intervention as well as an indication of how strongly the travel anxiety is expressed.

Additional Inventories

Comorbid conditions and areas of interest may need to be assessed. Additional inventories have included measures of depression and anxiety. Our studies have utilized the Beck Depression Inventory (BDI or BDI-II) for a measure of depression (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), and the State Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970) for a measure of anxiety. While these measures have been used in the prediction of malingering (see Hickling, Blanchard, & Hickling, 2006; Hickling, Blanchard, Mundy, & Galovski, 2002) and correct identification of PTSD (Hickling, Taylor, Blanchard, & Devineni, 1999), it is our opinion, given our current state of knowledge, that clinicians should be advised to use instruments they are comfortable and familiar with to provide self-report information from an MVA survivor.

Psychological Treatment for the Psychological Aftermath of Motor Vehicle Accidents: An Overview of the Psychological Literature

Psychologists have tried for a number of years to treat the emotional aftermath of motor vehicle accidents. The earliest intervention was attributed to

Table 1.2 Travel Anxiety Questionnaire

Name: ______________________________ Date: ________________

1. Are you driving at the **present** time? (circle **one**)
1. YES—go to question 3
2. NO—continue to question 2

2. If you are **not** driving presently, why not? (check **all** that apply)

☐ driving makes me anxious
☐ physically unable
☐ no car
☐ no license
☐ none of the above

3. Here are 8 driving situations. Use the two scales below to **rate how anxious** you are about each situation currently, as well as **how much you avoid** each of these situations **currently**. If the situation does not apply to you, please circle "NA" next to the situation.

Anxiety Rating Scale

0	1	2	3	4
No Anxiety	Very Little Anxiety	Some Anxiety	Moderate Anxiety	Severe Anxiety

Avoidance Rating Scale

0	1	2	3	4
None of the Time	Less than Half of the Time	About Half of the Time	More than Half of the Time	All of the Time

Nighttime Driving

Anxiety Rating	NA
Avoidance Rating	NA

Driving in Snow

Anxiety Rating	NA
Avoidance Rating	NA

Driving in Rain

Anxiety Rating	NA
Avoidance Rating	NA

Highway Driving

Anxiety Rating	NA
Avoidance Rating	NA

Heavy Traffic

Anxiety Rating	NA
Avoidance Rating	NA

Table 1.2 *(continued)*

Location of MVA		
Anxiety Rating		NA
Avoidance Rating		NA
Pleasure Trips		
Anxiety Rating		NA
Avoidance Rating		NA
Being the Passenger		
Anxiety Rating		NA
Avoidance Rating		NA
Please circle either yes or no:		
4. **Currently**, do you restrict your driving speed?	YES	NO
5. **Currently,** do you only drive to work?	YES	NO

Note: The more risk variables found following the MVA, the greater the chance of subsequent PTSD.

Joseph Wolpe, who, in 1962, utilized systematic desensitization to treat accident-related phobia. Most of the early research was in the form of case studies. Initial treatment efforts were reported over several decades. A summary of these studies can be found in Blanchard and Hickling (2004).

Earlier case studies included treatments that described and made use of the following: relaxation techniques, cognitive techniques, in vivo exposure techniques and imaginal exposure, and stress inoculation training (SIT) in which the feared situations are presented a little at a time to allow the individual to gain control over smaller elements of the situation and thereby gain a greater ability to deal with fuller aspects of the feared situations. Treatments have also included more traditional psychotherapy, supportive psychotherapy, and existential therapy in which the individual dealt with issues of mortality and surviving a near-death experience. Work was also described on how to help people deal with the issues of chronic pain and chronic physical injuries that result from the motor vehicle accident. These studies were very helpful in guiding the development of more comprehensive enquiries into treatments that address the psychological effects of the MVAs.

Controlled Treatment Studies

This section will briefly summarize selected controlled studies that have been done, and then will summarize the Albany MVA Project's treatment studies. We will try to summarize the major findings by examining those treatments that were very brief, those that dealt with early symptoms, and those that treated symptoms once they were present long enough to reach the diagnosis of PTSD.

Single-Session Treatments

The earliest interventions for MVA victims generally involved treating trauma victims shortly after they had their MVA. This could involve either speaking to victims while at the hospital or within a week after they had been seen at the hospital. This type of intervention has generally involved provision of a venue for the victim to review the traumatic event, encouragement to express emotions related to the MVA, information about normal reactions to trauma, and encouragement about a gradual return to normal driving behavior. These early intervention studies were disappointing in that they failed to show any benefit of treatment over no treatment. In fact, they seemed to show that the early intervention may actually may have made the participants worse, or at best, delayed their recovery from the MVA in comparison to that of individuals who did not receive the intervention. Later studies with MVA victims who were not admitted to a hospital did not show a worsening for those who received a brief intervention, but no benefit was found for those who were given the brief, one-session treatment (for a detailed summary, see Blanchard & Hickling, 2004).

Multiple-Session Studies

A number of researchers have examined the effect of multiple sessions for the treatment of emotional disorders/reactions following MVAs. These treatments have used a number of different techniques. The first group of studies we will summarize dealt with early intervention (in the first month after the MVA). These early treatments were trying to help individuals so that they would not develop PTSD or later psychological difficulties following their accidents.

Probably the strongest studies have come out of Bryant and Harvey's work in Australia with acute stress disorder. In their first study (Bryant, Harvey, Dang, Sackville, & Basten, 1998), 12 patients were given cognitive behavioral therapy (CBT) while 12 others were given supportive psychotherapy. Each participant in the study had been evaluated within 10 days of his or her MVA. The CBT treatment condition consisted of five individually provided counseling sessions, which each lasted about 90 minutes. The sessions were spread over a six-week period of time. The supportive psychotherapy condition consisted of education about trauma and training in general problem-solving skills and provided the same amount of treatment. At the end of treatment only one of the CBT-treated participants (8%) met the criteria for PTSD while at six months two met the criteria for having PTSD. In contrast, 10 of the participants (83%) in the supportive treatment condition met the criteria for PTSD at the end of treatment while 8 out of 12 did so at six months. In their second study, Bryant, Sackville, Dang, Moulds, and Guthrie (1999) again showed that intense, early intervention, utilizing combinations of cognitive, exposure, and relaxation techniques, worked better than supportive psychotherapy treatment. It can be concluded at this time that intense, focused, early intervention has been shown to offer a great deal of help to high-risk individuals following MVAs. There is a hint in this research that supportive psychotherapy alone is not helpful and may even hinder spontaneous recovery.

Treatment for Those Diagnosed with PTSD: The Albany MVA Controlled Treatment Study

The Albany MVA Treatment Project began in 1994 and continued through 2002. The earliest studies were uncontrolled treatment investigations, which allowed us to examine how to best provide differing combinations of psychological treatments. Once an established treatment protocol was in place, we were able write a specific treatment manual and obtain the federal funding to test the effectiveness of a comprehensive psychological intervention for PTSD following MVAs.

This large-scale study involved gathering initial assessment data on 161 individuals (Blanchard et al., 2003). It turned out that 107 of these people were eligible for entry into our study, and 98 of them ultimately attended at least one treatment session. Seventy-eight of these 98 people completed either our cognitive behavioral treatment package or the supportive psychotherapy treatment or a waiting list condition before being given treatment. Twenty of the 98 dropped out of treatment: 9 who had been placed in the CBT condition, 10 who had been placed in the support condition, and 1 who had been on our waiting list condition. Participants were assessed prior to entry into the study, right after they completed treatment, and then at 3, 12 and 24 months afterward to assess the long-term benefits of the treatment.

Treatment consisted of 10 sessions on average. There was some flexibility for the therapist to decide if treatment could be ended at 8 sessions or if it needed to be extended to 12 sessions.

In general, the CBT treatment combined education about PTSD, a review of each patient's particular symptoms, training in relaxation techniques, a written narrative description of the MVA generated by the patient and instructions to read this narrative description three times each day, graded in vivo exposure to feared situations, cognitive therapy to correct dysfunctional self-talk and distorted cognitive fallacies, and initiation of pleasant-events scheduling. The therapist was able to introduce, as needed, anger management techniques and issues related to mortality and near-death experiences.

The support condition also included education about PTSD and the patient's particular symptoms described in such a way as to "normalize" the experience, followed by a detailed review of the patient's past life history with an emphasis on losses and traumas and on how the patient had dealt with these difficulties. The last six sessions were devoted to a discussion of other patient issues (other than the MVA), in a supportive, reflective fashion.

The initial results obtained at the conclusion of treatment were very encouraging: participants in the CBT condition improved significantly more than those in the support condition with regard to symptoms of PTSD. Moreover, those receiving CBT (75%) showed a greater likelihood than those receiving support (50%) of improving sufficiently that they no longer met the criteria for PTSD. The ones receiving CBT also improved more on measures of general psychological distress and overall functioning. Both treated groups improved more than those who went through the assessment but then had to wait three months for a treatment slot.

Three months later only 4 of the 21 participants who had been diagnosed with PTSD and who received CBT treatment still met the criteria for PTSD, as compared with the support condition where 12 of 21 still met the criteria for PTSD. At one-year follow-up, the treatment gains held up very well, with no instances of relapse to PTSD for those who had received CBT treatment. Interestingly, those who received support also continued to show gains in treatment, although they were also significantly more likely to have sought out additional mental health services.

In summary, those who received CBT were able to show significantly greater treatment gains than those in the supportive psychotherapy condition. These treatment gains continued over the first year, despite the finding that those in the supportive psychotherapy condition sought out additional mental health treatment. By the end of two years, both treatment groups were able to show significant improvement.

Guidelines and Policies for the Psychological Treatment of MVA Survivors

The growing knowledge of the psychological impact of MVAs and the ability to treat the disorders that can follow this trauma have led some countries to propose guidelines and recommendations for insurers and practitioners. Two model programs were found in the United Kingdom and Australia.

In England, the International Underwriting Association of London (IUA) and the Association of British Insurers (ABI) have published a guideline entitled *Psychology, Personal Injury and Rehabilitation* (International Underwriting Association of London, 2004). This report was part of a series that addressed the often underestimated and misunderstood psychological aspects of rehabilitation. As described in the foreword to the report, the conclusions and recommendations were based on a series of discussions between industry leaders from the legal, employment, and insurance sectors and leading academics from psychology and liaison psychiatry. The report was designed to provide a common source of present-day knowledge to be used in making practical changes to injury management systems. The report concluded that by their very nature, psychological and social influences must be considered in the broad context of postinjury services and experiences. The report sought to provide information and guidance on "understanding the diversity of outcomes that are found in practice identifying obstacles to recovery in systems and in individuals identifying opportunities for improvement, and [to] recommend changes in current practices, strategic and tactical changes and future research" (p. 4).

There are a number of clinical guidelines for the treatment of PTSD, one being from the National Collaborating Centre for Mental Health in England, put out by the National Institute for Clinical Excellence (NICE) in March 2005. The guidelines include recognition of the problem of PTSD in adults and children in primary and secondary care, screening and assessment, and treatment recommendations (National Institute for Clinical Excellence, 2005). The literature also includes consensus guidelines for the treatment of PTSD, such as that of Foa, Davidson, and Frances (1999). While not solely for MVA survivors with PTSD, they do provide a much-needed resource for treatment of the disorder.

In Australia, the Motor Accidents Authority of New South Wales (2003) has issued guidelines for anxiety, PTSD, and whiplash following MVAs. The target audience for the guidelines was health care practitioners in New South Wales, with companion documents developed for consumers, general medical practitioners, and compulsory third party insurers. The primary guidelines were developed to share current and optimum treatment for the anxiety disorders that follow MVAs. They were not intended to be mandatory or prescribed practice, but were intended for application according to individual need. The guidelines covered recommendations for ASD and PTSD, but did not include other common sequelae such as depression, driving anxiety, or substance abuse, which were identified as common and warranting their own needs. Family and social needs were also acknowledged to be absent from these particular guidelines.

These two sets of guidelines, the International Underwriting Association of London report (2004) and the Motor Accidents Authority guidelines (2003), reflect a model of the collaboration that can occur between practitioners and insurers. These collaborative efforts designed to address the needs of insurers, practitioners, and survivors of MVAs illustrate a growing appreciation of the substantial specialized needs that exist for this population of trauma survivors.

Future Directions

The controlled treatment studies at the Albany MVA Project have continued in several new directions. One frustration has been to see how difficult it has been to train enough psychologists in empirically derived methods that have shown promise to help individuals suffering from PTSD and related psychological disorders following their MVAs. There are just too many MVA victims and too few psychologists to treat them. This has led to our effort to provide a self-directed treatment and a treatment manual for interested psychologists in the Oxford University Press's Treatments That Work Series. These books, a patient workbook, and a therapist treatment manual, were written based on our empirically demonstrated CBT treatment (Hickling & Blanchard, 2006a, 2006b). It is hoped they will reach a wider audience than our earlier work has seemed to.

Our second direction has been to try to extract the most critical components of treatment and provide them in as brief a treatment for early PTSD as possible. A very brief (two and a half sessions) treatment has been developed and piloted

(Hickling, Blanchard, & Kuhn, 2005). While the initial data is encouraging, a more rigorous investigation is needed to determine if this brief intervention is in fact a beneficial intervention for those willing to engage in a largely self-directed treatment.

The third area of current investigation is the use of the Internet for psychological treatment. An ongoing dissertation is investigating the use of an online, Internet-based intervention, which, based on the treatment manual that has been shown to be effective in face-to-face treatment, might have some benefit when provided over the Internet. While it is anticipated that the potential audience for an Internet-based treatment is quite limited, given the extremely large population of potential users of the intervention, even a 1–3 percentuse by victims of MVA survivors would reach a significant portion of suffering individuals (Lerner, 2006).

Finally, we have been pleased to learn of replications of our treatment procedures in other settings. A group in Germany (A. Karl, 2005, personal communication) has experienced very good results with a German translation of our treatment manual (Zollner, Karl, Maercker, Hickling, & Blanchard, 2004). Furthermore, Holzapfel, Blanchard, Hickling, and Malta (2005) were able to replicate our results with a very chronic (2 to 6 year post-MVA) population, most of whom had lingering physical problems. A preliminary investigation is also starting in Italy, and we are encouraged by the continued interest in the application of the assessment and treatment of MVA survivors internationally (Elena Rebulla, personal communication, December 2006). It is hoped that the continued empirical and clinical findings will further guide the development of policies and recommendations of care for survivors of MVAs, insurers, and health care providers.

Acknowledgments

The authors would like to acknowledge with thanks the help of Mr. Bernie Rowe and Dr. Richard Bryant in the locating of information on international policies and guidelines for the treatment of MVA survivors.

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CHAPTER 2

TRAUMATIC STRESS RESPONSES TO MEDICAL ILLNESS IN CHILDREN AND PARENTS

Margaret L. Stuber

Although few would argue about whether going through diagnosis and treatment for cancer or an organ transplant is extremely stressful for a child and his or her parents, the examination of traumatic stress responses to medical illness is relatively recent. This has to do with the way in which traumatic stress has been understood and defined. The constellation of symptoms known as posttraumatic stress disorder (PTSD) was originally conceptualized as a psychological and physiological response to an overwhelming event, outside the realm of normal human experience. The symptoms of reexperiencing, avoidance, and hypervigilance were initially based on the experiences of adults exposed to events such as combat or torture. Much of the early research about the symptoms, biology, and treatment of posttraumatic stress was done with war veterans and victims of rape. The same types of symptoms were reported in studies of adults exposed to life threats from other types of events, such as fires, earthquakes, and hurricanes. Children and adolescents also began to be studied, and were found to have similar types of responses to life-threatening events, although the symptoms were expressed in different ways according to the child's developmental stage (Terr, 1985; Terr, 1991). Because researchers believed that traumatic events were qualitatively different (not just more severe) in their impact on people than ordinary stressful events, the precipitating events for posttraumatic stress symptoms continued to be defined as external threats to life or body integrity. Medical illnesses were not considered to be events severe enough to precipitate a full posttraumatic stress response.

This was the case until the definition of posttraumatic stress disorder was significantly revised in 1994, when the American Psychiatric Association published its fourth edition of the *Diagnostic and Statistical Manual* (American Psychiatric Association, 1994). Although the description of the symptom clusters remained very similar, the definition of what was considered a potential precipitating event was broadened. One could have a traumatic response to an event that was a threat to one's own life or body integrity, but also to witnessing or even hearing about an event that involved a loved one. A new criterion was added, emphasizing the emotional response of the individual to the event, rather than simply requiring exposure to an event. Chronic medical illness as a potential precipitating factor was specifically mentioned in the text describing posttraumatic stress. This was the result of the preliminary studies, or field trials, that were done as a part of the preparation of the *DSM–IV* (Alter et al., 1996; Pelcovitz et al., 1996). Since the publication of the *DSM–IV* guidelines in 1994, there has been significant interest and research into the prevalence, predictors, course, and types of posttraumatic stress symptoms in adults and children with a variety of medical conditions.

Research in Medical Traumatic Stress

The *DSM–IV* field trials, which led to the inclusion of medical illness in the definition of posttraumatic stress, examined symptoms in a small group of childhood cancer survivors and their mothers. In the study of childhood cancer survivors, three groups were compared: 23 adolescent cancer survivors, 27 adolescents who had been physically abused, and 23 healthy, nonabused adolescents. The results were even more dramatic than had been hypothesized. The cancer survivors reported more symptoms than the healthy, nonabused teens, but they also reported more symptoms than adolescents who had been physically abused. Only 7 percent of the abused adolescents reported having a history of symptoms of PTSD, compared to 35 percent of the cancer survivors (Alter et al., 1996). The study of 24 mothers of pediatric cancer survivors compared with 23 mothers of healthy children also found that significantly more mothers of pediatric cancer survivors reported symptoms consistent with a diagnosis of PTSD at some time in their lives. The surprise in the mothers' study was that the severity of the child's illness did not predict which mothers would have PTSD (Pelcovitz et al., 1996).

Subsequent larger studies have confirmed some, but not all, of these findings. A study of 309 childhood cancer survivors, compared to 219 age-matched healthy control children, found no difference in the prevalence of symptoms reported. Only 2.6 percent of the cancer survivors reported severe PTSD symptoms, compared to 3.4 percent of the healthy comparison group, with 12 percent of both groups reporting symptoms in the moderate range. As has been the case in most studies of posttraumatic stress responses, baseline or trait anxiety was the major predictor as to who would go on to develop persistent posttraumatic stress response symptoms. Severity of illness as judged by the oncologist was not a predictor of which child reported symptoms. However, the child's report of how severe the treatment was, and whether or not the child thought he or she could die, was significantly correlated with symptoms of PTSD. This suggested that the child's perception of the event was what determined whether or not the child developed posttraumatic stress symptoms (Stuber et al., 1997). The survivors' perceptions of treatment intensity and degree of life threat were not correlated with the judgment of the treating oncologist.

The parents in this study were more symptomatic than the cancer survivors, but showed the same disconnect between symptoms and severity of illness. Of the 309 mothers of childhood survivors, 10.1 percent reported severe levels of current posttraumatic stress symptoms and 27 percent reported moderate levels of symptoms. Only 3.0 percent of the 211 mothers in the comparison group reported severe posttraumatic stress symptoms, with 18.2 percent reporting moderate levels of symptoms. The same type of difference was seen in fathers, with 7.1 percent of the 213 fathers of childhood cancer survivors reporting severe symptoms, compared to none of the 114 fathers of a healthy control group. Moderate symptoms were reported by 28.3 percent of the fathers of survivors, compared to 17.3 percent of the fathers in the comparison group (Kazak et al., 1997; Barakat et al., 1997). As had been the case with the child survivors, trait anxiety and perceptions of life threat and treatment intensity were the most significant predictors as to which mothers and fathers went on to develop chronic symptoms of posttraumatic stress.

When members of a subset of the childhood cancer survivors and parents in this study were asked about the worst part of the experience, the survivors usually referred to some aversive or painful aspect of the treatment, while parents referred to the diagnosis or moments in treatment when they felt their child's life was in immediate danger. Younger children often described separation from parents as worse for them than the actual diagnosis. Parents and children appeared to experience different aspects of the cancer experience as traumatic. However, the perceptions of life threat and treatment intensity of the children were significantly associated with those of their mothers, and it was these perceptions that were stronger predictors of posttraumatic stress symptoms than the medical estimate of life threat and treatment severity. Perception appears to be the key to understanding who will be traumatized by an event, and children appear to share (or perhaps be influenced by) their mothers' perceptions, even if the specific worst moment they cite is different.

These studies offered support for the hypothesis that parents of childhood cancer survivors experienced the diagnosis and treatment of their children as traumatic events, capable of producing posttraumatic stress symptoms that could last for years. The children in this study had completed their treatment at least two years before these surveys, with an average of five years. Symptoms were slightly less prevalent in parents whose children had been off treatment longer, but it appeared most of the symptoms were chronic. The fact that parents reported so many symptoms and for such a long period of time was new and useful information for clinicians as well as traumatic stress researchers.

However, the survivors themselves were not reporting symptoms. This raised the question as to whether posttraumatic stress response is really a problem for children with serious medical illnesses, despite the initial field trial. One possible explanation for the discrepancy between parental symptoms and child symptoms in response to the same events is that the parents are somehow protecting the children from trauma. A second possible hypothesis is that children and adults have different responses to traumatic events, and that the discrepancy between parents and childhood cancer survivors is due to developmental differences in understanding and processing the threat.

The parental protection hypothesis would suggest that childhood cancer survivors would continue to report few symptoms as they grew older, as the assumption is that the parent kept them from being traumatized at all, and thus from developing symptoms. However, if the issue is developmental, childhood cancer survivors would be expected to report more posttraumatic stress symptoms when they became adults. In a subsequent study of 78 childhood cancer survivors, now aged 18 to 40 years, the developmental hypothesis appeared to hold. Symptoms consistent with a full diagnosis of PTSD were reported by 20.5 percent of these survivors. The survivors' perceptions of current life threat and more intense treatment histories were associated with symptoms of posttraumatic stress, but the oncologists' estimate of life threat and treatment intensity was not. Higher levels of overall psychological distress were seen in survivors reporting symptoms diagnostic of PTSD (Hobbie et al., 2000). This suggests that children are not protected from the trauma, but that symptoms may simply have been delayed until the survivors are exposed to the developmental expectations of young adulthood. This makes intuitive sense, since completing school, getting a job, finding a life companion, and having children are more difficult for survivors who are likely to have cognitive difficulties, be uninsurable, have scars or disabilities, and be infertile secondary to cancer treatment. The full reality of the impact of cancer may not be felt until they encounter these recurrent reminders of the traumatic events in their past.

To test this interpretation, the evaluation of pediatric medical traumatic stress responses has been expanded to groups beyond childhood cancer survivors. Unfortunately, cancer is not the only life-threatening medical illness with intrusive treatment that children and adolescents experience. But how bad does the illness or treatment have to be to lead to a traumatic stress response in a child? The research to date suggests that simply being sick enough to be in a hospital, stressful as it is for children and families, is generally not enough to produce traumatic stress symptoms. Relatively serious illness and intrusive treatment, at least as perceived by the child, are required to generate this type of response. This is supported by a study comparing the prevalence of symptoms of posttraumatic stress in 35 children hospitalized in a pediatric intensive care unit to 33 children hospitalized on general pediatric wards. None of the children on the wards reported symptoms consistent with a diagnosis of PTSD, compared to 21 percent of children who had been in an intensive care unit. Irritability and persistent avoidance of reminders of the admission were more common in the children from the intensive care unit than in those from the wards (Rees, Gledhill, Garralda, & Nadel, 2004). A similar prevalence of symptoms is reported by another group of children who clearly undergo intensive intervention, pediatric organ transplant recipients. In a study of 104 adolescent heart, liver, or kidney transplant recipients, more than 16 percent reported symptoms meeting criteria for PTSD (Mintzer et al., 2005).

These studies give further support for the idea that medically ill children are not totally protected from traumatic stress response by their parents. However, when we go beyond childhood cancer, we also confirm that parents appear more symptomatic than their children, even though one could argue that the parents are merely witnesses to the traumatic events.

Of 164 mothers of children who had undergone kidney, heart, or liver transplantation (Young et al., 2003), 26.8 percent met the full diagnostic criteria for PTSD. Similar results were seen in a study of 49 mothers of children with diabetes, with 20.4 percent of the mothers reporting symptoms consistent with a diagnosis of PTSD 12 months after their children were diagnosed. As was seen in the fathers of childhood cancer survivors, the fathers of children with diabetes reported fewer symptoms than the mothers. Of the 48 fathers, 8.3 percent reported symptoms consistent with a diagnosis of PTSD 12 months after the diagnosis of their children (Landolt, Vollrath, Ribi, Gnehm, & Sennhauser, 2003). In parents of children undergoing serious burns, the number endorsing posttraumatic stress symptoms is even higher, with approximately 47 percent reporting significant symptoms three months after the burn (Kenardy, Spence, & Macleod, 2006).

A longitudinal study of parents of infants and children admitted to the pediatric intensive care unit examined the relationship between parental perceptions of illness severity, objective measures of severity, acute traumatic stress responses, and PTSD two months after discharge. Of the 272 parents in the initial assessment, 32 percent (87) met the criteria for a diagnosis of acute stress disorder. Of the 161 parents who also completed the two-month follow-up, 21 percent (33) met the criteria for PTSD. The PTSD symptoms at follow-up were correlated with the ASD symptoms and with the parent's degree of worry that the child might die, but were not correlated with objective measures of the child's severity of illness (Balluffi et al., 2004).

Although there is a common theme as to risk factors, it should be noted that some of the variability in prevalence of children or parents reporting symptoms has to do with the threshold used by researchers. Some researchers considered people to be positive for posttraumatic stress symptoms only if all the *DSM–IV* criteria were met for PTSD, while others included people who had clinically significant levels of symptoms but did not meet the specific diagnosis criteria of the DSM. This will be discussed further in the consideration of future directions.

Why Is This Important?

Any research has to answer the "so what" question. Why is it important to know that life-threatening medical illness leads to chronic symptoms of posttraumatic stress in children and parents? If this had not been noticed prior to 1991, when the first paper on this was published (Stuber, Nader, Yasuda, Pynoos, & Cohen, 1991), is it really clinically important? A partial answer to this was seen in a study of 51 young adult survivors of childhood cancer (18–37 years old), with an average of 11 years post successful treatment. The 11 survivors who met criteria for a diagnosis of PTSD were compared to the 40 who did not on standard measures of quality of life and psychological distress. Those survivors who reported symptoms consistent with a full diagnosis of PTSD reported clinically significant levels of psychological distress and significantly lower quality of life on 17 of the 18 variables measured. The survivors who did not report PTSD fell well within population norms for psychological distress (Meeske, Ruccione, Globe, & Stuber, 2001). This suggests that posttraumatic stress responses are a part of a larger picture of chronic emotional distress and disturbances in quality of life in people exposed to life-threatening medical illness and intrusive, albeit life-saving, treatment.

In addition to concern over the psychological distress of posttraumatic stress symptoms, interest in intervention has been spurred by some recent suggestions that posttraumatic stress responses may affect adherence to medical instructions. A small study of pediatric liver transplant recipients found that nonadherent patients demonstrated improved adherence with immunosuppressive medications after a trauma-focused cognitive therapy intervention that did not directly address the nonadherence (Shemesh et al., 2000). One interpretation of these findings is that the medication is serving as a traumatic reminder, bringing up aversive thoughts and feelings that are avoided by not taking the medication.

There is also a growing body of literature suggesting that there are adverse physiological consequences to chronic posttraumatic stress response. A recent study compared mothers of childhood cancer survivors to mothers of healthy children, using a composite index of biological risk factors that have been associated with chronic stress responses (blood pressure, cholesterol, glycosylated hemoglobin, cortisol, norepinephrine, and epinephrine) known as allostatic load. The results indicated that the survivors' mothers with PTSD had a higher allostatic load than the survivors' mothers who did not have PTSD, who in turn had a higher allostatic load than the mothers of healthy children. This suggests that the traumatic stress response was putting these mothers at greater risk of illness and disability (Glover, Steele, Stuber, & Fahey, 2005). Changes in immune response have also been suggested, with mothers with symptoms of posttraumatic stress having a higher percentage of CD4+ and lower CD8+ levels and demonstrating blunted natural killer cell reactivity to a stress challenge, compared to nonsymptomatic women (Glover & Poland, 2002).

A recent article reviewed all of the published studies on structural abnormalities of the hippocampus and other brain regions in persons with PTSD compared to trauma-exposed and nonexposed control groups. Significantly smaller hippocampal, anterior cingulated cortex, and left amygdala volumes have been reported in adults with PTSD but not in children. Children and adolescents with

PTSD have been found to have significantly smaller corpus callosum and frontal lobe volumes compared to controls. The authors of this meta-analysis suggest a resulting model in which there are abnormalities of multiple frontal-limbic structures, but that hippocampal volumetric differences do not become apparent until adulthood, and then are related to PTSD severity (Karl et al., 2006). Indeed, there is some evidence that hippocampal volume is actually increased in children with PTSD (Tupler & De Bellis, 2006). A specific study of pituitary volume did not show any consistent change in volume between children with PTSD and those who without PTSD (Thomas & De Bellis, 2004). The impact of posttraumatic stress on the anatomy and physiology of the brain and immune systems is a rapidly expanding area of investigation, with many implications for understanding the prevention and treatment of posttraumatic stress.

Of more immediate practical concern is one potential result of these brain changes, which is an impact on memory in children. Children and adolescents with symptoms of posttraumatic stress demonstrate impairments in general memory and in verbal memory, compared to nonsymptomatic trauma-exposed children and adolescents, or to nontraumatized controls (Yasik, Saigh, Oberfield, & Halamandaris, 2006).

CASE EXAMPLE: TRAUMA SYMPTOMS

Terry had undergone a bone marrow transplant as treatment after her second relapse of leukemia, when she was seven years old. Her treatment required her to be in an isolation room in the hospital for almost two months. Visitors were limited, and all those who visited had to be careful to wash their hands. Food, toys, and clothing had to be treated to remove all bacteria or viruses, as her chemotherapy and radiation treatment caused her to be immunosuppressed and very vulnerable to infection. The treatments also made her mouth sore and bleeding, as well as causing her to feel tired and nauseated most of the time.

In the hospital Terry became withdrawn, rarely talking or laughing after the first two weeks. She became anxious if her mother was not in the room, and fought with the nurses who brought her medications. After she got home, she appeared jumpy and irritable. She hated to go to the doctor for follow-up, and would scream in the car on the way to the clinic until she threw up. She had recurrent nightmares of monsters climbing in the windows of her room at the hospital.

Terry's mother wept as she spoke about Terry's hospitalization. She worried about what the radiation would mean for Terry's ability to do well in school, and mourned Terry's likely infertility. She found herself unable to sleep before she took Terry in for a medical visit, terrified that there would be an indication that the leukemia was back. However, she never discussed any of this with her husband or with Terry. She commented that he seemed to be working longer hours and drinking more than he did before Terry's illness and transplant. Both mother and father were reluctant to think too far into the future and preferred to live one day at a time in thinking about Terry.

Psychological Interventions

In the studies of medical traumatic stress responses summarized above, chronic medical illness is conceptualized as a series of potentially traumatic events, including diagnosis, treatment, and aftereffects of treatment. Helplessness, horror, or intense fear may or may not be experienced in response to any of these components of illness. The physiological response to threat is an activation of the "fight-flight" response, most immediately evident in an autonomic system activation causing a rise in heart rate. Pain appears to amplify the biological response, as well as the experience of helplessness. Perceptions of life threat are better predictors of traumatic stress responses than is statistical likelihood of death from a given illness.

Thus it would appear that interventions to decrease helplessness, horror, intense fear, pain, and perceived threat would be helpful in preventing or reducing posttraumatic stress responses and symptoms. This is the underlying assumption of most pharmacological and behavioral interventions for medical posttraumatic stress.

Three basic types of psychological interventions have been reported in the literature for treatment of symptomatic children and parents exposed to medical life threat. The earliest reported in the literature uses play, drawings, and retelling of the event to help the children to process the experience they went through, and to feel more in control (Pynoos et al., 1987; Terr et al., 1999). This approach is based on the pioneering work of Robert Pynoos and Lenore Terr with children exposed to interpersonal violence and natural disasters (Pynoos et al., 1987; Terr et al.,1999; Pynoos & Nader, 1988; Terr, 1985). A second approach is work using a cognitive behavioral approach, called trauma-focused CBT, to help a child become more able to control the fear and to better assess threat (Shemesh et al., 2000). This is based on the extensive work of Edna Foa with women who had been exposed to interpersonal violence (Foa, 2006) and Judy Cohen with children exposed to abuse (Cohen, 2005). The third approach uses a family systems approach to work with families of medically traumatized children to help them understand their differing perspectives and better support one another. Anne Kazak and her group have been the pioneers in this area (Pai & Kazak, 2006). Only this last intervention approach has been tested and found to be feasible and effective in a large sample of medically ill children and their families (Kazak et al., 2005). The cognitive behavioral approaches have a significant amount of supporting data in other childhood trauma and are now manualized, and have been adapted for children with medical traumatic stress symptoms (Shemesh et al., 2000).

The common strategies in each of the psychological interventions include age-appropriate activities, individually or in a group, which allow the following:

(1) experience of a safe place, with a safe person
(2) help in relaxing or modulating distress responses
(3) retelling or reliving aspects of the traumatic event

(4) reassessing the thoughts and feelings associated with the event
(5) reconsidering catastrophic thinking or distortions
(6) recognition of reminders that trigger traumatic distress
(7) reconstructing a sense of what is dangerous and what is safe
(8) dealing with guilt and blame

These treatments are usually time limited and can be as brief as one two-hour session, or as lengthy as a series of 10 sessions. Studies with medical illness are small and nonrandomized at this point. However, a similar approach has been tested and found to be useful in a randomized, controlled trial of group cognitive behavioral treatment within the schools for children exposed to interpersonal violence (Stein et al., 2003).

Identification and early interventions for those who have not yet developed chronic symptoms have also been developed and are available for general use by those caring for medically ill children and their parents. Screening forms for use by clinicians working in emergency departments and intensive care units allow identification of those with symptoms of acute stress disorder, which is seen as a significant risk factor for later development of posttraumatic stress symptoms. Intervention can then be targeted to those most at risk. Educational materials are also available: these can be given to parents to help them identify symptoms that indicate a need for early intervention. These can be used as a part of the "anticipatory guidance" that pediatricians routinely provide for families of children. These tools are available in the Medical Traumatic Stress Toolkit through the National Child Traumatic Stress Network (NCTSN) website, nctsnet.org. Sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) of the federal government in the United States, the NCTSN has used a partnership of university centers and community-based service providers to develop and implement interventions for children and families exposed to a variety of traumatic stressors (Stuber, Schneider, Kassam-Adams, Kazak, & Saxe, 2006).

Preventative efforts for all children and parents exposed to medical life threat are also available through the NCTSN website, developed by hospital-based researchers and clinicians based on clinical experience with hospitalized children and children with acute injuries. The general format of these interventions is psycho-educational, utilizing written materials as well as individual and group meetings with clinicians. Basic components include strategies to reduce helplessness, fear, and horror by better understanding what is happening in the treatment, and what kinds of reactions parents can expect from their children. Concrete efforts to restore some of the normal parenting role are also very helpful, for example, allowing parents to feed or bathe their children in the hospital. Parents are helped to adjust their expectations in light of expectable stress-related regression, without removing the entire structure upon which the child relies.

Preventative group interventions, which may help prevent significant posttraumatic stress symptoms by reducing helplessness and the sense of isolation that contributes to fear, have also been used. Support and mutual problem-solving types of groups appear to be more useful for parents than for adolescent cancer survivors in one study (Stuber, Gonzalez, Benjamin, & Golant, 1995). Specific training in problem solving appears to be helpful for mothers (Sahler et al., 2005). However, settings that allow medically ill children to feel less alone and to regain a sense of being "regular kids" appear to be quite successful A popular and informal format for these types of groups is the specialty camp, such as the Ronald McDonald Camp Good Times for childhood cancer survivors, and the Paul Newman Hole in the Wall camps for children with a variety of medical problems, including organ transplant recipients. At this point the data supporting the utility of these camps are limited (Martiniuk, 2003), but the number of camps continues to grow.

With the increasing availability of the Internet, virtual support groups have also been created, with apparent success. A Web site at experiencejournal.com allows children and parents dealing with cancer, heart disease, and organ transplants to read or hear the stories of other patients and families, as well as learn from the experts (DeMaso, Gonzalez-Heydrich, Erickson, Grimes, & Strohecker, 2000). Another Web site, sponsored by the Children's Oncology Group, a national association of pediatric oncologists, offers support and education for adolescents dealing with cancer at http://www.teenslivingwithcancer.org.

Pharmacological Interventions

Pharmacological interventions have also been targeted either at prevention or at treatment of symptoms. Preventative pharmacological interventions have focused on reduction of the fight-flight response, known as autonomic arousal. This approach has been based on two different types of studies. The first type of studies examined heart rate in the immediate posttrauma period as a predictor for later posttraumatic stress symptoms. These studies have been done primarily with children brought into the emergency department after traffic injuries. In one such study, 190 children, aged 8 to 17 years, were assessed for symptoms of posttraumatic stress approximately six months after their injuries. Those children who had a higher heart rate at the time of triage in the emergency department were more likely to report symptoms consistent with a diagnosis of PTSD or "partial PTSD" (Kassam-Adams, Garcai-Espana, Fein, & Winston, 2005). This type of study has led to a number of medication trials with drugs designed to reduce heart rate. Although a number of small trials of such medications have been successful, none have been sufficiently impressive to convince physicians to give medications that could be dangerous to an ill or injured child at the time of hospitalization.

The second type of medication study has been more influential in clinical and research thinking about preventative interventions for posttraumatic stress responses. In 2001, Glenn Saxe and Frederick Stoddard (Saxe et al., 2001) examined the relationship between posttraumatic stress symptoms in children who had sustained major burns and the amount of morphine they had received during the hospitalization. The severity of symptoms of posttraumatic stress reported six months after the burn was negatively associated with the amount of morphine they had received. This was counterintuitive, since one would assume that the amount of morphine should be proportional to the size and severity of the burn, and that the size and severity of the burn would be related to the likelihood of posttraumatic stress symptoms. However, the posttraumatic stress symptoms were not greater in those with more severe burns. Morphine for pain during hospitalization for burns appeared to reduce the likelihood of later posttraumatic stress symptoms. This was hypothesized as a result of pain control and sedation reducing both autonomic arousal and perception of threat, and thus reducing the psycho-physiological process that leads to chronic posttraumatic stress symptoms. At the least, this finding reinforces the need for excellent pain control for ill or injured children. In addition, it raises some interesting questions about the prevention of posttraumatic stress symptoms.

Pharmacological treatments of symptoms are also theoretically based on addressing autonomic arousal and the physiological stress response. For example, persistent increases in cortisol releasing factor (CRF) concentration have been associated with trauma exposure in early life and with PTSD. This increase in CRF may be reversed with the use of paroxetine, a serotonin reuptake inhibitor (Nemeroff et al., 2006). However, most of the pharmacological treatments have been empirical, addressing specific symptoms. Randomized, controlled trials are needed. In the meantime, the literature suggests starting with selective serotonin reuptake inhibitors, known as SSRIs. These have been found to be effective for many of the symptoms associated with posttraumatic stress responses, such as anxiety and withdrawal, and found to improve quality of life. However, SSRIs are not always sufficient to address all of the symptoms. Adrenergic agents such as clonidine may be used alone or in conjunction with an SSRI to treat impulsivity and hyperarousal. In some cases a mood stabilizer, such as lithium, or even an antipsychotic medication may be needed. Each of these agents has been found to be useful in some situations, so clinicians are advised to address targeted symptoms, rather than expecting there to be a PTSD-specific medication for children and adolescents (Donnelly, 2003). One type of medication that is generally not recommended is the benzodiazepines. Although these may be useful short-term medications for sleep disturbances, they may increase a sense of helplessness in acute situations, by causing disinhibition or grogginess without any real reduction in anxiety.

CASE EXAMPLE: INTERVENTION

Rosa is referred for a consultation with the hospital based pediatric psychologist because the liver transplant team is worried that she does not seem to be consistently taking her immunosuppressive medications, and she is starting to reject her liver. Rosa acquired hepatitis on a visit to her extended family in Mexico when she was 10 years old. She had previously been well and very athletic, enjoying playing soccer with her school team. Rosa had a liver transplant four months after her diagnosis, and had a rocky course for the first year after the transplant, with frequent hospitalizations for infections and acute rejection episodes. Rosa is now 12 years old and two years post-transplant, and has been stable. However, over the past few months her liver tests have been less good, and her medication blood levels have been more variable.

On interview, Rosa describes vomiting blood during a soccer game, and the horror she saw on her mother's face. She admits she tries to avoid seeing herself in the mirror when she is undressed, as her scar reminds her of seeing her father crying at her bedside when she woke up after the transplant. She had never seen him cry before, and it terrified her. She had been sure she was dying. She still has nightmares about both of these events.

In the therapy she becomes more able to remember what happened, and gains a sense that she can control the resulting feelings. She learns how to respond when she encounters things that remind her of the transplant. She practices relaxation techniques, and challenges her fears and catastrophic thinking. Over a few weeks she finds that she can get up the courage to try out for the track team, despite her mother's apprehension about her being involved in sports again. Rosa appears more able to concentrate, is doing better in school, and is more social. Her mother reports that Rosa does not seem to "forget" to take her medication as often, and is much less upset now when her mother offers it to her. Rosa's mother is also more relaxed, now that her daughter seems to be back to being a normal, healthy girl.

Best Practices

As described above, clinical research has suggested that children with life-threatening illness and their parents are at risk for the development of chronic symptoms of posttraumatic stress. This has been found in childhood cancer survivors, organ transplant recipients, diabetics, and children with serious burns, among others. The actual prevalence of posttraumatic stress in children with life-threatening illness is still not entirely clear, with a range of 3–35 percent in studies of childhood cancer survivors, with most studies finding reports of significant symptoms in approximately 15–20 percent of child survivors. For perspective, the prevalence of PTSD in a general urban population has been estimated to be 5 percent for men, 10.4 percent for women, and 3.7 percent for 12- to 17-year-old boys and 6.3 percent among 12- to 17-year-old girls (Seng, Graham-Bermann, Clark, McCarthy, & Ronis, 2005).

As has been described above, parental reports of posttraumatic stress in response to the medical illness or injury of their children have been higher than those of the children, ranging between 8 and 45%, with most studies finding more severe symptoms reported by mothers than by fathers. This may be simply a gender difference, as women usually report more symptoms than men (Nemeroff et al., 2006). However, this also may be a reflection of the relative exposure of mothers to traumatic episodes during treatment, since mothers are more likely to accompany their children to the clinic and hospital.

Individuals who are more anxious at baseline are at higher risk to develop posttraumatic stress symptoms in response to medical life threat and intrusive treatment. This applies to both children and parents. A certain threshold of severity of illness appears to be required to develop posttraumatic stress symptoms, as children admitted to the intensive care unit appear to be at much greater risk than those general pediatric wards. However, beyond that threshold, the actual severity of the illness or injury is less important than the child's perception of life threat or treatment intensity in predicting who will go on to develop posttraumatic stress symptoms. Children's perception of threat appears to be influenced by that of the parent, whose posttraumatic stress symptoms are also related to their perception of life threat and treatment intensity. Thus, although the posttraumatic stress symptoms of mothers and children are not directly related, they are indirectly related through the apparent sharing of the perception of life threat and treatment intensity.

Interventions are best conceptualized as either preventative strategies or treatment of symptoms. Prevention of posttraumatic stress symptoms appears to require the following:

(1) Effective pain management
(2) Screening for signs of autonomic arousal, such as increased heart rate
(3) Psychoeducational interventions with parents
(4) Care to avoid additional trauma, such as separation from parents
(5) Efforts to decrease helplessness for child and parent

Examples of successful preventative approaches would be the use of the Medical Traumatic Stress Toolkit from the National Child Traumatic Stress Network, or the camps offered to children with a variety of illnesses that would preclude them from participating in other camps. Support and psycho-educational groups offered for parents are also useful as general preventative approaches.

Treatment approaches should include interventions with both child and parents, and should address feelings of pervasive fear and helplessness. The approaches with the best evidence base are trauma-focused CBT (tested with other types of childhood trauma) and family systems approaches (specifically tested for children with cancer and their families). Both use time-limited approaches, which can be followed individually or in groups.

Medications may be indicated to address specific symptoms, or when the anxiety or concurrent depression is disabling. The class of SSRIs is generally the best first step, with the most research having been done with sertraline and paroxetine (Gothelf et al., 2005). Benzodiazepines should be used sparingly, as they can turn an alert and frightened child into a disinhibited and groggy frightened child, who is even more difficult to comfort.

Helping the parents to be calm and supportive for the children is one of the best investments in preventative and treatment intervention that a clinician can offer. Parents who are out of control emotionally are even more distressing to children in a treatment setting than absent parents. Well-meaning parents can easily increase distress in their children by being apologetic or overly reassuring to the child. Providing information to the parents is usually the single best way to help them to overcome their own helplessness and intense fear, and to enable them to support their children.

Public Policy

Academic medical centers are working all the time to reduce the actual life threat of childhood illnesses. Obviously, reducing the threat would be very helpful in reducing the fear and helplessness of children and parents. However, much of the improvement in survival has been purchased at the cost of increases in treatment intensity. Children diagnosed with cancer often go through years of chemotherapy and radiation treatment, with many painful procedures and separations from their families. Organ transplants require lengthy operations and hospital stays, as well as a lifetime of medication and blood tests. Many successful treatments have become a source of horror and helplessness. Although this cannot be eliminated, hospitals and medical care providers can reduce the traumatic impact by becoming aware of the types of things that are traumatic for children and parents.

A recent survey suggests we have a long way to go to educate physicians about posttraumatic responses in children. Although studies of children after motor vehicle–related injury suggest that up to 80 percent will develop symptoms of acute stress response, only 20 of 287 board-eligible or board-certified pediatric emergency physicians reported that they believed children were likely to develop these types of symptoms. These physicians were aware that an associated parental injury increased the risk of traumatic stress symptoms, but 86 percent incorrectly believed that severity of the injury was associated with future development of PTSD. Only 11 percent of the physicians were aware of the available tools to assess the risk for PTSD, and only 18 percent provided any verbal guidance about PTSD to the parents (Ziegler, Greenwald, DeGuzman, & Simon, 2005). Further education is clearly indicated to address this and the needs of the parents.

Only a generation ago, it was common for children in the hospital to be separated from their parents for all but a few hours a day. This was justified on the basis of space, infection control, and how upset the children became when the parents left. Today parents are able to stay with their children throughout a hospital stay, even sleeping in their rooms except in intensive care or isolation settings. This reflects a shift in the understanding of the needs of hospitalized children. Current debates now center on the presence of parents as a child prepares for anesthesia preoperatively, with similar arguments made on both sides. Once again, however, the wrong question is being asked. Rather than asking whether children will do better or worse if their parents are present, the question is how to make the parents as helpful as they can be to the child. A supportive, calm adult is what the child needs. If that person can be the parent or close relative, it is much more effective for the child than any other adult. However, because the child will tend to interpret the danger of a situation from the parent's response, an anxious parent will be worse than a calm staff person. Pediatric hospitals now help prepare children for surgery with tours, photographs, and coloring books. Psychoeducational and support services should be offered to their parents as well, so that parents can be with their children in a supportive way throughout the hospital experience.

Pain control has already been recognized as a major health concern. However, control of pain in children continues to be difficult. Children are not as good reporters of pain as adults, and are less able to localize or describe types of pain. As pain is better understood, anticipation of pain should allow us to premedicate surgical patients. Pain medication should be regularly titrated and given around the clock, rather than using "prn" or "as needed" dosing. This prevents the buildup of pain to an unacceptable level before the next medication is given, and reduces the delay between the onset of pain and the distribution of pain medication in the blood stream, thus reducing physiological and psychological stress on the child and parents. Education of physicians, nurses, and other hospital staff is needed to change the way that we think about pain medication.

Prevention of traumatic stress responses requires changes in what is done acutely in the hospital and over time in treatment. Communication is the key ingredient to reducing helplessness in these settings. Parents need to have good education and communication about their child's illness and treatment from the beginning. They also need to know that they will not get differing opinions and information from the variety of medical teams who see their child. This requires good communication between the different teams.

Current research is rapidly increasing the understanding of the neurobiology of posttraumatic stress responses. This will ultimately be the key to understanding both prevention and treatment. In the meantime, however, better treatment studies are needed. To do these properly, investigators will have to better understand the constellation of symptoms of posttraumatic stress responses in children and adolescents and to find out whether symptoms are the same in people exposed to medical life threat as they are to natural disasters or interpersonal violence. It may be that the prolonged experience of intrusive and painful procedures that are performed with parental permission and by seemingly well-meaning people has a very different impact on children than one-time episodes of violence, much as sustained abuse by a parent has a different impact from a single disaster (Terr, 1991). Although we now know that children can be traumatized even if physicians are doing things "for their own good," we still have much to learn about the full significance of these symptoms for the lifetime that has been restored to them.

CASE EXAMPLE: TRAUMA PREVENTION IN A HOSPITAL

Toby is brought in to the hospital after collapsing at school. His parents have been called and have come to the emergency room, but have not been able to locate where he is or get any information on his status. They are frantic by the time they find a nurse who knows where he is, and even then they are told to wait before they can see him. When they are brought in to see him, he is hooked up to a number of beeping machines. He does not respond to their voices, and his mother begins to cry. His heart rate begins to climb, and the machines start making shrill noises. His parents are told they must leave now, and wait until he is admitted to the hospital. They meet with several doctors, who all seem to ask the same questions. Is there anyone in the family with heart disease or diabetes? They are told that Toby has had a syncopal episode, that his glucose level is over 300, and that he may have diabetes. They are stunned and confused, not really understanding anything except that last word. Yes, mother had a relative with diabetes, an aunt. She became blind, had to go on dialysis, and died of an infection when she was only 34. Is that what will happen to Toby?

When they join Toby in his room in the pediatric intensive care unit (PICU), he is fighting with a nurse who is trying to draw his blood. His mother runs over to comfort him, happy to see him awake. His father looks around at the PICU. It reminds him of Las Vegas. The lights are on as if it is day, although it is now almost midnight, and everyone is busy, with machines humming. Toby asks his parents what happened, and when he can go home. He is eight years old and has never slept away from home without his parents.

One of the nurses introduces herself to the family. She explains that there will be an opportunity for them to meet with the doctor and the team who will care for Toby in the morning. There is a room in which they can sleep that night if they want. Toby is likely to be moved to a regular pediatric bed in the morning, and there will be a bed there in the room with him for one of them to stay with him. They will meet with the nutritionist and be taught whatever they will need to know about Toby's care before he goes home. In the meantime, they need to know that diabetes care is much better than when mother's aunt was a girl. Toby is finally sleeping comfortably, and they decide to have dad stay in the hospital, while mother goes home to collect some things to make Toby feel more at home—and to finally eat something for the first time in over 12 hours.

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CHAPTER 3

TRAUMA AND THE TREATMENT OF PAIN

Allen Lebovits

Pain is one of the most complex of human experiences. It is the most common reason for which patients seek medical care. Over 80 percent of all physician visits are due to pain. Pain accounts for over $70 billion annually in health care costs and lost productivity (Gatchel & Turk, 1996). It is defined by the International Association for the Study of Pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage." Accordingly, the perception of pain is not only a sensory experience but also an emotional experience. Sensory information and affective state play interactive roles. Pain is reacted to with varying levels of emotional distress that can mitigate the perception of pain. Heightened levels of anxiety in reaction to the pain often exacerbate the very sensation of pain.

It is important to distinguish between acute and chronic pain. The distinction between the two is not simply a matter of duration: (1) Acute pain is biologically useful; it serves as the body's alarm warning of an underlying medical condition, while chronic pain has lost its biological usefulness. (2) The etiology of acute pain is almost always identifiable, while the complex interaction of physical and emotional factors in chronic pain makes the etiology often unclear. (3) Cure and relief are almost always attainable in acute pain but are often not possible with chronic pain. The goal in chronic pain treatment is to improve functionality, for example, increasing activities of daily living, interacting more with people, and/or returning to work. (4) Acute pain may lead to anxiety while chronic pain is often associated with depression. These distinctions between acute and chronic pain have important therapeutic implications. The treatment approaches for each are very different.

The first psychological model of chronic pain was the psychodynamic approach, which emphasized the psychological etiology of pain. Freud viewed pain as a symptomatic expression of an unconscious conflict seeking awareness. In 1965, Melzack and Wall revolutionized the way we think about pain with their "gate control" theory. For the first time, pain theory incorporated higher brain functions such as cognition and affect. The theory postulated the existence of a "spinal gate," in the dorsal horn of the spinal column, that modulates transmission cells influenced by inhibitory and facilitative fibers. Quite significantly, the theory postulated that cognitive and affective states can help open or close the gate. Although the theory has been revised due to new physiological discoveries, its basic premises still remain.

Behavioral models, particularly operant conditioning, proposed by William Fordyce in the 1970s, became popular. Fordyce proposed that the behavioral expression of pain, pain behavior, is the result of positive and negative reinforcers from the patient's environment, such as social reinforcement from family and friends, medications from physicians, financial incentives, or avoidance of activities. Subsequently, cognitive behavioral models of pain became more popular and remain the prevailing theory with regard to the assessment and treatment of chronic pain today. The cognitive behavioral model theorizes that the experience of pain is a reciprocal interaction of thoughts, feelings, physiology, and behavior (Bradley, 1996).

The traditional medical model of chronic pain was that pain had either a physical basis or a psychological one. It is now well accepted that chronic pain is a complex interplay of physiologic, psychologic, and social processes (Turk & Okifuji, 1996). These biopsychosocial determinants of chronic pain interact with one another: Neurophysiologic responses to noxious stimuli such as pain can trigger psychological responses, while psychological states such as depression or anxiety can affect the neurophysiologic system by enhancing or inhibiting the transmission of noxious signals. Social factors such as stress, trauma, environmental reinforcers of pain (for example, an overly attentive spouse), or financial compensation (through disability or litigation, for example), can significantly influence a patient's perception of pain. Many patients with chronic pain, particularly if the pain resulted from an accident at work, will go on disability because they cannot or will not return to work. The disability system, however, often works against the best interests of the patient and the goals of pain management: (1) by offering compensation comparable to work: in effect, paying the patient to have pain; (2) by promoting activity restrictiveness, which works against the goal of returning patients to a more optimal level of function; (3) by extensive delays in authorizations for medical and psychological evaluations and treatments—many pain syndromes have a much better prognosis if treated earlier rather than later; and (4) by the lack of light-duty work or trial return-to-work periods. This can lead to fear on the part of the patient to return to work and lose his or her disability. Another potential problem is the definition of "light duty," which can be inappropriate. For example, a bus driver returning from disability may be assigned to cleaning buses rather than driving them.

The most prevalent psychological characteristic of chronic pain patients is depression (Romano & Turner, 1985). Depression and chronic pain occur together so frequently that it is often difficult to determine whether the depression is a precipitant of the pain or a consequence of living with intractable pain. Levels of depression can range from minor mood-state disturbances to major clinical depressions with active suicidal ideation. Other characteristics of patients with chronic pain include increased dependency on others; increased illness behaviors such as grimacing; overreliance on medications; increased health care utilization; and family dysfunction; for example, spouses of pain patients may display clinically significant levels of emotional distress.

Psychological Assessment of Chronic Pain

The multidisciplinary evaluation and treatment approach to the patient suffering with chronic pain is widely practiced today and considered to be the standard of care (AAPM Council on Ethics, 2005). The psychological evaluation and assessment of chronic pain patients has evolved from unidimensional to multidimensional models. Since the formation of the first multidisciplinary pain center in 1961 by John Bonica at the University of Washington, there has been a proliferation of such centers. A multidisciplinary pain center is a facility in which a comprehensive evaluation and treatment are provided by a team of health care professionals including physicians, psychologists, physical therapists, occupational therapists, and nurses. A major advantage of the team approach is that a broad base of knowledge and expertise is available, and this can facilitate a team analysis of the appropriate diagnosis of pain and the appropriate treatment approach.

Despite the increasing recognition of the importance of appropriate pain control, as evidenced by the formation of national professional societies such as the American Pain Society and the recently revised accreditation criteria of the Joint Commission on Accreditation of Hospitals, mandating pain evaluations of every hospitalized patient, pain is often undertreated. Lack of knowledge on the part of health care professionals regarding the appropriate evaluation and treatment of pain and poor attitudes, particularly the unwarranted fear of addiction on the part of both patient and provider, hamper proper pain control efforts (Lebovits et al., 1997). Appropriate pain control therefore continues to be a significant challenge for the patient, the patient's family, and health care providers.

It is important to assess for the occurrence of trauma, as its contribution to the complexity of the pain diagnosis may not always be evident. Some patients may avoid discussing trauma due to fearfulness. In other cases, people may be unaware of their trauma. Additionally, some of the symptoms of posttraumatic stress disorder (PTSD), such as affective disturbance, hyperarousal, or sleep problems, could be seen by the health care provider as being due to the patient's pain. Alternatively, severe, unrelenting pain could be the source of the trauma itself: Many patients with chronic pain fear that it is life threatening; they anticipate further medical interventions, such as surgeries, which can be a threat to their physical integrity. The sudden onset and life-altering nature of chronic pain often lead to feelings of helplessness and intense fear.

Measures of Pain

A useful assessment measure for patients with chronic pain and trauma is the Posttraumatic Chronic Pain Test (PCPT) (Muse & Frigola, 1986). The PCPT contains six true-false items that screen for the presence of PTSD related to the accident that caused the patient's pain. The PCPT has good reliability (.90), split half reliability (.59), and interrater reliability (.93). An important area of investigation in the clinical interview with the patient with chronic pain, particularly with women presenting with chronic pelvic pain, is a history of childhood physical, emotional, or sexual abuse. There appears to be a relationship between childhood abuse and physical pain in adulthood (Schofferman, Anderson, Hines, Smith, & White, 1992).

Although the treatment of a patient with chronic pain mandates a comprehensive evaluation of the medical as well as psychological contributors to the etiology, maintenance, and exacerbation of pain, evaluating and treating chronic pain patients with a unimodal, strictly medical approach still occurs. Relying solely on radiographic results, which have been shown to be unreliable indices of pain, to explain a patient's pain, can lead to failed surgical interventions. Additionally, significant spinal abnormalities are found in patients who do not experience back pain. Jensen et al. (1994) found that 64 percent of 98 individuals who did not have any pain had a disk bulge, protrusion, or extrusion on MRI. Thirty-eight percent had an abnormality of more than one intervertebral disk.

Other detrimental effects of a strictly medical approach to chronic pain includes not evaluating chronic pain patients for PTSD, which can lead to failed medical interventions and subsequent significant psychological morbidity as a result of another failed treatment approach. In fact, the depression often experienced by PTSD patients can be exacerbated by the failure of treatment based on a unimodal medical approach, as they get increasingly frustrated by the failures of treatment and as their depression does not get addressed. Physical pain is often accompanied by emotional pain, particularly when the circumstances of onset are traumatic. The early and accurate identification of individuals who are at risk of developing PTSD could lead to psychological interventions that can potentially lessen the severity of PTSD symptoms.

CASE REPORT 1

A 28-year-old three-time karate champion from a South American country, married with two small children, was crossing the street in Manhattan when his life changed suddenly forever. He awoke in a hospital bed in excruciating pain to discover that his right leg had been amputated above his knee after he was hit by a car. I saw him six months later for the first time. He was trying to adjust to a prosthesis and had florid symptoms of posttraumatic stress disorder and severe chronic pain.

> Pharmacologic interventions took the edge off his physical pain but didn't touch his emotional pain. He told me he had gone to the roof of his apartment building three times to jump off but "hasn't had the courage" to do it yet. Pain drugs weren't enough for him. No one in the busy medical system thought it worthwhile to address his significant depression, his constant nightmares, and his enormous rage at the doctors who amputated his leg. No one asked him about his failing marriage and the growing distance between him and his children.

Psychological treatments for pain are often overlooked by doctors as well as insurance companies. Doctors may resort to more invasive and expensive pain interventions, such as spinal cord stimulators and implantable pumps, that are more likely to be reimbursed by insurance companies but offer minimal evidence of being useful, especially when compared to less costly and less invasive psychological treatments. Cognitive behavioral methods, such as biofeedback and relaxation training, have proven effective for specific pain syndromes yet are thought of as "alternative" or "complementary." In this case example, had the young man had more immediate psychological attention, his emotional as well as physical pain would probably not have been so far out of control.

Another example of the psychological issues that can be overlooked without a comprehensive psychological evaluation is patterns of somatization, which can lead to repeated medical interventions and further contribute to medical and psychological morbidity. Therefore, the Commission on Accreditation of Rehabilitation Facilities (CARF) accredits only chronic pain programs that are interdisciplinary in both their evaluation and their treatment of patients and require a psychologist or psychiatrist as part of the core pain team.

The psychologist needs to take the results from pain questionnaires, clinical interviews, and psychological assessment measures, and with sound clinical judgment formulate a diagnosis and treatment plan that is individually geared to each patient. These results need to be evaluated together with the medical findings and be part of the interdisciplinary overall treatment plan. To paraphrase Sir William Osler, "It is not the type of disease that a patient has that is as important as the type of patient that has the disease."

Psychological Management of Pain

Psychological intervention with the patient who has chronic pain is an integral part of a multidisciplinary approach to pain management. The overall goal of pain management centers today is to return the patient to a more optimal level of functioning. Improved functionality rather than cure of pain is often the focus of pain management. Many pain patients have difficulty accepting that the primary treatment goal is improved functionality rather than pain relief. Frequently, behavioral functioning is the primary goal, followed by emotional functioning. Family members can be very helpful to the therapist in supporting patients' "wellness" behaviors rather than reinforcing "pain" behaviors. Decreased reliance on medications and utilization of the health care system as well as reduced level of subjective pain sensation are important but secondary treatment goals. The simultaneous engagement of physical therapy as part of the patient's recovery is essential as it mitigates the negative influence of deconditioning that many patients experience. Activity and physical therapy are often the focus of the psychological therapy and need to be continually inquired about and reinforced.

The most commonly utilized psychological approach is the cognitive behavioral modality. The general objective of cognitive behavioral treatment strategies is to assist the patient in reconceptualizing his/her belief about pain as an uncontrollable medical symptom to a belief that the patient's response to pain can to an extent be under his/her control. The initial step is educating the patient about the mind-body relationship. The effectiveness of this step depends on the patient's defensiveness, level of knowledge about the mechanism of pain, and attitudes about the mind-body relationship. The mainstay of this approach is relaxation training, which helps patients to redirect their focus away from pain, reduce autonomic reactivity, and enhance a sense of self-control. Relaxation training can be accomplished through guided imagery, progressive muscular relaxation, biofeedback, and hypnosis. Relaxation seems to work through reduction of muscle tension, distraction of the patients from their pain and bodies, and creation of a feeling of enhanced control over their bodies.

Guided imagery has the patient focus on a multisensory imaginary scene. Typically, the image is elicited from the patient, and the psychotherapist guides the patient through the image, substituting sensations such as warmth or numbness for pain. Diaphragmatic breathing (inhaling and exhaling more deeply by using diaphragmatic muscles as opposed to more superficial breathing using primarily chest muscles) is an important part of the relaxation experience, distracting the patient even further.

In progressive muscular relaxation, patients are taught to alternately tense and relax individual muscle groups throughout the body. Only nonpainful muscle groups and body locations are used. Patients learn to recognize and differentiate feelings of tension and relaxation.

Biofeedback is a particularly effective modality for teaching chronic pain patients relaxation as well as self-regulation of physiological processes. Biofeedback monitors ongoing physiological processes such as muscle tension, heart rate, temperature, and even brain waves (called EEG neurofeedback) and provides the patient with visual and auditory feedback. Body sensors attached to a computer enable the patient to achieve relaxation, which can increase pain tolerance, decrease emotional distress, and even relax specific muscle spasms. Physiological self-control leads to a sense of control, better coping skills, and hopefulness. Pain syndromes with which biofeedback is most effective include headaches, transmandibular joint dysfunction (TMD), myofascial pain syndrome, fibromyalgia, and pain exacerbated by stress or anxiety.

Hypnosis is another particularly effective therapeutic technique with pain patients. It not only teaches patients relaxation but also enables them to experience an analgesic reinterpretation of their pain, experiencing numbness, for example, instead of pain. In one study, women with metastatic breast carcinoma pain undergoing weekly group therapy with self-hypnosis had significantly lower pain ratings over one year than a control group (Spiegel & Bloom, 1983).

In addition to education and relaxation training, an essential part of the cognitive behavioral approach is cognitive restructuring. With this technique, patients are taught to identify maladaptive negative thoughts that pervade their thinking and to replace them with more constructive and adaptive positive thoughts. The maladaptive thoughts often take the form of statements about oneself or one's illness that are negative and can include overgeneralizing or catastrophizing. Typical maladaptive thoughts of patients with chronic pain include the following: "Pain signifies something is terribly wrong," "Pain means I need more surgery," and "No one can help me. It's hopeless."

A National Institutes of Health (NIH) technology assessment conference on the efficacy of mind-body approaches for the treatment of chronic pain and insomnia found "strong" to "moderate" evidence to support the use of relaxation techniques, hypnosis, cognitive behavioral therapy, and biofeedback in reducing chronic pain (NIH Technology Assessment Panel, 1996). The American Psychological Association has specified that the psychological treatment of chronic pain is one of 25 areas for which there is empirical validation for psychological intervention.

Psychotherapy also plays an essential role in psychological intervention with pain patients. This can include supportive psychotherapy, group therapy, psychoanalytic (dynamic) psychotherapy, and/or family therapeutic interventions.

Nevertheless, there are barriers to the integration of these psychological therapies into chronic pain management practice. These barriers include a continued overemphasis on the biomedical model, a lack of standardization of psychological techniques, physician reluctance to refer (due to lack of awareness of benefits and concern regarding patient feeling that the physician perceives patients' pain as imaginary or "in their head"), and poor insurance reimbursement.

Trauma and Pain

Medical advances have increased the rates of survival subsequent to major trauma, and these, in turn, have increased the prevalence of chronic pain as a sequela of trauma. Thus, patients with chronic pain often have a traumatic onset etiology. A significant number of patients seen by chronic pain specialists may experience considerable amounts of psychological distress and some may have PTSD. Motor vehicle accidents, a frequent precipitating event for the onset of pain, has been estimated to produce approximately 28 individuals with significant PTSD symptoms in every 1,000 adults in the United States (Norris, 1992). Studies have reported between 29 percent and 43 percent of patients with temperomandibular disorders (TMD) as having had a trauma as the precipitating cause (Greco, Rudy, Turk, Herlich, & Zaki, 1997; Harkins & Martenay 1985).

The complexity of the mind-body relationship in patients who have chronic pain is amplified when they also have PTSD. PTSD has been estimated to occur in about 10 percent of chronic pain patients (Benedikt & Kolb, 1986; Muse, 1985). When patients with pain as a result of an accident are referred for psychological treatment, the reported PTSD rates increases from 50 percent (Hickling & Blanchard, 1992) to 100 percent (Kuch, 1987). One study evaluating Vietnam veterans with PTSD found a rate of pain of 77 percent, though the chronicity of the pain was not specified. Fibromyalgia patients whose pain developed as a result of an MVA compared to fibromyalgia patients whose pain was not related to an MVA had a threefold increase in PTSD or phobia. The reexperiencing and intrusive recollections of the traumatic event are associated with an increase in muscle tension as well as anxiety, which exacerbates pain (Blanchard et al., 1983). PTSD has been theorized to decrease the pain threshold due to neurobiologic changes such as changes in the release of norepinephrine or decreased hippocampal volume. It is unclear whether the decreased pain tolerance observed in posttrauma victims is due to changes in physiology resulting in hypersensitivity to pain or due to changes in selective attention and sensory appraisal. Hypervigilance to bodily sensations is commonly reported by post-MVA victims. Heightened body awareness and anticipation of pain due to having a trauma may lead to an increased focus on physical sensations and misinterpretation of benign sensory input as pain. The failure to diagnose and treat PTSD properly in chronic pain patients can lead to minimal or inadequate pain relief (Benedikt & Kolb 1986; Muse, 1985).

Unresolved traumatic stress can help maintain chronic pain for many years or actually activate physical pain many years later. In a study of 100 spinal surgery patients, 95 percent of patients who recalled no developmental traumas (physical, sexual, or emotional abuse, alcohol/drug abuse in caregiver, or abandonment) had a successful postsurgical outcome (Schofferman, Anderson, Hines, Smith, & White, 1992). Only 15 percent of patients who recalled three or more of these traumas/risk factors had a successful postsurgical outcome. The authors of this study theorized that for those patients with a history of abuse, surgery is another traumatic event that reactivates the childhood template of abuse. Patients who can be consoled are likely to improve; those who have been psychologically traumatized and are not readily consolable may not improve.

Clinically, it has often been noted that patients presenting with chronic pain with a traumatic onset, such as an accident, are frequently more difficult to treat than patients presenting with chronic pain with idiopathic onset (pain not originating as a result of traumatic onset) (Turk & Okifuji, 1996). Posttraumatic pain patients report significantly higher levels of pain severity, disability, life interference, and affective distress, as well as lower levels of activity, than do idiopathic onset pain patients. Additionally, significantly more traumatic onset pain patients receive opioid medications and are treated with nerve blocks, physical therapy, and TENS (transcutaneous electrical nerve stimulation) than nontraumatic onset pain patients. Traumatic onset pain patients who also have significant levels of posttraumatic stress disorder (PTSD) report higher levels of pain and affective disturbance than do traumatic onset pain patients with low levels of PTSD and nontraumatic onset pain patients. Patients with accident onset pain, regardless of the presence of PTSD, report greater disability than do patients whose pain is not accident related (Geisser, Roth, Bachman, & Eckert, 1996).

The treatment of both pain and PTSD have had mixed results. Systematic desensitization, used successfully to reduce PTSD symptoms, has had marginal effects on pain. However, imaginal exposure therapy to the accident scene did lead to pain improvement in one study (Kuch et al., 1985). In a comparison of patients suffering from traumatic onset of temporomandibular disorders (TMD) with those reporting symptoms of unknown origin, Greco et al. (1997) showed that both traumatic and nontraumatic onset groups had positive outcomes following treatment that included biofeedback. The authors acknowledge that the lack of differences may be due to their very broad definition of traumatic onset ("specific onset event") as compared to that of others who used a more limited definition of trauma, such as overt trauma. Nevertheless, they did find that a significantly higher percentage of trauma patients used pain medication at follow-up, similar to previous findings that traumatic onset pain patients required more treatment modalities. Several studies, however, have reported less improvement due to treatment in patients with traumatic onset of pain, with treatment success rates doubling in nontraumatic onset pain patients. Waylonis and Perkins (1994), however, found that the symptoms of traumatically induced fibromyalgia were similar to those of spontaneous fibromyalgia.

Traumatic onset pain patients appear to have greater difficulty in adapting to their chronic pain than do patients whose pain onset was gradual and nontraumatic. This situation is exacerbated when traumatic onset pain patients also have symptoms of PTSD. Sudden changes in lifestyle may have an adverse effect and be more difficult to cope with. When an event is sudden and catastrophic, adaptation is slower than when the individual has an opportunity to adapt to change over time. Additionally, perception of fault is a potential mediator of pain severity; having a target to blame interferes with a healthy recovery and adaptation to pain. In fact, feeling victimized may increase the likelihood of developing PTSD. This might be why individuals with pain who are also involved in litigation tend to cope less well than others. Traditional modalities of chronic pain management (pharmacologic interventions, nerve blocks) do not address the special needs of accident victims.

A confounding variable is that many traumatic onset pain patients are in litigation (Romanelli, Mock, & Tenenbaum, 1992), which in of itself could account for many of the obtained findings, such as increased affective distress and the need for more treatments. Litigating traumatic onset pain patients tend to remain in treatment longer and have less treatment success than nonlitigating traumatic onset pain patients (Burgess & Dworkin, 1993). Similarly, studies have suggested that individuals with pain receiving Workers' Compensation tend to respond poorly to treatment, due to secondary gain issues involved. Because Worker's

Compensation is based on the occurrence of an accident, PTSD symptoms may play a mediating role in explaining the poor treatment outcome for pain patients receiving Workers' Compensation compared to patients whose pain is not accident related. An additional confounding variable when comparing studies of type of onset pain is the duration of pain of the patients, with the longer the duration the less the impact of onset type.

Report on a Study of the Relationship between Trauma and Pain

A study was undertaken to determine whether the circumstances of onset of pain are related in a significant manner to pain variables such as number of pain locations, pain intensity ratings, constancy of pain, interference with sleep, litigation and financial compensation, frequency of analgesic intake, health care utilization, work status, interference with activities and relationships, physical activity, health perception, and mood state disturbance. Additionally, we were interested in determining to what extent these variables could predict onset type.

The participants in this study were 1094 patients with chronic pain (of mixed noncancer diagnoses), referred to the NYU Pain Management Center, who completed a questionnaire about their pain as well as standardized psychological measures on their initial visit. The NYU Pain Management Center is a multidisciplinary pain program housed within the Department of Anesthesiology of the NYU Medical Center. After a multidisciplinary evaluation, patients can receive a wide array of medical and psychological interventions. Participants were grouped into two categories based on their response on the initial questionnaire to the question regarding the circumstances of their pain onset:

Patients completed a specially devised pain questionnaire that assesses areas of clinical relevance. The pain questionnaire, designed to yield objective clinical outcome measures as recommended by the Commission on Accreditation of Rehabilitation Facilities, evaluated the following: (a) demographic characteristics (age, gender, education, marital status, race, and living situation); (b) pain variables (locations, 0–10 scales rating worst, least, and average intensity, constancy, duration, sleep interference, and intensity variation since onset); (c) circumstances related to the onset of pain; (d) litigation and compensation status; (e) analgesic intake and relief; (f) use of health care resources (hospitalizations for pain, pain visits to doctors, previous pain interventions and their efficacy); (g) functionality (work status, job satisfaction, household functions, volunteer work, occupational/vocational rehabilitation enrollment, 0–10 rating scales of degree of pain interference in seven areas, hours spent resting, and blocks able to walk); and (h) a health perception rating scale.

Patients also completed two standardized measures of mood state: the Beck Depression Inventory (BDI) (Beck et al., 1961; Beck, Steer, & Garbin, 1988) is one of the most widely used tests with chronic pain patients because it is a relatively quick measure of depression—a mood state closely linked with chronic pain. The BDI consists of 21 items that evaluate both the cognitive/affective and vegetative symptoms of depression. Patients endorse various symptoms of depression, and this produces a total score of depression ranging from 0 to 63. Scores above 10 reflect minor depressive states, while scores above 17 are indicative of a moderate to severe state. The BDI is able to distinguish between depressed and nondepressed chronic pain patients. Alpha coefficients for the BDI range from .73 to .95. Patients also completed the Spielberger State Anxiety Inventory (STAI), a 20-item self-report measure that is one of the most widely used measures of state anxiety (Spielberger, 1983) and has demonstrated good validity and reliability. Patients are asked to rate statements on a four-point scale regarding how they feel right now, which evaluates "state" anxiety, transitory feelings of anxiety usually in response to specific situations. Scores range from 20 to 80, with each item rated by the patient from 1 ("not at all") to 4 ("very much so"). Total scores can then be converted to normative percentiles, based on medically ill populations.

Analyses show many statistically significant differences between the two groups. Demographically, traumatic onset patients are significantly younger (44.2 vs. 60.1), are significantly more likely to be male (53% vs. 43%), and are significantly more likely to be involved in litigation (42% vs. 0%) and receiving Workers' Compensation (34% vs. 3%). Their pain intensity levels are significantly worse, and they have significantly more pain locations. With regard to health care utilization, they report significantly more pain visits to doctors in the past month, and have tried significantly more pain interventions. Trauma onset patients as opposed to nontrauma onset patients perceive their health as significantly worse. They are also more dysfunctional, spending significantly more time resting, and perceiving their pain as interfering significantly more with life's activities. There were no differences, however, with regard to the number of household tasks done. Trauma onset patients are significantly more depressed and anxious than nontrauma onset patients.

These results point to the importance of the trauma onset variable in any pain assessment and as a determinant of pain, health behaviors, functional level, and mood state. Traumatic onset patients have greater difficulty in adapting to their chronic pain than nontraumatic onset patients. The sudden change in life as a result of an accident, as well as posttraumatic reactions, appears to adversely affect the ability to cope. Traditional modalities of pain management (such as pharmacologic interventions and nerve blocks) may not address the special needs of accident victims.

CASE REPORT 2

A 15-year-old girl was in her usual state of health until two months prior to her presentation to the multidisciplinary pain clinic for right arm pain. She was with her boyfriend and two other persons when an assailant burst into the apartment and sprayed bullets around, fatally shooting her boyfriend and one other person. The patient received five gunshot wounds (one on the right side of her neck, three in the right upper extremity, and one to her abdomen); she was awake and alert when rushed to the hospital but complained of right-handed numbness and abdominal pain. She suffered numerous thoracic and abdominal injuries that required extensive surgery as well as through and through bullet wounds to her right arm. Throughout the hospitalization she was given opioids for pain. She was discharged on day six of hospitalization.

The patient presented to the Pain Service two months later with a constant dull burning pain of her right arm that she rated as 9 out of 10 where 0 = no pain at all and 10 = the worst imaginable pain. She was very protective of her arm and verbally abused a physician who attempted to touch it. She would wear a warm damp towel around her arm and would continually get up to wet the towel even during the interview. The skin was shiny, the muscles were atrophic, and there was a slight bluish discoloration of her fingers. Her hand was hyperesthetic and she described a feeling of coolness in that arm. She was able to move her hand and arm by herself and appeared to have a normal range of motion. She stated that she could not close her hand. Her past medical history was noncontributory; she denied any history of drug or alcohol abuse. Her symptoms were consistent with a diagnosis of complex regional pain syndrome (CRPS).

The patient presented with a strongly anxious affect, accompanied by a vigorous shaking of both legs such that the chair rattled and her heels made a loud tapping sound. She held her right hand bent upward at the elbow, and also clutched a damp rag in the palm of her left hand. She would moan whenever her hand moved.

She was appropriately oriented to all three spheres but displayed a constricted range of affect—predominantly anxiety and anger. There was a mild loosening of thought associations. Since the traumatic event and as was evident in the sessions she would continually and intrusively recollect the traumatic event in minute detail. She also reported experiencing recurrent dreams of the event as well as sleep disturbance. She focused in an obsessive style on the now idealized six-month intense relationship that she had had with her boyfriend, and on his death rather than her near fatal wounds. She had strong feelings of guilt for having survived and not having saved her boyfriend. She readily acknowledged a strong relationship between stress now and exacerbations in her pain intensity levels. She also had insight into the fact that she did not want her pain to go away, in order not to forget her boyfriend. Her physical pain was a reminder to her of him and her way of holding onto him.

A significant functional limitation was that she would not go outside by herself for fear of being shot. She had withdrawn socially from her friends and had a diminished interest in all activities.

Significant premorbid history included her parents' separation five years earlier and their recent divorce. She denied any history of physical or sexual abuse. Her mother appeared to have a very close relationship with her but had great difficulty in setting limits. The patient herself, a bright adolescent, was a freshman in high school who, due to her relationship, had not been

> attending classes regularly prior to the shooting. She was diagnosed as having posttraumatic stress disorder.
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> The pain management intervention was multidisciplinary, based on three therapeutic modalities: nerve blocks and pharmacologic interventions, physical rehabilitation, and cognitive behavioral interventions. The three treatment modalities were intertwined, supportive and facilitative of each other to produce a synergistic effect. The goal was to achieve a physically and psychologically functional adolescent with minimal residual pain.
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> Over the course of 15 weeks she received 13 stellate ganglion blocks as well as pharmacologic management: she was put on ibuprofen 400 mg qid and 25 mg amitryptiline, which was gradually increased to 50 mg daily. Only after the nerve blocks did she become less protective of her hand and agree to physical therapy. The pain-free arm mobility that she experienced after each nerve block enabled her to tolerate physical therapy. She was seen in psychological treatment over a 20-week period. Her mother was seen conjointly for three of the sessions and treated separately by a social worker. The objectives of psychological treatment were as follows: (1) to have her vent feelings, among which anger and guilt predominated; (2) to increase her age-appropriate behaviors, such as return to school, peer socialization, and shopping, behaviors that served the pain management objective of distraction and adoption of wellness behaviors; (3) to support health promotive behaviors, such as compliance with her medical appointments as well as physical therapy; and (4) to decrease her illness behaviors, such as wearing and watering the towel and the number of hours spent in the house and bed.
>
> Her physical pain improved significantly with the nerve blocks, which enabled aggressive physical therapy as well as facilitated her engagement in cognitive behavioral therapy. The intensity of her feelings lessened, and her PTSD symptoms improved remarkably, characterized by significantly fewer intrusive recollections. She became noticeably calmer and less distressed, and displayed a wider range of affect. She went shopping with her mother and significantly increased her socialization activities with her friends. Follow-up nine months after her treatment had ended revealed a marked improvement in her pain intensity and frequency. She could write with her hand, and, although she still had not returned to school, she was seeing a home tutor. Her PTSD symptoms continued to improve but still were not completely resolved. She increased her peer activities and relationships and would go out of her house by herself.

This individual initially presented as a distraught, difficult-to-manage young adolescent with intense physical and emotional pain, but a patient multidisciplinary approach to her pain proved efficacious. Continued pain improvement and increased arm mobility were greatly facilitated through the process of her venting of emotions, which replaced her communication through pain symptoms. Physical pain had been her method of communicating her emotional pain, her unresolved grief and anger, rather than direct emotional expression. She had great difficulty in letting go of her pain and illness behavior, which meant accepting the finality of her boyfriend's death. Improved range of motion and greater mobility accomplished through physical therapy facilitated the accomplishment of the psychological-behavioral goals of having her dress herself, shop, and socialize.

Conclusions

The simultaneous presentation of physical pain and emotional pain such as PTSD requires a multidisciplinary approach based on the conjoint utilization of interconnected specialties. The patient whose pain started as a result of trauma demonstrates the complex biopsychosocial interplay that is characteristic of chronic pain. Better, more individualized assessment of patients who have pain and PTSD can only lead to more effective treatment of this very difficult-to-treat population. Targeting PTSD symptoms as a primary therapeutic focus may help chronic pain programs improve the treatment outcome for the multitude of issues that these patients have.

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CHAPTER 4

ANESTHESIA AWARENESS AND TRAUMA

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Patients who undergo general anesthesia expect to be placed in a state of oblivion and have no memory of the surgical experience. Anesthesia providers also intend to render their patients unconscious and maintain such conditions throughout the surgical procedure. Current information from the United States (Sebel et al., 2004) and Europe (Sandin, Enlund, Samuelsson, & Lennmarken, 2000) reveals, however, that at some point following routine surgery and anesthesia care, one to two patients per thousand are able to recall events of their operation. In the United States this is estimated to result in 100 cases per workday. The incidence during procedures recognized to be at "high risk" may be 10 times greater. There is a spectrum of psychological outcomes following postoperative recall of intraoperative consciousness (or more colloquially, "anesthesia awareness"), which ranges from relatively minor outcomes to a severe and persistent posttraumatic stress disorder (PTSD). This chapter will discuss the current state of understanding of this phenomenon, present case studies, and discuss treatment and prevention strategies.

General Anesthesia

General anesthesia (GA) is a state of unresponsiveness to the stimulation of surgery. In a well-delivered general anesthetic the patient is unconscious, his or her autonomic nervous system is either not responding or responding only minimally to surgical stimulation, and the patient is quiescent, or not moving, during stimulation. Unconsciousness is usually induced and maintained through the use of hypnotic drugs. Examples of hypnotic drugs include volatile inhalation agents such as isoflurane, desflurane and sevoflurane, benzodiazepines, barbiturates, and propofol. It is possible to create a state of GA by utilizing only a hypnotic drug, but this requires very large doses of the mono-agent and can result in very prolonged wake up times from anesthesia and undesirable side effects; all these agents, for example, cause depression of heart function. More typically the anesthesiologist creates a state of GA by administering several agents, each intended to achieve individual goals: hypnotic drugs to create a state of unconsciousness, opioids and/or nitrous oxide to limit transmission of noxious stimulation to the brain, and paralyzing or "muscle-relaxing" agents to prevent patient movement. The anesthesiologist must understand and manage a complicated three-way interaction: a patient and his or her comorbidities, the physiologic stress of surgical trauma, and the pharmacologic action and interaction of the selected anesthetic agents.

Given the complexity of the human nervous system and of the task of administering anesthesia, an incidence of anesthesia awareness (AA) of one to two patients per thousand is, perhaps, understandable. This philosophy, however, fails to recognize the potentially devastating and life-altering effect this experience can have on patients. In addition, this philosophy is at odds with the profession of anesthesiology's traditional concern for patient safety: decades-long efforts to improve patient outcomes have been highly successful. As the chance of actually surviving a surgical procedure has been maximized, attention has now turned to the prevention of other undesirable outcomes, such as AA. The American Society of Anesthesiologists (ASA; American Society of Anesthesiologists Task Force on Intraoperative Awareness, 2006), and other professional anesthesiology societies have recently issued statements or guidelines for the prevention and treatment of AA. Essential to prevention and treatment, however, is some understanding of how AA can occur.

Causes of Anesthesia Awareness

Anesthesia awareness occurs when there is inadequate delivery of an unconsciousness-causing agent during the course of surgery. Several reasons for inadequate delivery can be considered: patient comorbidities, unrecognized increased patient requirement, and human or equipment error. Most puzzling, however, is that some episodes of AA fall into none of these categories and the etiology must be considered unexplained.

There are clinical situations where an anesthesiologist chooses to provide what may be an inadequate amount of unconsciousness-producing agent. These situations are considered to be at high risk for AA, with an incidence as great as 1–2 percent. As mentioned above, these agents cause depression of heart function and the anesthesiologist sometimes must balance the risk of administering more agent, and potentially causing a poor cardiovascular outcome, with the risk of delivering less agent and potentially causing AA. The exsanguinating trauma patient is a good example, as is the patient with limited cardiac "pump" function undergoing open-heart or other major surgery. Women undergoing Cesarean sections with GA are often given limited amounts of these agents due to concern for transmission to, and subsequent depression of, the newborn.

AA also occurs when a patient has an unexpectedly increased requirement for anesthetic agents. This usually occurs with patients who are consuming either prescribed or illicit substances such as opioids or marijuana, or who regularly consume alcohol. If these habits are detected during the preoperative interview, the anesthesiologist may be able to adjust the delivered anesthetic appropriately. If not, the patient may experience AA before the anesthesiologist adjusts the amount of delivered agent.

As anesthesiologists are human beings and work in an environment with systems and machines, there is also the possibility of human or equipment error. For example, the vaporizer that delivers the inhalation agent to the breathing circuit may run dry or the intravenous line may become disconnected. Despite monitors and alarms, preoperative equipment checklists, and a culture of vigilance, events such as these occur.

There are patients who experience AA and who fit none of these categories. In these patients, traditional monitoring and assessment during surgery somehow "fails." Analysis of a retrospective database maintained by the American Society of Anesthesiologists revealed 61 cases of AA (Domino, Posner, Caplan, & Cheney, 1999). In 16 percent of cases, no associated causative factor could be discerned. In a prospective study of 11,785 Scandinavian patients, no causative factor could be elucidated in 10 of 18 patients who experienced AA (Sandin et al., 2000). In an Australian dataset, patients appeared to receive adequate doses of anesthetic drugs in 13 of the 81 incidents of AA (Bergman, Kluger, & Short, 2002).

In trying to understand how these patients could experience AA, it is necessary to consider how unconsciousness is traditionally assessed and the effect of muscle relaxant drugs on such assessment. Anesthesiologists learn to detect or suspect lack of unconsciousness through increases in heart rate or blood pressure, somatic signs such as sweating or lacrimation, and patient movement. While highly useful, monitoring the heart rate and blood pressure has an imperfect predicative value in detecting consciousness (Russell & Wang, 2001). Somatic signs, when present, suggest an inadequate anesthetic state, but not necessarily consciousness, and their absence does not guarantee lack of consciousness. Most patient movement is probably due to spinal reflexes and does not necessarily reflect consciousness. However, information from patient anecdotes shows that, when conscious, patients attempt to signal to their caregiver through movement. When completely paralyzed, they are unable so to communicate. Indeed, a repeated, and tragic episode reported from patient experience is the attempt to signal consciousness by moving, only to be given additional muscle relaxants.

The use of muscle relaxants increases the incidence of AA: in the ASA database, the relative risk of AA is increased 2.28-fold with muscle relaxants (Domino, Posner, Caplan, & Cheney, 1999). However, AA can occur without muscle relaxants. In the study by Sandin et al. (2000), the overall incidence of awareness was 0.15 percent, 0.18 percent when muscle relaxants were utilized and 0.10% when they were not. In another study, three patients did not move a nonparalyzed arm at the time of skin incision despite later recall of the skin incision, because they were comfortable, not in pain and not distressed (Russell & Wang, 1997). Why nonparalyzed patients do not move when conscious is not always clear, but may reflect the complexity of the nervous system-anesthetic-surgery interaction (Kerssens, Klein, & Bonke, 2003).

Experience of Anesthesia Awareness

Firsthand accounts of awareness are available in the anesthesia literature ("On Being Aware," 1979; Cobcroft & Forsdick, 1993) or from Internet sites such as anesthesiaawareness.com. Scientific information about patient experience with AA comes from both retrospective (Schwender et al., 1998; Moerman, Bonke, & Oosting, 1993) and prospective studies (Sebel et al., 2004). Retrospective studies suffer from reporting bias: those who volunteer to come forward and be interviewed may be different from other patients who experience awareness, particularly in terms of psychological outcome. Prospective studies are extremely labor intensive and difficult to perform. In addition, as AA is relatively rare, large numbers of patients must be studied to obtain useful data.

These studies reveal that most episodes of AA consist of an auditory experience; patients remember sounds from the operating room environment. They often remember a derogatory or inflammatory remark. They report anxiety with 36–92 percent of the episodes, and a feeling of helplessness in 46–62 percent. Pain is reported less often, in 18–39 percent of the episodes. It is difficult to determine how long the intraoperative consciousness lasted in some patients. Some episodes were relatively brief; others lasted for a prolonged period of time. The longer episodes were probably associated with muscle relaxant use.

Another important point that has emerged from this work is that it is insufficient to screen for AA only on the day of surgery. For some reason, the process of memory formation and recall of intraoperative events is often not immediate. In the study by Sandin et al. (2000), patients underwent structured interviews three times: in the postanesthesia care unit, postoperative day 1–3, and again postoperative day 7–14. Of the 18 patients with awareness, only 6 had recall on the day of the procedure. By the second interview, 12 patients recalled events from the operating room; it required three interviews to account for all of the awareness patients. Phobic avoidance and denial played a part in these findings: two patients admitted at the second interview to dissimulation during the first to avoid discussion of traumatic material. It is likely that many episodes of awareness go undetected because awareness patients avoid reporting their experiences for the same reasons. The anesthesiologist responsible for the episode is the last person in whom the patient may wish to confide!

In the past, some patients have hesitated to report awareness out of fear of not being believed. Their fears were not unfounded: in a retrospective series (Schwender et al., 1998), 10 of 45 awareness patients recounted that their report of awareness was met by caregivers with disbelief. Anecdotal reports suggest that caregivers sometimes downplay these episodes by explaining them as being dreams. As knowledge about the phenomenon of awareness has spread in recent years in both the anesthesia and surgical communities, initial patient reports of awareness will, hopefully, be met with a more supportive response. Indeed, the ASA's "Practice Advisory for Intraoperative Awareness and Brain Function Monitoring" (American Society of Anesthesiologists Task Force on Intraoperative Awareness, 2006) states that anesthesiologists should "speak with patients who report recall of intraoperative events to obtain details of the event and discuss possible reasons for its occurrence." The advisory also recommends that counseling or psychological support be offered.

Psychological Effects of Awareness

There appears to be a spectrum of psychological aftereffects following AA. The consequences of awareness for patients are varied and are probably related to the duration of awareness, the experience of pain during awareness, and the degree of anxiety experienced while aware. Some patients do not seem overtly affected. Others, however, clearly are: retrospective studies report aftereffects such as anxiety during the day, nightmares, and sleep disturbances in 51–69 percent of patients. It is not clear what percentage of these patients received psychological treatment or the time course of their symptomatology.

What is clear, however, is that a subset of patients develops a persistent, life-altering posttraumatic stress disorder (PTSD) and should be immediately referred for psychological counseling (Macleod & Maycock, 1992). To try to quantify the incidence of PTSD following AA, an attempt was made to perform follow-up interviews with the 18 patients who experienced awareness in the Scandinavian dataset (Lennmarken, Bildfors, Enlund, Samuelsson, & Sandin, 2002). Of 18 patients, 2 were lost to follow-up and 6 refused to be interviewed. Of the remaining 9, 3 reported persistent but mild psychological sequelae, and 4 reported ongoing PTSD requiring psychological therapy. The authors were concerned that the patients who refused to be interviewed might also suffer from PTSD because attempted avoidance of the trauma is a symptom of the syndrome. The incidence of PTSD in this group of 11,785 patients, then, was at least 0.034 percent and perhaps as high as 0.08 percent. In another study, the Clinician Administered PTSD Scale was administered to 16 patients who reported AA and it was found that 9 of 16 patients, at a mean time of 17.9 years after the surgery, met PTSD criteria (Osterman, Hopper, Heran, Keane, & van der Kolk, 2001). They found that these patients had significant postoperative distress related to "feeling unable to communicate, unsafe, terrified, abandoned and betrayed."

Anecdotal patient reports suggest that the incidence of PTSD is correlated with the duration of intraoperative consciousness. Patients with prolonged awareness were most likely completely paralyzed with muscle relaxants, hence the repeated reports equating the sensation to being entombed, resulting in feelings of extreme terror and complete helplessness. Some awareness PTSD patients are unable to sleep in a supine position and must sleep sitting in a chair. This may be a result of experiencing intraoperative consciousness in the supine position.

Early referral for psychological support may ameliorate some of the current patient suffering, and treatment strategies are discussed below. Ideally the patient will be referred to a caregiver with both expertise in the treatment of PTSD and also an understanding of AA. The anesthesiologist may need to educate the psychologist about the issues at hand. With an incidence of AA in the United States of about 100 patients per workday, there is clearly a large group of patients who may require psychological care.

PATIENT CASE STUDIES

Patient 1

Eight years ago, at the age of 46, the patient underwent a procedure to remove an eye, the result of a chronic and painful corneal condition. At some point following the induction of general anesthesia, she returned to consciousness. She estimates that her duration of consciousness lasted 40 minutes. The first thing she remembers was hearing disco music, then her surgeon saying, “Cut deeper here. No, deeper.” She experienced extreme panic when she realized that she was conscious during the surgery. She attempted to move her head to signal her consciousness, but was unable to do so.

After repeated attempts at moving, she heard the surgeon say, “She’s moving.” No one attempted to reassure her or communicate with her. Instead of being reanesthetized, she felt a burning sensation across her back, which was probably an additional dose of muscle relaxant being administered. As the surgery continued, she wished that she would die instead of continuing her conscious state. She continued to attempt to move and the surgeon said, “She’s moving again.” The anesthesiologist commented that something was wrong with his equipment, which was the apparent cause of her consciousness. Her awareness persisted for several more minutes as the surgeons tugged on her eye. She remembers the moment her optic nerve was severed.

She emerged from the anesthetic thrashing about and came out of the operating room (OR) screaming that she had been awake while her eye was removed. In the recovery room, no one would address the fact that she had been conscious during surgery. That evening she recounted her experience to her pastor, who did believe her. When the surgeon came to see her the next morning, she informed him of her experience and quoted operating room dialogue verbatim. No psychological counseling was offered.

The anesthesiologist did not visit her until the third postoperative day. He patted her hand and told her that everything she said had happened was true, but that she had also had local anesthesia, that she could not have felt pain, and therefore no harm could possibly have been done. He then left. No psychological counseling was offered.

Postoperatively, she developed PTSD; however, without proper referral, she did not begin receiving counseling until eight months following her operation. Her treatment involved "talk therapy" and she was prescribed fluoxetine and clonazepam. Her PTSD symptoms persist to this day: she is easily startled, has flashbacks, triggers, temper flare-ups, mood swings, and fatigue, and does not do well in situations over which she has no control. She has not slept for more than an hour and 15 minutes at a time, nor has she lain on her back since her operation.

Patient 2

The patient elected to have a general anesthetic for a Cesarean section. At some point following the induction of anesthesia, she awoke and felt a burning, searing pain, as if "someone were pushing something burning through me." She felt that she was "being hurled into mayhem." She thought that it was more than she could bear and that her "brain was exploding." She began to imagine herself as a speck in the room and that no one knew she was there. She tried to scream, but realized her scream was only in her mind. She tried to move multiple times, but was unable to do so. She realized that she could not communicate with her caregivers and thought she would never see her baby. She thought that she was dying and that at least then, the pain would end.

The experience "robbed her of the happiness of becoming a new mother."

She found herself dreaming about the experience over and over, the events being replayed again and again.

Several years later she needed to undergo further surgery, an appendectomy, with a different anesthesia provider. This provider tried to reassure her that she would be closely monitored and that the provider would watch over her. Although apprehensive, she agreed to be anesthetized and experienced no intraoperative consciousness.

Shortly thereafter she required a third procedure and the anesthesiologist was the same as for her Cesarean section. Again apprehensive, she thought that since the second procedure had gone without awareness, this would go well also. Again, however, she found herself conscious during the operation and was "more terrified than I have ever been before." She again felt burning pain and "could not believe that it was happening again." She had experienced anesthesia awareness twice in four years.

This patient was provided with little in the way of professional psychological intervention during the first two years following these events. Subsequently some general counseling support and cognitive behavioral therapy has been provided, but rather late in the day. She continues to experience flashback phenomena, behavioral avoidance, and depression more than 10 years later. Her marriage has also been a casualty of the awareness episodes.

Patient 3

The patient underwent a general anesthetic to drain an abscess in her jaw. She realized that she was awake and that the surgical team did not know this. She struggled to move, but was unable to do so. She experienced intense pain. She felt completely helpless and knew "her life was in someone else's hands." She remembers the sensation of the scalpel and then no more: she thinks that she actually "passed out" rather than was reanesthetized.

She experiences nightmares and dreams about lying awake on the operating room table and about "dying any minute." She has panic attacks and flashbacks, particularly from bright lights similar to those in the operating room. She has felt suicidal and realizes that her personality has changed. Before the surgery she was outgoing and vivacious, but now she is withdrawn and avoids contact with people she does not know.

Treatment began with addressing the depressive component, which was the most marked feature of her initial presentation, with both cognitive behavior therapy and selective serotonin reuptake inhibitor (SSRI) antidepressant medication. The flashbacks, which were severe, were managed using a combination of distraction techniques when they occurred and cognitive exposure to the flashback content in the clinic. This included cue exposure: stimuli that provoked flashbacks were identified and a program of graded exposure to these was implemented. The patient was taught cognitive and breathing techniques for managing the panic attacks. After six months there was a marked improvement in her condition, but she continued to experience the occasional flashback or nightmare (perhaps once every two weeks).

Treatment of Anesthesia Awareness

Management in the Immediate Postoperative Period

A suspected episode of anesthetic awareness may come to light in a number of ways: the anesthesiologist may be aware of some equipment fault or clinical error intraoperatively and realize that this may have given rise to unintended consciousness; the patient may have been unusually agitated as she/he emerged from the anesthetic; or the anesthesiologist may have heard from nursing or other staff that following or during postoperative recovery, the patient has made comments indicative of intraoperative memory or distress. It is crucial under any of these circumstances for the anesthesiologist responsible for the general anesthetic to go and speak to the patient as soon as possible, accompanied by a witness, such as a nurse.

The anesthesiologist should listen carefully, intently, and empathically to the patient's account of the experience. It is imperative that the anesthesiologist should take the account seriously and not attempt to invalidate or undermine the patient's version of events. The anesthesiologist should offer an apology where it is clear that the patient has experienced a distressing event, irrespective of the cause. Usually the patient is desperately trying to understand what has transpired, and is looking to the anesthesiologist to provide an explanation. It is understandable that anesthesiologists, finding themselves in this situation, would be concerned about the legal implications and potential for litigation: however, an apology does not constitute an admission of guilt or liability (Aitkenhead, 1990). In many cases, patients will not proceed to litigation if they receive a genuine apology from the responsible clinician along with a credible explanation as to how the episode of awareness arose.

After hearing the patient's account of the experience, in most cases, the anesthesiologist will need to be make further inquiries in order to better understand what led up to the incident, and will need to be circumscribed in her/his attempt to provide an explanation in the first instance. However, a fuller account of how the incident arose should be forthcoming within a matter of days. When listening to the patient's account, the anesthesiologist should be attentive and empathic, in other words, should show clear nonverbal and verbal indications that he/she really does understand the emotional and psychological implications of what the patient is describing.

As mentioned previously, many patients in the past have been told that their accounts of anesthetic awareness cannot possibly be true or that they have experienced a rather vivid intraoperative dream. Commonly this has led to disbelief among spouses, relatives, and friends and invariably has led to profound exacerbation of the posttraumatic stress disorder (Wang, 2001). Entirely fabricated claims of anesthetic awareness are extremely rare, and clinically the recommended policy is always to assume that the patient has genuinely had a traumatic experience (Aitkenhead, 1990). On occasion, a patient may have misattributed an awareness event that took place in the time period immediately before or after the surgery rather than during the operation, and this can be clarified through gentle and diplomatic questioning combined with verification of events with other OR staff. Providing patients with the time and attention needed for them to give a full and detailed account of their experience to the responsible anesthesiologist is likely to provide a good deal of therapeutic mitigation of the trauma they suffered, although it will rarely give rise to complete remission.

Nursing staff in the recovery area should monitor the patient during the early postoperative period and pay particular attention to the occurrence of flashbacks, nightmares, panic attacks, generalized anxiety, and depression. An early appointment with a clinical psychologist or psychiatrist experienced in the management of posttraumatic stress disorders should be arranged. Whether or not the patient manifests any of the above-mentioned phenomena during the immediate postoperative period in the hospital, the anesthesiologist should arrange a follow-up meeting with the patient within a period of two weeks of discharge (Wang, 2001).

The Role of Muscle Relaxants and Paralysis in the Genesis of Psychological Trauma

In a careful and rigorous, prospective awareness study (Sandin et al., 2000), it was found that of the sample of 11,785 patients (including both paralyzed and nonparalyzed anesthetic techniques), 11 paralyzed patients and 4 nonparalyzed patients had significant memory of intraoperative events. However, of the four nonparalyzed patients with awareness, none had found the intraoperative experience traumatic or distressing, nor did they have immediate or delayed PTSD reactions. In contrast, 11 of the 14 paralyzed patients reported intraoperative trauma and anxiety, but only 6 of the 11 experienced intraoperative pain. Persistent postoperative psychological symptoms were associated with patients who, during the operation, did not understand why they were wakeful and why they were paralyzed.

In the follow-up study two years later (Lennmarken et al., 2002), 9 out of the 18 awareness patients were interviewed. Of the 9 interviewed (7 paralyzed, 2 nonparalyzed), 4 were found to have severe psychiatric symptoms (PTSD). All 4 had received muscle relaxants during their operation, and not one had experienced intraoperative pain.

In summary, although awareness in the absence of muscle relaxants does occur (but at a lower rate than for the paralyzed patients), it rarely gives rise to serious psychological consequences. For those who do have long-term psychological sequelae, not understanding what was happening during the wakeful intraoperative experience seems to be a key component of the etiology (but not necessarily intraoperative pain).

In the second author's (MW's) clinical practice, it is commonly a catastrophic misunderstanding or misinterpretation of the cause of the paralysis that gives rise to severe intraoperative psychological traumatization. So, for example, the patient may fear that the surgeon has accidentally cut the spinal cord, or that some unusual drug interaction has occurred, rendering the patient paralyzed for the rest of her life. It is frequently the intraoperative misconception that the state of paralysis is irreversible that causes acute psychological trauma. This clinical impression appears to be supported by the Sandin and Lennmarken data, in that those patients who had unresolved PTSD were those who were described as having being "confused" and distressed by their predicament intraoperatively.

What lessons can be leaned from these data and clinical anecdotes? First, there is a strong argument for better preoperative information being provided, including the nature and actions of muscle relaxants. This is controversial, since many anesthesiologists do not wish to frighten their patients with anxiety-provoking information in relation to a risk that they consider infinitesimal. However an incidence of one in five hundred is not infinitesimal. Moreover, if such information might reliably reduce the incidence of intraoperative traumatization and postoperative PTSD for those who do experience awareness, then the small risk of increasing the preoperative anxiety of some patients may be justified, given the devastating and often chronic effects of postawareness PTSD (Wang, 2001).

Second, it is crucial that, in obtaining an account of the patient's awareness experience during the early postoperative period, the patient's understanding of the nature of his or her experience is verified. Nothing should be assumed, and assumptions of the patient's point of view based on the anesthesiologist's sophisticated knowledge of muscle relaxants and anesthesiology should be avoided. If and when detected, misunderstandings should be carefully and empathically addressed, without undermining the validity of the patient's account of the experience.

Early Psychological Intervention

In recent years, there has been much made of the importance of psychological debriefing during the first 48 hours following a traumatic experience (Dyregrov, 1997); however, there is now much empirical evidence that such intervention at best has no effect and in some patients may actually worsen the posttraumatic stress disorder, effectively retraumatizing the patient (Rose, Bisson, Churchill, & Wessely, 2002). It is imperative however, that awareness patients are followed up and monitored closely, preferably by mental health professionals with experience of posttraumatic stress disorder. There is a natural process by which an individual comes to terms with a traumatic incident, and it is important that the patient is given the time, space, and expectation to allow this process to take its course. Patients should be provided opportunities for psychological and counseling support during the first three months postoperatively, but they should not be compelled to retell their traumatic experience. The natural and common cycle of emotional and psychological avoidance of thoughts and recollections of the experience alternating with sudden, distressing, uncontrollable intrusive memories and images should be explained, and presented to the patient as a normal adaptive process. The patient should be given to expect that this cycle will occur frequently during the early days and weeks, but in most cases of general PTSD, noticeable improvement in frequency, intensity, and duration will have taken place by the end of the third month.

Psychological Intervention in the Medium Term

Nevertheless, because of the severity of trauma often associated with anesthetic awareness, many patients will continue to experience severe, disabling, and intrusive flashback phenomena and manifest pathological phobic avoidance of a variety of situations and cues associated with operations, hospitals, and medical staff. If these phenomena remain severe and show no sign of remission after three months, a period of intensive cognitive behavioral treatment is indicated (Harvey, Bryant, & Tarrier, 2003). Ideally, this should be provided by an experienced clinical psychologist with qualifications and expertise in cognitive behavior therapy for posttraumatic stress disorders. A detailed and comprehensive assessment of the patient and her/his difficulties should be undertaken by the psychologist, giving rise to an individualized clinical formulation. This formulation will then drive intervention and will take account of not only cognitive behavioral components but also the emotional, social, occupational, and community context of the patient's difficulties. The psychologist should attempt to mobilize support from family and friends in the implementation of the intervention, in order to encourage maintenance and generalization of improvement. The nature of any flashback phenomena and associated cognitive avoidance will need to be carefully assessed with particular attention to *silent assumptions* and implied but unspoken consequences and fears. Erroneous conceptions should be tested. Specific cognitive behavioral interventions will include behavioral cue exposure and habituation to the most distressing thoughts and images that constitute the disabling intrusions. Phobic avoidance phenomena should be addressed using a carefully planned and implemented program of graded exposure, which might include visits to the hospital and the operating room in which the incident took place (Harvey et al., 2003). Patients who experience depression in the postoperative period should be treated with the standard cognitive behavioral therapy (CBT) for depression protocol alongside SSRI antidepressant medication (Beck, 1976).

It is important to create appropriate expectations with regard to rate of improvement and the likelihood of residual difficulties in the longer term. Even among patients who have been carefully and competently managed, and who have responded to psychological intervention for PTSD, most, because of the severity of the trauma, will have ongoing PTSD difficulties for many years following the awareness event. In the main, these will be perhaps the occasional nightmare or flashback, perhaps once a month or less. Following successful treatment, these will no longer be functionally disabling, but they will continue to cause short-lived distress. It will also take many years for the patient to reestablish trust in medical staff and to feel comfortable in hospital environments.

Further Surgery

The need for further surgery is a common and understandably difficult scenario in which previously resolved PTSD phenomenology reemerges. Many awareness patients attempt to delay or avoid the surgery altogether. This needs to be managed with care and skill. The anesthesiologist needs to provide special reassurance that the awareness episode will not be repeated, perhaps by ensuring the use of additional monitoring equipment or procedures such as the isolated forearm technique or a brain function monitor (described below). A shared understanding of how and why the awareness occurred in the first place, and what will be different this time, becomes even more important. The patient may need additional psychological support and intervention during the period prior to the operation and on the day of admission. The anesthesiologist should set aside time to meet with the patient and his or her supporter (partner, relative, or friend) during the two weeks before the scheduled operation date, to provide reassurance, explanations, and opportunities for questions.

Prevention of Anesthesia Awareness

Preventing or limiting the incidence of AA is a multifaceted issue. As mentioned above, international professional anesthesiology societies have issued advisories and guidelines and, in the United States, the Joint Commission for

Hospital Accreditation (JCAHO) has issued a sentinel event alert about the topic (Joint Commission for Hospital Accreditation, 2004). These documents address preoperative, intraoperative, and postoperative strategies to limit the incidence or severity of AA.

Preoperatively, attention should be paid to appropriate equipment checklists and the identification of patient risk factors that may heighten the chance of AA. Patients who are identified as being at high risk should be so informed. Preoperative administration of a benzodiazepine or scopolamine may limit memory formation should intraoperative consciousness occur.

Intraoperatively, monitoring alarms should be enabled and persistent vigilance maintained. Should consciousness be detected or suspected, some feel that administration of benzodiazepine may offer retrograde amnesia; however, there is no good evidence that this is likely to be effective. Muscle relaxants should be used judiciously, and patient movement should be never treated with muscle relaxants alone; anesthetic agents should be increased.

It is currently controversial as to whether traditional operating room monitors and techniques are adequate or whether a new generation of electroenchalographic (EEG) monitors should be employed. Although several different algorithms are utilized, these "brain function" monitors display a metric to the anesthesiologists that reflects the ongoing activity of the patient's cerebral cortex. By increasing the delivery of the unconsciousness-producing agent when the metric rises over a specific amount, the anesthesiologist may be able to decrease the incidence of AA. In a prospective study of patients undergoing procedures who are known to be at high risk for AA, an 82 percent reduction in AA in patients monitored with the Bispectral index (BIS) monitor (Aspect Medical Systems, Newton, MA), compared to those cared for with only traditional monitoring, was demonstrated (Myles, Leslie, McNeil, Forbes, & Chan, 2004). Ekman, Lindholm, Lennmarken, and Sandin (2004) compared the incidence of AA in patients at average risk for awareness who were cared for with BIS monitors to the incidence in historical controls. They found a similar reduction in incidence. There is currently no clear consensus among anesthesiologists about the merits of these monitors: some use EEG-based monitoring on all patients, some on those given muscle relaxants, some only on those considered high risk, and some on no patients. Further prospective studies about brain function monitoring and AA could be very useful in fully defining these monitors' utility. Wang and Russell have argued that the isolated forearm technique (in which a tourniquet is applied to an arm prior to the administration of muscle relaxant, allowing a sufficiently conscious patient to signal to the anesthesiologist) should be used more routinely (Russell & Wang, 1995), and an authoritative review described the technique as the "gold standard" in awareness detection (Jessop & Jones, 1991). However, it remains controversial as a routine anesthesiology monitoring procedure.

Anesthesia awareness is a rare but predictable event. Despite major advances in understanding the phenomenon, it continues to occur. It is unlikely that the incidence will ever be zero, but with improved understanding and monitoring, hopefully, the incidence will decrease. As the current incidence in the routine surgery is one to two per thousand patients, and 10 times greater in the high-risk patient, every location that administers general anesthesia can be expected to have patients with this experience. It makes sense to be prepared, including having appropriate psychological counseling services prepared and caregivers with an understanding of the phenomena of AA interest and expertise in the prevention and treatment of PTSD pre-identified and perhaps even on call to attempt to lessen subsequent patient suffering.

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CHAPTER 5

AIDS AND TRAUMA IN THE TWENTY-FIRST CENTURY: IMPLICATIONS FOR PREVENTION, TREATMENT, AND POLICY

Cheryl Gore-Felton and Michael DiMarco

Globally, at the end of 2005, there were an estimated 33–46 million people living with HIV (PLH) or AIDS. Worldwide surveillance data indicate that AIDS has been diagnosed in virtually every country, and while rising AIDS mortality rates have caused global HIV prevalence to stabilize, the incidence has continued to rise (UNAIDS/WHO, 2005). South Africa continues to be at the epicenter of the AIDS crisis, with approximately 25 million adults and children living with the virus at the end of 2005 (UNAIDS/WHO, 2005). In North America, approximately 1.3 million individuals are living with HIV/AIDS and an estimated 25 percent are unaware of their serostatus (Centers for Disease Control [CDC], 2003a).

In the United States, the estimated number of deaths among persons with HIV decreased by 25 percent during 1995–1996 (CDC, 2003b), by 46.4 percent in 1997 (Holmes, 1998), by 21 percent during 1997–1998 (Martin, Smith, Mathews, & Ventura, 1999), and by 8 percent during 2000–2004 (CDC, 2005). The dramatic decrease observed in 1997 is credited to the advent of antiretroviral therapy, which changed HIV from an acute, life-threatening disease to a chronic, manageable disease for many living in the United States (Beaudin & Chambre, 1996).

The number of new HIV infections in the United States is estimated at 40,000 per year (CDC, 2003b). Ethnic minority groups are disproportionately represented among HIV/AIDS cases, such that African-Americans, who represent about 13 percent of the total U.S. population, constituted 50 percent of persons living with HIV/AIDS at the end of 2004 (CDC, 2005). Similarly, people who are Hispanic/Latino comprise 13 percent of the total U.S. population (including Puerto Rico) (CDC, 2005), but accounted for 19 percent of the cumulative number of new U.S. AIDS cases during the period from 2000 to 2004 (CDC, 2005). From 2000 through 2004, approximately 72 percent of the persons diagnosed with AIDS were 25–44 years old, 40 percent were black, 40 percent white, and 19 percent Hispanic (CDC, 2005). By gender, African American and Hispanic males accounted for 57 percent of the new HIV infections and a striking 78 percent of new HIV infections among women cumulative through 2004 (CDC, 2005). It is important to note that sexual contact accounts for most of the HIV transmission for men and women. There is no imminent cure for HIV/AIDS, and until there is one, the best weapon against AIDS is prevention. In order to develop effective prevention programs, it is critical to understand the factors associated with risk behavior, particularly among populations that are vulnerable to infection and in which the incidence rates continue to increase. To date, men who have sex with men (MSM) and minority women represent most of the HIV/AIDS cases in the United States, and understanding the factors that put each group at risk, as well as those factors that serve as bridges between the groups, facilitating HIV transmission, has received a great deal of attention over the past two decades and will be the focus of the remainder of this chapter.

Sexual Risk Behavior among HIV-Positive Persons

In 1996, medication known as highly active antiretroviral therapy (HAART) transformed the trajectory of HIV/AIDS disease progression such that it extended life expectancy and improved physical health as well as quality of life (Emini, Schleif, Deutsch, & Condra, 1996; Rabkin & Ferrando, 1997; Vittinghoff et al., 1999). Although HAART enables individuals to live longer, healthier lives, there are increased challenges in reducing transmission risk behavior. For instance, research among HIV-positive men and women found that the likelihood of contracting a post-HIV sexually transmitted infection (STI) increased as the length of time living with HIV and AIDS increased (Gore-Felton et al., 2003). Additionally, an epidemiological study among over 16,000 MSM found that as HAART use increased over time, so did the reports of multiple sexual partners and unprotected anal intercourse (Katz et al., 2002). It may be that the advent of effective pharmacological interventions increases physical and psychological well-being in such a way that over time individuals begin to feel better. For many, normal activities, including new relationships and sexual activity, resume. Moreover, some individuals who have responded favorably to medication management may believe that unprotected sex poses little risk because of their decreased viral load and their perception that this lowers the probability of transmitting the virus (Vanable, Ostrow, McKirnan, Taywaditep, & Hope, 2000).

CASE EXAMPLE: MR. S

Mr. S is a 38-year-old gay-identified Caucasian male diagnosed with HIV in 1992. His viral load has been undetectable for the past six years. Overall, Mr. S is in good health. He has a history of being victimized because of his sexual orientation, and on one occasion he was beaten so badly that he suffered three fractured ribs. He admits that he has a tendency to get involved with partners who have "tempers." For the past five years, he has been in a relationship with a male partner who has been violent toward him. He has a college degree in marketing and works on a consulting basis.

Mr. S participated in a clinical research project for men living with HIV. The project recruited men receiving treatment from an infectious disease clinic in the Midwest. The inclusion criterion for the research study was HIV risk behavior in the past three months. Participants received 15 sessions of cognitive behavioral skills training in stress management, risk reduction behavior, and strategies to improve adherence to medical treatment.

When Mr. S was originally diagnosed with HIV, he refrained from any form of sexual activity for a year and a half. He recalled going into a "deep depression," thinking his life was over. He received psychotherapy and antidepressant therapy for approximately two years after he was initially diagnosed. The psychotherapy focused on the cognitive and behavioral components of his depression with particular emphasis on the meaning of HIV in his life. Mr. S. came to understand that he took unnecessary risks such as going to bars and getting drunk to the point of suffering blackouts. He would wake up in motel rooms, sometimes beaten and robbed.

By focusing on his HIV status in therapy, Mr. S was forced to confront his own internalized homophobia, which was the result of sociocultural norms as well as the physical and emotional abuse he suffered during his elementary and junior high school years. He suffered insults, derogatory epithets, and physical bullying (e.g., being pushed, spat on, and hit) on an almost daily basis. He did not talk with anyone about the abuse and by the time he graduated high school he was a fixture at the gay bars. During high school he began to date older men, and around that time he was involved in his first abusive relationship with another man. The physical and emotional abuse that Mr. S experienced as a child created a great deal of shame, guilt, and anger toward self. Therapy focused on working through the negative affect associated with his abuse experiences. Focusing his attention on his negative feelings about his sexual orientation in a safe, nonjudgmental environment enabled him to realize that he had been reacting to others' hatred, which was separate from how he felt about himself. Through this process he was able to articulate his desire to meet a man and establish a long-term relationship. Prior to therapy, Mr. S could not articulate this desire and engaged in behaviors, such as one-night stands, excessive alcohol use, and abusive partners that ensured he would not establish a long-term, loving relationship with another man. These behaviors allowed him to suppress his "taboo" desire for a meaningful relationship with another man. After he was diagnosed with HIV, he did not think it would be possible to meet a man that would want to be in a relationship with him. His therapy focused on challenging his beliefs and attitudes about his sexual orientation and provided education related to his trauma experiences, trauma reactions, and subsequent risk behavior.

> After two years of psychotherapy, Mr. S met his partner; this was approximately two years after protease inhibitors were introduced. Mr. S's partner is HIV negative and was very accepting of Mr. S's diagnosis, which is not uncommon in the gay community. Mr. S reported that he was quite nervous about sexual activity at the beginning of the relationship because he did not want to infect his partner. He reported using condoms for sexual intercourse including anal and oral sex. Over time, condom use gradually tapered off for oral sex, as both he and his partner deemed oral sex to be a low-risk behavior, particularly if ejaculation into the mouth was eliminated. Mr. S explained that he and his partner became less nervous about transmission as they increased their education on the technical transmission probabilities. Gradually, the couple began to engage in reciprocal anal sex without condom use. Ms. S, still concerned about transmission risk to his partner, refrained from ejaculation. He and his partner agreed that anal sex could occur if his viral load remained undetectable, thus lowering the probability chance for transmission.
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> Over the course of time, Mr. S concluded that condom use lowered the feeling of intimacy the longer the relationship progressed. Both he and his partner yearned for a closeness that they believed could only be achieved through unprotected sex. Intellectually, both Mr. S and his partner knew the risk for HIV transmission existed; however, they used mathematical probability to determine when Mr. S's viral load was significantly low and thus the probability of infection would be close to nonexistent. They did not consult a physician on this matter.

This case illustrates important key concepts in how risk behavior is influenced over time. First, risk behavior often develops in response to traumatic experiences. When physical and emotional abuse occurs during childhood, the sense of oneself is challenged and the emotional response can be overwhelming. Individuals will seek homeostasis by engaging in behaviors to numb the negative feelings. In this case, Mr. S used alcohol and sex to numb his emotional pain. He thought he was to blame for the abuse he suffered and as his punishment he continued to expose himself to risky situations that included abusive relationships. As noted earlier, he was also able to hide from his desire to have a meaningful relationship with another man.

Second, HIV-related risk behavior occurs within the context of one's relationships. Often alcohol and or drugs facilitate sexual risk behavior. Part of the reason for this is that substances impair judgment and make it difficult to have a conversation with a partner about protection. In the case of Mr. S, engaging in self-injurious behavior that was a result of years of abuse and substance use was a way to numb the emotional response to his destructive behavior. Once he got into therapy, he was able to discontinue his self-injurious behavior. Indeed, he practiced safe sex for years before meeting his current partner.

Third, HIV-related risk behavior is often linked to intimacy and closeness within couples. Mr. S's partner supported limited risk behavior, which encouraged Mr. S to engage in unprotected sexual activity. The couple attempted to minimize the risk of transmission by using statistical probability for transmission. The couple intellectualized and rationalized risk behavior as permissible under the circumstances that they believed posed the least amount of risk for transmission. Over time, there tends to be a natural evolution for sexual relationships to deepen sexual intimacy through skin to skin contact, which is part of the human experience for most individuals. Assisting couples to understand this normal desire and not pathologize it is an important aspect of interventions to reduce risk behavior. Effective therapists need to have genuine empathy for couples who are struggling with these basic human needs, so that viable alternatives are explored, as are factors that motivate safer behavior and minimize transmission risk within couples where one person is HIV positive.

Notably, once individuals learn their HIV-positive serostatus, most people change their behavior to avoid transmitting HIV to others (Crepaz & Marks, 2002; Kalichman, Rompa, & Cage, 2000); however, depending upon the sex act, 10–60 percent of HIV-positive persons report sexual behaviors that place themselves and others at risk for sexually transmitted diseases (STIs) (Crepaz & Marks, 2002). A review of the research on risk behavior among HIV-positive adults suggests that high-risk behaviors are more likely with other infected persons, but significant rates of risk behaviors are observed with HIV-negative partners and partners of unknown serostatus (Kalichman, 2000). As a result, it is critical to develop interventions that can assist HIV-positive persons in reducing high-risk sexual risk behavior and provide assistance in maintaining good physical and psychological health.

Traumatic Life Events

Interpersonal Violence

In comparison to the general population, people living with HIV tend to report experiencing more traumatic life events, particularly those that are violent and abusive. Indeed, in a nationally representative probability sample of 2,864 HIV-positive adults, 21 percent of the women and 12 percent of the MSM reported interpersonal violence. Similarly, a study among HIV-positive African American women living in the inner city found higher prevalence of physical assault, rape, and robbery compared to their HIV-negative counterparts (Kimerling et al., 1999).

Among female sex partners of male drug users, a substantial proportion reported histories of rape, assault, and threat of assault. These traumatic events were associated with HIV risk, such that women who had been raped or threatened with assault were more likely to have multiple sex partners and engage in unprotected anal sex (He, McCoy, Stevens, & Stark, 1998). Indeed, some researchers now assert that violence assessment, particularly with regard to domestic violence, is an important adjunct to effective HIV prevention (Klein & Birkhead, 2000). Men are also vulnerable to violence, and in same-sex relationships where there is abuse, HIV-positive MSM have reported difficulty leaving the relationship and for some individuals they report higher risk for HIV transmission because of difficulty engaging in safer behavior with abusive partners (Letellier, 1996).

CASE EXAMPLE: MS. B

A 32-year-old Caucasian woman with a history of childhood sexual abuse, domestic violence, rape, and injection drug use was diagnosed with human papillomavirus (HPV) and HIV six years ago. She had four children, all of whom were taken from her custody by child protective services over the past 10 years because of neglect. Ms. B has not injected drugs for six years; she stopped using heroin when she was diagnosed with HIV/HPV, but she continues to struggle with alcohol addiction and on occasion she uses crack cocaine with her current boyfriend.

Ms. B admits that she has sex for drugs and food on occasion. Ms. B's caseworker suggested she participate in a women's psychotherapy group for HIV-positive women who also were experiencing trauma-related symptoms. Ms. B was easily startled, often suffered panic attacks, and rarely got a good night's sleep because of night terrors. She was sexually abused by two of her mother's boyfriends from the age of 5 until she was 10 years old. She is sexually provocative and admits that she can get a man to do anything she wants him to by using sex. She often laughs when talking about painful memories and says sexually provocative things to other group members when they discuss interpersonal relationships. Ms. B told the group during the first session, "I don't know why I'm here with all you bitches, I was hoping at least one real man would be here!" The group facilitators picked up on the anger and fear behind that statement and assisted Ms. B in focusing on her emotions. To do this, she was directed to concentrate on her body and identify what she felt and where she felt it. Through this exercise, Ms. B was able to say that she was afraid the women wouldn't like her so she wanted to say something that would distance herself from them before they had a chance to hurt her. The women acknowledged her pain and validated her anger by discussing their own fears about being in the group and their history of being hurt by others.

The facilitators assisted Ms. B in exploring her anger, particularly toward women. Other women in the group were struggling with the same issue, which enabled Ms. B to connect to the anger she felt toward her mother for not protecting her when she was a child from sexual abuse. This feeling was validated by two other women who shared a similar history of abuse. Ms. B was also able to disclose the circumstances in which she was likely to engage in unprotected sex. Typically, it was while she was under the influence of alcohol or drugs. She stated there were times she didn't care if someone else got the virus and there were other times she was scared she was going to give it someone else.

Ms. B used sex, alcohol, and drugs to cope with the pain of her abuse memories. The group was able to provide her with skills to cope with the negative affect associated with her abuse memories and reframe her subsequent behaviors as ways she developed to survive the horrific feelings of abandonment, fear, shame, and anger. Ms. B continues to struggle with using condoms all the time. She can use them with people she is just "kickin' it with," but she finds it difficult to assert herself with her boyfriend. The gender-power differential in couples has been associated with HIV risk, particularly in cases like Ms. B's, where poverty influences behavior because certain needs like food or a place to stay have to be met. After the group, Ms. B sought treatment in an outpatient substance use program for her alcohol addiction.

The case of Ms. B is not unusual. A clinic-based sample of HIV-positive adults found that individuals who reported greater severity of sexual coercion (based on the number of times the coercion occurred) were more likely to report more unprotected sex during the past three months. This is important because it's not simply the experience of sexual coercion that is related to sexual risk behavior; it appears that the severity of abuse is an important correlate of sexual risk behavior. This is consistent with research indicating that more severe trauma-related symptoms were associated with risk behavior, such that individuals who experienced more severe intrusion symptoms (e.g., nightmares) were more likely to report unprotected sex during the past three months (Gore-Felton & Koopman, 2002). Avoidant symptoms were associated with sexual risk behavior, in that individuals reporting more severe symptoms of avoidance were less likely to report unprotected sexual intercourse in the past three months. A possible explanation for this may be that individuals who suffer from avoidant symptoms may also experience more severe disruptions in their ability to establish or maintain intimate relationships, resulting in decreased opportunities to engage in risky sexual behavior (Gore-Felton & Koopman, 2002).

Childhood Sexual Abuse and HIV/AIDS

There is a growing body of evidence that adults and adolescents who were sexually abused as children are more likely to engage in high-risk activities that could increase their risk of exposure to HIV (Allers & Benjack, 1991; Bartholow et al., 1994; Carballo-Diéguez & Dolezal, 1995; Lemp et al., 1994; Zierler et al., 1991). The sequelae of childhood sexual abuse (CSA) can have long-lasting deleterious effects on an individual's psychological, physical, and social functioning. For instance, sexual compulsivity has been linked to a history of abuse (Allers, Benjack, White, & Rousey, 1993; Carmen & Rieker, 1989) and is associated with behaviors that confer high risk for HIV transmission, such as having multiple partners or engaging in impulsive, unprotected sexual intercourse. Moreover, mood disorders that result from abuse, such as chronic depression, and behaviors that include self-destructive tendencies, revictimization, and drug/alcohol abuse can increase one's vulnerability to HIV infection (Allers et al., 1993).

In a study of HIV transmission risk, Zierler et al. (1991) reported that female and male survivors of CSA were more likely to have engaged in sex work, to change partners frequently, and to have casual sex with acquaintances than people who were never abused. Furthermore, survivors of both sexes reported more frequent use of alcohol and tranquilizers and were more likely to report a history of a sexually transmitted infection or to have serologic evidence of HIV infection. Surprisingly, abused men in this sample had a two-fold increase in prevalence of HIV infection (Zierler et al., 1991). Similar findings were found among 52 HIV-positive adults, such that almost two-thirds (65%) reported histories of childhood sexual/physical abuse (Allers & Benjack, 1991).

For women, a history of CSA is a major risk factor for becoming HIV positive (Allers et al., 1993; Lodico & DiClemente, 1994: Zierler et al., 1991). Moreover, female victims of CSA are at much higher risk than nonvictims of becoming prostitutes or drug abusers (Russell, 1986), and few women make a conscious connection between their childhood victimization and later high-risk behaviors (Russell, 1986). Sexual coercion has also been linked to CSA, such that women with a history of CSA were significantly more likely to experience unwanted sexual intercourse as adults (Messman & Long, 1996) and were at greater risk for HIV infection (Whitmire, Harlow, Quina, & Morokoff, 1999).

For men, there is also evidence indicating a strong relationship between CSA and HIV risk behavior. In a study of 1,001 adult homosexual and bisexual men attending STD clinics in three American cities, one-third of the sample had experienced sexual abuse during childhood or adolescence, and this variable was associated with HIV-risk behavior, such as unprotected anal intercourse during adulthood (Bartholow et al., 1994). Lemp et al. (1994) reported that in a sample of 425 young MSM, a lifetime history of forced sex was significantly associated with the likelihood of having unsafe anal sex in the six months prior to the interview. Similarly, a study examining high-risk sexual behavior among 182 men of Puerto Rican ancestry living in New York City who had sex with men found that men who reported a history of childhood sexual abuse were significantly more likely to engage in receptive anal sex and to do so without protection (Carballo-Diéguez & Dolezal, 1995). A study examining a conceptual model of sexual risk among gay and bisexual men found that psychopathology, drug use, and trading sex for money, drugs, or a place to stay mediated the relationship between CSA and subsequent adult HIV risk behavior (Gore-Felton et al., 2006). Victimization that confers risk of HIV infection is also more common among men with a CSA history, who are more likely to report sexually coercive events involving unprotected anal intercourse (Kalichman, Gore-Felton, Benotsch, Cage, & Rompa, 2004), which is the highest sexual risk behavior for HIV transmission.

CASE EXAMPLE: MR. M

Mr. M is a 42-year-old African American male who participated in a group stress management intervention that recruited men who reported HIV risk behavior (sexual or injection drugs) and psychological trauma symptoms. Mr. M stated that he is currently in a relationship with a woman and considers himself to be heterosexual. She does not know that he is HIV positive. He admitted that he has had sex with men, typically when using drugs and alcohol.

Mr. M has been diagnosed with AIDS for the past five years. He is also infected with Hepatitis C. He has a previous history of injection drug use. He stopped using injection drugs, including heroin and cocaine, around the time he was diagnosed with AIDS. The group members challenged Mr. M to consider whether his AIDS diagnosis had any impact on changing his drug use. Mr. M accepted that there was a connection and added that his drug use was an excuse to escape from the harsh realities of life. Mr. M occasionally uses marijuana and alcohol to help him relax.

The group helped Mr. M identify the benefits and consequences of escaping though the use of drugs. Instead of criticizing his current marijuana and alcohol use, the facilitators helped Mr. M reframe a seemingly negative behavior into a drive to survive by shielding awareness of his emotional pain. Avoidance behavior, common among individuals coping with traumatic stress, was normalized as an adaptive human survival drive rather than a character flaw. The peer support of the group helped Mr. M reduce his shame and enabled him to talk about other sensitive personal information. Mr. M disclosed that an older male cousin had sex with him when he was about 10 years old. Mr. M struggles with anger toward his cousin but has never shared his experience with his family because he fears that his manhood would be questioned.

The stress of keeping this secret is very stressful and Mr. M becomes enraged when he thinks about it. He has spent most of his life trying to forget about it. Although he had insight that the situation was stressful, he lacked awareness of how his stress manifested itself through physical feelings of tension and aggression. The group facilitators were able to provide important psychoeducational information related to the effect of trauma on the brain and subsequent emotional and physical responses. This information was key to validating the experiences of hyperarousal, avoidance, and reexperiencing that Mr. M had related to his childhood sexual abuse. The therapeutic utility of group process was evident for Mr. M when the other group members confirmed these experiences as universal, which further validated these responses as normal given exposure to trauma.

Mr. M was able to discuss his anger toward men and women, which he often acted out sexually by not using condoms. Mr. M was able to identify his anger and subsequent shame associated with his sexual abuse. After he was able to connect emotionally to the feelings he had spent years trying to bury, he was able to understand his behavior toward others and his inability to maintain intimate relationships. For Mr. M, it was important to discuss how safer sex was protection for him so that he could maintain his health. The threat of being infected with an additional HIV strain that might be resistant to his current medication regimen along with the threat of acquiring a different sexually transmitted infection that might complicate his current medical course was helpful in motivating him to use condoms with his sexual partners.

Trauma-Related Stress Symptoms and HIV/AIDS

Studies examining trauma among populations already infected with HIV underscore the strong relationship between previous trauma and subsequent

HIV infection. A chart review of 238 female patients at an HIV outpatient clinic found that almost one-third (32%) had a history of sexual abuse (Bedimo, Kissinger, & Bessinger, 1997). Gore-Felton and Koopman (2002) conducted a study among a diverse sample of 64 HIV-positive men and women living in California and found that almost a quarter of the sample reported moderate to severe trauma symptoms, suggesting a clinical diagnosis of posttraumatic stress disorder (PTSD). The types of trauma reported were heterogeneous and included interpersonal violence, childhood and adulthood sexual victimization, robbery, burglary, and witnessing violence. Moreover, the severity of the abuse (adult and childhood) and the trauma-related symptoms (avoidance and intrusion) were associated with sexual risk behavior.

In addition to the traumatic experiences of interpersonal violence and abuse, being diagnosed with a chronic, life-threatening illness has been categorized as a traumatic stressor in the fourth edition of the *Diagnostic and Statistical Manual* (American Psychiatric Association, 1994). Moreover, a growing body of research suggests that traumatic stress responses, and even full-blown PTSD syndromes, can ensue from the traumatic experience of being diagnosed with a life-threatening illness. For instance, a number of studies have documented clinically significant cancer-related posttraumatic stress symptoms: intrusion, avoidance, and anxiety (Alter et al., 1996; Butler, Koopman, Classen, & Spiegel, 1999; Cella, Mahon, & Donovan, 1990; Cordova & Andrykowski, 2003; Koopman et al., 2002). Very little empirical research has been conducted among HIV-positive persons examining this phenomenon. However, among the few studies that have examined trauma symptoms among HIV-positive adults, the results have been consistent with the cancer studies. For example, in a study among MSM examining PTSD symptoms in response to HIV infection, 30 percent met the criteria for PTSD. In this same study, PTSD associated with HIV was significantly and positively associated with a history of PTSD from other traumatic events that occurred prior to being diagnosed with HIV (Kelly et al., 1998). Additionally, HIV-positive women who reported less social support had a higher incidence of PTSD and exhibited higher rates of avoidance symptoms compared to women who reported more social support (Jones, 1999).

Posttraumatic stress symptoms complicate not only responses to traumatic stressors themselves but also the severity and course of comorbid medical and psychiatric problems, including HIV infection. The prevalence of PTSD in the general population is about 9 percent (Breslau, Davis, Andreski, & Peterson, 1991); the prevalence of partial PTSD is estimated to be close to 30 percent (Weiss et al., 1992). The rates are likely to be higher among those with HIV infection, due in part to the lifestyle associated with elevated disease risk. For instance, among HIV-positive African American women, 62 percent reported experiencing at least one traumatic life event, and 35 percent of the sample met the full criteria for PTSD diagnosis (Kimerling et al., 1999). Moreover, 87.9 percent reported symptoms of reexperiencing the traumatic event, 73.5 percent reported avoidance, and 70.4 percent reported symptoms of hyperarousal.

CASE EXAMPLE: MR. A

Mr. A is a 35-year-old Hispanic male who lives in a known gang area. He has been HIV positive since age 20. He learned that he was HIV positive as a result of going to an emergency room after being beaten with the handle of a gun. He can remember feeling completely powerless when the gun was held to his head. He disclosed this information in a group for men living with HIV disease. Mr. A is currently in a relationship with an abusive man who is 20 years older than he is. Mr. A knows that he needs to leave the relationship, but he has nowhere to go. His partner sometimes locks him out of the apartment when he is angry. As a result, Mr. A has had to sleep on the street. Mr. A often feels on edge, particularly when he is locked out of his apartment and needs to sleep on the street in a dangerous area where he may be assaulted.

In addition to coping with his partner's aggressive outbursts, he also stated that his partner makes him use methamphetamine and then lets his friends have sex with him. Mr. A stated that he wants to please his partner so he complies with the request. At times he is so intoxicated that he does not even know what is happening to him. He admits to being "passed around" for receptive anal sex at sex parties that his partner hosts. Mr. A knows that when he uses methamphetamine he does not take his antiretroviral medication as prescribed. The ongoing traumatic stress has led to inconsistent attendance at routine medical appointments, reduced access to medication, low medication adherence, and the lack of a safe place to live. Mr. A's low self-esteem and inability to leave the abusive relationship place him at high risk for reinfection with another HIV strain as well as other sexually transmitted diseases.

An all male psychotherapy group was very beneficial for Mr. A. He had a group of men affirming his manhood while at the same time empathizing with his pain. This atmosphere of acceptance and trust enabled Mr. A to reveal a childhood that was exposed to repeated physical violence and emotional abuse by his stepfather, who constantly called him "faggot." Mr. A was able to identify his low self-esteem and self-worth as motivating factors that kept him in his current abusive situation. Paradoxically, the more acceptance and affirmation Mr. A felt from the group the greater his ambivalence grew about attending the group: this was demonstrated by sporadic group attendance. The group confronted Mr. A's sporadic attendance in a caring manner that enabled him to connect to his feelings about the group. Mr. A revealed that he felt safe in the group, which was a feeling he had not experienced before, particularly among men. He knew the group was time limited and thought being too involved with the group would only hurt too much when the group ended. This disclosure allowed the group to offer support outside of the group meetings and to discuss community programs and services that were available, once the group ended, to provide ongoing social support.

To assist Mr. A cope with the transition of the discontinuation of the group, he was encouraged to access the community services while still in the group. Mr. A met other caring men and women at the community service

> programs and was able to access services that enabled him to leave his abusive relationship and move into transitional housing. Mr. A agreed to attend individual psychotherapy sessions, which began while the group was still ongoing. This provided a bridge once the group ended for Mr. A to continue to work on bolstering his self-esteem, developing social support, and reducing his risk behavior.

It is important to note that empirical evidence suggests that PTSD occurs only in a minority of individuals exposed to a trauma, indicating that the stressor cannot be the sole etiologic agent of PTSD. Indeed, idiosyncratic factors such as type of trauma, trauma severity, and biology (i.e., genetics) influence the trajectory of trauma symptoms and functioning over time (Shalev & Yahuda, 1998). However, for those who do develop PTSD symptomology, the symptoms follow a similar, defined pattern of distress regardless of the particular traumatic stressor.

Mechanisms Linking Traumatic Stress to HIV Risk Behavior

An important question to ask is, “Why does trauma lead to risk behavior?” While no studies have definitively established the mechanisms that link trauma with HIV risk behaviors, several models have been proposed. One hypothesis is that the psychological symptoms (e.g., intrusion, hyperarousal, and avoidance) associated with a traumatic experience may interfere with the individual’s ability to integrate safer patterns of interpersonal and personal functioning. Clinical observation, along with empirical research, indicates that trauma symptoms are often accompanied by psychological distress such as frustration and anger.

Notably, cognitive behavioral interventions that have been successful in reducing PTSD symptoms have also been successful at reducing comorbid psychological distress (Zoellner, Fitzgibbons, & Foa, 2001). When specifically considering HIV-related risk behavior, various psychological mechanisms have been identified that mediate change in HIV risk behavior, including the following: health beliefs (Becker & Joseph, 1988), self-efficacy (Bandura, 1994), peer influence (Fisher, 1988), and coping (Mayne, Acree, Chesney, & Folkman, 1998). The relationship of each of these mechanisms to sexual/drug use risk behaviors has received some support.

For example, levels of self-reported self-efficacy are associated with sexual refusal, consistency of condom use, and reduced total number of sexual partners and anonymous partners (Aspinwall, Kemeny, Taylor, Schneider, & Dudley, 1991; Kasen, Vaughan, & Walter, 1992; Rosenthal, Moore, & Flynn, 1991; Walter et al., 1993). However, no single model seems to be comprehensive in explaining the major factors influencing risk behavior. This is particularly true for populations that have experienced a traumatic stressor. Therefore, it is important to consider additional models and allow further theoretical understanding to emerge as new evidence is obtained.

An alternative perspective, the distress model, states that emotional distress is related to HIV risk acts (Richardson, Schott, McGuigan, & Levine, 1987;

Rotheram-Borus, Rosario, Reid, & Koopman, 1995). Reducing mood disturbance may be a key factor leading to reduced sexual and drug use risk behavior. Brendstrup and Schmidt (1990) observed that distress due to undertreated stressors might create a barrier against adopting safe sexual practices among homosexual/bisexual men. In longitudinal HIV risk reduction research focusing on gay/bisexual male adolescents (Rotheram-Borus et al., 1995), components of the health belief model, self-efficacy theory, peer influence, coping, and distress models were examined. Only the distress model was supported, such that the pattern of protected anal or oral acts varied with emotional distress, substance use, and conduct problems.

Previous cross-sectional studies have shown that sexual abuse is the event that most often leads to PTSD among women (Breslau et al., 1991; Resnick et al., 1993). This, coupled with evidence that there is a risk of increased drug disorders associated with an increased risk for HIV among individuals with PTSD, has led some researchers to hypothesize that PTSD psychopathology may mediate the relationship between abuse and sexual risk behavior (Miller, 1999).

A study among gay and bisexual men examined this assertion and found preliminary support for the hypothesis that psychopathology does mediate the relationship between CSA and sexual risk behavior (Gore-Felton et al., 2006). Specifically, borderline functioning, dissociative symptoms, and intrusive trauma symptoms mediated the relationship between CSA and adult sexual risk behavior (Gore-Felton et al., 2006).

The Effect of Trauma on Physiology

Physiological Indicators of Stress

The autonomic nervous system and the cardiovascular, metabolic, and immune systems protect the body by responding to internal and external stress. However, cumulative stress can disrupt this complex interactive system. McEwen's model of stress and health (McEwen, 1998) incorporates a considerable body of research suggesting that chronic elevation of cortisol caused by stress, as well as other factors, can lead to immunity problems as a function of allostatic load, which is the cumulative effect of stress on the body. In healthy individuals, cortisol levels are usually highest prior to awakening and decrease over the course of the day (Posener et al., 1996).

Experiencing chronic stress or enduring major traumatic life events may result in raising cortisol above its usual levels. Evidence suggests that chronic elevation of cortisol may increase HIV viral replication (Corley, 1995; Swanson, Zeller, & Spear, 1998). Recent research further indicates an association between depressive symptoms, cortisol, and disease progression among HIV-positive men (Leserman et al., 2000).

Traumatic and other stressful life events are highly prevalent among persons who become HIV positive. Childhood sexual abuse and other traumatic life events appear to be risk factors for sexual risk behavior and injecting and other drug use associated with HIV infection (Gore-Felton & Koopman, 2002). Clinical evidence suggests that stressful life events predict more rapid HIV disease progression. Indeed, research found that for every severely stressful life event per six-month interval, the risk of early HIV disease progression doubled (Evans et al., 1997). In research on persons recently notified of HIV-positive serostatus, PTSD symptoms of avoidance and intrusion were associated with greater distress, and avoidance was predictive of lower CD4+ percentages (Lutgendorf et al., 1997).

Research suggests that the development of PTSD is likely facilitated by an atypical biological response in the immediate aftermath of a traumatic event, which in turns leads to psychiatric symptoms (Yehuda, McFarlane, & Shalev, 1998). Thus, interventions that target both the psychological and physiological manifestations of PTSD are likely to be effective in reducing trauma-related stress symptoms.

CASE EXAMPLE: MR. M

Referring back to the case of Mr. M, the 42-year-old African American male with a history of injection drug use and childhood sexual trauma, an important function of the group was to provide Mr. M feedback on the triggers that lead to his use of drugs and alcohol to mentally escape from stress. The group helped Mr. M understand that he was using drugs and alcohol to help his body relax. The group facilitators focused the group's attention on the basic human need to feel calm and safe, which increases the desire to reduce feelings of stress such as tightness in one's stomach and chest in response to hyperarousal symptoms of trauma. This type of education helped increase awareness of how hyperarousal symptoms are associated with the avoidance and experiencing symptoms of posttraumatic stress disorder.

The group practiced diaphragmatic breathing, which helped Mr. M and others learn how to master the desired internal calmness that was sought through the use of drugs and alcohol. Paradoxically, Mr. M's use of drugs and alcohol increased the feeling of being out of control which was the cost of blocking out intrusive memories. The diaphragmatic breathing and guided imagery helped Mr. M lower his feelings of anxiety and created the calm physiological response he wanted while maintaining a sense of control. It was emphasized that Mr. M could use the diaphragmatic breathing techniques as an additional coping tool and as an alternative to drugs and alcohol.

Relationship between Adult PTSD and Substance Abuse

It is important to understand the link between trauma and substance use, because substance use and sexual risk behaviors are the principal routes for the transmission of HIV infection (DesJarlais & Friedman, 1988; Hearst & Hully, 1988) and they tend to co-occur. It is argued that alcohol and other drugs have direct causal effects on sexual behavior and condom use by impairing one's judgment about possible risks, disinhibiting one physically and psychologically, and making one less sensitive to the concerns of a partner (Strunin & Hingson, 1992). High-risk sexual behavior is strongly related to substance use (Ostrow et al., 1990). Thus, use of drugs and alcohol can increase the risk of becoming HIV infected when the sexual partner has HIV infection (Ostrow et al., 1990; Penkower et al., 1991), suggesting that an intervention aimed at decreasing risk behavior in the context of substance use, particularly among PLH, is likely to reduce HIV transmission. Indeed, the majority of persons with AIDS have been infected either through sexual risk behavior, injection drug risk behavior, or both (CDC, 2002), and risk behaviors continue among some persons already HIV infected. Even among well-educated employed women who are not intravenous drug users (IDUs), 60 percent engaged in unprotected sexual activity after learning that they were HIV positive (Brown & Rundell, 1990).

Importantly, many MSM and IDUs have changed their risk behaviors in response to the threat of AIDS (Catania et al., 1992; DesJarlais & Friedman, 1988). However, even after people have reduced their high-risk sex and drug use behaviors, relapse often occurs (DesJarlais, Friedman, & Casriel, 1990; Stall et al., 1990). One explanation may be that trauma-related stress was not assessed and, therefore, symptoms of stress were not addressed in the intervention. It should be noted that the comorbidity of PTSD and substance abuse is high (Keane & Wolfe, 1990; Kulka et al., 1990). For example, 59 percent of women with trauma histories attending a drug rehabilitation clinic experienced symptoms that met the criteria for PTSD (Fullilove et al., 1993). In the cases of undiagnosed PTSD, it may be that individuals turn to substances in an effort to self-medicate their anxiety symptoms (e.g., hyperarousal, avoidance, reexperiencing). Clinicians have long noted the association between alcohol use and anxiety disorders. Indeed, alcohol belongs to the same class of drugs, known as sedative-hypnotics, that include benzodiazepines. Benzodiazepines have been prescribed for the treatment of anxiety for years. However, today they are not the drug of choice to treat anxiety because of their tolerance and addictive properties. However, they are efficient in reducing feelings of anxiety and explain why so many individuals with anxiety disorders use alcohol to get relief from disturbing symptoms.

Implications for Disease Management and Clinical Practice

Group Interventions

As previously noted, a great deal of progress in understanding the life cycle of HIV has resulted in the development of HAART; however, at present, there is no cure for AIDS and no vaccine against HIV infection, and none seem imminent. Although HAART is responsible for prolonging life and slowing disease progression among many persons with HIV/AIDS, not everyone has been helped by the HAART regimen (Deeks et al., 1997).

Support groups and other psychosocial interventions have a role to play in enhancing the quality of life for HIV-positive persons. Research has found that psychosocial interventions may enhance survival among persons with cancer (Goodwin et al., 2001; Spiegel, 2002) and may have similar effects on individuals living with HIV/AIDS. For example, a study examining changes in immunologic status among 25 HIV-infected men, randomly assigned to a 10-week stress management intervention or to a wait-list control, found that men receiving stress management had higher CD4(+), CD45RA(+), and CD29(+) cell counts over a 12-month period after completion of the intervention (Antoni et al., 2002). It is important to note that this difference was found independent of the individual's number of naïve T cells and HIV virus load. Thus, there is evidence that stress management is an efficacious method of immunologic reconstitution among HIV-infected men.

These findings are consistent with results among participants in a 10-week bereavement support group for HIV-positive individuals, which demonstrated health benefits such as higher CD4+ cell count, lower plasma cortisol levels, and fewer numbers of physician visits, compared to those of control group participants (Goodkin et al., 1998). The clinical implications of such immune function benefits are continuing to be investigated. Given the importance of immune function in HIV/AIDS, further research on the psychoimmunology of psychosocial interventions is likely to lead to clinically useful results.

Although individual psychosocial interventions for HIV-positive persons can be effective (Markowitz, Klerman, & Perry, 1992; Perry et al., 1991), group interventions have the clear advantage of providing social support and validation. Researchers have demonstrated positive effects of group intervention for HIV/AIDS patients on psychological variables, including mood, sexual and drug use risk behaviors, and beliefs and knowledge about HIV/AIDS. Moreover, psychosocial interventions using groups have proven efficacious in helping to reduce emotional distress among HIV-positive patients (Kelly et al., 1993a). For instance, frequency of unprotected anal intercourse among depressed HIV-infected men was significantly reduced by a supportive-expressive group intervention, and a cognitive behavioral group intervention resulted in significantly less illicit drug use (Kelly et al., 1993b). Additionally, a skills-training group resulted in safer sex practices among gay men and safer sexual practices among single, pregnant, inner-city women (Hobfall et al., 1994).

In addition to reducing risk behavior, cognitive behavioral group interventions have been successful in reducing stress symptoms. Indeed, cognitive restructuring and coping skills have produced marked improvement in "reexperiencing" and "avoidance" symptoms. This is an extremely important clinical finding in light of the fact that the most frequently experienced symptoms in PTSD are reexperiencing and autonomic arousal symptoms (Resnick et al., 1993; Rothbaum et al., 1992). A body of evidence amassed over the past decade indicates that when different treatment modalities are compared, cognitive behavioral interventions are the most effective in alleviating trauma symptoms (Gore-Felton, 2000; Gore-Felton, Gill, Koopman, & Spiegel, 1999).

As previously noted, improvements in antiviral treatment are prolonging the lives of people living with HIV disease. Because HIV transmission is preventable by changing and maintaining behavior, the use of behavioral skills that prevent HIV transmission is the primary available means to curtail the HIV epidemic.

The lives of HIV-positive persons are often complex, and their social as well as psychological needs often go unmet. There is substantial need for social support in the face of life-threatening illness. Fortunately, group interventions that provide social support and the opportunity to learn adaptive coping skills have been successful in helping patients manage their anxiety and depression (Markowitz et al., 1992). It is clear from the literature that distress, posttraumatic stress symptoms, social network exposure, and drug abuse can complicate the course of HIV disease and may predispose vulnerable individuals to engage in risk behavior. It is also clear that over a decade of research in the field of HIV has consistently demonstrated that group interventions can effectively reduce risk behavior, alleviate psychological distress, and improve health outcomes.

Social Support

There is substantial need for social support in the face of life-threatening illness. Under normal circumstances, social support helps individuals mobilize their psychological resources and manage emotional responses to stress as well as provide financial support, materials, skills, and cognitive guidance to handle situations optimally. Studies have shown that the mere perception that adequate support is available can serve to buffer situational stress as much as the actual level of social support.

HIV-infected patients are confronted with high levels of stress related to their health status, and their social support systems are often burdened and impaired. An AIDS diagnosis is frequently linked to a decrease in the number of supportive contacts or a change in the pattern of those contacts. For example, AIDS patients report lower levels of practical and emotional support from family members. In fact, many AIDS patients report greater availability of emotional support from friends than from family members (Kelly, Raphael, & Statham, 1996).

Problems with inadequate social support may have physiological as well as psychological consequences. In general, greater social support has been associated with better immune system function. Among HIV-positive persons, those with less deterioration in CD4+ cell count were significantly more likely to report greater social support availability (Theorell et al., 1995). Consistent with the research suggesting that more social support is associated with better immune function, bereavement, a loss of an important source of social support, has been associated with decreased immune system functioning (Goodkin et al., 1996).

Social support may be an important factor in minimizing the intensity of the stress experienced by HIV-positive individuals. An explanation as to how this may occur can be found within the theoretical framework of the stress-buffering hypothesis of social support. The stress-buffering hypothesis of social support (Cohen & Wills, 1985) refers to the protection that social support provides against the effects of stressful events and situations. This protective effect of social support is thought to operate both by contributing to the resources available to individuals to cope with the stressor and by reducing the stress response to the stressor (Cohen & Wills, 1985).

Incorporating psychosocial approaches to the standard treatment and care of HIV/AIDS patients may promote better health outcomes. Transforming how medicine views psychosocial factors within the context of chronic illness undoubtedly means treating HIV from an interdisciplinary approach, which focuses appropriate attention on the psychosocial influences that affect disease course. As individuals live longer with HIV, becoming middle- or older-aged, it will be necessary to consider developmental influences on psychosocial functioning within the context of a chronic, life-threatening disease that continues to be socially stigmatized.

Individual Interventions

Maintaining behavior change for many years requires well-developed coping skills and the use of strategies to manage mental health distress symptoms to sustain reductions in transmission acts (Gore-Felton et al., 2005).

Preventive interventions for HIV-positive individuals offer benefits for both the individual and society, including reducing psychopathology, decreasing the likelihood of transmission to uninfected persons, and reducing the probability of reinfection with drug-resistant HIV strains that may accelerate disease progression.

There are several benefits to using an individualized intervention approach. Some individuals may fear the stigmatization associated with a small-group intervention; attending the group discloses one's serostatus to other group members, which poses a risk of loss of privacy should a group member decide not to maintain confidentiality. In some settings, arriving at the site discloses one as being HIV positive. Moreover, scheduling group sessions at times that are convenient for participants and staff can be very challenging. Our current structure and organization of health services are amenable to individual sessions. For instance, medical and community-based clinics are typically organized around delivery of individual sessions; this is certainly the norm in clinics for those with sexually transmitted diseases, both in this country and internationally. When the interventions are delivered in individual sessions, the coordination and stigmatization issues are not present, which enhances the feasibility and acceptability of disseminating the intervention.

Medical Adherence and Health Outcomes

Minimizing the symptoms associated with HIV disease is imperative to restoring quality of life, which includes reducing stress responses to health-related stressors among individuals living with HIV/AIDS. As for individuals living with other chronic illnesses, HIV/AIDS presents challenges to maintaining health behaviors over an extended period of time. Adherence to treatment regimens, defined as the match between the patient's behavior and health care advice (Haynes, Sackett, & Taylor, 1980), is important because less than very high medication compliance can facilitate the development of drug-resistant HIV strains (Bangsberg, Moss, & Deeks, 2004). Moreover, there is evidence suggesting that less than very high adherence to HAART can lead to treatment failure, as evidenced by an increase of HIV-1 RNA (viral load) in the body (Bialer, Wallack, &, McDaniel, 2000). Individuals may also develop viral resistance across different classes of medications, limiting their ability to benefit from other drug therapies. Multiple factors have been associated with adherence (Johnson et al., 2003). Consequently, improving long-term utilization of and adherence to HAART is integrally related to health maintenance among PLH and requires interventions that can be tailored to meet the multiple demands of individuals.

Policy Implications

As medical interventions continue to improve health and increase the overall life expectancies of people living with HIV/AIDS, there will be more people living with HIV, suggesting that HIV prevention efforts need a broader focus that includes HIV-positive populations. Incorporating the assessment of trauma and the treatment of trauma-related symptoms among HIV-positive men and women may be a particularly effective method of reducing sexual risk behavior. Thus, intervention and prevention efforts may be able to thwart new infections by developing strategies that not only build skills needed to prevent HIV but effectively target psychological symptoms and behaviors that occur within the context of traumatic life experiences.

Policies that encourage individuals to know whether they are HIV positive or not may encourage early entry into care, which may assist in identifying individuals early in their disease and educate them about safer behavior. For instance, some infectious disease physicians advocate changing the current medical standard-of-care to include HIV testing when other sexually transmitted diseases are being tested for, without the need for special consent by patients. Similarly, there are those that consider preventive medicine to include HIV testing for high-risk age groups so that it becomes standard practice much like a colonoscopy at age 50 and mammograms for women 40 years and older. However, there are others who believe it is time to implement routine, not risk-based HIV testing (Beckwith et al., 2005).

Normalizing HIV Testing

Early in the HIV epidemic, health providers in the United States targeted high-risk groups for HIV testing and counseling, chiefly homosexual men and injection drug users. As the epidemic progressed in the 1980s and 1990s it became clear that HIV/AIDS affects men and women of all sexual orientations. Testing and prevention campaigns shifted from targeting a demographic label (gay or bisexual) to targeting actual risk behavior (unprotected sex, multiple partners, needle sharing, or sexually transmitted infections (STIs) as a way of identifying those at highest risk for HIV. Typically, health providers offer testing to patients who endorse risk factors for HIV, relying heavily upon the self-report of the patient.

Aside from objective findings of an opportunistic infection or presence of other STIs, a test is typically offered when a patient reports a history of risky behavior, such as unprotected sex, drug use, or intercourse with a partner of the same sex. This is problematic because self-report may not reliably identify risk behavior and may limit access to necessary HIV testing and prevention counseling. Integrating non-risk-based HIV testing and counseling into all aspects of health care, such as primary care, family planning clinics, and the emergency department, will normalize the role of routine testing as care standard, identify cases among those who do not know they have HIV, and create a powerful cultural shift in how testing is perceived in the eye of the public (Beckwith et al., 2005).

Imagine being given an HIV test in an annual physical exam, regardless of any stated risk, evidence of opportunistic infection, or STI, that would, under current policies and practices, prompt testing. To offer HIV testing for "no apparent reason" would require a policy change in how medicine is practiced and how Medicare, Medicaid, and other third-party payers reimburse health organizations for preventative testing. Continued reliance on risk-based testing for patients who may be reluctant to self-identify risk would limit the ability of the health care community to diagnose HIV infection. These missed opportunities to diagnose delay treatment, increase health care costs, and keep patients from receiving the necessary educational and behavioral counseling that would lower the risk of transmission to others.

In 2001, the CDC revised their guidelines for HIV testing, counseling, and referral for the screening of pregnant women (CDC, 2001). The revised guidelines call for health care providers to provide routine testing and counseling in areas where the prevalence of HIV infection is equal to or greater than 1 percent and for persons with increasing behavioral risk for infection regardless of the prevalence of HIV infection. This was the first step in recognizing the need for routine HIV testing by broadening the inclusion criteria for testing. In 2003, the prevention effort called for expanding its strategies to increase the early identification of HIV with appropriate linkage to care by making HIV testing a routine part of medical care, particularly in communities where the prevalence is greater than 1 percent, by the inclusion of rapid HIV testing in outreach outside the medical care setting, and by a focus on decreasing perinatal HIV transmission (CDC, 2003a)

In 2006, the CDC again revised their recommendations for HIV testing. These newly revised CDC recommendations advocate routine voluntary HIV screening as a normal part of medical practice, similar to screening for other treatable conditions, among populations where the prevalence of HIV is greater than 0.1 percent (CDC, 2006).

The recommendation to routinely offer testing when the local prevalence is greater than 0.1 percent is impractical. Health care providers would have to know specific population estimates, which are not easily assessable. HIV risk is based on social networks and specific risks behaviors for individuals as well as the prevalence for HIV infection in a particular social network. It would be strategic to test everyone, taking the burden away from "prevalence rates" and physician/provider perception in initiating voluntary testing.

Furthermore, the practice of relying on an accurate risk assessment is faulty because it is limited by self-reported data, which are vulnerable to social desirability, recall bias, and normal forgetting. As mentioned earlier, individuals may not feel comfortable sharing risk behavior or simply asking for testing. Not only are some patients reluctant to self-identify risk, but health providers may not seek information regarding risk because of their own discomfort in asking patients about testing or fear of being seen as offensive. If patients are inaccurate in their risk assessment and providers are reluctant to ask about testing, HIV testing that is based on risk assessment will undoubtedly fail.

Routine testing, regardless of risk, would considerably increase the early identification of HIV disease, which would assist in getting individuals into treatment early and exposing high-risk individuals to prevention messages. It is important to note that regardless of the test results, the exposure to HIV testing, in and of itself, is an intervention, because it highlights the risk of HIV infection. This process can affect decisions by increasing the cognitive dissonance related to maintaining risk behavior. Moreover, pairing testing with access to counseling can facilitate behavioral changes necessary to decrease risk behavior. Thus, a policy that encourages HIV testing as routine, standard medical care and affords individuals access to counseling and prevention messages is likely to reduce HIV incidence rates.

Early Education and Prevention

Most of the HIV that is transmitted worldwide occurs within the context of an intimate relationship, usually a sexual relationship. Policies that encourage dissemination of best prevention practices to youth before they become sexually active are necessary to build "sexual esteem." With "sexual esteem," girls will not feel the need to have sex before they are ready or because they fear losing the affection of someone they care about. Similarly, boys will not feel pressured to prove their worthiness through sexual conquests or their manhood by becoming teen fathers, or feel pressured to engage in sex before they are emotionally ready.

It is true that part of sexual education is learning how to use a condom correctly; however, when HIV prevention curricula are carefully scrutinized, it is evident that much more is being taught. This includes self-efficacy, assertive communication, social support, self-esteem, and self-worth, and for those who have experienced sexual trauma it is about reclaiming one's sexuality, learning to be sensual without sex, and restructuring the meaning of what a sexual being is. Abstinence-based programs appear to work best for early adolescents who have not yet become sexually active (Jemmott, Jemmott, & Fong, 1998). However, for adolescents who are already sexually active, education and prevention programs are necessary to decrease risk behavior and in some cases return adolescents to abstinence (Jemmott, Jemmott, & Fong, 1998).

In light of this evidence, the debate about whether or not abstinence-only programs should exist in schools seems moot. Like most human dilemmas, the problem is complex and therefore requires a multifaceted approach—one size will not fit all. Thus, incorporating abstinence-only programs into education and prevention seems like the best approach to providing our youth with information that will delay sexual activity and keep those who are sexually active safe from unwanted pregnancies, STIs, and HIV infection. The savings to society and public health of such an approach would be substantial.

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CHAPTER 6

EMOTIONAL TRAUMA FOLLOWING BURN INJURY IN CHILDREN

Rhonda S. Robert

In 1947, one of the most significant industrial disasters in the United States occurred in the Texas City port. A ship carrying 7,700 tons of ammonium nitrate caught fire and exploded. The explosion blew nearly 6,350 tons of the ship's steel into the air at supersonic speed, causing a number of other fires and explosions, including a fire on a second ship carrying a large amount of ammonium nitrate and sulfur. The official death toll was 581. Five thousand were injured, and 1,784 were admitted to 21 area hospitals (Minutaglio, 2003). Many of the Texas City disaster burn injury survivors were cared for at the University of Texas Medical Branch (UTMB). The extensive clinical experience gained due to this disaster by medical professionals resulted in significant advances in burn care.

Given the excellent care for adults at the University of Texas Medical Branch Blocker Burn Unit and the potential for shared resources, the Shriners of North America built their first burns institute in Galveston, Texas, in 1966.[1]

Improving the survival rates of persons who sustained major burn injuries became a major medical focus. As survival rates improved, quality of life issues became more salient. The mental health clinicians were integrated into the burn care team and psychosocial research followed.

Posttraumatic stress is one of the most commonly occurring psychiatric symptoms experienced by the burn injury survivor (Thomas, Meyer, & Blakeney, 2002) and is the primary focus of this chapter. In the initial portion of the chapter, background literature on burn trauma is summarized. This is followed by clinical considerations, a case vignette, and policy recommendations.

Background Literature on Traumatic Stress in Burn Injury

Persons who survive trauma frequently report symptoms of emotional distress. Symptoms of both acute stress disorder (ASD), which are present during the first month following a traumatic event, and posttraumatic stress disorder (PTSD), which describes stress symptoms occurring after one month, will be discussed in terms of burn injury.

Traumatic stressors experienced by the burn injury survivor may be numerous and ongoing. In addition to the injury event, the burn injury survivor experiences pain throughout the period of acute physical healing, and may experience long-term changes in physical abilities and the permanent social stigmatization of scarring (Thomas et al., 2002). The life-saving medical procedures themselves are often experienced as traumatic (Stuber, Shemesh, & Saxe, 2003). Given the uniqueness of the burn injury event and long-term traumatic losses, treatment and recovery expectations derived from other populations may not generalize to this population. However, information based on other populations may be informative.

Lifetime prevalence estimates for PTSD in adults vary. Variance is largely attributed to sampling and assessment methods (Meichenbaum, 1994). Estimates of lifetime prevalence of PTSD in the adult population of the United States based on community-based studies vary from 8 percent (American Psychiatric Association, 2000) to 25 percent (Robins, Helzer, Croughan, & Ratcliff, 1981), making it one of the most common psychiatric disorders in the United States. No estimate of lifetime prevalence for ASD has been established. However, there have been studies of the prevalence of ASD after some events such as road traffic accidents.

People respond to trauma differently. Investigators have explored a dose-response relationship between trauma severity and distress response. Sustaining physical injury and the extent of that injury (Kilpatrick et al., 1989), encountering the grotesque and macabre (Green, 1991), enduring physical torture (Thygesen, Hermann, & Willanger, 1970), loss of a loved one in the trauma event, and prolonged events (Horowitz, 1986) are aspects of the dose-response relationship that have been considered.

Dose variables and the ASD response have not been reported in the literature. Regarding the PTSD response, the dose variables in burn injury that have been considered include percentage of total body surface area burn, length of hospitalization, visible disfigurement, digital amputation, age, gender, and electrical versus thermal burn injury. The findings are equivocal for these variables (Baur et al., 1998). Patterson, Carrigan, Questad, & Robinson (1992) and van Loey, Maas, Faber, & Taal (2003) found patients' total body surface area burn and length of hospital stay to be associated with PTSD. In contrast, El Hamaoui and colleagues (2002), Powers and colleagues (1994), and Perry and colleagues (1992) all reported no relationship between development of PTSD and length of hospitalization or severity of burn. Tedstone and Tarrier (1997) found that patients with small burn injuries of 1 percent or less experienced clinically significant levels of psychological difficulties post-burn. In children between the ages of 12 and 48 months, size of the burn was related to PTSD (Stoddard et al., 2006). Perhaps the burn survivor's perception is as important as the size of the burn. For the adult, perception may be primarily focused on threat to body integrity, while the toddler's perception may be more closely linked to physiological pain.

The relationship between PTSD and visible burn disfigurement has also been studied. Madianos, Papaghelis, Ioannovick, & Dafni (2001) found facial disfigurement to be the only burn characteristic significantly associated with the presence of psychiatric problems and illness. Williams and Griffiths (1991) found visibility of the burn to be a useful factor in the prediction of psychological outcome. Taal and Faber (1998) counter these findings. In their study of 174 participants, visibility of the burn scars was not a predictor of pathological feelings.

No results were found regarding major limb amputation. Fukunishi (1999) addressed digital amputation. Japanese women with digital amputation were at risk of developing PTSD. Emotional problems associated with digital amputation would lead one to suspect that a limb amputation would be a major risk factor for emotional adjustment post-burn injury.

Frequency of PTSD in those with electrical burn injury as compared to those thermally injured was not uncovered in the literature. Mancusi-Ungaro, Tarbox, and Wainwright (1986) compared emotional problems, but not PTSD specifically, in electrical and thermal injuries. Those with electrical injuries scored differently on the Minnesota Multiphasic Personality Inventory from those with thermal injuries. Graham (1987) reported that the differences may be tapping cognitive problems post-electrical injury, but do not establish PTSD. Other investigators have concluded that emotional problems are associated with electrical injury, but have not utilized a thermally injured comparison group (Hooshmand, Radfar, & Beckner, 1989). Premalatha (1994), Laforce and colleagues (2000), and van Zomeren and colleagues (1998) presented case studies in which a person with electrical shock developed PTSD.

In the literature specific to pediatric burn survivors, the relationship between age and PTSD is mixed. In a sample inclusive of children and adults, El Hamaoui et al. (2002) found that PTSD was related to being of a younger age, whereas Kravitz et al. (1993) found no relationship between age at time of burn and the incidence of nightmares. With a nonburned population of Hurricane Andrew survivors, Garrison et al. (1995) found that PTSD increased with age in an adolescent sample. Perhaps a relationship between PTSD and age exists, though not linear in nature. For example, at certain developmental stages, individuals may be more susceptible to the occurrence of PTSD than at other stages. The relationship between PTSD and age warrants further investigation in future research.

The relationship between gender and PTSD has also been examined. In burn survivors, Patterson et al. (1992) studied a U.S. sample in which female patients were more likely to have PTSD. In other cultures, the results have varied. In a

Moroccan burn survivor population, El Hamaoui et al. (2002) found no relationship between PTSD and gender. In a Japanese sample, female burn survivors were at greater risk for PTSD (Fukunishi, 1999). In a Dutch sample, female gender was associated with PTSD (van Loey et al, 2003). In a community-based sample of adults from the United States, Kessler (1995) found that 20 percent of women exposed to a trauma developed PTSD, compared to 8 percent of men.

Ethnic group relationship to the occurrence of PTSD in burn survivors is not known. Some information is known about the relationship between ethnic group and the occurrence of PTSD in veterans and disaster survivors, though the findings are mixed. In some samples of combat veterans, occurrence of PTSD was similar across ethnic groups (Penk et al., 1989; Zatzick, Marmar, Weis, & Metzler, 1994). In contrast, a sample of Puerto Rican Vietnam veterans had a higher risk for PTSD and experienced more severe PTSD symptoms than white, non-Hispanic Vietnam veterans, and these differences were not explained by exposure to stressors or acculturation (Ortega & Rosenheck, 2000). Hispanic ethnicity was a predictor of PTSD in the neighborhoods near to the 9/11 terrorist attacks (Galea et al., 2002). In addition to different rates of expression, PTSD might also be expressed differently between ethnic groups. Norris, Perilla, and Murphy (2001) found that symptom expression was different between Mexican and American groups. The Mexican sample was higher in intrusion and avoidance symptoms, whereas the U.S. sample was higher in arousal symptoms.

Others have suggested that event and injury characteristics will not fully explain why some persons experience PTSD and others do not. For example, in a diathesis-stress model, the individual's characteristics and long-standing environmental elements, rather than the event characteristics, are emphasized (Butler, Koopman, Classen, & Spiegel, 1999). Experiencing a traumatic event is not necessarily associated with negative psychological outcomes or psychiatric disorders.

Some survivors report positive outcomes of surviving extreme stress (Frankl, 1959). Researchers have found a number of ways to describe positive outcomes, including benefit finding (Tomich & Helgeson, 2004), posttraumatic growth (Ickovics et al., 2006), and stress-related growth (Frazier & Kaler, 2006).

The diathesis-stress model does not discount the dose-response relationship, but highlights the importance of taking into consideration a person's personal characteristics and factors in the person's environment. Variables of interest include the following:

- Social support (Bum-Hee & Dimsdale, 1999; Buckley, Blanchard & Hickling, 1996; Gilboa, 2001; Perry et al., 1992)
- Coping style (Fauerbach, Richter, & Laurence, 2002; Lawrence & Fauerbach, 2003)
- Attribution of responsibility (Lambert, Difede, & Contrada, 2004)
- Dimensions of personality (with special interest in introversion/extroversion; Taal & Faber, 1998)
- Pre-event trauma history and pre- and posttrauma mental health (with special interest in mood disorders; Bum-Hee & Dimsdale, 1999; Fauerbach et al., 1997)

- Anxiety disorders and enuresis (Stoddard, Norman, Murphy, & Beardslee, 1989)
- Substance abuse and attention problems (Caffo & Belaise, 2003)
- Cognitive style (e.g., locus of control; Harvey & Bryant, 1999)
- Relationship between children's symptoms and trauma-related symptoms in parents (Kratochwill, 1996)
- Fear of dying during the traumatic event and initiation of litigation (Blanchard et al., 1996)
- Level of hypnotizability (Bryant, Guthrie, Moulds, Nixon, & Felmingham, 2003; DuHamel, Difede, Foley, & Greenleaf, 2002).

In a study conducted at Shriners Burns Hospital in Galveston, Texas, a negative relationship was found between psychological history (i.e., abuse, neglect, or a mental disorder) and response to pharmacotherapy treatment for acute stress disorder. If the patient had a significant psychological history, the patient was significantly less likely to respond to treatment.

Since 1995, burn survivors at Shriners Hospital–Galveston have been assessed for acute stress disorder (ASD) throughout hospitalization. About 9 percent of that acutely injured population experienced ASD. What distinguishes the 9 percent of the group who present with ASD from the remainder of the population is not known. How the trauma is evidenced across time post-burn is also unclear. The research literature is limited regarding childhood trauma, course of ASD, effects of early treatment, and the relationship between ASD and PTSD (Bryant & Harvey, 1997; Marshall, Spitzer, & Liebowitz, 1999). In child-based studies, parents have been asked to retrospectively describe how their child fared after a traumatic event (Harvey & Bryant, 2000). Retrospective studies lack generalizability, given the influence of current symptoms on recall of acute symptoms. Knowledge gleaned from parent versus child reports also lacks generalizability given the disparity between reporters of internalized emotional experiences (Davis et al., 2000).

The development of trauma symptoms in the burn survivor after the acute hospitalization should be assessed. Delayed onset PTSD is seen in 7–30 percent of the adult populations sampled (Buckley et al., 1996; Pfefferbaum, 1997). Richard Bryant (1996) found that one-third of burn survivors develop posttraumatic stress disorder within two years of their injury. Delayed onset of PTSD is defined as a minimum of 6 months posttrauma before symptoms develop.

PTSD can be enduring and debilitating (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). For adult burn survivors in the Netherlands who were one to two years post-burn, symptoms of PTSD were the most important predictor in the desire for burn-specific aftercare (van Loey et al., 2001). Though spontaneous remission occurs in about half the adult population, the other half have enduring concerns. Remission in children is less well understood, though war-related studies indicate that 26–31 percent of children sampled had PTSD 6–10 years post-event (Sack et al., 1993). Given this delayed expression of emotional trauma and the long-standing potential for the symptoms seen in adults and children surviving war, long-term evaluation of burn injury survivors is desired.

Clinicians treating persons posttrauma suspected that early treatment of ASD would have prevented PTSD, and initial studies of adults receiving early treatment showed remission of symptoms (Cardena et al., 1998). Early treatment was also supported by reports that early occurrence of trauma symptoms was predictive of the development of later PTSD in adults (Liebowitz et al., 1998). In subsequent studies, no relationship between the occurrence of ASD and PTSD has been detected, raising doubts about the positive effect of early treatment on subsequent expression of PTSD (Foa, Keane, & Friedman, 2000).

In adults sustaining burn injuries, Ehde, Patterson, Wiechman, & Wilson (2000) found that PTSD symptoms at one month postinjury were the only significant predictor of posttraumatic stress symptoms at one year. Difede and colleagues (2002) found that hospitalized adult burn patients who were diagnosed with ASD were at high risk for chronic PTSD.

For traumatized children, the impact of early intervention is not known (Cohen, Mannarino, & Deblinger, 2006). In a study of long-term psychosocial sequelae of pediatric burn injuries, an unusually high incidence of anxiety disorders other than posttraumatic stress disorder has been reported. Blakeney, Thomas, Berniger, Holzer, & Meyer (2001) sampled 50 adolescent burn survivors who were described by their parents as distressed. This sample was biased in that only survivors who were identified as distressed by their parents were represented. However, the information captures the nature of the symptoms experienced by adolescent burn survivors. Anxiety disorders were the most common diagnoses with 34 percent of this sample reporting one or more anxiety disorders. In this study, the Computerized Diagnostic Interview Schedule for Children (C-DISC) was the structured diagnostic tool utilized. Psychiatric disorders were recorded for the past six months. All were at least two years postburn. Forty percent did not meet the criteria for a psychiatric diagnosis, while the other 60 percent met the criteria for one to three disorders. Anxiety disorders were the most commonly described, including agoraphobia, separation anxiety, social phobia, specific phobia, obsessive compulsive disorder, general anxiety, panic disorder, and posttraumatic stress.

Additional long-term follow-up data are needed to increase understanding of the unique distress of traumatized children by providing necessary information to clarify the complex relationships between stress exposure, ASD, PTSD, and person-environment variables.

Clinical Course of Care

Assessment of Preexisting Mental Health Problems

Accidents occur. Many injuries occur irrespective of the survivor's behavior. Blame is not ascribed to victims of burn injury. For some, however, premorbid mental health problems increase the risk of likelihood of injury. For example, adult burn survivors are more likely to have substance abuse problems or mood disorders as compared to the general population (Patterson et al., 2003). Children and adolescents are more likely to have problems of inattention and poor impulse control (including attention deficit/hyperactivity disorder; Thomas, Ayoub, Rosenberg, Robert, & Meyer, 2004), substance abuse (especially use of flammable inhalants), mood disorders, developmental disorders, cognitive impairment, and behavior problems (including oppositional defiant disorder and conduct disorder; Thomas et al., 2002). In rare instances, self-immolation as a suicide attempt is seen (Stoddard, 1993; Stoddard, Pahlavan, & Cahners, 1985). Thus, screening for preexisting mental health disorders in burn-injured patients is an essential beginning to treatment.

Fire setting is a noteworthy behavior that requires thorough assessment and intervention (Kolko, 2000; Wilcox & Kolko, 2002). The problem behavior of fire setting varies in nature. Based on the teachings of David Wilcox (2000), the Texas state fire marshal, Juvenile Fire Setting Division, utilizes the following categories for fire-setting types: curious, crisis, delinquent, and pathological. The curious fire setter is typically in the preschool age range. The curious fire setter is motivated to explore the environment. Based on the consequence of the action, the likelihood of repeating the behavior will be increased or decreased to the point of habituation or extinction. School-age children typically exhibit crisis fire setting. In this case, fire setting is a behavioral manifestation of distressing emotions. The fire may serve as an outcry or an attempt to garner the assistance of others in the child's crisis. The child may also find the fire soothes feelings of distress, eliciting feelings of power, warmth, and calm. The fire can induce a trance-like state , similar to that elicited by visual imagery or hypnosis. The older school-age child typically exhibits delinquent fire setting. Delinquent fire setting may be a manifestation of habituated misbehavior, with the intent to belong and be recognized (Wilcox, 2000). Fire involvement is a misbehavior that can result in attention, power, retribution, peer acceptance, and excitement. Delinquent fire setting may also be attributed to unmanaged problems of poor impulse control, for example, attention deficit/hyperactivity disorder, and bipolar mood disorder. The older teenager typically exhibits pathological fire setting. The goals of pathological fire setting vary and include suicide or suicide attempt, homicide or homicide attempt, pyromania, and arson. The pleasure or relief when setting a fire motivates pyromania. Arson is motivated by the potential for monetary gain or improvement in living circumstances. In a sample of 796 admissions between 2000 and 2002 at Shriners Hospital–Galveston, 11 percent (n = 88) were due to fire setting. Of these 88, 67 percent (n = 59) were curious, 10 percent (n = 9) crisis, 17 percent (n = 15) delinquent, and 6 percent (n = 5) pathological (Robert, Rosenberg, Rosenberg, & Meyer, 2004).

Assessment and treatment for fire-setting behavior is not commonly taught in traditional mental health training programs and is an area in which to develop skills if working with the burn trauma population. According to the prevalence estimate noted above, more than 1 out of every 10 pediatric burn patients were injured due to fire setting. No evidence has been found that a burn injury brings an end to problem fire-setting behaviors. Thus, the problem behavior of fire setting is a primary component of psychological assessment and treatment with a pediatric burn survivor population.

One resource for cross training and referral can be found through fire departments. Juvenile fire setting prevention programs are available through fire departments across the nation. The S.O.S. Fires Youth Intervention Program has an online database at www.sosfires.com, on which prevention programs across the nation are listed. Package programs are available for those interested in developing assessment and intervention skills or a fire-setting prevention program for the local community. One such program has been created and determined to be effective by Irene Pinsonneault (2002c), and the related materials are sold through Fire Solutions in Fall River, Massachusetts. The intervention is formatted for eight weekly sessions and available for pre-school-aged children, school-aged children, and adolescents. Franklin and colleagues (2002) as well as Kolko (2001) have tested efficacious treatment interventions. Barry Bennett, the burn team social worker at Loyola University Medical Center, and his colleagues, Gamelli, Duchene, Atkocaitis, and Plunkett (2004) created and established the efficacy of a juvenile fire setter assessment and treatment program entitled Burn Education Awareness Recognition and Support (BEARS). Fire and burn injury safety, product regulations and design issues, and criminal acts are also aspects of burn trauma. Regarding fire and burn injury safety, some persons do not have an emotional, cognitive, or behavior disorder but act without understanding the physical laws of fire. For example, a child who is learning to mow the lawn naively pours gas into a hot lawnmower. Education regarding fire and burn injury safety would likely prevent such an accident. Given the preventable nature of injuries such as these, burn care professionals including mental health professionals provide community-based fire and burn injury safety education. The second week of October is fire safety week and the first week of February is burn awareness week. Both are perfect opportunities for community educational involvement.

Product regulations and design issues are also highlighted in a thorough prehistory interview and assessment. Though the attention of the mental health professional is directed toward the psychological adjustment of the patient postburn injury, the information gleaned from the psychological interview is pertinent to safety standards and policies. Clothing, household appliances, and building features and materials are commonly questioned in the occurrence of burn injury, despite current safety standards and policies. Working with the professionals at the Consumer Product Safety Commission can be helpful in both clinical and research-related work. Clinically, people ask the question, “Why me?” After an accident, persons seek meaning in traumatic events. Some people answer that question by taking a role in making the world a safer place. Many patients report giving talks, writing articles, and teaching others about lessons learned through their burn injury trauma. If this is an aspect of personal adjustment posttrauma, placing a report on an injury through the Consumer Product

Safety Commission can serve an emotionally therapeutic purpose. Patient or caregiver online reporting is encouraged at www.cpsc.gov.

Some burn injuries are caused by a criminal act by a third party. The trauma is twofold. Both the injurious event and the betrayal by another are traumatic. Vulnerable persons are abused by burning, including children, disabled people, and the elderly. Assault, arson, and attempted murder, though less common, are examples of crimes that result in a burn injury. The prevalence of children abused by burning is staggering. In one sample at the Shriners Hospital–Galveston, 22 percent of the children who were hospitalized for burn injuries were suspected of having been injured by maltreatment, including abuse and neglect. The reported range is as high as 30 percent (Bennett & Gamelli, 1998). For the clinician completing the history, the risk for abuse and neglect needs to be thoroughly assessed. Assessing for abuse and neglect has been described in a chapter on child maltreatment in the third edition of *Total Burn Care* (Robert, Blakeney, & Herndon, 2006). Identifying possible abuse and neglect is necessary both for the personal safety of the patient and for emotional recovery from trauma.

A thorough preinjury history is the first step in providing comprehensive psychological services. Those who have a significant premorbid mental health problem will have more challenges in trauma recovery (Fauerbach, Lawrence, Haythornthwaite, McGuire, & Munster, 1996). Given the intertwined nature of premorbid mental health problems and posttrauma recovery, both should be treated.

Assessment and Treatment of Emotional Trauma

Trauma in a child impacts the entire family. Traumatic distress in one family member is associated with traumatic distress in other family members. Family-based services are optimal and thus both caregivers and survivors are addressed in the following section.

Recommendations for the Treatment of Caregivers

Trauma symptoms are reported as common and severe in caregivers (Stuber et al., 2003). Family stress and caregiver stress are predictive of acute stress symptoms in children hospitalized with injuries (Saxe et al., 2005). Given the high risk for caregiver trauma and the impact of caregiver trauma on the child's emotional recovery, early intervention is recommended. The caregiver is usually available to be seen before the patient, as the patient receives medical evaluation and treatment upon arrival. Caregivers typically describe dissociative symptoms and hypervigilance, as well as survivor guilt. Posttraumatic stress symptoms can be disruptive to a parent's feeling of being capable of caring for a burn-injured child (Rizzone, Stoddard, Murphy, & Kruger, 1994). For example, a parent's anxiety is associated with increased parent-child conflict and conflict with the extended family (Hall et al., 2006). Interventions should be aimed at decreasing parental distress. The following are recommended:

- Normalize trauma response as a normal person's reaction to an abnormal event.
- Provide structure and reassurance without establishing false expectations.
- Educate the caregiver on common trauma reactions. Knowing what is normal allays fears about losing one's mind or identity.
- Keep interventions simple and relevant to the next 24 hours, as a person's ability to attend to and learn new information is compromised by the emotional trauma and physical exhaustion related to rescue efforts. For example, traumatic stress symptoms that might negatively impact the caregiver in the next 24 hours should be described, for example, insomnia, loss of appetite.
- Predict the likely symptoms and provide suggestions as to how to cope effectively with the symptoms likely to occur within the next 24 hours.
- Guide the caregiver in helping the patient within the bounds of the caregiver's capacity.

Many caregivers need to be desensitized to the stimuli associated with burn injury. Desensitization is the process of gradually introducing anxiety-provoking stimuli so that a person increases tolerance and is able to approach that which was previously overwhelming and distressing. Desensitization is most commonly described in phobia research and well established as effective in decreasing anxiety (Taylor, 2006). The clinician can help with the desensitization of the caregiver by understanding the caregiver's apprehension about visiting the patient. After the concerns are elicited, the clinician can make suggestions regarding gradual exposure, attention and neglect, and competent caregiving goals. Gradual exposure might involve the caregiver sitting outside the room and incrementally moving closer to the patient. The clinician might accompany the caregiver to coach the caregiver as needed. The clinician can prompt the caregiver as to what is important to acknowledge and what can be ignored for the time being. For example, making eye contact with the patient calms many caregivers. Touching the patient can also be comforting to both the patient and the caregiver. A common location spared from injury is the top of the head. The importance of caregiver presence is complemented with words of reassurance that describe the caregiver's availability and love for the patient and the patient's current safety. Many caregivers fear that the patient will ask a difficult question for which they are not prepared. The most important rule is to be truthful. Establishing a false expectation can be more damaging than speaking the truth. The patient needs to be able to trust the caregiver during this time. The caregiver is a port in the storm. Caregivers may fear that the truth will be an assault to the patient. The caregiver may not know how to state the difficult answer and may not be emotionally prepared. When a need exists to balance truth with preparedness, the patient may be provided with incomplete answers. The information that is provided establishes a foundation for the remaining information. Another option is for the caregiver to validate the importance of the question, acknowledge not having an answer, reassure the patient that someone does have the answer, and note that the caregiver will secure the answer for the patient. The caregiver is encouraged to bring the question to the clinician, who can help the caregiver develop both an answer and a method by which to deliver the answer.

The delivery of distressing answers deserves consideration (Matsakis, 1996). The traumatic loss information should be embedded in a narrative that includes a beginning. The events preceding the trauma need to be recalled, including routinized aspects of daily living and the presence of caring others. The trauma event needs a label, and the patient's injury consequent to the trauma needs to be stated. Thereafter, the rescue efforts and the personnel involved, as well as current safety status, should be emphasized. The love and reassurance embedded in rescue offset the impact of the traumatic events.

Many clinical techniques utilized with those traumatized by burn injury can be derived from non–burn specific trauma literature. Comprehensive books for clinicians include *Effective Treatments for PTSD: Practice Guidelines from the International Society for Traumatic Stress Studies* (Foa et al., 2000); *Clinician's Guide to PTSD: A Cognitive-Behavioral Approach* (Taylor, 2006); and *Treating Trauma and Traumatic Grief in Children and Adolescents* (Cohen, Mannarino, & Deblinger, 2006).

Recommendations for the Assessment and Treatment of Children

At this time, there is no profile that can reliably predict which patients will suffer which mental health problems at which time points in the future (Thomas et al., 2002). For this reason, all patients should have access to mental health services. Throughout the course of recovery, traumatic stress symptoms should be assessed for both caregivers and patients, including toddlers and pre-school-age children. Children as young as one year of age can be reliably assessed, as recently described in a series of articles by Fred Stoddard, Glenn Saxe, and colleagues (see two articles by Stoddard and colleagues published in 2006).

Intrusion symptoms (reliving the event) are the most salient trauma symptoms in the medically ill child (Shemesh et al., 2006). Nightmares and altered sleep patterns are usually the symptoms first noted by the burn-injured patient (Robert, Blakeney, Villarreal, Rosenberg, & Meyer, 1999). Utilizing a numeric rating subsequent to endorsement of an item adds to the ability to monitor changes in distress level. A number of assessment tools are available and a sampling follows. The first two tools are specific to the burn patient population.

"About Your Burn Injury" (see Shakespeare, 1998) is a 10-item questionnaire developed at the Odsstock Burns Unit. No reliability and validity data were found. The self-completion questionnaire assesses self-perception of physical, social, and psychological functions specific to burn rehabilitation.

The "Child Stress Disorders Checklist" (Saxe et al., 2003) is a new measure that holds promise in use with burned patients. The items are specific to burn trauma and recovery, and this checklist is the only standardized, burn-specific measure available.

The "University of California at Los Angeles Post-Traumatic Stress Disorder Reaction Index" (Steinberg, Brymer, Decker, & Pynoos, 2004) is a widely used structured interview for diagnosing childhood PTSD. Investigators have used the 20-item test to assess children who witnessed sexual assaults on their mothers, who were exposed to gunfire, and who were injured in a severe boating accident. Adults can also complete this scale. The children's version has simplified wording appropriate for the language capacities of school-age children, and the scale has been modified to enable diagnosis. A parallel form is available for questioning parents about symptoms exhibited by their traumatized children. Both instruments have well-established validity and reliability and are frequently utilized by investigators of childhood PTSD.

The "Children's Impact of Events Scale" (C-IES) (Yule, 1990) includes subscales for intrusion and avoidance and is used to assess posttraumatic symptoms in children. This measure was adapted from the well-established adult version and has been established as equivalent. Nelson is the vendor.

The "Trauma Symptom Checklist for Children" (TSCC; Briere, 1996) is a self-report for children aged 8 to 16 years of age who have experienced traumatic events. The 54-item TSCC includes two validity scales (Underresponse and Hyperresponse), five clinical scales (Anxiety, Depression, Anger, Posttraumatic Stress, Dissociation), and eight critical items. The TSCC scales are internally consistent (alpha coefficients for clinical scales range from .77–.89 in the standardization sample) and exhibit reasonable convergent, discriminant, and predictive validity in normative and clinical samples. This test has been translated into Spanish. PAR is the vendor.

The "Children's PTSD Inventory—A Structured Interview for Diagnosing Posttraumatic Stress Disorder in Children and Adolescents" (Saigh, 2004) is a structured interview for children aged 6 through 18 years. The items directly correspond to the *DSM-IV* diagnostic criteria for PTSD. The inventory is currently available in English and Spanish. Harcourt is the distributor.

"When Bad Things Happen" and "Parent Report of the Child's Reaction to Stress" (Fletcher, 1992) are parallel child and parent interviews used to diagnose disorders and emotional responses posttrauma. Internal consistency was uniformly high for all scales (.89–.94). Convergent and divergent validity have been established (Fletcher, 1996). Both child and parent interviews are available in Spanish.

Other Aspects of Mental Health Care during Acute Hospitalization

During the acute phase of treatment, the physical and emotional recovery processes are intertwined. For example, emotional trauma is recurrent and trauma responses are rekindled if the pain and anxiety specific to physical treatment are unmanaged (Stoddard, Saxe, Ronfeldt, Drake, Edgren, Sheridan, 2006a; Saxe et al., 2005).

Assessment and management of pain and anxiety require an interdisciplinary team, including physicians, nurses, physical therapists, mental health professionals, and pharmacists. Background pain, procedural pain, generalized hospital anxiety, preprocedural anxiety, and procedural anxiety need to be assessed and treated consistently. Assessment and treatment guidelines improve care and, consequently, pain and anxiety management protocols are recommended (Patterson, Tininenko, & Ptacek, 2006; Patterson, Hofland, Espey, & Sharaar, 2004; Ratcliff, Brown, Rosenberg, Rosenberg, Robert, & Cuervo, 2006; Sheridan, Hinson, Nackel, Blaquiere, Daley, Querzoli, et al., 1997).

Psychological techniques for acute pain and anxiety management complement pharmacotherapy. Psychological preparation can greatly reduce anticipatory anxiety. Procedural and sensory preparatory information strategies are particularly effective techniques (Everett, Patterson, & Chen, 1990). Procedural-based preparatory information is focused on the mechanics of the procedure. With sensory information, common patient feeling states are described. The cognitive behavioral techniques included in types of relaxation training (e.g., deep breathing, visual imagery, progressive muscle relaxation, hypnosis) have been shown to counteract procedural anxiety and thus minimize the cyclical interaction between anxiety and acute pain (Cromes, McDonald, & Robinson, 1980; Knudson-Cooper, 1981). The cognitive aspects of interpreting painful stimuli affect pain perception (Patterson, 1995). For example, if pain is equated with death, perceived pain increases; however, when pain is equated with cleaning and healing, perceived pain decreases. Another cognitive behavioral strategy found to be effective in reducing perceived pain involves patient participation in decision making during wound care (Kavanaugh, Lasoft, & Eide, 1991).

With procedural pain and anxiety managed, traumatic stress symptoms can be addressed (Tcheung, Robert, Rosenberg, Rosenberg, Villarreal, & Thomas, 2005; Robert, Brack, Blakeney, Villarreal, Rosenberg, & Thomas, 2003). Both pharmacotherapy and psychotherapy should be considered (Robert, Villarreal, Blakeney, & Meyer, 1999). Theoretically, symptoms of traumatic stress have a biological component, most notably symptoms in the intrusive reexperiencing and hyperarousal categories (Kirtland, Prout, & Schwarz, 1991). From a utilitarian perspective, prompt relief of symptoms is important, as persistent ASD symptoms have a negative impact on physical recovery from burn injury (Kavanagh et al., 1991). For example, a child who is agitated may move, and movement may compromise skin grafts. In addition, ASD symptoms in the pediatric burn population are associated with poor sleep and poor appetite. Children with burn injuries need both increased food intake and rest for maximal recovery. Also, patients may be too physically impaired to engage in psychotherapy, for example, unable to focus cognitively, developmentally unable to process emotions verbally, or too distraught or agitated to verbalize emotions. Thus, psychopharmacological agents may be a primary treatment option (Tcheung, 2005).

Psychological services are recommended throughout the acute hospitalization period. One component of adjustment post-burn injury involves the grieving process. The patient grieves for the loss of self, perceived invincibility, objects, pets, home, family members, physical function, and/or aspects of appearance. A bereavement model may be helpful to the clinician working with patients during this phase (Knudson-Cooper, 1982). Shock and denial may predominate during the initial hospitalization; anger and depression often follow (Thomas et al., 2002; Koon et al., 1992).

Though individual treatment is variable, some techniques have been established as efficacious in decreasing trauma symptoms with this population. Stress management tools have been shown to be effective, for example, deep breathing, visual imagery, hypnosis, and self-hypnosis. Psychologist David Patterson at Harborview Medical Center in Seattle, Washington, has established the efficacy of stress management tools in facilitating adjustment postinjury and coping with the medical procedures necessary for physical recovery and tailored burn-specific interventions including a self-hypnosis induction specific to wound care (Patterson & Jensen, 2003). Burn injury patients are particularly amenable to hypnotic suggestion due to motivation, regression, and dissociation (Hoffman, Doctor, Patterson, Carrougher, & Furness, 2000). Ewin (1983) asserts that hypnosis should be used early and has a number of applications. Hypnosis is effective in impeding the progression of the burn injury when utilized with the first few hours of injury. Altering the physiological stress response to the injury minimizes subsequent soft tissue damage. Ewin (1984) also notes the positive impact of hypnosis on pain and anxiety management during the acute phase of recovery. Dr. Patterson has also used virtual reality technology as the vector for stress management interventions with the burn-injured patient (Hoffman, Seibel, Richards, Furness, Patterson, & Sharar, 2006; Patterson, Tininenko, Schmidt, & Sharar, 2004; Patterson, Wiechman, Jensen, & Sharar, 2006). Psychologists James Fauerbach and John Lawrence have investigated the efficacy of coping strategy interventions in the emotional rehabilitation from burn trauma (Lawrence & Fauerbach, 2003; Fauerbach, Richter, & Lawrence, 2002; Fauerbach, Lawrence, Haythornthwaite, & Richter, 2002; Haythornthwaite, Lawrence, & Fauerbach, 2001). For example, reducing catastrophic thinking and increasing sensory focusing have been established as effective tools in the acute phase of recovery.

Self-help texts can be a helpful resource during the acute emotional recovery phase of the patient. The staff of the Baltimore Regional Burn Center developed a self-help book specifically aimed at the burn patient and family members, entitled *Severe Burns: A Family Guide to Medical and Emotional Recovery* (Munster, 1993). Though it is not specific to burn injury, one book that guides both the professional development of the clinician and the emotional recovery of the patient is *I Can't Get Over It: A Handbook for Trauma Survivors* (Matsakis, 1996). Cohen, Mannarino, and Staron (2006) have recently established as efficacious a 12-session cognitive behavioral therapy intervention for children with treatment components in both posttraumatic stress and grief. Though not specific for burn-injured patients, the combination of trauma- and grief-related interventions is most fitting for this population.

Beyond Acute Recovery

Psychologist Patricia Blakeney of the Shriners Hospital–Galveston, Texas, has compiled a substantive body of research that establishes an expectation that burn survivors can thrive emotionally and socially (Blakeney, Robert, & Meyer, 1998; Blakeney et al., 1998; Meyers-Paal et al., 2000). Yet burn injury increases a child's risk of developing a major mental illness. Visible distinction and physical limitations have the potential to negatively impact adjustment across the lifespan. Young adults who sustained burn injuries as children have a 45.5 percent prevalence rate of current Axis I major mental illness and a lifetime Axis I prevalence rate of 59.4 percent, with anxiety disorders, major depression, and substance abuse being the most frequently occurring disorders (Meyer et al., 2007). The current and lifetime prevalences of mood, substance abuse, behavior, sleep, and anxiety disorders in this population are higher than those of some other traumatized populations (Stoddard et al., 1989). Extreme anxiety, fear, phobias, generalized anxiety disorder, and traumatic stress are seen beyond the acute hospitalization period (Thomas et al., 2002). Given the elevated risk, young adults who suffered major burn injury as children should be screened for these illnesses in order to initiate appropriate treatment.

Compensatory and coping strategies have the potential to stave off maladjustment and facilitate adjustment across time. Self-confidence, extroversion, and relationship-based skills are a few examples of compensatory strategies beneficial to the survivor of burn injury; in contrast, social introversion predicts the development of pathological shame (Taal & Farber, 1998). An example of a group format curriculum for the development of social skills is *Reach Out! Developing the Tools for Successful Social Interaction after Burns: A 2, 3, or 4-Day Program* (Clarke, Cooper, Partridge, Kish, & Rumsey, 1999). This program is a product of the organization Changing Faces, which was founded by James Partridge, an educator and survivor of burn trauma and injury. Partridge advocates the importance of taking the initiative in social encounters and moving the agenda quickly away from issues of appearance and on to more substantive aspects of social communication. Social psychologist Nicola Rumsey has provided an empirical base for the thesis that behavior rather than appearance predicts successful social encounters. Partridge and Rumsey are engaged in a joint venture to explore the impact of the Changing Faces social communication curriculum on those with visible distinction consequent to burn injury. A list of publications from Changing Faces can be accessed from the charity's Web site, www.changingfaces.co.uk. Nicola Rumsey is a professor at the University of the West of England, located in Bristol, and has published extensively on visible distinction.

Patricia Blakeney, Walter J. Meyer, III, and Christopher Thomas have applied the Changing Faces Social Skills Program to both adolescent and young adult long-term survivors of childhood burn injury (Blakeney et al., 2005). One year subsequent to the training program, survivors' psychosocial competence had been enhanced.

CASE VIGNETTE

Joanna is a Caucasian female burned in a house fire. She sustained a 50 percent total body surface area burn (TBSA) injury, with 45 percent being 3rd degree. She was three years of age at the time of her injury. Joanna was in the house playing with her toys and found herself engulfed in flames. Her face, arms, legs, hands, and feet were burned. Skin donor sites were from her torso. Now seven years of age and four years postinjury, Joanna receives reconstructive burn care.

Joanna is enrolled in the first grade. She repeated pre-kindergarten due to months missed post-burn injury. Joanna's uncle has been tutoring Joanna, and the uncle has noticed a marked decrease in memory and attention post-burn. Intelligence testing revealed a deficit in verbal intelligence and achievement.

Joanna is physically active, has a bright affect, enjoys school, is loving to friends and family, and is pleasing to the adults in her family and community. Joanna's mother reported that Joanna is having significant attention problems. She is having difficulty concentrating and sitting still. Her mother notes problems with daydreaming, poor coordination, and poor schoolwork. Her mother first noticed the problems post-burn injury. Joanna's schoolteacher notices attention difficulties and difficulty completing work.

Joanna's mother perceives Joanna's life to have changed for the worse consequent to the burn injury. In regard to Joanna's post-burn adjustment, her mother has been concerned about the impact of Joanna's physical appearance on her self-esteem. Initially, Joanna was reportedly timid and tried to hide her burn scars. For example, she would not wear clothing that would reveal the burn scars. Joanna has progressed from that point and is now able to wear such clothes. However, some of the post-burn timidity remains. Joanna has not worn jewelry on her burned hand, though she adorns her nonburned hand with jewelry. Her mother is concerned that Joanna is uncomfortable with the appearance of her burned hand. Her mother perceives that Joanna is aware of how people talk about her burns in public situations and perceives Joanna to feel hurt. Joanna's family drawing does reflect a sense of feeling separate or different from the others in the family. Joanna has asked her mother on occasion during bath time, "When will all the burns go away?" Her mother is concerned about Joanna's feelings as she gets older, and how Joanna will deal with her scars as a young adult. Changes in Joanna's development leave her mother with unanswered, anxiety-provoking questions. Her mother also expressed concern about regression. Joanna continues to suck her thumb every night prior to bedtime and clings to adult caregivers.

Joanna experiences a significant degree of posttraumatic stress. She experiences intrusive thoughts, exhibits avoidant behavior, and has numerous anxiety symptoms. Joanna recalls the fire and burn as an upsetting and bothersome event. She sometimes experiences bad dreams that appear to be anxiety related. She has scared, upset, or sad feelings that she tries to avoid. An example of avoidant or compartmentalized thought was exhibited in the contrast between her assertion that she does not recall post-burn events and her drawing of her experience in the hospital, in which she portrays herself in her hospital bed, surrounded by medical accoutrements and family members, while imagining what happened to her pets in the house fire. Joanna refused to draw a picture of the burn event. She reported feeling nervous and jumpy since the injury. She believes that most of the time thoughts or feelings about what happened get in the way of remembering things, including new learning. She believes paying attention is much more difficult post-burn than pre-burn. And she stays away from things that make her remember what happened and what she went through.

During the parent interview, Joanna's mother was unable to recall the burn injury history. She began to cry once the burn history was broached and cried throughout her description of her impaired attention, concentration, and memory post-burn injury. She also described having a sleep disturbance, which involves difficulty initiating sleep, staying asleep, and awakening prematurely. She exhibits hypervigilance as evidenced by calling home frequently (about twice daily) to check on Joanna's well-being, as well as changing her work schedule to maximize her time at home when Joanna is at home. The mother restricts her activities to those that include Joanna, which reassures her of Joanna's safety, and she avoids activities and situations that remind her of the event. The sound of an ambulance siren triggers intrusive thoughts of Joanna's burn and recovery, as well as fear that other family members are currently in danger. She continues to reexperience the event through nightmares.

Joanna and her family have survived a traumatic house fire. During her hospitalization, Joanna endured multiple surgeries; frequent wound care, which family members likely participated in as well (e.g., staple removal, line replacement, dressing changes, wound debridement); daily stretching and strength-building exercises; and intrusive medical procedures throughout each day (e.g., x-rays, breathing treatments, wound culture samples, blood samples). Distress came from any number of sources, for example, the immobilization of a three-year-old, pain of exposed and damaged nerve endings in the skin, acute traumatic stress symptoms, itch, generalized anxiety, short-term changes in appearance such as cropping of her long hair to the nap, and long-term changes to the body's appearance and function (burn and donor site together comprise far more than 50 percent of the body surface area).

Once Joanna was discharged from the hospital, much of the hospital routine continued in the home environment. Joanna's mother was trained to complete daily wound care in the home. The daily bath and wound care routine took several hours. Joanna wore pressure garments for about one year, for the purpose of minimizing disfigurement and maximizing function. To facilitate flexibility and range of motion, Joanna completed her rehabilitation exercises thrice daily. She was encouraged to incorporate stretching and exercise into her daily life and consequently became active in sports. To maintain skin integrity, Joanna's mother frequently massaged her scars. Joanna wore pressure garments 23 hours per day on all skin that sustained deep second or third degree burns. One pair of garments was hand washed and air dried daily. Donning the garments was a struggle because of their binding capacity, which applied 12 pounds of pressure. Once the garments are on, wearing them is difficult because of the heat and itch. Thermal regulation is different for Joanna in that she has lost the sweat glands for 45 percent of her body. She may be less tolerant of high outdoor temperatures or require more hydration when exposed to high outdoor temperatures. For the first one to two years, she was hypermetabolic and maintaining a normal body weight was a struggle as she needed to increase caloric intake. She is at risk for less dense bones and consequent orthopedic problems. For her lifetime, sunscreen and/or clothing need to be applied to all burned areas before she goes outside, to prevent skin damage and hyperpigmentation.

Joanna and her family have been diligent in adhering to these numerous and enduring demands, while displaced from their home, which was being rebuilt. They have insured that Joanna attends each of the annual burn camps provided through her medical facility and engages in a physical activity program that combats skin contracture.

Joanna and her mother continue to have the emotional scars of trauma. The first several years post-burn are spent in the reorganization of the family. The daily survival demands postpone emotional healing. Emotional healing comes after the physical crisis. Cross-sectional studies have shown that three to four years are the average amount of time post-burn required for a sample population to look similar to a nonburned normative sample in some areas of emotional and behavioral functioning (Blakeney et al., 1998), which is consistent with Joanna's and her mother's experience.

Ideally, Joanna will develop compensatory skills to deal with new, unique, and distressing situations. About 30 percent of pediatric burn survivors adjust abnormally (Blakeney et al., 1998). To adapt to the emotional demands post-burn, Joanna will need a supportive, organized family that encourages her independence and can consistently adhere to a medical and rehabilitation treatment plan that lasts a lifetime. Joanna does have a dedicated mother who has provided a family with such qualities.

Joanna's verbal intelligence deficit will put her at high risk for adapting to "beyond normal" circumstances. As Joanna's academic curriculum is increasingly based more on abstract, verbal reasoning, Joanna's achievement will likely lag. Strengths for Joanna are visual-spatial reasoning and visual-motor abilities. Joanna will naturally learn best kinesthetically (by doing) and modeling from others. What caused the low average intelligence and verbal comprehension deficit for Joanna is not clear. Though neurocognitive damage is associated with burn injury (hypoxia and closed head injury) and electrical injury, Joanna did not have any measures of learning pre-burn beyond family observation and experience, for example, school performance, standardized academic achievement or estimate of intelligence, allowing for attribution of neurocognitive damage to burn injury.

Joanna has lost her body as it was, as well as a sense of safety that existed prior to the traumatic injury. Burn survivors frequently experience staring and teasing because of their visible distinction. Struggles are frequently seen regarding losses and grief consequent to the burn injury. Joanna currently has PTSD symptoms, as does her mother.

The long-term consequences for Joanna are not fully known. She will face social dilemmas beyond those of others. She will choose her career differently. She will need to be sheltered from the sun and heat. She will likely need a job that balances standing and sitting, rather than a job that is exclusively a standing job. She will not have jobs that focus on her body, for example, modeling. Joanna will need access to academic tutoring throughout her academic career. She will need access to intermittent counseling and medical care all of her life. Her mother will need access to counseling intermittently throughout Joanna's childhood and adolescence.

Summary

The science of psychosocial rehabilitation from burn injury is advancing. Standardized assessment tools and their application with the burn injured have developed substantially across the past decade. Pain management standards have improved. Posttraumatic stress, depression, pain, sleep disorders, and body image of the burn survivor are better understood due to the persistence of clinician-scientists committed to the emotional rehabilitation of this important population (Esselman, Thombs, Magyar-Russell, & Fauerbach, 2006). Intervention efficacy studies have been sparse in the literature but are slowly gaining in prevalence and need to be further pursued.

Policy Recommendations

Public Education on the Prevention of Burn Injury

Strategies for the prevention of burn injury are greatly needed. Much of the mental health professionals' general training and many of their skills can be applied to prevention-related interventions, such as knowledge in the area of learning, behavior, and the process of change. Injuries consequent to maltreatment, fire-setting, other un- or undertreated mental health disorders, and retail products need to be addressed.

Research on Causes of Self-Injury and Abuse by Burning

Better understanding of maltreatment by burning could be accomplished through large sampling of patients and survivors. When events occur infrequently, as do some of the most dangerous signs of maltreatment, large sampling is needed. A national database established under a public safety initiative would allow for larger sampling and greater disclosure of information between agencies. One initial step has been accomplished. As of 1995, the American Burn Association initiated collaboration with the American College of Surgeons and created the TRACS/ABA Burn Registry. Ninety burn centers participate and by 2002, the National Burn Repository (NBR) was well established and generated an annual report. The NBR collects data on some behavioral parameters of burn injury, including suspected self-inflicted injury, child abuse, assault or abuse of adults, and arson. The total of all behavioral parameters reported in the NBR accounts for 4.9 percent of burn injuries.

What is lacking is thorough assessment of behavioral parameters and consistent methods of reporting on them. The 4.9 percent prevalence rates of total problem behaviors in the burn injury population is likely an underestimate. Fire setting alone accounted for 11 percent of the burn injury population and suspected maltreatment accounted for another 22–30 percent in non-NBR samples cited above. In addition, data are not collected on many significant behavioral parameters, such as neglect and fire setting.

Maltreatment needs to be pursued more aggressively. However, making a determination of maltreatment can be difficult. Breadth of knowledge is needed to understand the plausibility of injury stories. When a burn injury story is provided, investigating the plausibility of the events requires the knowledge base of professionals not typically found in the burn center. Forensic experts, fire dynamics experts, and mechanical engineers, combined with the experts in burn injury pathophysiology, the burn care professionals, would allow the plausibility of the story to be tested (Hansen & Barnhill, 1982). Such collaborative relationships and studies are needed.

Reporting of Burn Injuries

Fire setting destroys and compromises human lives. The burn-injured fire setter, however, is at risk for not having the fire-setting behavior addressed. Some states have no laws addressing the reporting of burn injuries to fire service officials, while others clearly regulate burn injury reporting and clarify related limitations of patient confidentiality. Massachusetts law mandates the reporting of all burn injuries >5% TBSA. State police manage the Massachusetts Burn Injury Reporting System (M-BIRS), which delineates procedures, forms, and education on both toll-free telephone and facsimile reporting. Excerpted below is the Massachusetts General Law Chapter 112, Section 12A, amended by the Act of 1986:

> Every physician … examining or treating a person with a burn injury affecting five percent or more of the surface area of his body, or, whenever any such case is treated in a hospital, sanitarium or other institution, the manager, superintendent or other person in charge thereof, shall report such cases … at once to the commissioner of public safety and to the police in the community where the burn occurred.

Advocating for such legislation in all 50 states would be a meaningful mission, as has been accomplished with child abuse and neglect laws.

Improvements in Product Safety Standards and Laws

Retail products are repeatedly associated with burn injury stories. After improvements in product safety standards, laws, or codes, some products have ceased to be associated with burn injuries. Improvements in product safety are commonly left to victim advocates. Change may be more effective or expedient if products involved in burn injury are subject to mandated reporting. For example, the Consumer Product Safety Commission has collaborated with burn centers for the purpose of gathering a large data sample within a short amount of time. In one such national initiative, the role of clothing in burn injury is being studied. In less than five months, 107 patients provided data that have allowed for clothing safety to be studied. Other products, codes, and standards associated with burn injury need to be studied as well.

Resources

Books that address social challenges such as teasing can be clinically helpful:

Sticks and Stones: Seven Ways Your Child Can Deal with Teasing, Conflict, and Other Hard Times, by Scott Cooper (2000)

How to Handle Bullies, Teasers and Other Meanies: A Book That Takes the Nuisance Out of Name Calling and Other Nonsense, by Kate Cohen-Posey (1995)

Organizations

The Phoenix Society, a national burn survivor organization, sponsors an annual conference, a monthly publication entitled Burn Support News, and the Web site www.phoenix-society.org.

The Texas burn survivors support organization can be contacted at www.texasburnsurvivors.org.

The National Ability Center, at www.discovernac.org, is committed to the development of lifetime skills (e.g., self esteem, confidence, physical development), thereby enhancing active participation in all aspects of community life.

Online Support

The Burn Survivors Throughout the World Web site is www.burnsurvivorsttw.com.

Hundreds of survivors display their autobiographies at www.burnsurvivorsonline.com.

The National Center for PTSD Web site is NCPTSD.va.gov. It provides resources for trauma survivors, family members, and professionals.

Safety Tips

Steps to bath safety:

Set the hot water heater at 120 degrees or less.

Install and set a pressure balance tub and shower valve, for example, Delta Scald-Guard.

Use a thermometer and hand to test the water temperature before bathing;

ALWAYS have a bathing child within eyesight.

When drinking a hot beverage while supervising children, use a lidded travel mug.

Fit propane tanks with quick release valves.

When working outdoors, apprise yourself of the location of high-tension wires and STAY CLEAR—both person and tools.

Install hot water heater 18 inches above the foundation OR use a water heater that does not have a pilot light.

Check to see that free-standing oven-range units are installed with mounting brackets, ensuring that the units cannot tip.

Keep children out of kitchens and baths, unless:
  The activity is focused on the child
  The child is within arm's reach, and
  The child is within eyesight.

In addition to supervision, try doorknob slipcovers; use cabinet locks; make cleaning materials and chemicals inaccessible to children; child safety gates can be of assistance.

Place small appliances AND THEIR CORDS out of child's reach. Look for cords that have a quick release and are coiled.

Gas is a tool, so:
  Store in sealed container
  Make inaccessible to children
  Store away from source of ignition
  Put in a cool engine (e.g., before you begin mowing)
  Use only in a well-ventilated area (e.g., outdoors)
  Use with machines, not people (e.g., never use to kill lice).

Baby walkers with wheels should only be used in secured spaces, e.g., with no stairs, no hot materials, no electrical outlets, no appliances/tools. Imagine the bumper car ride at the carnival—a flat surface that is fenced in.

Install fire and smoke detectors in the home.

Change the batteries in the fire and smoke detectors biannually, when you reset your clocks.

Place fire extinguishers in the home.

Create a house fire escape plan and discuss with the family, including escape routes, how to proceed out of the home, how to get help, and where to meet once outside the home.

Place lit candles and space heaters in the same room as adults, so candle activity is always in eyesight.

NEVER use fuel, including accelerants:
  On existing flame
  In unventilated area
  When burning trash
  On a recreational camp fire
  When barbecueing.

NEVER store fuel by ignition source.

Use sealed fuel can.

Cover unused outlets.

Use electrical cords that have an approval tag from Underwriters Laboratories. Do not use damaged electrical cords, for example, cords that are frayed, worn. Use only for designated application.

Small kitchen appliances are safe when:
  The base is wider than the top
  The base is heavier than the top
  The lid seals the liquid when cooking
  The cord is not accessible to a child.

Kill lice with lice shampoo. No other options exist.

When putting out campfires, use water. If you do not have water and use dirt, stir the dirt and embers until the embers extinguish. Do not bury the embers with dirt, as this creates a long-lasting "oven."

When you have a concern about product safety, contact the Consumer Product Safety Commission: phone (800) 638 2772; Web site www.cpsc.gov.

Note

1. The Shriners of North America are a philanthropic group whose original mission was to provide free medical care to children affected by polio. After polio was eradicated from the United States, the Shriners established a mission beyond orthopedics, which was to provide free medical care for children who sustain burn injuries. A number of organizations generously funded research at the Shriners Hospital–Galveston across the past 10 years, which advanced the psychological rehabilitation services for the burn survivor. These organizations and programs include the International Association of Fire Fighters Burn Foundation Research Grant Program, the Shriners Hospitals for Children Research Grant Program, the University of Texas Medical Branch (UTMB) Small Grants Program, the National Institutes of Health, and the National Institute for Disability and Rehabilitation research program. Much of which follows is a summary of experience gleaned while a member of the burn care team in Galveston, Texas.

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CHAPTER 7

THE TRAUMA OF SPINAL CORD INJURY

Frank J. Padrone

This chapter brings together the often devastating experience of spinal cord injury (SCI) and the phenomenon of trauma that can result in posttraumatic stress disorder (PTSD). It opens with a series of brief descriptions of the onset of the injury, and then to capture more closely a person's actual experience, information on spinal cord functioning and the consequences of injury is presented. There is an interlacing throughout of the effects of SCI and those of trauma, beginning with the emotional impact of SCI. The phenomenon of trauma is presented, followed by actual case illustrations of the impact of SCI and its long-term effects. The path through adjustment, healing, and psychological treatment is reviewed, with a closing section on policy issues.

> I was diving into the water, and then my head hit something…. There I was at the bottom, and I couldn't move. (Quadriplegia, now called tetraplegia, 21-year-old male)
>
> We were moving along, and then skidding … and the tree…. The next thing I woke up in the hospital, and looked down at the catheter (I learned later) coming out of the end of the penis. I knew I couldn't feel it. (Quadriplegia, now called tetraplegia, 26-year-old male)
>
> The elevator fell like a rock. And then I was lying there in the dark … and realized I couldn't move my legs, and slowly realized that I couldn't feel a thing below my waist. (Paraplegia, 21-year-old female)
>
> I knew it was serious by the time I got to the emergency room, but then the questions … I couldn't feel…. the shouting … the lights. (Paraplegia, 20-year-old female)
>
> And whenever I have a bowel accident, she says I go crazy. (Paraparesis, 42-year-old male)

> Whenever she catheterizes me, I'm like in a different world. I'm really not there. (Quadriplegia, now called tetraplegia, 29-year-old male)

When considering the experiences described above, we might ask not only what is the trauma, but also where does it begin and where does it end? To comprehend the trauma of SCI, it is necessary to have some appreciation of the circumstances of the initial injury, as well as the numerous losses and changes that result. Such losses have an ongoing impact that affects not only the survivor but also anyone who is close to him/her.

Significant physical disability usually affects more aspects of life than one can initially realize, which can be said about most disabilities. The fact that SCI can affect so many of the body's physical systems, however, has led victims to comment in anguish at times that there is no area of life that has gone untouched by their injury and disability. The initial experiences of the physical, emotional, and interpersonal consequences of SCI may represent only the starting points of the impact, as one moves forward into daily living. These consequences reappear and are reexperienced over time, often with dismay, frustration, and the painfully acute awareness that only personal experience can produce.

The following is a brief outline of spinal cord function. The spinal cord extends from the base of the brain and ends in the mid-lumbar region. It is essentially a bundle of nerves, surrounded by a boney column of vertebrae, which carries messages to and from the brain. Messages from the brain provide movement and strength to all muscles of the body, including the ability to breathe and control bowel and bladder functions. Messages to the brain provide physical feelings or sensations from all areas of the body.

To provide a better understanding of the physical effects of SCI, a brief overview of the regions of the spine and parts of the body that they innervate may be helpful. These regions are numbered in descending order from the brain.

Cervical Region (C1–C8): Located in the neck and controls the back of the head, the neck, shoulders, arms, hands, and diaphragm.
Thoracic Region (T1–T12): Located in the upper back and controls the torso and parts of the arms.
Upper Lumbar (L1–L5): Middle of the back, below the ribs and controls hips/legs.
Sacral Segments (S1–S5): Located just below the upper lumbar region and controls the groin, toes, and some parts of the legs.

There are two types of spinal cord injuries: complete and partial. If a spinal cord injury is complete, there is no voluntary function below the point of injury. This means the person will experience no sensation or voluntary movement below that point. A complete injury at the cervical level results in paralysis and loss of sensation to all four limbs and the trunk (quadriplegia or tetraplegia) and loss of ability to control all functions below that level, such as bowel and bladder control and many sexual functions. Furthermore, if the spinal cord injury is high, for example C1 or C2, the person may need a respirator or diaphragmatic pacemaker to breathe properly. Other complications that may result from a spinal cord injury are low blood pressure, an inability to regulate blood pressure, reduced control of body temperature, an inability to sweat that occurs below the level of injury, and chronic pain. Patients with cervical spinal injuries also have an increased susceptibility to respiratory disease, especially due to the fact that they are often unable to cough and due to difficulties with blood pressure regulation, known as autonomic dysreflexia. Complete injury below the cervical level results in dysfunction to the lower parts of the body (paraplegia) (Cleveland Clinic, 2006).

As noted above, many victims experience incomplete losses (partial injury), where some of the neurological pathways necessary for motor activity and sensory experience continue to be able to route their messages. Some or all of the physical systems may have partial function, such as some voluntary movement of legs or even a toe, with varying degrees of strength. There also may be partial or spotty sensation, in addition to varying degrees of voluntary control over different bodily functions.

The loss of the ability to move voluntarily below the level of the injury has a myriad of implications that most people do not imagine unless trained in the area. The full awareness of losses requires firsthand knowledge of their implications for living, which is acquired over time through daily experience. The loss of bowel and bladder control, the loss of sensation, the loss of many or even most of the physical aspects of sexual functioning, and potential infertility in men round out the beginning of the losses. To list the systems that have suffered damage yields a deceptively simple description of what the effects of SCI truly are. The real life consequences of each of these areas of functioning, ranging from the obvious to the subtle, become apparent to those affected only over time.

Emotional and Psychological Impact of Spinal Cord Injury

To understand more clearly the extent of stress and trauma of SCI, an awareness of the obvious and subtle losses in function is necessary. It has been our experience both clinically and in our Internship Training Program in Clinical Psychology at Rusk Institute of Rehabilitation Medicine, New York University Medical Center, that to begin to become aware of the impact of SCI, it is necessary first to know what the physical losses involve, before one can begin to understand the psychological impact.

As an example of the need for experience, the case of a 24-year-old man can be illustrative. He had been recuperating in bed for weeks after SCI, and expressed an eagerness to start using a wheelchair. Within two days of beginning to use the wheelchair, he became irritable, glum, and depressed. Not until he was actually using the wheelchair did he begin to process the full experience of his loss of the ability to walk. In this same way, the first full awareness for many people that they cannot embrace a loved one, hold a baby in their arms, pursue a toddler, or defend a loved one can be an excruciating experience. Such a level of awareness may not be reached until the actual event is thought through in detail or actually encountered. Additionally, it seems that this emotional pain can be reexperienced with future encounters. Similarly, to hear that one very likely may not be able to have an orgasm, or at least not one similar to previous experience, may be a shock. Consider on an individual basis the repeated exposure to sexual experiences with arousal but not orgasm. At the interpersonal level, the individual experiences can become reciprocal and intensified. Overall then, it seems that before a genuine appreciation can be developed for the impact of SCI, some knowledge of the obvious and subtle losses is essential.

If one is totally or completely paralyzed below the injury, mobility is restricted, and one probably requires the use of a wheelchair to get around. Obvious! It may be ultimately true that a wheelchair is not a problem but a solution to a problem. Initially however, getting around in the chair leads to the firsthand experience that "I can't walk," or other difficult realizations, which derive from the actual living and experiencing of what is known.

Additionally, not so obvious with various levels of paralysis may be the inability to move one's body from one surface (wheelchair) to another (commode), called a transfer. Depending on the level of disability, a transfer may require considerable help, ranging from verbal guidance to total assistance with the maneuver, which involves essentially being lifted from one surface to another. The actual experience can include associated acute feelings of dependence, helplessness, and embarrassment as the process is learned through repeated daily experiences that will interact with personality factors. Similarly, depending on the level of the injury, varying degrees of assistance with dressing may be necessary. Such a need can bring on a host of feelings, which can increase when the helper shifts from hospital personnel to a home attendant or loved one.

If bladder and bowel control are lost, one may have "accidents." Obvious! Not so obvious is that catheterizations may be necessary until the end of life, performed by the person with the disability, or a stranger, or a loved one. Bowel routines that prevent unexpected bowel accidents may involve insertion of rectal suppositories to prepare for elimination or digital removal of the stool from the bowel by the victim or someone else. The stress of such an experience in our culture has led some young men, when approached for education on the process, to "curse out" a nurse repeatedly, until they were able to tolerate what they perceived as a humiliating horror.

If all sensation is lost, one does not have the sense of touch, temperature, or pain. Obvious! Not so obvious is the pressure sore that can develop on the buttocks as a result of paralysis and the lack of sensation. The sore or decubitus can result in the need to lie on a special mattress for a month, in order to heal. The new sense of vulnerability and helplessness that one now feels is a byproduct. In addition, feelings of shock and embarrassment can follow from awareness of a noxious odor, when one suddenly realizes that a bowel accident has occurred that was not perceived in any way.

Although sexual feelings of arousal and sexual activity continue after SCI, there are often distressing experiences of losses and changes in sexual functioning (Sipski & Alexander, 1992) that may be even less apparent than other losses. Such losses are contingent upon the extent of the injury (complete or incomplete) and on the level of SCI (lower or upper level). Sexual functions affected can include the following: orgasm for men and women, erection and ejaculation for men, vaginal lubrication for women, and fertility for men but not for women once menstruation resumes (Bors & Comarr, 1960; National Spinal Cord Injury Information Network, 2000). An extensive literature exists on SCI and sexual functioning, including treatment approaches to the various difficulties (Sipski, Alexander, & Gomez-Marin, 2006).

These losses can remain unnoticed, unless actually experienced or actively considered, as is expected in acute rehabilitation. The realization that there is no longer direct sexual pleasure from the sense of touch below the level of injury can be disheartening. Obvious! Less apparent are the actual experiences of the losses, for example, orgasm, and what the actual sexual experience might be for a person with SCI. For example, after five months of rehabilitation, a 40-year-old woman with complete tetraplegia, was stunned when she realized that sexual intercourse would no longer include internal vaginal sensation. The realization developed only after she had been gently led to the awareness through a series of leading questions.

Emotional reactions following SCI can be varied and significant. Depression following SCI has been examined extensively. It has been considered a secondary complication that negatively impacts the quality of life for primary and secondary victims (Elliot & Frank, 1996). Although much of the literature reports less depression with SCI than is commonly believed, most of this research focuses on major depressive disorder (MDD), which may tend to omit the less intense depressive reactions that are commonly observed. With major depression there can be the risk of suicide. DeVivo, Black, Richards, and Stover (1991) found that the suicide rate among SCI victims was almost five times greater than among the general population, with the highest rate occurring within five years after injury. The University of Washington Rehabilitation Medicine update on spinal cord injury (2001) points out that the highest rate of MDD among medical patients occurs with SCI at 23–30 percent.

It should also be noted that the data on the question of suicide rates do not include information on what has been called passive suicide, which can occur when efforts at maintaining health or treating the medical complications from SCI are not applied. A more accurate estimate of the incidence of suicide in SCI requires a consideration of other variables, such as the presence of psychiatric illness, the existence of previous suicide attempts, and whether the onset of SCI had been the result of a suicide attempt. The psychological impact of SCI is made even more vivid when considering vulnerability to suicide. The consensus in the mental health community is that MDD is a treatable condition. Combined use of antidepressant medication and psychotherapy has been found to be effective, although access to medication may be more readily available than psychotherapy.

Heinrich, Tate, and Buckelew (1994) examined the responses to the Brief Symptom Inventory of 225 people with SCI at three points over a period of more than two years. They found significantly higher scores on all of the symptom scales for

SCI victims than for the normative group. They concluded that the patterns of response were less indicative of psychopathology than of reaction to traumatic injury. Symptoms decreased after 24 months had elapsed, suggesting a greater need for mental health services during this initial period. The fact that the initial assessment was conducted at discharge from inpatient rehabilitation, which often represents a period (one to four months) of increased psychological distress, suggests the possibility of even greater distress following injury. Dryden et al. (2005) reviewed depression and SCI, with a focus on risk factors. Results of this review showed that of 201 SCI patients, 28.9 percent were treated for depression. Such a classification might suggest that the incidence of depression is in fact higher, since it does not include those with depression who were not treated. Psychological risk factors included a history of depression and/or substance abuse.

In addition to psychological sequelae of SCI, another area of investigation has been that of possible neuropsychological or cognitive effects. Clinical observations and analyses of injuries, which consider the extent of the physical forces on the body during SCI, have led to a body of work on the incidence of mild traumatic brain injury (MTBI) as a comorbidity. A review by Hess, Marwitz, and Kreutzer (2003) concludes that as many as 40 percent of SCI victims may have suffered some MTBI, not only from a blow to the head but also from the acceleration and deceleration forces involved in the incident. They report disagreement in the SCI literature; for example, Trieschmann's work (1988) asserts that the incidence is overestimated and that the findings are based more on emotional trauma. Hess, Marwitz, and Kreutzer reasonably conclude that treatment planning should screen for cognitive deficits, and appropriate modifications in treatment can be provided to assist with learning new skills as indicated. Following a neuropsychological evaluation, cognitive rehabilitation, which research has shown to be effective, also can be provided.

The literature on SCI abounds with descriptions and evidence of the broad range of emotional reactions and disruptions that flood the injured person and all those involved. Heinemann and Rawal (2005) provide an excellent review of the work in the field, including emotional and behavioral reactions, models of adjustment, life satisfaction, coping, family support, and substance abuse. They conclude, drawing somewhat on Hammell's (1992) conclusions, that adjustment may be a long-term process, which only begins in acute rehabilitation, and that recognition of individual differences by health care providers is essential when assisting people with SCI.

With this brief overview of examples of the onset of SCI and some of the initial and long-term stressful experiences, consideration of trauma phenomena in the context of SCI now can be more meaningful. The proposition can be advanced that there is more trauma today than ever before. More people survive trauma as primary and secondary victims than ever before, given widespread technological advances in recent decades. These advances have a direct bearing on both the occurrence of and survival from SCI. A total of 11,000 individuals per year survive SCI in the United States, with approximately 250,000 people currently living in the United Sates with SCI (National Spinal Cord Injury Information Network, 2006).

Etiology and demographics reported by Richards, Kewman, and Pierce (2000), regarding both complete and partial SCI, show that more than 50 percent of injuries occur between 16 and 30 years of age, with 82 percent of those injured being male. Heinemann and Rawal (2005) offer the following statistical data on SCI victims. Males continue to account for 80 percent of SCIs, but there is an increase noted in persons 60 years of age and older. The latter group now makes up 10 percent of the SCI population, probably due to falls and other injuries. Following rehabilitation, 94 percent of persons with SCI return to live in a private residence; this percentage increases to 98 percent within 10 years after injury. Within two years after injury, 13 percent are competitively employed, increasing to 38 percent within 12 years. Divorce rates are noted to be 19 percent higher with SCI than in the general population, eight years after injury. The past 20 years have seen an increase in injuries due to violence, for example, gunshot wounds. Carey and Lakso (2006) find half of SCIs result from motor vehicle accidents, with substance abuse continuing to be a major risk factor at onset.

Trauma and Posttraumatic Stress Disorder

Certainly trauma is not new, but over recent decades there has been an increase in the study of the phenomenon, resulting in a growing body of knowledge. When examining the experience of trauma, consideration of stress is essential. Stress can be viewed as the mental tension and strain (*Webster's New World Dictionary*, 1991) that accompanies adjustment or coping with change. Stress can result from positive and negative experiences. When people are coping with traumatic experiences, the resulting stress is labeled traumatic stress. When stress following a traumatic incident continues, it has been called posttraumatic stress (PTS; Rothschild, 2000).

PTSD is defined in the *Diagnostic and Statistical Manual* of the American Psychiatric Association (*DSM-IV*, 1994), as follows: "The essential feature of Posttraumatic Stress Disorder is the development of characteristic symptoms following exposure to an extreme traumatic stressor " (p. 424). The formal diagnosis of PTSD in the same manual requires the following detailed considerations: The event must involve actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and the person needs to experience intense fear, helplessness, or horror.

These events overwhelm the ability to cope. They pose danger and produce feelings such as helplessness and terror. One does not need to imagine but only review the previously listed narratives of those SCI victims, to see how well their experiences fit into this PTS category. In addition to what can be viewed as the emotional scarring of an experience, there has been a growing body of literature on the physiological reactions to stress that can help to form an understanding of just how traumatic experiences lead to PTS and PTSD. Both the onset of SCI and the ongoing life experiences with this disability can be traumatic, so that PTS can be an ongoing reality for many with SCI. Such a conclusion is underscored by Bracken and Shepherd (1980), who observed that SCI is "one of the most extreme psychological insults of all forms of trauma" (p. 74).

Koren, Hemel, and Klein (2006) suggest that if a traumatic event is accompanied by a physical injury, there is an increased risk for PTSD, and that this relationship may not be related to the severity of the injury, but rather to psychophysiological reactions that involve threat.

Psychological Reactions to Trauma Are Relative

Although trauma may be one of those aspects of human experience that some can describe as "You know it when you see it," such as surviving a horrific accident, being assaulted, or suffering a SCI (often referred to as "breaking one's neck or back"), not all such events are equally traumatic to people who experience them. Krystal (1985) suggests that trauma is defined by the person's perception of it, which involves affective and cognitive processes. Although the events are objective, they are recorded in a person's subjective experience of his/her helpless situation. Personal meaning is given to these events based on past experiences and views one has of oneself.

Since trauma can be conceptualized as personally defined, which has been this author's experience in working directly and indirectly (in supervision of others) with more than 1,000 SCI victims. It cannot be assumed that all people who experience the same horrible event will experience it as equally traumatizing. Not all people in the same horrific accident, even if they suffer the same injuries, have the same experience. So too, it has been our experience that not all people with a C4–5 tetraplegia experience exactly the same emotional impact, even though the physical losses may be identical. Such differences seem to be based in part on the meaning ascribed to the event from pretrauma experiences.

Giller (1999) also emphasizes that the key element in trauma is the person's subjective experience. An event or ongoing condition can be said to be traumatic when it overwhelms the person's ability to integrate the emotional experience, and the person subjectively experiences that life, body integrity, or even sanity are threatened. "Psychologically, the bottom line of trauma is overwhelming emotion and a feeling of utter helplessness, with physiological upheaval that plays a leading role in the long range effects" (p. 14).

Consideration has been given to the possibility of a greater vulnerability in some individuals to developing PTSD. Scharff and Scharff (1994) suggest that trauma in childhood and genetic factors may contribute to this predisposition. Such trauma in the context of the absence of healthy attachment to caretakers may result in a diminished ability to regulate stress during later traumatic experiences (Rothschild, 2000). More recently, attempts to expand our understanding of trauma, as well as the treatment of PTS and PTSD, are bringing together notions from neurobiology, childhood development, and psychodynamic psychotherapy, leading to a new paradigm that posits an ongoing interaction between experience and biology (Shore, 2002). The implication is that just as trauma may modify brain function, so too may positive life experiences. Since psychotherapy can be such a positive experience, this proposition may bode well for the treatment of trauma, to be addressed later. Cappas, Andres-Hyman, and Davidson (2005) are more explicit on this subject, when listing their principles of brain-based psychotherapy, which include the principle that "Experience transforms the brain" (p. 375).

PTSD is not uncommon. Approximately 8 percent of the population (Green & Kaltman, 2003) will suffer this malady at some point. The incidence of PTSD following SCI is extensively reviewed by Nielson (2003). Rates vary from 10 percent to 45 percent. Nielson concludes that the differences in rates may be explained by methodological issues. Distinction between one-time traumas and repeated traumas has been made by Terr (1991). She notes that physical disability represents a type of repeated trauma, in that the reexperiencing of physical limitations is retraumatizing. Persistent pain and the existence of previous unrelated trauma are two risk factors that can increase the risk for PTSD following physical injury (Martz, 2005).

In addition, it reasonably can be proposed that there are many people who have suffered and survived traumas, including SCI, who do not meet the criteria for a diagnosis of PTSD but who have some or many of the symptoms, with which they and their loved ones are quite familiar. Blanchard, et al. (1995) suggest that in such situations, criteria have been met for partial PTSD. These victims likely suffer from PTS (Rothschild, 2000). The incidence of PTS and PTSD in families of children with SCI was reviewed by Boyer, Knolls, Kaflakas, Tollen, and Swartz (2000). They found evidence for PTSD in 25 percent of the patients, 41 percent of the mothers and 35 percent of the fathers, demonstrating the traumatic impact on secondary victims.

Although the subjective meaning of experience significantly contributes to trauma, that meaning is not simple or readily apparent. For example, regarding a disability there is the practical meaning, such as physical dependence and the inability to perform specific tasks. There is also the psychological meaning, experienced at onset and ascribed to losses of function that are based on psychodynamic factors, which can be disruptive. There may be specific threats to the ego and to strategies or defenses that had been used to cope in the past with inner conflict but that may no longer be useful (Padrone, 1999). Meaning then exists at multiple levels.

Recent work on the role of responsibility or causal attributions in PTSD and trauma is relevant. Massad and Hulsey (2006) propose that the development and maintenance of causal attributions contribute to the meaning of the experience. Self blame, for example, that continues on a long-term basis may contribute to the development of PTSD. It is noted, however, that causal attribution is only one of the aspects to be considered in treatment of the trauma of SCI.

Case Examples

The following case examples are presented to demonstrate some of the traumatic aspects of SCI, ranging from experiences at onset through reintegration into the community and well into full participation in life. They are drawn from the experience of many different people with SCI. Descriptions of persons involved have been modified and experiences integrated to preserve anonymity, while retaining the relevant issues. Each of the people described had the following stressful experiences in common: They endured the trauma of the injury and the emergency room experience, including threat to life and feelings of helplessness. The victims each had repeated experiences with bladder and bowel accidents due to incontinence. They each subjectively experienced the incontinence as more emotionally intolerable than had initially been apparent. Psychological symptoms developed, despite the fact that the incontinence was managed after discharge from rehabilitation through regimens and devices.

The three people had the following losses in common. None of the three any longer experienced orgasmic reactions, and the men no longer experienced psychogenic erections. The two SCI victims with tetraplegia regained some abilities, through intensive rehabilitation, that reduced the amount of help they needed, but they were both dependent in most activities of daily living. They needed significant assistance moving in and out of a wheelchair to any other surface, and help with bladder and bowel management, showering, dressing, and other activities of daily living. They were able to perform some upper body grooming and eating/drinking with adaptive devices. They both had lost all sensation below the level of the injury, which when combined with paralysis resulted in the need for scheduled turns in bed and weight shifting in their wheelchair to prevent pressure sores on the buttocks. Such sores or "skin breakdowns" can require many weeks on a special bed to heal, and can lead to life-threatening infections unless properly addressed. Both victims also had difficulty coughing, due to paralysis of the intercostals and abdominal muscles, resulting in increased vulnerability to upper respiratory infections. The PTSD symptoms of numbing, dissociation, explosiveness, vigilance, and avoidance can be found among their experiences.

CASE EXAMPLE 1

A 40-year-old man suffered a lower thoracic (T10) incomplete injury in a motor vehicle accident, while working as a salesman. He later reported being trapped in the car, unable to move or feel his legs, and in considerable pain. He reported the increasing odor of something smoldering, and feared the car would go up in flames while he was trapped. Following his rescue, his emergency room experiences included ongoing pain, while the various tests confirmed he was not able to feel. There was the need to insert a urinary catheter into the penis, which he suddenly realized he was able to see but not feel. Surgery was performed to stabilize his spine.

Two weeks later he was admitted to inpatient rehabilitation with a disability of paraparesis, which involved extreme muscle weakness of the legs and bowel and bladder incontinence due to sphincter dysfunction. There was loss of most sensation from the level of injury downward, although there were areas of spared sensation. He was physically helped from a wheelchair to all other surfaces. He was wheeled into the shower, where he required assistance. Initially he needed help with dressing and undressing. His reactions to experiences with bowel and bladder accidents were considered to have been muted. Overall, in addition to irritability and angry outbursts at staff and his wife, there was considerable difficulty in compliance with various schedules and the typical skin precautions.

By the time of discharge there was some additional return of spotty sensation. Muscle strength improved so that he was eventually able to use crutches to walk short distances, although he still required a wheelchair for long distances. He was able to manage the necessary intermittent catheterizations three times daily and his own bowel routine, requiring suppositories. He was seen only periodically by a psychologist due to his resistance to the contact throughout his inpatient stay, and participated in only two sessions with his wife for sexual counseling, as he was not able to experience psychogenic or reflex erections.

Two years after discharge he was referred by his physician for outpatient psychotherapy for treatment of a reactive depression. His increasing depression was marked by angry outbursts, followed by several days of agitation and withdrawal, following most bowel accidents. His wife's description of his reaction: "It's as if he'd been boiled in oil."

Treatment revealed that by history this man had derived considerable self-esteem from what might be considered "traditional" values of manliness. He had taken some pride in being a "take charge guy," who did not shrink from challenges and was a successful breadwinner. The experience of bowel accidents at home, away from the clinical setting of the hospital, was acutely agonizing for him. He felt like a "helpless child." Such thoughts, when allowed to flow, gave way to memories of the helplessness and fear he had experienced in his smoldering car, while awaiting rescue. These and subsequent repeated experiences of his loss of strength and virility, in the context of a significantly diminished standard of living, had shattered his view of himself.

Bowel accidents seemed to be both the trigger for and a condensed version of his combined experience of helplessness, fear, and inadequacy, which was as intolerable as the "boiling" that his wife had sensed. In addition, the extensive list of health regimens and precautions that he experienced as emasculating was an ongoing confirmation and reminder of the nightmare of his journey, which he avoided through noncompliance.

CASE EXAMPLE 2

An 18-year-old woman involved in a motor vehicle accident as the driver, soon after she had earned her license, suffered a C4–5 fracture, with a complete spinal cord injury. She awakened in the emergency room, tetraplegic and intubated (a tube had been passed through her mouth and down her windpipe to mechanically ventilate her), since she could not breathe adequately on her own. She soon underwent neurosurgery for spinal fusion to stabilize cervical vertebrae. Later, during hospitalization in acute rehabilitation she progressed to using a wheelchair with rubber "quad tips" that enabled her to propel the chair for short distances. Neurogenic bladder was managed with an indwelling catheter that required periodic cleaning and changing by another person. She used a urinary collection leg bag, which she was able to empty independently, but which also required periodic cleaning. Bowel routines required oral colonic stimulants and rectal suppositories, inserted by family or attendant, usually over a commode or in bed, depending on the condition of her skin. Bowel accidents were rare, but could occur with gastrointestinal (GI) illness or eating the "wrong foods," following which she required total assistance for cleansing.

During her six months in rehabilitation, she had considerable emotional support from family and friends. Such support continued after her discharge and return home. She was included in all family gatherings. Interactions with her were almost always upbeat and encouraging. From the onset, depressed or sad feelings were quickly neutralized and met with distractions. The family provided a 12-hour attendant at home to provide for all of her physical needs, later including an increase to 24-hour help, so that the attendant accompanied her to college. It was as if every possible effort to prevent or minimize sadness or frustration was successful. She eventually became a successful writer, and married at age 27 to a man aged 30. They had two children for whom she cared, with the help of an attendant, some family members, and her husband.

At age 39 she sought psychotherapy at her husband's urging. Increasing marital conflict over daily interactions, routines, and responsibilities was the presenting problem. It soon was revealed that her dissatisfaction with home attendants had led to her routinely firing them every three to six months. She and her husband had frequent spats over her minor needs, for example, a glass of water. She also was experiencing an increase in the "insensitivity" of her children, now nine and seven years old, and becoming quite critical of them.

Work in therapy revealed that her experience of frustrations, which resulted from her disability and which were not anticipated by others or immediately relieved by them, was certainly contrary to her experiences over the years with her family. Her surface reaction was that they did not care enough to help her with what "anyone could see" was a problem for her. She soon angrily accused others of being inconsiderate or selfish. Attendants were held to a similar standard, including taking the responsibility to remember what she might need when away from home, for example, medications. They were labeled as irresponsible and undependable. Treatment revealed that these reactions were rather surface defenses to protect herself from the painful realization and natural grieving over losses that would occur if she were to endure the reality of her dependence. Such feelings of grief eventually did appear, when for the very first time since her injury, she wept, as she related the lost pleasure and freedom she once had felt, when running on a beach.

As this layer of shielded grief was experienced and dissolved, access to other layers became possible. There were more powerful feelings of impending panic in situations that forced a fuller experience of her disability. She was being protected from the overwhelmingly traumatic feelings of helplessness, which she had experienced in the emergency room, and then throughout much of her daily rehabilitation, as the "good patient." In addition, treatment revealed that the experience of total dependence connected to a lifelong conflict over maturation and independence, which had been marked by ambivalence. The natural process of separation and independence from the security provided in her home apparently had been slowed during her early years by several major disruptions in her family, leading to emotional reactions that had been repressed. Her conflict over independence had been disowned, and now led to intolerable anxiety, with the awareness of her total dependence. During the treatment of this intense anxiety, another terror emerged. Although her children were bused to school, she had refused to allow them to ride in a vehicle with any driver other than her husband. Her vigilance and avoidance of panic took the form of carefully detailed and elaborately organized arrangements for all of the children's outings, so that they and she did not experience the anxiety of a possible accident. There were also elements of guilt for her accident, since she had been an inexperienced driver.

CASE EXAMPLE 3

While practicing for a diving competition, a 19-year-old man was injured in a dive from the 40-foot platform. As he was emerging from a backward flip, he struck his head on the platform, suffering a C5–6 fracture with a complete injury. He then fell the 40 feet into the water, and remained well below the surface of the pool completely paralyzed. Even though stunned, he was desperately trying not to breathe, as he hoped he would be rescued in time. After what "seemed like ages," his colleagues pulled him up to the air, which he had difficulty breathing in, due to his inability to expand the muscles required.

His neck was placed in a supportive collar by the emergency medical technicians (EMTs). His emergency room experiences included the tests to confirm that he was not able to feel or move anything, except his face and head. Stabilization of his neck was assured by a halo traction device, which is composed of a narrow metal circle through which four pin-type posts are placed in the scalp. The posts were screwed into the scalp to the outer table of the skull. Two posts were placed near the top of his temples, and two others to the rear of his head to secure the circle, like spokes protruding from the hub of a wheel. The metal circle (the halo) was supported by rods extending downward to a shoulder/chest jacket that supported the halo. Following surgery to stabilize his spine, he was admitted with the halo in place and with tetraplegia for seven months of rehabilitation. His physical experiences were typical, although his skin required extra care to prevent pressure sores, to which he seemed more prone to develop than is usual.

At discharge from rehabilitation, he remained bladder incontinent, used a condom catheter and urine collection leg bag. Periodic catheterizations, which he was not able to perform himself, were necessary. Bowel routines required rectal suppositories, inserted by an attendant or family member either in bed or over a commode, depending on the condition of his skin. Bowel accidents were rare, but could occur with GI illness or eating the "wrong foods." He was capable of reflex erections.

He was able to propel his wheelchair for moderate distances, with rubber-tipped protrusions from the rim, called "quad tips." He also learned that he was prone to develop pressure sores on his buttocks, one of which required three weeks to heal, while he was confined to a special bed. A more careful than usual regimen of pressure relief, while seated in his wheelchair, in addition to planned turns in bed, was necessary to protect his skin. Finally, at some point in the future he would be able to learn to drive a specially-equipped motor vehicle.

His parents, especially his mother, had an extremely difficult time adjusting to the reality of the injury. His mother frequently would utter comments of desperation to him, and on occasion wail throughout the house that she didn't deserve this life. He avoided being at home as much as possible through his college years. His mother became increasingly depressed over time, and this worsened five years after his injury, when his father suddenly died. Although there was some home attendant care and assistance from two younger brothers, more of the work was assumed by his mother after his father's death. At age 29, he married a woman, aged 40, who had two pre-school-age children younger than 5 years of age. He was able to drive a specially equipped van, and was employed by an insurance company, dealing with customer complaints. Although he had a home attendant for four hours a day to help, his wife assumed many of the personal care needs when necessary, such as bladder catheterizations, bowel care, bathing, and dressing.

He entered psychotherapy six years later in reaction to feeling increasingly stressed, and when told by a physician that his significant increase in leg pain during muscle spasms might have a stress component. The sources of his stress seemed to be related to a number of experiences with the children. For example, he agonized over the fact that he was not able to attend parent-teacher conferences at the children's school, because there were flights of stairs leading to the three entrances. His initial reaction to this realization was a level of rage that he never before had experienced. In addition to such frustrations and his stress and pain, additional elements emerged in his treatment: While he was being catheterized and during his bowel routines, he tended to "space out," in a somewhat dissociated state. It was as if he were no longer present, and the voice of the person in attendance became a distant droning. There was also some intense anxiety regarding the children's well-being, especially their safety. If a family outing involved swimming, he would position himself nearby, assuring a direct line of sight, as he vigilantly watched over them.

The treatment revealed the ongoing elements of the trauma, which began with this capable athlete near the bottom of the pool. They continued through his helplessness in rehabilitation, and persisted through the "tortured years," bearing his mother's suffering. Apparently elements of dissociation began while at home. He struggled to ignore the stress of repeated experiences of physical helplessness, dependence, and added vulnerability due to his skin problems. Such stress increased in the presence of his wife, if there were any detectable signs of effort, strain or fatigue on her part. He could not so easily dismiss her reactions as merely histrionic, as he had his mother's reactions. His new found parenthood placed him in closer proximity to scenes similar to his accident, over which he now vigilantly and helplessly stood guard, while containing an inner terror.

Case Examples Review: Trauma Summary

In the vignettes sited, all three victims experienced the fear of death and helplessness at the time of accident and/or during treatment in the emergency room. Feelings of helplessness and vulnerability continued for two of the three for many years. One showed increased arousal with bouts of explosiveness, signs of an inability to tolerate inner experience. Two showed signs of avoidance of experiences that might result in hypervigilance or panic for them. One showed signs of dissociation. All three experienced being repeatedly traumatized by various aspects of their situation, which then intertwined with long-standing personal conflicts. It should be noted that only one of the three people suffered the pressure and stress of major financial concerns. Two of the three were gainfully employed, which spared them the more common experience of financial concerns that can lead to considerable distress for SCI victims.

The outcomes of treatment for these three people were all successful, in that the symptoms of PTS and PTSD were significantly reduced or eliminated. For example, for one, explosive rages and days of withdrawal no longer followed bowel accidents. There was certainly distress and reactions of "damn the [accidents, disability, or auto accident]," which seemed appropriate to the situation. These reactions were not nearly so disruptive, however, to his life or to his experiences with others. The other two patients experienced similar changes in coping with their own stressful experiences, in that symptoms of avoidance, dissociation, panic, or vigilance were no longer so significant. Distress continued to be experienced in many of the same situations, but at more appropriate levels. The treatment included: education regarding PTSD symptoms, a detailed review of trauma experiences, with careful attention to monitoring levels of stress, and psychodynamic psychotherapy.

Adjustment Process to SCI and Trauma

Much of the research does not support a linear or sequential stage model of adjustment. Apparently there is no single predictable sequence of reactions that all victims of SCI experience. Catherall (2004) proposes a model for primary and secondary victims of trauma on the road to healing, which builds on previous models (Remer, 1984). Because of individual differences among victims and variations in the nature of the trauma, there may not be universal applicability, but the process is very similar to clinical experience. The stages are not distinct or linear; they overlap and recycle, with some dependence among them. There is also an interaction between the processes of the primary and secondary victims, which much of the research in the area does not seem to consider. Unique to Catherall's model is an initial stage that precedes the trauma and addresses the background of the victims, which in clinical experience is seen as critical. The complexity of the model is seen as its strength, in that it seems to describe the reality of the healing process more accurately than other models do.

As Catherall (2004) explains, the primary victim's process includes six stages:

(1) The *pretrauma stage* of the person's socialization background. To this background might be added the preexisting psychological factors or pretrauma personality for each of the victims and the dynamics of the preexisting relationship.

(2) The *trauma event* (for the primary victim) *and trauma awareness* for the secondary victim may be multidimensional, especially with SCI. Clinical experience suggests that awareness is an experiential process, which takes place over time and involves more than information. It also can involve emotionally laden insights about the present or inferences about the future.

(3) *Crisis/disorientation* can be marked by shock, denial, and a state of disorganization. As this process moves forward, it may be revisited repeatedly by all involved.

(4) *Outward adjustment* occurs when the primary and secondary victims reinstitute old coping mechanisms on a personal and interpersonal level. This temporary adjustment eventually falters in the face of the need for significant personal and interpersonal change.

(5) *Reorganization* needs to occur on the personal (intrapsychic) and interpersonal (relationship) level, as a result of the experience of what is called the "secondary traumatic impact." Integration of these changes needs to occur in this stage, once again in the pretrauma context (Catherall, 2004). Most important, and supported by clinical experience, is that this stage may be unsuccessful or incomplete, which can lead to a recycling to previous stages.

(6) *Integration and resolution*, the final healing stage, follows, when all involved have managed intrapsychic and relationship changes. The difference in the process between the primary and secondary victim is clearly the trauma event for the former. One of the key elements in this system is the ongoing interaction between the stages of each of the victims, so that stresses in one can result in recycling for both, and progress in one can assist the progress of the other.

Although it may be disheartening to note that there may not be a final end point to the process, since there can continue to be need for repeated adjustments, the success achieved can be demonstrated by the extent of the need in the future to return to previous steps. With success, the crisis stage will not be revisited. Recycling only to the *reorganization* stage, rather than a return to the crisis stage, is the hallmark of success. The new challenges are now worked through more rapidly. Such ongoing experiences may be similar to the adjustment to psychological challenges and conflicts that most people face in their lives, but without the stress of trauma.

Healing and Seeking Help Following SCI

In keeping with the core meaning of trauma as a wound, there is an emphasis in the literature on recovery that focuses on the process of healing (Herman, 1997; Schiraldi, 2000). Since helplessness and disempowerment are two of the key aspects of trauma that are often concretized by physical disability, the field of rehabilitation advocates strongly for empowerment as an essential element to healing, as does Herman (1997).

Bearing in mind that healing is not an event, Schiraldi (2000) offers some insight into and indicators of the process, which is likened to having been thrust into a dark valley, out of which one may need to climb rather than emerge. This metaphor seems quite applicable to healing from the trauma of SCI. The healing is not a passive event and does not simply develop over time, although time may allow a necessary respite, so that inner resources can be called upon. Possibly due to the demands of the physical changes incurred with SCI, living with this disability is an active process that requires effort. Returning to the community and engaging life is usually a struggle. Having climbed back out of the valley, one will be able to feel strong and whole again after the process. One will be able to think or not to think about the traumatic events, and do so without a slide into a host of disturbing thoughts, but rather with feelings that are appropriate in intensity. The successful effort also can allow one to tolerate feelings that one was not able to endure, without states of arousal or numbing of the feelings of associated anxiety or depression. During the process, the mourning of losses will have occurred, along with reestablishing a personal sense of worth and strength, based on a realistic self-evaluation. Overall the outcome will reestablish a comfort level with all feelings, and a commitment to turning one's energy to living in the future, with a realistic sense of responsibility.

The process may be quicker for some than others, with movement up and back down. Dealing with the memories may require more than simply thinking about them; rather they will need to be processed in a such a way that one is able to assimilate and come to terms with them. Although this outcome is what may be meant by the term "acceptance," the use of the term is often experienced by SCI victims as glib. Notions of acceptance can be thought by victims to be based in insensitivity, ignorance, or denial. Constructs of assimilation, integration, or adjustment seem to more accurately include the idea of a process, rather than a decision to embrace, which acceptance may connote.

Despite signs of growing psychological distress, reluctance to seek and engage qualified help may persist. It may be helpful to bear in mind, in addition to the reluctance suggested by Good et al. (2006), that the feelings of helplessness and the fact of increased dependence following SCI can contribute to the reluctance to seek help. Of equal if not greater influence may be cultural factors that influence perspectives on health, medical care, physical disability, and psychological problems and their treatment. Schiraldi (2000) offers an overview of indicators for treatment and useful considerations in the selection of a treatment path, outlining various effective approaches that can be taken.

Psychological Intervention Following SCI

Various forms of psychological treatment are offered following SCI. The type of intervention provided can be determined by the setting and by the primary purpose of the treatment, for example, treatment of depression, PTSD, or adjustment to disability. Different techniques are employed, such as cognitive behavioral psychotherapy (CBT) and psychodynamic psychotherapy, in an individual and/or group format. Pharmacological treatment is also commonly used for treatment and to assist in the adjustment process. For people who require inpatient rehabilitation, psychological services are offered almost routinely, often as part of the interdisciplinary team approach to rehabilitation. Rehabilitation services to outpatients, who by definition have less physical disability, are usually prescribed on a discipline-specific basis, so that psychological services are offered less frequently.

Coping effectiveness training (CET), which is based in CBT techniques, has been found to be an effective group approach to improving psychological adjustment. Following treatment, a significant improvement in depression and anxiety was noted, when compared to controls (Kennedy, Duff, Evans, & Beedie, 2003). It was concluded that participants found the results of SCI to be more manageable, in addition to the benefit derived from group discussion and problem solving. Mixed findings have been reported on CBT by Craig, Hancock, Dickson, and Chang (1997). Significant change was not noted between treatment and control groups following treatment, but beneficial long-term effects on high levels of depression were reported a year later. It was concluded that CBT was effective over time with more intense depression.

Elliot and Kennedy (2004) conducted a review of research in the area of SCI and the treatment of depression. They note that although there is considerable literature on depression and SCI, it often includes descriptive and anecdotal data. Studies that do employ control groups contain methodological problems, and rarely use randomized clinical trials. Elliot and Kennedy conclude that many of the assumptions regarding the efficacy of treatment remain empirically untested, and discuss some of the reasons for the current state of research in this area.

There are a number of modalities for the treatment of PTSD, as cited by the National Center for PTSD of the Department of Veterans Affairs. The most common treatment techniques are CBT, pharmacotherapy, eye movement desensitization and reprocessing (EMDR) and brief psychodynamic psychotherapy. Common to most approaches are the following elements: education regarding the development of PTSD as an anxiety disorder that develops in normal people when they are exposed to extreme stress; carefully monitored exposure to the traumatic memories, through recall and imagery in a safe setting; experience of feelings of anger or shame, which are not uncommon following trauma; and training in coping skills to deal with memories or reminders, without numbing or becoming overwhelmed. There is agreement that if a person is in crisis at the start of treatment, these issues should be addressed prior to PTSD treatment.

Currently, the University of Southern California Institute for Creative Technologies is developing an approach called the Full Spectrum PTSD treatment system (Rizzo et al., 2005) to address the increase in PTSD among returning veterans of the Iraq war. It is an approach based on virtual reality scenarios that was introduced in 1997.

In the three vignettes above, the treatment approach employed is a multidimensional one that has evolved in our work over the years. It clearly is not the only useful approach. Although various constraints have limited our ability to gather data, our approach is one in which we have developed confidence. It includes elements of a number of different models for the treatment of the emotional difficulties found with SCI and trauma. The treatment is heavily psychodynamic, with interpersonal and existential underpinnings. It is interlaced with concepts and strategies from a cognitive behavioral model of psychotherapy, in addition to the somatic (neurobiochemical) considerations of trauma. Neuropsychological principles are employed as necessary. This integrated approach is contained within the context of a rehabilitation psychology frame.

The treatment presumes that SCI results in emotional upheaval, and that trauma is an emotional and somatic experience. The intervention requires the development of a working relationship marked by empathic relatedness. Herman (1997) offers support for aspects of such a model via a survivor's comment: "Good therapists were those who really validated my experience and helped me to control my behavior rather than trying to control me" (p. 133). Validation and empathy are seen as critical to the therapeutic relationship, which McCabe and Priebe (2004) indicate is one of the essential ingredients for effective treatment. In this regard, our supervision of psychologists in training at Rusk Institute focuses on the elements implied in the victim's description of a good therapist. Empathy is considered crucial to success. Of equal importance is the goal of empowerment of the patient, which includes resisting the possible tendency of the psychologist to take control, in an attempt to rescue the patient.

As the phenomena of trauma and its treatment have become delineated over the years, an additional component of education has been added to our approach; it explains the physiological phenomenon of trauma and its naturally following symptoms. The extent and timing of the education is a judgment based on clinical considerations, such as the extent of PTSD symptoms. In this regard, the process of treatment is based on the psychologist's ability to be primarily a clinician, flexibly calling upon knowledge from the facets of the model cited above, rather than a focus on a particular model or technique. The focus is on the current moment, in the context of the past and future. Such flexibility in approach is necessitated by the variety of situations and reactions that are presented by our SCI population.

Our process of treatment begins with current difficulties, followed by an exploration of the onset and later aspects of the ongoing experiences with SCI to assure that they include an appropriate level of emotion for this person, rather than one that is muted, disorganizing, or in some other way symptomatic. The extent of the focus on historical information and experience is determined by clinical judgment. In the process, and probably more specific to the treatment of PTS and PTSD, one function of the psychologist is to modulate the amount of emotion experienced, although there may be frequent and necessary expressions of grief, depression, and rage. Reviews of these experiences may require many repetitions. In this way, the traumatic experiences and losses can be more readily placed into memory, a process that the experience of trauma possibly had prevented. In this course of treatment, the traumatic experiences lose the ability to generate symptoms of trauma.

Further highlighting the need for treatment following SCI is the possibility that the incidence of PTSD and PTS among SCI victims may be even higher than reported (Nielson, 2003). Since much of the research is quantitative and not qualitative, and since findings are also based on self-report to questionnaires, outcomes may be questionable. It has been our experience that most SCI victims, especially males, tend to minimize their personal distress and actively employ mechanisms that avoid experiences that might trigger emotional distress. Many, who show signs of more intense distress as reported by staff, diligently avoid contact with mental health providers. Some results in the literature, then, may be thrown into question, since many investigations are not based on a total sample but rather on the percentage who agree to participate. In this regard, Good et al. (2006) studied rehabilitation outcomes among men recovering from serious injuries, and found that more than half of the masculine characteristics included were negative indicators for seeking psychological help. Such a finding may explain some of the reluctance to engage in psychological treatment. Hoge et al. (2004) also reported that of combat veterans returning from duty whose evaluations showed positive indicators for mental disorder only 23–40 percent sought mental health services. As additional support for the proposition that the incidence of PTSD and PTS among SCI victims is underrepresented in the literature, our experience has noted that contact with psychological services for men with SCI has required outreach and creatively designed programs to engage them.

In order to better engage SCI patients, a program was designed at Rusk Institute, called the "Seminar in Personal Functioning," which was led by a physician and a psychologist. Each of four 90-minute group sessions addressed a specific area of physical loss, beginning with a didactic presentation on the anatomy and physiology of the loss and followed by experiential group discussion on living with such a loss. The topics presented were paralysis, bowel and bladder incontinence, physical sensation, including care and protection of skin, and sexual functioning. Additional experiential groups on sexual functioning, which included audiovisuals and discussions, then followed.

To manage the consequences of SCI involves work and daily attention to physical needs. Partners often may serve as caregivers and they may be seen as members of the rehabilitation team, with insufficient attention paid to them as secondary victims (Padrone, 1999). Daily attention to the needs of the victim can be traumatizing for a caregiver, while ironically the work can be a distraction and a haven from addressing the emotional impact of personal losses and trauma. The consequent increase in stress can be amplified by worry about the primary victim and personal exhaustion, as exemplified in the recent proliferation of caregiver stress tests, developed by specific illness/disability organizations.

Rehabilitation and Adaptation to SCI

Losses from SCI are once again both obvious and subtle, ranging from loss of functions to loss of beliefs in fairness and in oneself. Herman (1997) speaks to the necessity to mourn losses, in order to resolve trauma. She suggests that incomplete mourning can perpetuate trauma. The social rituals that usually enable mourning are not available to trauma victims, resulting in an increased probability of psychological symptoms. Experience suggests that since mourning is an inner experience, and since it is culturally influenced, the actual process may vary among people. Since SCI always involves loss, the need for mourning may be clear, but it is often resisted or avoided. It may be seen as weakness or giving in (Herman, 1997) to weakness, to growing feelings of grief, loss, and even the disability itself. Actually one might say that in the face of such experiences, it is an act of courage.

Incomplete mourning also has been seen to diminish a victim's empathy for the suffering of others, since by implied comparison their suffering is relatively meager. In the context of such a lack of empathy, cynicism may develop. Cynicism can be seen not necessarily as a feature of personality but rather as a sign of a depression or mourning that was indicated but never happened. As victims truly experience the injustice of their situation, with the validation of a trained professional, anger and indignation may rise. Experience supports the proposition that such feelings of indignation often release a person to reclaim a lost sense of power and dignity. Herman (1997) poignantly concludes: "Mourning is the only way to give due honor to loss; there is no adequate compensation" (p. 190).

Finally, disability and trauma persist throughout an ever-changing life span that moves forward through many of life's milestones, which are made numerous by the relative youth of the victims (Padrone, 1999). Such milestone experiences bring with them their own challenges, which can exacerbate feelings of loss and helplessness and retraumatize the victims. As one moves through the life cycle, relationships will begin and end, challenges will result in success, failure, or disappointment. Families will evolve, and later experiences certainly will scrape the wound. The extent to which resolution has been accomplished will limit the recycling of the adjustment process through each milestone and stressful experience.

The trauma of SCI profoundly and irrevocably changes one's life. In varying degrees and under the myriad influences suggested here, it presents a series of traumatic events that can go on indefinitely, unless there is appropriate intervention. Notions of "coping with adversity," "getting through," and "hard work" can be said to be the mantra of rehabilitation, which most often has at its core not the goal of cure but that of empowerment. Although resolution of trauma may be successful, it is not necessarily complete. Experiences of stress and trauma can often be revisited, but the litmus test of success is that they do not lead to the full recycling symptoms of PTS or PTSD. With the necessary assistance, people with spinal cord injury can and do go on to lead full and productive lives.

As mentioned earlier, discharge from rehabilitation may be only the beginning of the road back from the trauma of SCI, but the soil will have been prepared with the empowerment that rehabilitation can provide. Possibly unique to the trauma of SCI, when compared to other traumas, is the existence of a network of well-established rehabilitation facilities and services throughout the country for treatment and ongoing research.

The disability of SCI, when viewed in the context of trauma, makes a commitment to rehabilitation more relevant. Howard Rusk, who has been called the "Father of Rehabilitation Medicine," has spoken eloquently on the strength of the human spirit, which he viewed as the unique quality that fuels the courage to live actively, despite the losses and trauma of disability. When well into his late 80s, Howard Rusk delivered a brief address to a small gathering at Rusk Institute, which concluded with a personal recognition of the losses that aging can bring. It seemed to epitomize his view of suffering loss while retaining the ability to remain open to life, feelings, and being human. He concluded his message with the following comment: "I may no longer be able to run about and accomplish the things I did once, and I may not be able to [do other things]... , but I can love as good as ever." In the closing line in his autobiography, he expressed his genuine respect for our human struggle with loss and his conviction that people can climb back up from the trauma of disability, when he said: "To believe in rehabilitation is to believe in humanity" (Rusk, 1977, p. 238).

Public Policy Issues and SCI

Following SCI, the need for rehabilitation and for psychological services is clear. The selection of a treatment facility is an important decision, in which consideration should be given to the range of services provided, the availability and intensity of those services, and the quality of the rehabilitation program. Inpatient services are provided in a number of different settings, including hospital-based units and rehabilitation centers. Most desirable programs deliver treatment through an interdisciplinary team, which includes providers of psychological services. Some inpatient programs provide treatment in a designated unit or program, delivered by a specialized team. Standards of care are assured by program approval from the Commission on Accreditation of Rehabilitation Facilities

(CARF), established in 1966. Outpatient rehabilitation programs also provide an interdisciplinary program of treatment, although some patients may not require all services (Hagglund, Kewman, Wirth, & Riggert, 2005).

Rehabilitation following SCI with significant disability is generally automatic, but the availability and extent of psychological services offered, as well as other services, may not be. This development in the treatment of SCI reflects the major changes in delivery of all rehabilitation services over recent decades. As the need for services and the number of facilities to provide them has increased significantly, efforts to control costs also have been necessary. Length of stay for inpatient treatment has been significantly reduced for all hospital stays. As a result, there is a greater need for services on an outpatient basis. There has been pressure to eliminate some services, by "streamlining" the rehabilitation team, and to institute dual training for others, both of which suggestions have raised quality of care objections. Insurance coverage by managed care companies now includes 95 percent of insured workers. The management of costs has led to capitation initiatives, which place the care providers in a potentially difficult position; if more care is recommended, there is a negative financial consequence. The government Medicaid and Medicare programs provide an increasing proportion of payment for inpatient coverage. Since SCI tends to strike at a relatively early age, before careers, employment, and finances have stabilized, a significant portion of patients are in need of Medicaid coverage. Furthermore, the Medicare program provides health care coverage for an increasing number of SCI patients. There has been a rise in the number of SCI patients who are elderly, and a person is eligible for Medicare following two years of permanent disability, both of which result in Medicare assuming the responsibility for health coverage. Increasing the problem is the fact that the "limitations of these programs … often exacerbate the health problems of persons with disabilities" (Hagglund et al., 2005, p. 805). Additionally, the psychological and behavioral difficulties with which many people with disabilities contend can result in increased medical and emotional difficulties when they go untreated, ironically increasing health care costs.

Two additional Medicare cost containment strategies currently are impacting inpatient rehabilitation services, and these strategies tend to affect all other third party payers. A Prospective Payment System (PPS) has been implemented, which provides for a single payment to hospitals based on type of disability, for example, stroke or SCI, and on level of care needed, which is similar to the Diagnostic Related Groupings (DRG) payment system in acute hospitals. In this system an average length of stay is calculated for each disability and level, and the facility receives a fixed payment, which can increase with comorbidities. This method of payment has resulted in reduced costs and reduced lengths of stay in inpatient rehabilitation (Hagglund et al., 2005). Although the achievement of rehabilitation goals seems to have become more efficient, patients are being discharged to their home or to a subacute rehabilitation facility with greater levels of dependence than in the past. Although treatment and progress can continue at home or at the subacute facility, the patient will receive less intensive treatment. Little attention has been paid to the psychological price paid by patients and family.

A second strategy is known as the 75–25 percent rule, which specifies that 75 percent of patients admitted to acute inpatient rehabilitation facilities (IRFs) must be drawn from a specific list of diagnostic groups, for the facility to continue to be classified as an IRF and continue to receive the current rate of reimbursement. Although spinal cord injury is included on the approved list, the impact of the rule may be to reduce the number of available beds in rehabilitation facilities, thereby leading to additional pressure on the facility to discharge patients sooner. Since it has been estimated that only half of patients being treated in an IRF facility meet the specified criteria, the rule is being phased in with annual increments to allow time for necessary reorganization, such as bed reductions. In addition to the estimated cost reduction, it is anticipated that many patients will be denied admission to acute rehabilitation, because they do not fall into the designated diagnostic categories (Hagglund et al., 2005), and will be sent to subacute rehabilitation facilities.

Furthermore, something of a "catch-22" situation has now developed. As access to intensive and long-term inpatient treatment is being reduced, limits are also being placed on the number of outpatient treatment sessions that a patient may receive. The search for outpatient psychological assistance may require some effort to deal with the maze of daunting funding issues. The psychological issues that need to be addressed here are complex. They often require more than the limited number of counseling sessions that may be provided by a managed care company to "get through" or stave off a crisis. Overall, the availability of professional and financial resources for treatment is limited, while the need has grown.

Should seeking help through physicians and rehabilitation personnel be unproductive, additional sources of information can be found through the Commission on Accreditation of Rehabilitation Facilities (CARF) at http://www.carf.org/consumer.aspx?Content=content/about/providerlist.htm&ID=6. Extensive listings of qualified mental health practitioners also are available through state professional organizations. Hurdles do include, however, limited availability of wheelchair accessible offices, even following the Americans with Disabilities Act, which took effect in 1992. The number of clinicians who are experienced with SCI may be limited, although competent clinicians should be able to assimilate new information rapidly and integrate it into the work. On a positive note, the pool of professionals is growing. There is an increase in the number of training sites for mental health professionals in the field of rehabilitation. At another level, board certification for psychologists is now provided (since 1995) by the American Psychological Association in the area of rehabilitation psychology as a specialization.

Community reentry is a major goal of rehabilitation. Considerable legal progress has been made toward the removal of barriers to full participation in life for people with disabilities. Legislation has been enacted that addresses accessibility issues, employment opportunities, and safety issues in the workplace. In this context, awareness of one's rights can be empowering for those with disability. An excellent review of such information is provided by Bruyere and van Looy (2005).

Overall, there are complex rehabilitation needs following SCI, which are addressed most effectively in CARF-accredited inpatient programs. If such programs are not readily available, recommendation is made for acute rehabilitation programs, with a complete interdisciplinary team that provides regular psychological services as part of the team effort.

Although cost containment in health care is needed, people with disabilities do have special health care needs that can be complex, which brings into question the blanket application of cost-cutting efforts across disabilities. Many of these policies take into account only the physical needs of patients, with little attention paid to the psychological and neuropsychological needs. Finally, government spending on research in the area of SCI is subject to budget reductions and politicizing of certain efforts, such as has been seen in the stem cell debate. People with disabilities often do not have advocates in the legislature who can speak for the needs of this vulnerable and high-risk group. There needs to be a reasonable balance between cost reduction and the quality of health care.

Acknowledgments

I would like to express my gratitude to the many people with spinal cord injury for their permission to bear witness to and share in their journey and to Jung Ahn, MD, clinical professor of rehabilitation medicine, New York University School of Medicine.

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CHAPTER 8

DISCLOSURE OF TRAUMA IN THE MEDICAL SETTING

Ruth Q. Leibowitz

When traumatic life experiences create problems in a person's life, disclosure to a caring other is often an important first step toward healing. However, people hesitate to disclose for many reasons. The two veterans quoted below waited many years before sharing their stories:

> I think the reason that people don't come and open up is because they're too damn proud.... you don't want to be a whiner. You can handle anything, because that's what you're taught. I was 26 years in the military so you're Mr. Macho and you don't want to open up with what's really in your heart to somebody that you don't know, because then you … are real vulnerable for some more hurt that you don't deserve. (Male veteran, age 63. Experienced childhood physical and sexual abuse, exposure to toxic substance, combat trauma, atrocity, death of son. Disclosed a year and a half prior to being interviewed)
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> Because I went all those years growing up as a young person into having children and then going into the military and I felt that if I survived it without no one knowing it that it was best to wait and just get my 20 years in. Then I would be able to seek help without feeling threatened.... I hung in there … even if it meant being stressed out, depressed, and crying.... I cried behind closed doors, but I held it in, and it wasn't easy. (Female veteran, age 60. Experienced serious transportation or other accident, childhood sexual and physical assault, military sexual trauma. Disclosed six months prior to being interviewed)

Why did these and many other individuals wait years before seeking help for trauma-related distress? Why is trauma of importance to health providers, even those who focus primarily on biomedical issues? How can clinicians invite patients to disclose earlier in the course of their symptoms—or should they?

This chapter was conceptualized first and foremost with the primary care practitioner (PCP) in mind. In addition to providing preventive treatment, PCPs are often the first professionals sought when a health problem is suspected. In many health care systems, patients cannot make appointments for specialty care without a referral from their PCP. Thus, of all types of medical environments, primary care may well be the most important arena for recognition and referral for treatment of trauma-related distress.

It is hoped that providers in specialty areas will also benefit from this chapter. A number of specialty-care medical populations are noted for high incidences of significant trauma histories. Particularly prevalent in PTSD samples are disorders of the cardiovascular, gastrointestinal, respiratory, musculoskeletal, endocrine, neurological, gynecological, and immune systems (Schnurr & Jankowski, 1999). Finally, mental health professionals who accept referrals from, work alongside, and/or provide training for colleagues of more biomedical specialties may find additional ideas for this interdisciplinary work.

PTSD is not the only mental health diagnosis that can develop in the aftermath of trauma. Other anxiety disorders, depression, eating disorders, and somatic symptoms are also commonly associated with traumatic life experiences (e.g., Mayou, Bryant, & Ehlers, 2001; O'Donnell, Creamer, & Pattison, 2005; Rayworth, Wise, & Harlow, 2004; Zatzick, Russo, & Katon, 2003). Early, repeated trauma is associated with borderline personality disorder (Bandelow, Wedekind, Broocks, Hajak, & Ruther, 2005; Lee, Geracioti, Kasckow, & Coccaro, 2005; Sansone, Songer, & Miller, 2005). Increased rates of suicide are seen among individuals with trauma histories (Roy, 2004; Tarrier & Gregg, 2004). Thus, although I will focus on PTSD in this chapter, it is important to acknowledge other ways in which trauma-related distress can manifest itself.

The information and viewpoints contained in this chapter emerge from extensive literature reviews, my own clinical training experience, and the early results of a recent study conducted in a southwestern Veterans Health Administration (VHA) system (see acknowledgments; and Leibowitz, Jeffreys, Copeland, & Noel, 2006b) in which surveys with questions about trauma history and disclosure experiences were collected from 173 veterans in PTSD outpatient treatment and 395 patients visiting outpatient primary care clinics, and interviews were conducted with 56 veterans and eight providers. This research is referred to as the disclosure study, and the words of participants are interspersed throughout the chapter.

Screening versus Disclosure

There is presently debate among professionals about whether routine screening for trauma (in particular, intimate partner violence) should occur in primary care. The details of this controversy are beyond the scope of this chapter; however, the interested reader can read Ramsay, Richardson, Carter, Davidson, & Feder (2002), U.S. Preventive Services Task Force (2005), and Nicolaidis &

Touhouliotis (2006) for a taste of the issues. Screening and disclosure are different processes that do not necessarily overlap. Screening is a formalized written or spoken attempt by a health professional to learn the absence or presence of a patient's experience or symptoms.

Screening can and sometimes does occur impersonally and without context. For example, the Veterans Health Administration (VHA) currently requires that patients be screened for military sexual trauma and PTSD symptoms. The good news is that implementation of this requirement has led to increased identification of trauma-related distress. The bad news is that in some clinics this screening is done in an impersonal manner by a nurse, medical assistant, or physician who the patient may or may not have ever met before. Although the screening itself is required, there is no requirement to provide an explanation of why the questions might be meaningful or relevant to the patient's health or quality of life.

The act of screening may or may not lead to disclosure. Conversely, disclosure can occur in the absence of screening. As will be illustrated, disclosure is most likely to occur when the patient is in a state of readiness and in the context of a relationship with the provider. The PCP quoted below noticed the following about several women who initially denied their trauma histories but later sought help:

> Some women have dealt with it and so they will volunteer that information and it doesn't seem to bother them at all. Others will deny it, and if it has happened and they have never disclosed I have no knowledge of that. But there have been patients who have told me that it didn't happen, and then they will come back later and subsequently they will say, well, you know that really DID happen to me but I was afraid to say anything.... I think it's the trust factor more than anything else. I think that they have to get to know me.... You know, before you disclose anything to anybody you have to have some sort of confidence about what they're going to do with your information.

Trauma and Health

Many published studies connect trauma and its aftermath with various aspects of physical health. In the biopsychosocial model described by Wilson and Cleary (1995) and further elucidated by Schnurr and Green (2003), health is conceptualized as a multidimensional construct that includes but goes far beyond purely biological conditions and processes, including functional status and quality of life.

Traumatic experiences and PTSD interact with health in numerous domains including physiological changes, diagnosable biomedical illness, perceived symptoms, well-being, health behaviors, ideas, and functional abilities.

Trauma Survivors in the Medical Setting: Prevalence and Trauma-Health Associations

Many individuals with mental health issues, including trauma-related distress, do not initially seek specialty mental health care. Instead, they appear in medical clinics with multiple psychosocial problems that may remain unrecognized by busy providers. Some authors (Norquist & Regier, 1996, Regier, Narrow, Rae, Manderscheid, Locke, & Goodwin, 1993) have conceptualized the general medical setting as part of a "defacto mental health care system." The tendency to seek help from medical rather than mental health professionals for trauma-related distress has cultural as well as individual components. For example, for survivors of a volcanic eruption in Japan, more severe symptoms of PTSD and depression were associated with more frequent help-seeking from medical but not mental health professionals (Goto, Wilson, Kahana, & Slane, 2002). Goto and colleagues conceptualized this as being "related to cultural norms regarding shame and self disclosure of emotional distress" (p. 157).

Patients and providers frequently do not recognize links between physical and psychological symptoms of traumatic events (Munro, Freeman, & Law, 2004). In the disclosure study, the most frequent reasons individuals with PTSD gave for initially disclosing to a health professional were those that were external to themselves, such as pressure from a friend or family member to seek help for emotional or behavioral problems. A VHA psychologist who assessed many individuals recently returned from Iraq and Afghanistan mentioned that those young men and women with symptoms of trauma-related distress do not generally ask their medical providers about PTSD. Rather, they seek help for individual symptoms that they do not realize are part of a larger pattern, such as sleep disturbance and worsening relationships with co-workers.

Patients are not the only ones who often fail to make the connection between past trauma and present symptom patterns. A psychiatrist who has worked with trauma survivors for 20 years expressed surprise that even with all the media coverage and generally increased public knowledge of PTSD, patients with trauma histories referred to her by primary care colleagues are generally not explicitly referred for potential PTSD, but for depression or chronic pain.

Primary care providers see a substantial proportion of patients with trauma histories. Researchers who cast a wide net by including many different categories of trauma find the highest prevalences. For example, the prevalence of at least one traumatic experience has been detected at more than 85 percent in one primary care sample (Applegate, 2001). Eighty-one percent of the women in one sample reported significant trauma histories (Escalona, Achilles, Waitzkin, & Yager, 2004) More than 80 percent of the veterans surveyed in primary care waiting rooms for the disclosure study reported at least one category of trauma in their lifetime, with 65 percent reporting more than one, and approximately 25 percent reporting more than four.

When the focus is narrowed to specific types of trauma, the number of traumatized individuals presenting in primary care remains high. Beebe, Gulledge, Lee, & Replogle (1994), found a sexual assault prevalence of 30 percent among female patients, and Friedman, Samet, Roberts, Hudlin, & Hans (1992) found a prevalence of 16 percent and 19 percent for physical and sexual abuse respectively among two samples of male and female primary care patients.

Of female family practice patients currently in a relationship, 10 percent reported being physically hurt by their partner in the past year, and 39 percent reported lifetime intimate partner violence (Burge, Schneider, Ivy, & Catala, 2005).

Not everyone who experiences trauma develops PTSD; in fact, the majority do not. Schnurr and Green (2003) estimate that between 8 and 14 percent of men and 20 to 31 percent of women who have experienced Criterion A traumas develop PTSD.[1] Whether or not PTSD develops appears to be related to a wide variety of variables, including gender, type and intensity of trauma, number of traumatic events experienced, ethnicity, education, and social support (e.g., Beckham et al., 2000; Kessler, Sonnega, Bromet, Hughes, & Nelso, 1995; Stretch Knudson, & Durand, 1998). Some trauma experiences are more likely than others to lead to PTSD. For example, PTSD rates following rape are reported to be as high as 50–80 percent (Solomon & Davidson, 1997). In contrast, the lifetime prevalence of PTSD for male combat veterans is generally believed to be 20–30 percent (e.g., Blake et al., 1990). Though the majority of individuals who experience a Criterion A type of trauma do not develop full-criteria PTSD or chronic trauma-related distress, those who do constitute a sizable minority. Of primary care patients who experience trauma, approximately one-third report trauma-related distress (Seville et al., 2003).

At least as early as 1988 it was observed that the aging combat veteran population appeared to have more medical problems than other individuals in their age cohort. Lipton and Schaffer (1988) wrote: "A major problem in dealing with this group of men has been their reluctance to admit to symptoms, either physical or psychological. They have usually suffered in silence for years, unable or unwilling to ask for help despite urging by family and friends" (p. 317). Though almost 20 years have passed since this paper was written and media coverage about the psychological effects of trauma has increased, these words still describe many veterans today. Even the youngest remain hesitant to tell their stories.

A landmark 2004 study by Hoge and colleagues of soldiers deployed to Iraq and Afghanistan found a high degree of combat exposure. Of those who screened positive for a mental health disorder, only 23–40 percent had sought mental health care. Major reasons for not doing so were fears of stigmatization and potential harm to their military careers. Though this study focused on active-duty soldiers, similar barriers were mentioned by several veterans in the disclosure study, for whom fears of stigma and job loss in the civilian sector continued to be a concern.

Patients' trauma experiences remain underidentified in medical settings. Coker, Bethea, Smith, Fadden, &Brandt (2002) conducted interviews with female primary care patients and matched their findings on the prevalence of intimate partner violence (IPV) with medical record documentation, finding that IPV remained undocumented for 84 percent of those patients who experienced it. Of 18 battered women who reported having seen their "regular doctor" in the prior year; only one in three had discussed their abuse with their provider (McCauley, Yurk, Jenckes, & Ford, 1998). Magruder et al. (2005) found that slightly less than one half of the cases of PTSD that were uncovered by rigorous study procedures had been diagnosed by primary care clinicians.

Trauma-related distress can affect the health of the patient, the provider-patient relationship, and the larger health care system. Female medical patients with a history of physical/sexual abuse have lower pain thresholds and report more frequent use of maladaptive coping strategies than do those without abuse histories (Scarinci, Mcdonald-Haile, Bradley, & Richter, 1994). Zayfert, Dums, Ferguson, and Hegel (2002) found that patients with PTSD reported significantly worse physical functioning than did patients with panic disorder, generalized anxiety disorder, or major depression. Williamson, Thompson, Anda, Dietz, and Felitti (2002) found that childhood abuse was associated with adult obesity. Health behaviors such as increased substance use, risky sexual behaviors, poor exercise habits, nicotine dependence, binge drinking, and poor nutritional habits have been associated with a wide range of trauma types, and with PTSD (e.g., Beckham et al., 1997; Breslau, Davis, & Schultz, 2003; Lang et al., 2003, McNutt, Carlson, Persaud, & Postmus, 2002). A Vet Center counselor described one client's cycle of behaviors that resulted from trauma triggers:[2]

> She's a Vietnam era vet, sexual trauma, subject to depression. When she is depressed she will eat a lot of fatty foods, sweets.... She has developed diabetes and doesn't take her medication so then the depression worsens. Obesity is a problem. She doesn't exercise at all. And she'll present with ... "I'm not taking medication correctly. I'm having problems with my diabetes. My blood pressure is going up." She works in a setting where if she has a male supervisor it's very difficult for her ... and often [there are] environmental cues that relate to the trauma in the military and then she just rolls right into the poor self-care.

Both trauma experience and PTSD appear to be related to physical health outcomes. Cloitre, Cohen, Edelman, & Han (2001) studied childhood abuse survivors and found that trauma exposure but not PTSD was associated with an increased number of self-reported medical conditions. However, PTSD rather than trauma exposure was associated with decreased perceived physical health. Wolfe, Schnurr, Brown, and Furey (1994) found that war zone exposure contributed to health effects independently of whether study participants had PTSD. In contrast, the results of a study of firefighters suggest that PTSD rather than exposure to fire-related disaster accounted for an increase in reported physical symptoms (McFarlane, Atchison, Rafalowicz, & Papay, 1994).

Given these varied results, an obvious question arises: is it trauma exposure by itself or PTSD that is most associated with changes in health? A study by Seville and colleagues (2003) may shed light on this issue: In a primary care patient population, trauma by itself did not predict greater physical and psychosocial impairment, but continued distress related to the trauma did. A number of authors have found that distress patterns that do not meet the full criteria for PTSD nevertheless affect multiple life domains, including health (Gillock, 2001; Marshall et al., 2001; Schlenger, Fairbank, Jordan, & Caddell, 1999). In fact, Gillock, Zayfert, Hegel, and Ferguson (2005) recently reported that primary care patients with partial PTSD showed greater similarities to full-PTSD patients in their levels of medical utilization, physical symptom intensity, and health functioning than they did to patients without PTSD. Thus, perhaps, trauma-related distress (regardless of whether it meets PTSD criteria) mediates or moderates health-related outcomes.

Trauma-related issues reach beyond the level of the individual. They affect health care systems in numerous ways, including provider-patient interactions, services utilization, and overall costs. In a community sample, the total number of traumas and a history of physical or sexual abuse correlated with both PTSD prevalence and increased use of medical services (Rosenberg et al., 2000). High users of VHA primary care services are much more likely than low users to have current PTSD (Deykin et al., 2001). Veterans with more severe PTSD are greater utilizers of both mental and physical health services than those without (Calhoun, Bosworth, Grambow, Dudley, & Beckham, 2002). Schnurr, Spiro, and Paris (2000) found that for male veterans with PTSD, increased use of medical services was not completely attributable to comorbid (concurrent) Axis I disorders such as depression.

Trauma can affect the provider-patient relationship and patient satisfaction with health care. In a study by Plichta, Duncan, and Plichta (1996), women who reported abuse by a spouse during the past year also reported greater dissatisfaction with their health care than those who reported no abuse. Only about one-tenth of these women had talked with a physician about their abuse. In contrast, Lang et al. (2005) found that women with more PTSD symptoms expressed more satisfaction with overall care than did those with other mental health diagnoses. In a study of physicians' reactions to working with patients with rheumatological complaints, Walker, Katon, Keegan, Gardner, and Sullivan (1997) found that a patient's having been abused or having been raped during adulthood were two of a number of factors that were significantly associated with physicians' reports of frustration with patient care.

Patients with trauma-related distress sometimes have strong reactions to both personal and physical aspects of medical visits that are not generally as problematic for nontraumatized peers. A Vet Center counselor specializing in women's sexual trauma spoke of spending a great deal of time helping patients negotiate relationships with their health providers. A mental health professional who works primarily with combat veterans stated:

> It's extremely difficult for them to ask for help and any apparent hint of rejection will cause them to withdraw, and they'll either blow up or they just walk away and don't come back.... And the reason they walk away is they're afraid they'll blow up and sometimes because the waiting room is crowded and noisy and they can't tolerate it, and neither can they tolerate the effort it takes to explain to somebody that they just can't be here right now.

A psychiatrist described how trauma survivors may present with very different emotional exteriors:

> My interest dates back to the mid-80s when … it always seemed that the women who were the most chronically depressed had histories of childhood trauma. Then, the Vietnam patients began to come in—on the outside they seemed very angry and violent. But once you got to know them it became clear that they had experienced a great deal of trauma during the war. Then also in the mid-80s we started learning more about PTSD and realizing it fit many of these people. So I've gotten to see two major forms of PTSD—the more passive, depressed presentation of it and the more irritable, angry presentation.

The veteran quoted below denied the extent of his problems to both himself and others for many years, opting not to tell providers about symptoms of PTSD from combat experiences that included witnessing atrocities in Vietnam:

> I only told them what they wanted to hear, which helped me somewhat, but I was breaking appointments. I wasn't stable in my mind. I wasn't able to connect with anyone at that time, that's why I blew off…. I was scared because I had never had a one-on-one with anybody that was digging into my head…. For all these years I was telling everyone I was fine and I didn't want to really find out that I was crazy.

This patient's narrative illustrates how fears related to disclosure and help-seeking can interact with health behaviors—in this case, failing to follow through with appointments.

A primary care provider related how she had first become aware of potential issues for survivors of sexual abuse during physical exams:

> At a conference a midwife who was talking about … how sexual trauma would cause people to dissociate and so during a pelvic exam you need to … keep them engaged with you personally and try to minimize this retraumatization as much as you can. She worked in a public health clinic and one of the residents referred to it as a snake pit. She was perfectly horrified and asked him, "Why do you say that?" He said, "Because the women when you go to touch them … recoil from you." That was a red flag to her, and she began to wonder about the sexual trauma history of these women and did some evaluation on her own and realized that many had been victims of sexual trauma and consequently the exam was awful for them, and they would recoil. And [the resident] was referring not to the patients as snakes, but their behavior is like a snake trying to slither away…. And it opened her awareness.

One provider voiced several examples of situations in which trauma-related distress could interact with various aspects of medical treatment:

> If you're a primary care provider and you are sending your patient in for an MRI and it's a closed MRI … I have had patients walk out of there with panic attacks…. So radiology needs to know about it … how to address those types of patients that tend to be very anxious in those settings…. Even technicians, even phlebotomists should know how to deal with anxious patients because they are drawing blood with a needle and if they don't know that they've got somebody in there who witnessed torture in Vietnam and you ask them to just come and draw blood and they walk out of your office in a tirade because they can't stand that, they're going to label them as psychotic or some other problem versus really understanding, this person went through this [and it] makes them more anxious in this type of setting.

A Vietnam veteran recently told me that after a surgical procedure, he lost control of his temper in the hospital when informed that he had been administered morphine. He himself did not realize the reasons for the outburst until after discharge, as he recalled memories of morphine being administered to dying men and to silence the suffering wounded so that they would not give their positions away to the enemy. Had both he and his providers been aware of these associations, the anger might have been avoided, or apologies quickly made and accepted.

Some providers come up with "tricks of the trade" for helping their patients to cope with discomforts in medical settings that are related to their trauma histories. This social worker found a strategy to help clients feel more comfortable in the dentist's chair:

> I've had people who have worked in morgues, or have been on body recovery missions, to where the smell and taste of the blood—olfactory kinds of stimulation—will trigger off their PTSD symptoms. I teach them to go lay the eucalyptus right under the nose and they're not going to smell or taste anything other than that stuff. And they say well, what will the dentist think? And I say, you tell your dentist you have PTSD and that this helps you to manage your symptoms … and the dentist will say, "I don't have a problem with that. Thank you for letting me know." Then a few days later they come back and say, "I told the dentist that and he said, 'I don't have a problem with that.'"

Trauma Disclosure

Why Would a Patient Disclose?

Why may it benefit certain patients to disclose trauma to their medical providers? "May" is a key word here. Many individuals who experience trauma do not develop chronic forms of trauma-related distress and would not perceive any reason to bring up the topic during a medical visit. The majority of primary care patients who had experienced traumatic events reported no need for professional help (Mol et al., 2002). The minority who did want help, however, believed the primary care physician could play an important role.

For a variety of trauma populations, confiding in others in a naturally occurring context is associated with better mental and physical health. For example, Holocaust survivors who spoke in more detail about their World War II experiences had greater self-reported health controlling for preinterview health status (Pennebaker, Barger, & Tiebout, 1989). Schwarz and Kowalski (1992) followed a population of individuals exposed to school violence and found that those who did not seek help had more PTSD symptoms (especially avoidance), recall of life threat, and depression after the event than did those who had sought follow-up counseling.

A number of researchers have explored the constructs of self-disclosure and self-concealment and their relationship to physical and mental health. Cepeda-Benito and Short (1998) found that students who scored high on a measure of self-concealment evidenced greater psychological distress and avoidance of psychological treatment. Larson and Chastain (1990) found a relationship between higher scores on a validated self-concealment measure and increased physical and psychological symptoms, even after controlling for such variables as the occurrence of trauma and social support. Of the disclosure study's sample of 173 veterans in active treatment for PTSD, 42 percent reported at least one category of trauma that they were still not ready to disclose. This group of veterans reported significantly more PTSD-related and health-related distress than their peers did.

Individuals with good support systems may benefit from disclosure to nonprofessionals such as friends or family members. In their study of peacekeepers who had returned from Somalia, Bolton, Glenn, Orsillo, Roemer, and Litz (2003) found that individuals who had disclosed to significant supportive others about their experiences showed better adjustment than those who had not disclosed. Not everyone, however, has a good support system or wishes to disclose to people they know. One-half of the PTSD outpatients in the disclosure study reported that a health professional was the first person to whom they had disclosed. This 72-year-old veteran of both Korea and Vietnam expressed his reasons for preferring to talk to a professional:

> A: Well I didn't think anybody would be interested.... I didn't want to unload.... It's ... a little gory and some of them a little shaky, memories of bad situations. Especially when you see somebody with their intestines all open and he's still living. These are stories that you don't want to tell kids or family or friends or anybody, the general public.
>
> Q: What about telling a health professional? Like a nurse or a doctor?
>
> A: That would be fine. That's what they're trained for.

For individuals with trauma-related symptoms that affect their lives to a moderate or extreme degree, friends and family—no matter how well-meaning—may not be able to provide what is needed to reduce these symptoms. Chronic trauma-related distress is not so different from a chronic physical disease. For example, effective treatment of diabetes requires behavioral and/or medical interventions that a lay person is not trained to handle. In fact, few people would expect family and friends to alleviate or treat their diabetes. Likewise, individuals with chronic PTSD can benefit from psychotherapy and/or medications that are available from trained professionals.

Finally, as stated previously, many people suffer from trauma-related distress without realizing the source of their suffering. If a patient is unaware of the connections between trauma experience and present problems, why would he or she elect to bring up painful experiences?

Why (Not) Ask? Providers' Worries

A number of researchers have explored the attitudes, beliefs, and practices of providers related to screening for trauma in primary care and other medical environments. The majority have focused on intimate partner violence/domestic violence (IPV/DV), particularly with female patients. Most physicians appear to believe that IPV screening is an appropriate clinical practice for physicians and that assistance of victims is part of the physicians' role (Chamberlain & Perham-Hester, 2002; Garimella, Plichta, Houseman, & Garzon, 2000), yet screening is seldom accomplished consistently. For example, Elliott, Nerney, Jones, and Friedmann (2002) showed that only 6 percent of physicians screened all female patients for DV and 10 percent reported that they never screened. Another study found that even though more than 70 percent of physicians believed they could be of help with problems associated with physical and sexual abuse and more than 85 percent of their patients agreed, most physicians nevertheless did not routinely inquire about these forms of abuse at either initial or annual visits (Friedman et al., 1992).

In a landmark study, Sugg and Inui (1992) asked primary care physicians about their responses to IPV. One overarching response theme was discomfort regarding the possibility of opening up a "Pandora's box" or a "can of worms" by inquiring about domestic violence. Although that study was conducted approximately 15 years ago, its results still ring true. Below, several of the barriers most commonly mentioned by the physicians interviewed by Sugg and Inui will be listed and discussed.

First, in the study, physicians expressed concerns about offending the patient. Physicians feared that posing questions about domestic violence might be insulting to patients, or constitute a betrayal of trust that could compromise the patient-physician relationship. A similar concern on the part of nurses was echoed by Gallop, McKeever, Toner, Lancee, and Lueck (1995), who found that although a majority of nurses were supportive of inquiry about patients' past sexual abuse, many were nevertheless concerned about being perceived as intrusive by the patient.

Physicians also felt powerless to be of help to a patient who is a victim of domestic violence. Many physicians wanted to "fix" the problem and lacked confidence in their ability to do this, largely due to lack of training. A barrier reported by physicians in a more recent study (Garimella et al., 2000) was lack of knowledge about resources. In fact, 70 percent of physicians queried believed they did not have resources available to assist victims of violence. An internist who participated in the disclosure study admitted that, although she was interested in her patients as individuals, psychiatric care was not her area of expertise:

> I would like to take care of the whole person. If I could have a feeling for what's going on and provide some degree of counseling or reassurance to the patient and send them to a psychiatrist or some facility that knows how to better manage it, I would be very happy with that ... but not actually manage [psychiatric issues], because that is hard for me to do.

Physicians also expressed frustration about not having control over the outcome. Just over 40 percent of the physicians in Sugg and Inui's study (1992) expressed frustration that even if they intervened—for example, making a referral—the patient was ultimately in control. As one physician said, "I try to refer to resources. But that is part of my sense of impotence. I can't give this woman a job. I can't hold her hand. I can't do it for her" (p. 3159). This source of provider frustration has been found in other studies as well, and appears to be accompanied by negative judgment about the patient at least in some circumstances (e.g., Nicolaidis, Curry, & Gerrity (2004a).

Several of the concerns mentioned above are quite realistic and merit consideration and caution. Disclosure of trauma *can* "open a can of worms" for both provider and patient. The "tyranny of time" was mentioned by most physicians in the Sugg and Inui study (1992), and time continues to pose practical limitations. Other provider concerns, such as offending the patient by asking and/or not having control over the outcome of the disclosure, can be set aside with more confidence.

Revisiting Providers' Concerns

> Q: Are there any conditions you can imagine where you think a health provider should not inquire about a patient's trauma history?
>
> A: No. I don't think so. I think [the provider] should at least ask that "yes" or "no" question and leave it up to the patient to either say, "I'm ready to share this. Yes I've had that experience" or "no." And the next question should be, "Are you willing to talk about it?" And then it's back on [the patient], "yes" or "no." (male combat veteran, age 55)

The act of disclosure involves not only behavior but also relationship. The person telling his or her story to another does not do so in a void. The person who hears the story plays a role that can inspire anything from the trust and openness that may lead to obtaining real help to the silence or negative response that may mean no help at all, or even retraumatization.

As we saw, one concern raised by providers regarded offending patients by asking about trauma. Two separate, interrelated bodies of literature tell us that patients look for more than a strict biomedical focus from their primary care providers. The first focuses on the preferences, expectations, and beliefs of patients related to speaking with medical providers about general nonmedical issues, such as emotional distress and personal problems. This literature tells us that the majority of medical patients welcome providers' interest in nonmedical or psychosocial issues (Yaffe & Stewart, 1986; Brody, Khaliq, & Thompson, 1997; Burge, Schneider, Ivy, & Catala, 2005).

A number of factors appear to predict whether patients bring up psychosocial issues with medical providers. In a study by Del Piccolo et al. (1998), the level of emotional distress and positive attitudes about confiding predicted disclosure of nonmedical problems. Patients of community-based primary care practices were most likely to disclose psychosocial problems with prior physician inquiry, greater physician-patient familiarity, and more intense self-perceived distress (Robinson & Roter, 1999).

Even patients who desire help from medical providers often do not disclose their psychosocial needs. Barriers include patients' beliefs that they can handle distress on their own, embarrassment or hesitation to bother their physician, perceived lack of time, belief that the doctor is not interested, and negative experiences with physicians' behavior (Cape & McCulloch, 1999).

Gender is a predictor of disclosure and help-seeking in general, and studies indicate that women are more likely both to seek help and confide in providers than are men (Bland, Newman, & Orn, 1997; Steinert & Rosenberg, 1987). Suggested theoretical reasons for gender differences in help-seeking include gender-role socialization and degree of acceptance of the social construction of masculinity (e.g., Addis & Mahalik, 2003).

A growing body of literature specific to disclosure and identification of trauma in the medical setting has, to date, focused primarily on the intimate partner violence/domestic violence (IPV/DV) and childhood sexual abuse (CSA) experiences of female patients. The responses of the mostly male veteran population associated with the disclosure study suggest that barriers and supports for trauma disclosure are similar for both men and women, and across trauma type.

As was the case for the general psychosocial issues mentioned above, a majority of medical patients welcome inquiry about interpersonal violence from their physicians. For example, in a large sample of female primary care patients, 85 percent agreed that physicians should routinely screen for abuse (Caralis & Musialowski, 1997). Likewise, 85 percent of predominantly male primary care patients surveyed for the disclosure study agreed or strongly agreed that providers should ask questions about their patients' trauma histories, In fact, a major deterrent to disclosure cited by a number of researchers is simply the provider's failure to ask (Walker et al., 1993; Friedman et al., 1992). Other barriers to disclosure of IPV and/or family violence in medical settings include perceived lack of privacy, lack of confidence in the provider's ability to handle the issues, uncertainty about whether abuse/trauma was a valid topic to bring up during a medical appointment, and feelings of shame, guilt, and/or embarrassment (Bacchus, Mezey, & Bewley, 2003; Chang et al., 2003; Fogarty, Burge, & McCord, 2002; McCauley et al., 1998).

None of the veterans in the disclosure study reported feeling offended by trauma questions or screening per se. In contrast, they were offended by other aspects of the disclosure experience and the medical encounter, such as perceived provider failure to listen to them, lack of privacy, and feeling rushed. Thus, instead of being overly concerned about offending patients by asking about trauma at all, providers would better serve patients by learning to ask these questions most effectively, appropriately, and compassionately.

The issue of competency was also raised by providers in the Sugg and Inui (1992) study. Physicians in that study mentioned lack of training. Today it is more common for physicians to have received training in recognition and treatment of trauma (IPV specifically) than it was 15 years ago. In addition, U.S. medical schools now typically require courses in provider-patient communication. The good news is that the medical establishment has begun to realize the importance of communication in the health arena and to make this a part of medical education. However, the required communications course may only be a few hours long. This allows for teaching only the basics and conveys the implicit message that provider-patient communication is not truly an important aspect of professional identity.

Given that the time for communications training in many curricula is limited and that trauma is only one of many psychosocial issues of importance in the medical environment, perhaps training geared toward better communication with patients about difficult issues in general may be most valuable. After all, trauma does not stand alone as a potentially "difficult" issue.

An internist in the disclosure study made the point that building a relationship in which the patient feels comfortable bringing up difficult or potentially embarrassing issues opens the door not only to disclosure of trauma but to discussion of more "biomedical" issues as well, such as concerns about pinworms or a hernia in the scrotal sac: "Things like that, that matter to them but they might not really want to tell you about—it's easier to say, 'I'm fine.' So I could do those little things that if they trust you enough they want to tell you."

Several resources for communications training are listed at the end of this chapter. For helpful publications specific to the identification and management of IPV, see Fogarty et al. (2002); McCauley et al. (2003); Nicolaidis (2002, 2004); Nicolaidis and Touhouliotis (2006); and Thompson et al. (1998).

As a nurse-practitioner in the disclosure study voiced her perceptions of how and why providers fear patient disclosure during the medical encounter, she wove together a number of common provider concerns:

> For a lot of the providers [trauma's] just one more thing they have to screen for, and they're really not interested in taking the time to hear how that's going to affect that patient's interaction with them.... Doctors do not like to be in situations where they raise an issue and then they can't take care of it and patients can what I call "crater." You raise the subject and they can fall apart on you and end up retraumatizing themselves. You have to put limits on that and not allow them to go through the trauma history in detail. They need to do that with a person who is qualified. I think people avoid it because they're like, "I don't want to deal with this. When she starts to cry, I don't know what to do." We've offered in-services on it but the staff around here changes quite a bit and so it's very hard to keep people up to date on that.

The nurse-practitioner echoes the theme of competency and several other themes raised by participants in Sugg and Inui's (1992) study, also touching upon the themes of feeling powerless to help, and not having control over the outcome. Her narrative pertains not only to individual providers but also to the system in which they work. Two issues on an organizational level are mentioned. The opening statement about screening pertains to institutional and professional guidelines. Presently, within the VHA system, providers are required to screen for both military sexual trauma and PTSD. As in all health care systems, they are also expected to follow numerous other clinical guidelines. The requirements of multiple guidelines in the context of the short time typically allowed for a medical visit create a context of competing demands that are difficult for providers to balance.

The other organizational issue mentioned in the above quotation is the challenge of training medical staff in an environment of high turnover. This is particularly pertinent in training institutions such as VHA medical centers and university hospitals, where a high number of patients are seen by resident physicians who then move on to their next rotation.

Another "ingredient" of the medical environment that has not yet been explicitly mentioned is that of the community outside a particular practice or institution. The importance of a community level of support is implicit when providers express their discomfort related to lack of resources for patients. Community resources are important even in systems that have built-in educational, referral, and treatment sources. For example, within the VHA system, patients are considered entitled to treatment for PTSD if it stems from trauma experienced during military duty. There are a number of challenges inherent in this policy. First, if a veteran suffers from PTSD that is not related to military trauma, treatment for PTSD within the system is not guaranteed. Second, trauma-related distress is not always synonymous with PTSD. A veteran whose symptoms do not meet the full criteria for PTSD is also not guaranteed treatment.

Therefore, even in a system as comprehensive as the VHA, it is incumbent on providers to know of mental health resources available elsewhere in their communities. This was not the case in the system in which the disclosure study was completed, where 77 percent of primary care providers surveyed knew where to refer patients within the VHA for PTSD evaluation or treatment; however, only 15 percent knew where to refer in the outside community.

Primary care organizations need to find ways to maintain information about in-house, community, and national resources. Gathering and updating such information doesn't take long to do, but requires ongoing maintenance. Some large practices with collaborative, interdisciplinary staff may have employees such as nurse educators or social workers who are designated to collect, maintain, and check resources such as psycho-educational materials and nearby sources of referral. Practices without this built-in resource may have to come up with creative methods such as assigning an interested member of the office staff or collaborating with other small practices in the area to collect, maintain, and share information.

The PCP cannot be a specialist in all areas, and does not need to solve all problems on his or her own. Allies and colleagues within the treatment environment (including nonmedical office staff) and in the community can collaborate with PCPs to provide support to both patient and PCP. Some health care systems are interdisciplinary and integrative to the degree that a PCP is a short walk down the hall from a mental health colleague. Those without such resources challenge PCPs to collaborate with trauma specialists outside their own practice or organization.

Competency is not just an individual issue but a team and organizational issue. A number of disclosure study providers spoke about the importance of a team approach in meeting patients' needs. Below, a nurse-practitioner describes coordinated efforts to treat a "difficult" patient:

> Pelvic pain is one of those things.... I'm thinking of two particular patients who insisted they wanted severe radical surgeries. They were absolutely convinced that they needed their colon resected or they needed their ovaries out or these kinds of things, and it was all healthy tissue.... We were able to get [one patient] some good counseling. We were able to all stay on the same page and my job was to coordinate all the providers, because she would bounce from provider to provider and try to split and manipulate. We kept her all on the same page and she was able to get [to] a place [where] that was not her focus ... and her level of functioning was much higher than when she first came to see us.

This provider benefited from the mentorship of a psychiatrist in her organization:

> I watched her in action and probably the most instructive thing that I could do was to watch her set limits with patients, and just be very matter-of-fact about it. "No, we're not going to do that and here's why, but here's what we can do." We try to give people options. You never just want to shut somebody down. On the other hand, you don't want to be manipulated. So you stand on the same page with everybody else who has seen them, and you use them for support.

The chronic care model (e.g., Wagner et al., 2001, 2005) was developed as a way to conceptualize treatment of chronic physical and mental illnesses. It presents treatment in terms of multiple interactions and partnerships among patients, the practice team, the health system, and the community. If the identification and treatment of trauma-related distress is conceptualized in this manner, competency does not rest on the shoulders of the PCP alone but is shared by the members of the medical team and organization, the greater community, and the patient. The comprehensive website at http://www.improvingchroniccare.org/change/index.html provides additional information about this model. Also see Nicolaidis and Touhouliotis (2006) for an exploration of the relevance of the chronic care model to health care for IPV survivors.

Another concern of providers mentioned in Sugg and Inui (1992) was control over the outcome. This concern may stem in part from providers' unrealistic (i.e., inflated) sense of their responsibilities. For example, Nicolaidis, Curry, and Gerrity (2004a) found that a majority of primary care health care workers agreed with the statement that "A provider's responsibility includes making sure a patient gets to a shelter right away if he or she discloses abuse." In fact, this is not a responsibility of the provider, and is not the only or the best solution for everyone who experiences domestic violence; people who experience domestic violence often go through different stages of readiness to change and are not necessarily ready to take dramatic steps immediately upon disclosure (Nicolaidis, 2002).

A number of women interviewed by Chang et al. (2003) said they benefited simply from speaking about their abuse with someone whom they respected and whom they perceived cared about them. They did not necessarily expect a major change to occur at that moment, but often described the experience as one in which a door was opened or a seed planted. Mol et al. (2002), who surveyed both male and female primary care patients with trauma histories, found that they primarily wanted "sympathy, 'a number of good talks,' and care for physical complaints" (p. 390).

Another way for providers to reframe the issue of control is to consider that it is positive that the patient, not the provider, controls the outcome. Individuals who have suffered trauma—especially interpersonal violence—have been controlled at the hands of others, whether the "other" is a parent, a spouse, or a military interrogator. Thus, in the medical setting it is important for them not to be or feel controlled by others. Veterans and providers interviewed for the disclosure study emphasized that although it is good to ask about trauma, it is equally important not to push the patient to disclose or seek help or to label him or her as "crazy." Choices must be left in the hands of the patient.

Familiarity with the transtheoretical or stages of change model (e.g., Prochaska et al., 1994; Prochaska & Diclemente, 1986) can help clinicians to understand, accept, and work with patients' readiness to disclose and/or seek treatment. This model features five stages. In the precontemplation stage, the individual is unwilling to change and/or unaware of the need for change. In the contemplation stage, the individual is considering action, but has not taken practical steps toward it. In the preparation stage, the individual intends to take steps soon. In the action stage, the individual takes practical, observable steps toward change. Finally, in the maintenance stage, an individual maintains positive changes that have already been made, and takes steps to avoid relapse.

Although this model has traditionally been used in the context of overcoming addiction, it has more recently been applied to more general aspects of health-related behavior and the first two stages in particular could be conceptualized in terms of trauma disclosure for a patient suffering from trauma-related distress. For example, if a patient is in the precontemplation stage with regard to disclosure and help-seeking, it is doubtful that queries about traumatic distress or suggestions to seek help for symptoms will elicit much if any response. Two male combat veterans expressed this in their own ways:

> I wasn't ready to sober up until I got to the point to where I was ready, and then I wasn't willing to deal with my trauma. I wasn't ready to deal with the war until I got sober enough to have my brain to where I could think. So there was just a sequence of preconditions practically before it got me in the habit of giving the facts.

> You get ticked off for no reason and you don't want to accept that. You feel like nobody understands you. You don't want to accept the responsibility for your actions. You want to blame somebody else. You want to rationalize….You did this. No I didn't. Ah! You're full of shit! Then you walk out or you punch him out…. So when you come to see the PTSD person for the first time, you've got to admit to yourself and to your spouse … that you've got some problems. And if you're not willing to admit that, you're not going to get any help.

In the contemplation stage the individual begins to consider embarking on a journey of change. This stage is often marked by ambivalence, as expressed by this veteran:

> Okay, well, I'll accept the help. That's the next step. You got to be willing to say, "Yeah, maybe I do need help." But there is always that doubt there that everybody else is full of shit and you're right!

These two stages are most likely the most frustrating for the provider, to whom it may be obvious that the patient is suffering and perhaps causing suffering to those around him or her as well. These are the stages in which providers tend to make negative judgments and assumptions about patients, such as, "It's obvious that she ought to take her children and go to a shelter—she must want to be abused," or "This man is an idiot not to see how his anger is affecting his family—no wonder his children aren't talking to him." These are the stages in which the provider may also have unkind feelings toward him- or herself or the helping professions, such as, "Why do I even bother? Nothing I do with this patient makes a difference," or "Perhaps I should have been a car mechanic instead of a doctor—at least then my relationship with my 'patients' would be more straightforward."

These stages of change are normative, and regardless of the provider's wishes, the patient will go at his or her own speed. This does not mean clinicians cannot make a difference. For example, screening or a concerned inquiry at the precontemplation stage might plant a seed that will help move the patient along to contemplation. Providing information, a specific referral, or a list of community resources can help the patient plan or take action, or in terms of the model move on to the preparation or action stages. As stated previously, many of the veterans in our disclosure study waited years before they disclosed or sought help. Some received multiple messages from family members, providers, friends, and work supervisors that they could benefit from making changes. Ultimately, most listened, but their "listening timetable" did not conform to that of the well-wishers around them.

Finally, providers in the Sugg and Inui study (1992) mentioned time as a barrier. This is an important and real limitation mentioned frequently by patients as well. In fact, many trauma survivors are hypervigilant for any sign that their PCP is in a rush or otherwise unavailable to them. Any hint that a provider is concerned about time is sometimes interpreted as a sign of not caring or being untrustworthy. One veteran in the disclosure study likened the primary care clinic to a fast food restaurant where "You come in. Order. Then you go out.... And that's why I didn't go into detail with them." Another stated:

> ..... I was pushed in and I was pushed out very quickly.... I felt lonely. I felt betrayed. Then I said, well, I've lived with this problem for so long that I don't need them and they didn't understand how I felt. Most of them were interns and probably never experienced a trauma situation in their life so they didn't know how I felt.

Patients mentioned body language (such as fidgeting), manner of asking questions, and actions such as looking repeatedly at the clock as cues that providers were overly concerned about moving on.

If patients are not revealing important aspects of their physical and emotional health due to time issues, their best interests are not being served. On the other hand, providers in modern health care systems have very real time pressures that cannot be ignored. Conceptualizing the identification of trauma-related distress as a team rather than an individual responsibility, as described above, can help. Comfort and skill in setting limits with patients can also help.

Finally, some providers make the decision that spending more time with a patient under certain circumstances is worthwhile. Physicians in a study by Glowa, Frazier, Wang, Eaker, & Osterling (2003) acknowledged that IPV disclosure meant more work for the physician, yet also expressed a belief that it improved the doctor-patient relationship.

Is Disclosure Always "Good?" And How Can Providers Be Sensitive to Potential Pitfalls?

Providers' caution about the potential of opening Pandora's box is sometimes well founded. Disclosure can be difficult and the responses of those who hear the disclosure can have a powerful effect on the speaker. Previously, I cited Bolton et al.'s study (2003) showing that returning peacekeepers appeared to benefit from disclosing to supportive others. The word "supportive" is key, because those who did not feel their listeners were supportive experienced adjustment problems similar to those who had not disclosed at all. Campbell, Ahrens, Sefl, Wasco, and Barnes (2001) reported that women who had received supportive social reactions to their experience of rape had fewer health and emotional problems than those who reported responses they perceived as hurtful.

Although a number of veterans in the disclosure study expressed ambivalence about disclosure, the majority (more than 70%) were glad that they had disclosed that first time. Some of the most positive things veterans had to say about disclosure are as follows:

> I've been given like a reprieve, I mean like an awakening [laughs], slowly but surely. I'm understanding a lot of things that I didn't understand then.... I'm learning so much just from that little class [PSTD 101] that we're having.... I've learned that I have to learn by opening up my ears and opening up my eyes and shutting my mouth. (58-year-old male veteran)

> It was a big relief, like I had been locked in a cage for so many years and then all of a sudden someone just opened the door. It was a relief of ... finally I admitted it to somebody, and not be afraid. Because you were always being threatened, being threatened, being threatened.... I'm glad. I'm grateful and thankful to God that I came, even if it meant saying that to somebody about incest. I don't care now. I just wanted to feel better about myself. (60-year-old female veteran)

Not all veterans interviewed, however, were as positive about their disclosure experiences. Several experienced increased symptoms for some time afterward, including more frequent nightmares, flashbacks, and/or urges to use substances. A psychologist who works with combat veterans said this about the experiences of some of her patients following Compensation and Pension (C&P) interviews:[3]

> They don't know if they are ever going to see us again, and that's one of the things that they have a really hard time with when they go to see C&Ps.... They are being asked to disclose traumatic events.... I have had people hospitalized from having to go through that process.

Disclosure of past trauma can bring up issues that pertain not only to the original trauma but to later, connected events. One disclosure study veteran who expressed negative feelings about her disclosure had experienced military rape. Her adolescent son, who had not yet been told about his origins, was conceived as a result. Once she disclosed the trauma to health care providers, she began to consider whether she should also disclose to her son, a decision that was fraught with very real concerns and fears related to their relationship and his emotional well-being. As she expressed it, "I said to myself I opened a whole freaking can of worms, and I said to myself, my wall is tumbling down and it's cracking. My steel wall is cracking."

Because disclosure can be painful, it's important to imagine and empathize with the potential emotional state and beliefs of the trauma survivor, who may dread disclosure yet simultaneously wish for it. In the following disclosure study quotation, a 53-year-old veteran who had not yet disclosed past trauma from early adulthood shared his fears and wishes:

> I'm in control now. To relive the things that happened to me ... I'm afraid would rekindle the anger again, and I'm not sure that I really have a handle on it, I'm gonna be honest with you, because I still get very mad. The good thing about it is that further disclosure might help me understand on how to not let that happen. You know, to me it's a gamble. Do I further educate myself about my problem and seek the medical help from professionals who could help me? ... I got to have confidence in your end of the field.... That's like a marriage. Are you going to be truthful to me? And faithful to me?

Many trauma survivors spend years fending off traumatic memories through dissociation, distraction, overwork, or substance abuse. This combat veteran, who had not yet disclosed to a health provider, described what happened once when he allowed himself to be sober for a short time:

> I was going through the 28-day program ... and when I got sober I had a nightmare, and it was like I had two broken legs and I'm on the ground and here comes a guy with a big bayonet and he's going to pig-stick me, and I couldn't get away. And the next thing I knew I was standing on my feet in a dark room with my fists clenched, ready to swing, cold sweat and all that, and I said wait a minute. There is something wrong here.

He, like many survivors, would not easily surrender his defenses against the difficult memories and feelings that could emerge when the traumas are admitted into consciousness.

The Disclosure Experience: Keeping It Safe

> I think it should be a routine question.... Do you have any traumas that you have suffered that we need to know about? It's like saying, yeah I'm allergic to penicillin. Yeah, I had an incident in Vietnam where I saw a guy that got killed. Repetition is the mother of all skills, and the more that it's brought up the more that the health providers treat it as, it's normal for you to have these problems.... Like a guy comes in, have you had any problems in traumas this week? Have you seen anybody get killed on the freeway? (53-year-old male Vietnam veteran)

This veteran's emphasis on the importance of routine trauma queries may be conceptualized on more than one level. There is the explicit level related to gathering information. Above and beyond that, routine inquiries about trauma deliver important meta-messages, such as, "Trauma is a valid topic to bring up in this environment," "We are concerned about you as a whole person, not just a biological entity," and "Many people experience trauma and it is normal to have reactions to it."

As stated previously, providers sometimes (rightly) fear that first disclosure can bring up strong emotions they have neither the skills nor the time to handle. Veterans and health professionals interviewed for the disclosure study offered excellent words of advice on this issue. Both groups converged in the viewpoint that it can be injurious to the patient to disclose in too great a detail during a time-limited medical appointment. As one Vet Center counselor put it:

> Don't bring a veteran with sexual or war trauma, and ... then you start asking about their trauma and shut them down.... There is no perfect solution. But I think you can [educate] the veteran. Be up front. Just say, listen I only got ten minutes ... and this is what we're going to do. I'm going to ask you this. If I think you have post-traumatic stress I'm going to refer you to [someone who can help], so before we start do you have any questions? ... The second thing is if you don't have the training and the background to deal with trauma issues you shouldn't put yourself in that kind of position where you can't deal with how to teach people how to process their emotions. And then along with that, be aware of your own emotions. Be aware of your transference. Because you're going to have some angry people at times, and what you do and say can escalate that situation. And the last thing you want is a client jumping on your desk and trying to choke you.

The psychiatrist quoted below agreed with the benefit of educating and setting limits with the patient prior to inquiring about trauma-related experiences or symptoms.

> Providers get into this pattern when they are overwhelmed themselves. The situation creates a lot of stress because the provider realizes he or she is not helping the patient or not providing as much as the patient needs. It's OK to be explicit that the problem is an important one but not appropriate to discuss right now.... It is probably better to handle the situation explicitly, rather than communicating implicitly that it's not OK to bring the topic up.

Another example of helpful advice is demonstrated in a nurse-practitioner's words for medical providers who do not have the training or time to explore trauma details with patients, but need to or want to screen:

> The standard response is supposed to be, "Do you feel you need to see someone today?" If they start first of all to go into details, you need to stop them and say, "I'm not the right person to tell this to and I want you to get the right care, so I'll be glad to take you to see someone and get you down there to urgent care." If they don't, you know, they want to be seen but they're not in a state of acute distress, then we recommend that they [PCPs] refer them [elsewhere] depending upon the problem.

Thus, detailed disclosure of actual incidents can lead to retraumatization and is best done with the support of a provider who has experience in trauma treatment. There are ways, however, to effectively inquire about trauma without causing new trauma.

Guidelines for Effectively Inquiring about Previous Trauma

Based on the advice of both provider and patient participants in the disclosure study, the following guidelines are offered.

First, if the patient begins to disclose details of past trauma in a manner that indicates strong affect, the professional can provide explicit information about the limits of the present session, and help to "contain" the event in a healthy, compassionate manner. For example, the provider can communicate that seeking to limit disclosure details at this moment comes from a position of caring, because opening up only to be cut off can cause the patient additional pain, which the provider does not want the patient to suffer. These limits are practical, not personal.

The provider can offer that for further aspects of disclosure, and/or potential help for distress, a future appointment can be made with the same provider (if handling trauma is within the provider's range of competence) or a referral can be made to someone with expertise in this area. Some providers may feel comfortable openly and directly stating that trauma is not their area of expertise, so they are afraid that they will not be able to help the patient properly if the patient goes too deeply into the trauma. This lack of expertise is the provider's "problem," not the patient's.

The provider can also "normalize" the distress by conveying that trauma is part of the human condition, and it is possible to feel better. By "normalize," I do not mean to imply that trauma is not of concern—simply that it affects many people.

Finally, as previously stated, it is the patient who must decide what next step to take, if any. The provider is well within the realms of appropriateness to offer help if desired (e.g., a follow-up appointment or referral), to provide psychoeducation (e.g., a pamphlet about PTSD, a list of community resources), or even an opinion or observation (e.g., "I have seen a number of people that have been through a similar experience feel a lot better after x, y, or z, and I think you could benefit from it too"). As stated above, it is important to remember how vulnerable and/or angry trauma survivors can feel if they suspect that they are being pushed or controlled. Of course, if the disclosure relates to current, ongoing trauma such as IPV, the scenario is different, and must include an active exploration of the patient's present level of physical safety to determine if imminent action is warranted.

These approaches will not work for all patients. An experienced provider who has a strong, long-term relationship with a patient can generally "push" more than one who barely knows the patient and/or is not yet trusted or respected by the patient. Although many patients are comforted by knowing that they are not alone in what they have experienced, others might interpret negatively the reassurance that others have gone through similar experiences ("So, you're saying that lots of people go through this? So what's wrong with me that I can't live with it?"). No matter how helpfully a provider offers a potential referral, there will always be patients who interpret this as an assertion that they are "crazy." As stated above, patients with trauma-related distress can be hypervigilant for any sign that the provider cannot be trusted, and there is no sure way to know what word or glance will send the patient into either anger or disconnection. Generally, however, patients realize that the PCP is primarily trained as a biomedical and not a mental health expert. Although they want their PCP to be interested in them as a whole person, they are, at the same time, often all too cognizant of the time limitations inherent in today's health care system. Thus, by setting compassionate limits, the provider is generally not communicating anything that the patient does not already know. Not every patient will be happy with such limits, but many will appreciate the containment.

How questions are asked was viewed as important by veterans in the disclosure study. They preferred a direct, matter-of-fact style that invites the patient to identify whether or not trauma or trauma-related distress is an issue without eliciting detailed explanation of the event or feelings about it. Veterans expressed this opinion in a number of ways:

> A: I think if you ask the questions that basically say "yes" or "no" versus explaining to somebody, you'd get a better result. Because it's like you're sitting there with this person who wants to interview you and she doesn't know jack shit about what you've been through. So how can she ask you questions about what you've done, see? So if you would ask the questions as it would require a "yes" or "no" answer, a series of those, I think you would get a lot more out of an individual….
>
> Q: … It sounds like you're saying that you found it helpful to have very specific questions rather than putting it in your lap and saying, "Tell me what's wrong?"
>
> A: Exactly, "Did you take mortar fire? … Did you kill anybody? Did you see anybody get killed?" You know, instead of "What was your traumatic experience?" … You'll find a lot of people don't want to talk about what happened because all it does is bring back the flashbacks and then you go into a depression and you don't care if you would kill yourself. And that's why I say if you could answer "yes" or "no."

Providers must be aware that sometimes individuals who may not have disclosed a trauma for many years will come forward to disclose it because they are in extreme distress. For a patient prompted to disclose due to intense levels of distress, it is both appropriate and important to assess for suicidality. Quick instrumental assistance may be needed, whether it be inpatient hospitalization, referral to specialty mental health care, and/or medication.

There was no consensus among disclosure study participants regarding the preferred format of questions. Some veterans believed the questions should be presented on paper in the form of a questionnaire. That way, the patient might feel more comfortable responding to the question honestly rather than under the perceived pressure of an interpersonal process (i.e., the provider asking the questions verbally). Others preferred an interpersonal mode of asking and responding to questions.

Unfortunately, the research does not yet exist that tells us definitively what forms of inquiry are best for patients or under exactly what circumstances inquiries about trauma-related distress lead to the best outcomes. This is where providers' common sense, intuition, knowledge of their patients, wisdom gained from similar situations, and support and training from others can make important differences in the health and lives of patients, as well as the meaningfulness of the work.

The PLISSIT Model: Borrowing from Sexual Rehabilitation

Primary care clinicians may consider borrowing a model of psycho-education and intervention from another discipline—sexual rehabilitation. The PLISSIT model was introduced in the 1970s (see Annon, 1976), and remains in use in the fields of sexual counseling and rehabilitation. Unlike the stages of change model, which capitalizes on the patient's stage of readiness to act or change, the PLISSIT model focuses on the state of readiness and comfort of the provider. Briefly, the levels of professional comfort represented in this hierarchical model are permission (P), limited information (LI), specific suggestions (SS), and intensive therapy (IT). At the most basic level or rung of the hierarchy, the health professional can acknowledge that sexuality is an important, natural part of life, and convey to the patient that discussion about sexuality is permissible (P). Limited information (LI) can be provided concerning specific concerns the patient might have. Specific suggestions (SS) of behavior change are used to help the patient explore viable sexual potentials and techniques. Finally, the health professional at the highest rung of the model can provide intensive therapy (IT), which might deal with complex personal and social issues related to sexuality.

This model can be easily and practically applied to the recognition and treatment of trauma-related distress. It is reasonable to expect PCPs to be minimally at the permission level—this would correspond to being able to comfortably inquire about trauma experiences and communicate to the patient that discussion of this topic is appropriate and permissible within the health care setting. At the limited information level, a provider might ascertain if the patient is experiencing trauma-related distress and provide psycho-education related to these symptoms. The clinician might also provide information related to educational and/or treatment options available within the health care system or larger community. This is where a discussion of a potential medication trial or an offer for a specific type of referral would fit. With practice and compassionate limit-setting, both of these levels could conceivably be navigated without going into depth at that moment about the patient's trauma experiences.

The specific suggestions and intensive therapy levels of intervention would be outside of most PCPs' capacity to handle during the course of a primary care encounter, and would most likely involve collaboration and/or referral. This level might correspond to something like a "PTSD 101" group, where the patient learns both information and skills to better cope with PTSD-related issues. The intensive therapy level would correspond to formal group or individual therapy.

Conclusion

Several important themes and research studies related to disclosure of trauma in the medical setting have been outlined. Clearly, different situations call for different responses. An individual who is currently being victimized by an intimate partner has different needs from a combat veteran whose major trauma took place 40 years ago. Someone who experienced repeated childhood abuse over a period of many years may present very differently to the health professional than the recent victim of violent assault whose world up to that event has felt secure. Regardless of the cause or presentation of trauma-related distress, the first step is often the same—for the trauma to be disclosed. Once this occurs, a wide variety of steps can be taken, from none if this is the patient's preference, to immediate instrumental help (such as linking up a battered woman with a shelter and/or law enforcement or the legal system), or referrals for medication, psychotherapy, or other types of support.

Trauma is not only an individual experience; it is a public health issue affecting the mental and physical health of millions. Because of its prevalence in the medical environment, and because of the central place of primary care in a wide variety of healthcare systems, PCPs are in a position to be of tremendous support to patients suffering from trauma-related distress.

Acknowledgments

The disclosure study cited numerous times in this text was supported by the Department of Veterans Affairs, Veterans Health Administration, Health Services Research and Development Service and the Office of Academic Affiliations (TPP 98-002) while Dr. Leibowitz was a post doctoral fellow at the VERDICT Health Services Research Center at the South Texas Veterans Health Care System. The views expressed in this article are the author's and do not necessarily reflect the position or policy of the Department of Veteran Affairs. Gratitude is extended to study collaborators Matt Jeffreys, MD, Polly Noel, PhD, and Laurel Copeland, PhD, Dianne, Dunn, Ph.D., John Casada, MD and Yvette Huerta, MSW lent their combined expertise to the interview process, and Nedal Arar, PhD is providing mentorship with ongoing interpretation and coding. F. David Schneider, MD, contributed conceptually to this chapter. The author extends a particularly hearty thank-you to the veterans and clinicians who gave of their time and wisdom to teach us about the phenomenon of disclosure.

Notes

1. A *Criterion A* trauma is defined in the fourth edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (*DSM–IV*, 1994) as experiencing or witnessing an event "that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others" in which "the person's response involved intense fear, helplessness, or horror."

2. Vet Centers provide numerous services, including counseling to veterans who have served in a combat zone.

3. Clinical interviews used to help determine whether veterans will receive ongoing support for service-connected injury or disability.

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Resources

Please note that the Web sites and organizations listed below are only a few of many helpful ones available. Many have links to other related resources.

Resources Specific to Trauma and Trauma-Related Distress

American Psychological Association Online: Resources on Coping with Traumatic Events
http://www.apa.org/practice/ptresources.html
Lists a number of trauma resources that are helpful for both providers and patients.

The Center on Women, Violence, and Trauma
http://www.mentalhealth.samhsa.gov/womenandtrauma/
Part of Substance Abuse and Mental Health Services Administration (SAMHSA). Two goals of the center are to "develop leadership networks" and to "stimulate local change."

Childhelp U.S.A.
http://www.childhelpusa.org
This organization provides a National Child Abuse Hotline at 1-800-4-A-CHILD for abused children, caregivers, professionals, and adults survivors of child abuse. The organization has information on a wide network of local resources.

Family Violence Prevention Fund
383 Rhode Island St., Suite #304
San Beverlyco, CA 94103-5133
Phone: 415-252-8900
http://endabuse.org/
This organization "works to prevent violence within the home, and in the community, to help those whose lives are devastated by violence because everyone has the right to live free of violence." It does legislative work, promotes community education about family violence, and has excellent resources for providers.

From Within: An International Nonprofit Organization for Survivors of Trauma and Victimization
http://www.giftfromwithin.org/
Features Internet links, publication links, support group information, and more.

Healing Resources.info: Preventing and Healing Stress-Related Problems
http://www.traumaresources.org/
This nonprofit site includes a wide range of resources for people with stress-related disorders, including PTSD.

The International Society for Traumatic Stress Studies
This international organization includes researchers, providers, laypeople, educators, and more, and focuses on all aspects and types of trauma.
Trauma resources and links: http://www.istss.org/resources/index.htm

National Center for PTSD
http://www.ncptsd.va.gov/index.html
Contains information on PTSD assessment (including screening instruments), treatment, literature, links to other organizations, and more.

The PTSD Alliance
http://www.ptsdalliance.org/home2.html
877-507-PTSD
"A group of professional and advocacy organizations that have joined forces to provide educational resources to individuals diagnosed with PTSD and their loved ones; those at risk for developing PTSD; and medical, healthcare and other frontline professionals."

Rape Abuse and Incest National Network (RAINN)
"RAINN operates the National Sexual Assault Hotline and carries out

programs to prevent sexual assault, help victims and ensure that rapists are brought to justice."
http://www.rainn.org/
This group's national sexual assault hotline is free and confidential. Hotline: 1-800-656-HOPE
It provides information on local rape crisis centers.

The Sidran Institute: Traumatic Stress Education and Advocacy
http://www.sidran.org/
200 E. Joppa Road, Suite 207
Towson, MD 21286
Phone: 410-825-8888
"We help people understand, manage, and treat trauma and dissociation."

Miscellaneous Resources

Information on the Transtheoretical Model
http://www.uri.edu/research/cprc/transtheoretical.htm
Introduces and describes the stages of change model, and lists publications in this area.

Information on the Chronic Care Model
http://www.improvingchroniccare.org/change/model/components.html
Introduces, summarizes, and illustrates the model, and provides clinical tools and resources.

American Academy on Communication in Healthcare
http://www.aachonline.org/
This organization describes its goal as "to change the practice of medicine by helping clinicians and patients, and learners and teachers relate more effectively."

The Institute for Healthcare Communication
555 Long Wharf Drive
13th Floor
New Haven, CT 06511-5901
"Dedicated to enhancing the dialogue between clinicians and patients through education, research, and advocacy." This organization conducts training and does research on provider-patient communication.
http://www.healthcarecomm.com/index.php
Phone: 800-800-5907 or 203-772-8280
Fax: 203-772-1066
e-mail info@healthcarecomm.org

CHAPTER 9

YOUTH HOMELESSNESS AND TRAUMA

Sanna J. Thompson

Homeless adolescents are some of this nation's most vulnerable and underserved youth and comprise approximately one-quarter of all people who are homeless (Cauce et al., 2000). Although it is difficult to determine the exact number of youth who are homeless in the United States, estimates indicate that between 500,000 and two million youth run away and spend some period of time in emergency shelters or on the streets every year (Farrow, Deisher, Brown, Kulig, & Kipke, 1992). Since it is difficult to determine the actual number of youth identified as runaway or homeless, it is clear they are a group of youth living in precarious, unstable, and often abusive situations.

Homelessness among youth populations has serious consequences for public health. As these unaccompanied youth live in shelters and on the streets, they are at higher risk for a variety of public health concerns, such as physical/sexual abuse, high-risk sexual behavior, HIV/AIDS, suicide, and a variety of mental health problems. Engaging in high-risk behaviors often exposes these young people to high levels of violence and involvement in a variety of dangerous and illegal behaviors. These activities often prevent them from finding gainful employment and transitioning off the streets, and this leads to requiring public resources to meet basic needs, such as housing, food, and medical care. For example, health care systems are affected by homeless youth who do not receive preventative care, become seriously ill, and require expensive treatment. As they often cannot be discharged due their lack of a medically appropriate placement, hospital stays are longer and more costly. Some have suggested that an average homeless individual utilizes over $40,000 annually in publicly funded shelters, hospitals, emergency rooms, jails, and so forth (Chronic Homelessness, 2006). Thus, the costs to society of continued homelessness among young people into their adulthood are staggering.

Attempts to define and categorize homeless youth have suggested that a developmental trajectory beginning with the initial runaway episode and leading to immersion in street culture and homelessness can assist in understanding the wide range of characteristics evidenced by these youth (Patel & Greydanus, 2002; Smoller, 1999). Researchers identify "runaway" youth as adolescents under 19 years of age who have spent at least one night away from home without parental permission (Ringwalt, Greene, Robertson, & McPheeters, 1998). Runaway youth typically stay away for a day or two, mainly as a result of conflict or intolerable situations with parents/caregivers at home. For these young people, running away may be a rational decision because of the high likelihood of exposure to harm and danger. On the other hand, others run away believing that a more exciting life with few rules and limits awaits them (Lindsey, Kurtz, Jarvis, Williams, & Nackerud, 2000; Zide & Cherry, 1992). Most research, however, confirms that running away is often a last resort for adolescents dealing with unbearable situations, not simply a search for freedom and adventure (Hyde, 2005; Schaffner, 1998). Regardless of their reason for running away, these adolescents typically return to their families within a short time, do not experience the strains of living independently on the streets, and are not considered homeless.

Homeless youth, the focus of this chapter, are defined as those who have run away from their homes, remain away for extended periods of time, and have little or no connection to their families or caretakers (Smoller, 1999). These youth lack a fixed, regular, or adequate night-time residence, often seeking shelter in public places (e.g. parks, highway underpasses), in abandoned buildings, or with a stranger (Patel & Greydanus et al., 2002). In order to survive, homeless young people tend to be immersed in the "street economy," where they are associated with other street-involved youth who get most, if not all, of their needs met through eating at soup kitchens, sleeping outdoors, and "spare-changing" (begging) for money (Roy et al., 2004). The longer these youth are exposed to life on the streets, the more likely they are to become acculturated to the streets and the street economy (Auerswald & Eyre, 2002; Gaetz, 2004; Kidd, 2003).

Not all youth leave home by choice; many are pushed out or forced to leave. These youth are often referred to as "throwaway, push-outs, or forsaken youth" (Powers, Eckenrode, & Jaklitsch, 1990). Some of these youth are abandoned or deserted by parents, others are not allowed to return home even if they desire to do so, and others are coerced into leaving due to continual neglect and/or maltreatment. The members of this subgroup of homeless youth reportedly comprise approximately 50 percent of homeless adolescents and as a groupare more likely to attempt suicide, abuse drugs and/or alcohol, and engage in criminal activity (Ringwalt, Greene, & Robertson, 1998).

A final category of homeless youth, termed "doubly homeless," is composed of adolescents who have been removed from their homes by state authorities, placed in unsuitable settings, and run away from those placements. Many of these youth report being abused by foster families and feel anger and resentment at placements where they do not feel a sense of belonging, comfort, or safety (Williams, Lindsey, Kurtz, & Jarvis, 2001). Although the foster care system was designed to provide temporary care, youth may remain in state custody for years. Among adolescents admitted to foster care, many "age out" or transition from foster care to legal emancipation. These youth enter society with few resources and numerous challenges, often becoming homeless due to lack of stable housing, insufficient financial support, and poor independent living skills (Zlotnick & Robertson, 1999). "Doubly homeless" adolescents are believed to represent approximately 18 percent of the homeless youth population and come from the most problematic family backgrounds of all homeless youth (MacLean, Embry, & Cauce, 1999).

Why Youth Become Homeless

Several factors have been identified as reasons why youth leave home prematurely; however, family conflict is often the primary reason adolescents give for running away (Hyde, 2005; Tyler, Hoyt, Whitbeck, & Cauce, 2001a; Whitbeck, 1999). Almost without exception, families of homeless youth experience high levels of discord and poor communication. Verbal aggression between family members is common and creates a catalyst for conflict (Slesnick & Prestopnik, 2004). Conflict is also compounded by the lack of emotional cohesion or warmth that aids in holding a family together (Thompson, Kost, & Pollio, 2003; Whitbeck, 1999). Homeless youth are more likely to come from families that lack parental responsiveness, social support, and supervision; rejection by parents/caregivers is common (Whitbeck, Hoyt, & Bao, 2000). These young people report several issues that cause conflict with their parents or guardians, including parental and/or youth substance use, religious beliefs, sexual orientation, school performance, and personal style such as dress, hair color, or body piercing (Cochran, Stewart, Ginzler, & Cauce, 2002).

For youth who run away and become homeless, family dysfunction has often escalated from interfamily conflict to maltreatment (Thompson, Zittel-Palamra, & Maccio, 2004). These severely disturbed families exhibit high levels of child abuse, neglect, and family violence that significantly contribute to runaway behavior. Several research studies confirm that 60–75 percent of youth who run away have been maltreated by their families and conclude that the amount of family violence in these young people's background is remarkable (Kufeldt, Durieux, & Nimmo, 1992; Whitbeck & Simons, 1990). Homeless youth frequently report physical abuse that involves long and severe beatings, being kicked, slapped, and generally beaten up (Powers et al., 1990). Sexual abuse, generally measured by verbal requests for sexual favors, being touched sexually against one's will, and being forced to engage in sexual activities against one's will, is more commonly reported by girls (Simons & Whitbeck, 1991). Neglect, however, is common and evidenced by parents' inadequate guardianship, abandonment, lack of supervision, and failure to provide adequate food, clothing, and medical care (Whitbeck & Simons, 1990). These situations of chronic intrafamilial violence can erode the sense of safety, security, and cohesiveness on which family life is built. Thus, physically and sexually abused youth run away more often, stay away longer, and suffer serious psychological consequences, such as depression, suicide, and posttraumatic stress disorder (Ryan, Kilmer, Cauce, Watanabe, & Hoyt, 2000).

Homeless Youth Victimization

The research literature consistently suggests that although many youth leave their homes prematurely to escape a violent environment or abusive family, life on their own is not easier or safer then the life they left behind (Safyer, Thompson, Maccio, Zittel, & Forehand, 2000; Whitbeck, Hoyt, & Ackley, 1997). The risk of victimization while on the streets becomes a constant concern and an increased problem for youth who have been abused while in the home, as abused adolescents are significantly more vulnerable to assault on the streets than are adolescents with no history of abuse (Ryan et al., 2000). Increased time spent living on the streets increases the risk for victimization as they spend large amounts of time in public places, especially at night. They also become engaged in deviant survival strategies, such as panhandling, selling sexual favors, and dealing drugs, which increase their risk for criminal assault and other forms of victimization. Other known factors contributing to increased victimization include economic deprivation, involvement with delinquent peers, being younger, staying for longer periods of time on the streets, and engaging in survival sex (Yoder, Whitbeck, & Hoyt, 2003). Reports by homeless youth indicate that 37 percent have been sexually victimized, 23 percent have been robbed, 45 percent have been beaten up, 50 percent have been threatened with a weapon, 35 percent have been assaulted with a weapon, 37 percent have been propositioned for sexual favors, and 21 percent have been sexually assaulted while on the streets (Tyler, Hoyt, Whitbeck, & Cauce, 2001b). Females are more likely to be victims of sexual assault and exploitation, while males are more likely to become victims of physial violence (Whitbeck & Simons, 1990). These high rates of exposure to various forms of violence and victimization increase the likelihood that homeless youth will develop serious psychological difficulties.

Trauma and Homeless Youth

A growing body of research suggests that traumatic experiences have numerous debilitating consequences and can impede a young person's normal development (Foa, Johnson, Feeny, & Treadwell, 2001). Exposure to trauma during critical developmental stages can derail emotional growth and adversely affect young people's self-esteem, emerging sense of self, developing conceptualization of the world, ability to relate to and trust others, manage stress, plan for the future, and avoid future victimization (Thompson, McManus, & Voss, 2006). Adolescents who lack fundamental cognitive, emotional, familial, societal, and cultural supports are more vulnerable to serious adverse effects when exposed to traumatic experiences or situations (Becker et al., 2004a). It is clear that youth who are homeless are exposed to high rates of trauma, both on the streets and prior to becoming homeless. It has also been argued that the experience of being homeless is in itself a form of psychological trauma, as life on the street is characterized by extremely impoverished conditions, constant threats to survival in terms of daily struggles to meet basic needs, repeated victimization, and frequent witness to violent crime (Ayerst, 1999; Fest, 2003). Consequently, homeless adolescents are particularly vulnerable to the detrimental effects of trauma exposure and ongoing victimization, resulting in the development of posttraumatic stress disorder symptoms (Stewart et al., 2004; Thompson, 2005).

Characteristic symptoms of posttraumatic stress disorder (PTSD) are classified in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition, text revision, 2000; *DSM–IV–TR*) into three clusters: (1) intrusive thoughts and reexperiencing the trauma; (2) avoidance and numbing; and (3) increased sense of arousal or hypervigilance. The likelihood of developing these symptoms and their severity are typically associated with the frequency and duration of trauma exposure (Carrion, Weems, Ray, & Reiss, 2002; Foa, & Meadows, 1997). One of the few studies identifying PTSD among homeless youth (Stewart et al., 2004) reported rates of symptom categories among a sample of 301 homeless youth: 24.6 percent experienced intrusive thoughts, 27.2 percent avoided thinking about the traumatic event, 22.9 percent noted a decrease in their range of emotions (numbing), and 45.8 percent reported increased arousal and hypervigilance.

One of the hallmarks of trauma symptomatology is intrusive thoughts related to the traumatic event, as well as persistent reexperiencing of the event via nightmares, flashbacks, and strong physical and emotional reactions (Carlson & Dalenberg, 2000; Kaysen, Resick, & Wise, 2003). Homeless youth may continue to have upsetting images of a traumatic event or situation and reexperience the harm they suffered. If they are forced to suffer trauma-inducing situations on a continual basis, as in constant threats of sexual assault or violence while on the street, these young people may develop strong physical and emotional reactions to experiences that remind them of the trauma experienced. They may respond by overreacting to certain "triggers" associated with the trauma, such as being in certain places and similar circumstances (Stewart et al., 2004).

Avoidant behaviors, such as efforts to avert thoughts, feelings, conversations, or activities associated with the trauma, are symptoms often experienced by an individual with PTSD. These symptoms are described by homeless youth who have left home to circumvent continued abuse from a family member, only to confront constant threats to survival and ongoing, chronic exposure to traumatic experiences while living on the street (Stewart et al., 2004). Attempting to forget the painful memories of abuse or victimization often leads to drug and/or alcohol abuse (Thompson, Zittel-Palamra, & Forehand, 2005). Therefore, addiction to drugs and/or alcohol becomes increasingly likely as the youth struggle to cope with past trauma by blunting their emotions. Although society would view these young people's drug and alcohol use as a hindrance to improving their lives and successfully transitioning off the street, numbing the daily experiences of life on the street is viewed by these young people as a common and useful strategy (Fest, 2003). The experience of finding oneself alone at the age of most homeless young people can exacerbate trauma-related symptoms. Thus, using drugs and/or alcohol is a means to forget the stress and danger of street life, avoid thoughts of past traumatic experiences, and obscure distress.

Specific manifestations of other symptoms of PTSD, such as hyperarousal, difficulty concentrating, irritability, and trouble sleeping are often described by homeless youth (Thompson, 2005). They report that falling and staying asleep are extremely difficult and they intentionally remain awake for days to guard their own safety and protect their belongings. Other forms of hyperarousal can be seen in youth's marked distrust of others, especially adults (Kidd, 2003; Whitbeck & Hoyt, 1999). As many have been exploited and victimized by adults, including members of their own families, they become extremely distrustful and guarded in order to protect themselves against further victimization. This mistrust is evident in their underutilization of formal services and their suspicion of those in authority (Ayerst, 1999).

When the violence, molestation, and other trauma experiences occur repeatedly and come from several sources, the young person has little time to recover from one set of posttraumatic stress reactions before new ones are added. For example, a homeless young person may have been the victim of parental sexual abuse, then physically assaulted, raped, and/or witnessed a friend being shot while living on the street. This sequence of experiences does not "toughen up" the person; instead, each successive experience leads to more severe and chronic posttraumatic stress reactions and other developmental consequences. In fact, youth who have suffered from prior traumatic experiences may be more likely to react more intensely to successive traumatic situations (National Child Traumatic Stress Network, 2006). Thus, multiple traumatic experiences have adverse consequences on emotional processing and may impede the normal course of social and emotional development of these adolescents.

Given what we know about trauma among adolescents in general, the context of homeless youth's daily existence points to greater possibility for trauma-related experiences and symptoms. Trauma symptoms often co-occur with other disorders commonly found among homeless youth, such as mood, anxiety, substance abuse, and conduct disorders (Gadpaille, 2004). These comorbid factors, highly prevalent among homeless youth, may also exacerbate and/or mask trauma symptoms. Thus, homelessness and the experience of living on the street influence how trauma-related symptoms are manifested among these young people.

Homeless youth are more likely to experience complex responses to trauma that require special consideration from service providers (Foa, Keane, &

Friedman, 2000). Complex trauma refers to exposure to multiple, chronic, and/or prolonged, developmentally adverse traumatic events. Most often these experiences are of an interpersonal nature (e.g., sexual or physical abuse, community violence) with onset in early life. In violent environments, each trauma exposure may cause immediate traumatic reactions from which there is only incomplete recovery. When threats are ever present, coping mechanisms such as hypervigilance, emotional regulation, and avoidance may serve to provide a sense of control (Foa et al., 2000). With exposures to traumatic situations beginning in childhood and followed by further victimization after a young person has run away and turned to life on the streets, posttraumatic stress reactions may continue to develop over prolonged periods of time. Given the continuing traumatic situations to which these young people are exposed, service providers must be extremely sensitive to their desires for interaction and assistance (Stewart et al., 2004).

Homeless Youth Case Vignettes

As an example of the types of difficulties youth experience before and after becoming homeless, two case vignettes are described. These two cases, one male and one female, were chosen as they are typical of the hundreds of thousands of homeless youth who travel across this nation each year.

CASE EXAMPLE: CHRIS

Chris grew up in a family with an alcoholic father who would often come home from a night at the bar in an aggressive mood. He would become physically and verbally abusive to Chris's mother. It wasn't long before the drunken rages also targeted Chris. When Chris was 14, the beatings became markedly more frequent and severe. Not only was he being beaten when his father came home from a night of drinking, but he was also being beaten at other times when he was unsure of the cause that initiated his father's aggressive and violent outbursts. One day after a particularly horrendous beating, Chris decided he could not tolerate it any longer. He left home with a few belongings and sought refuge at a friend's house. His friend's mother was somewhat sympathetic to Chris's predicament and allowed him to sleep in a tent in their backyard. After a couple weeks with no attempt by Chris's parents to compel him to move back home, however, she became concerned and called Child Protective Services (CPS).

With involvement from CPS, Chris's Aunt Jane was contacted and agreed to temporarily take Chris into her home. Aunt Jane was a single mother of five young children and was overwhelmed by the responsibilities required to care for them. Although she initially felt obligated to care for Chris, she was resentful of the time, energy, and resources required to care for another child. She favored the needs of her own children over those of Chris; Chris's needs were simply ignored. He was treated as an enormous burden on the family and constantly berated for being unable to provide for or financially support himself.

Chris ran away from his aunt's house, certain that living anywhere other than where he was not wanted would be an improvement. After he spent a few nights sleeping in the woods near his house and missing school, CPS was again contacted and case workers picked him up. He was temporarily placed in a county detention facility while it was decided what to do with him. His parents were not allowed to take him back into their home and Aunt Jane felt Chris was just too much to handle. Thus, Chris was finally placed in a foster home with strangers. Chris again felt he didn't belong and was uncared for. In response, he became verbally belligerent, defiant, and abusive; he instigated several physical fights with his foster father when the foster father tried to enforce rules and boundaries with regard to Chris's behavior.

Chris responded by running away again. With nowhere to go and no one to turn to, he began sleeping in the park where he met some older homeless youth. Although these new "friends" picked on Chris and made fun of his inexperience concerning life on the street, they allowed him to hitchhike to San Francisco with them. On reaching their destination, however, the older homeless youth abandoned Chris, leaving him with no food, money, or place to stay. Chris didn't know where to go and ultimately camped with a group of homeless adults he happened across. He spent nights on the street but he couldn't sleep due to nightmares and always being worried that someone was going to assault him and take what few belongings he possessed. He had little appetite for the food he found when "dumpster diving" but had no resources to buy food or other necessities.

One of the homeless men Chris had been camping with recognized his vulnerability and inexperience on the street. He spent time teaching Chris how to "fly signs" (panhandle) for cash and showed him where he could get free food and clothing. The man also introduced Chris to heroin. Heroin made Chris feel good, as if everything was OK. It made him forget being hungry, feeling lonely and hopeless about his life. But Chris couldn't afford the drug, so he began selling it to others to get money to buy his own. Eventually, Chris was picked up by the police for drug distribution. He was convicted and ultimately sent by the juvenile courts to live with an uncle. His uncle required Chris to work in the uncle's construction business after school and on weekends, but Chris felt he was barely making enough money to pay for his basic necessities. He was bored and didn't like his uncle's imposed rules after his months of freedom. He knew there was violence, danger, and cruelty on the streets, but he was dissatisfied with his living conditions and uncomfortable with his uncle's constant supervision and monitoring of his behavior.

Once again, Chris ran away, this time from his uncle's home, and returned to the streets. During the next few years, he developed what other homeless kids called "street smarts." Living among other homeless youth, Chris became known as a "crusty" (an experienced, respected, and tough street youth). He learned how to protect himself physically by being aggressive and "hard core"; he protected himself emotionally by heavily using a variety of substances. One night, Chris found another homeless young man going through his things. Chris beat up the young man so severely that the police were called and Chris was arrested again. Chris was convicted and sent to a juvenile detention center for youth convicted of violent, criminal behaviors. Although protected from the stress and violence of the streets, Chris resided with youth far more violent and dangerous than he had known in the past. Chris was eventually released from detention, but with a criminal record and no home or family to which to return, the juvenile justice system was unsure where he should be placed. Now at age 21, he had exhausted all options for staying with family. He was ultimately released and returned to life on the street.

CASE EXAMPLE: MICHELLE

Michelle was 13 when her stepfather started coming into her bedroom at night. Due to threats of harm to herself and her little sister, Michelle was afraid to tell her mother about the sexual abuse she was experiencing. Her mother was also emotionally unstable and she often reacted with little emotional support for either of her daughters. Michelle responded to the abuse and her mother's indifference by changing her typical way of behaving. She stopped showering, her grades started slipping in school, and she avoided being at home as much as possible.

By the time Michelle was 15, one of her friends had acquired a car and Michelle accepted an invitation to go to Las Vegas on an unannounced weekend "road trip." She saw this as a way to escape the sexual assaults at home and did not tell her mother and stepfather where she was going. Arriving in Las Vegas was exciting at first. Michelle's friend knew some people who lived there and they let Michelle and her friend stay for the weekend. The weekend, however, extended to days, then weeks. Michelle found that the longer she stayed in Las Vegas, the more difficult it was to consider returning home and facing her abusive family life.

Eventually, Michelle and her friend were asked to leave their friends' home due to their heavy alcohol and drug use and the fact that they were not contributing financially to household expenses. Michelle and her friend had nowhere to turn and were forced to sleep in the car. During an evening of heavy drinking, Michelle and her friend got into an argument about a boy they both liked. The friend, once trusted, got in her car and drove away, abandoning Michelle on the street.

Michelle didn't know where to go. She didn't want to return home because of her stepfather's abuse and the lack of support she felt from her mother. She had learned where to find food at the local food pantry, but was unsure where she could sleep. Michelle knew she would get arrested if she slept on the main strip where cops frequently picked up runaway youth, so Michelle chose a darker alley away from the strip. A group of homeless men chose the same place to sleep and get high. Stumbling upon Michelle, the men sexually assaulted her. Although she was hurt and scared, Michelle couldn't call the police because she would be found to be a runaway and possibly returned to her abusive family.

After experiencing multiple victimizations, Michelle felt numb, lonely, and desperate. In order to survive, she began to engage in prostitution. Even though she felt this way of life was humiliating and degrading, she saw her options as extremely limited. In response to this way of life, Michelle began to engage in self-mutilation as a way to deal with the emotional pain she experienced. She used a razor blade to cut slashes into her wrists and abdomen; seeing the blood and feeling the physical pain calmed her inner turmoil. About this same time, Michelle's drug and alcohol use noticeably increased. She found that using substances was the only way to calm the nightmares, forget the abuse experiences, and allow her to feel safe enough to sleep. However, many mornings she woke up not knowing where she was or with whom she was sleeping.

Michelle continues to live on the street, most frequently in abandoned buildings. She misses school and dislikes using her body for money, but with no address and no identification she is unable to secure a legal job or to re-enroll in the local school system. She has joined a group of homeless youth, both boys and girls, whom she views as her surrogate family. Michelle relies on this street family for protection, emotional support, and drugs, as her life continues to be filled with danger, violence, and victimization.

Intervention Options and Recommendations

Homeless youth present a unique challenge to the service providers whose responsibility it is to assist them. Not only are these youth exposed to continuous trauma-inducing situations that create complex trauma responses, but few evidence-based treatment studies have been conducted that can guide practitioners to the most appropriate and effective treatment methods. While research has begun to describe and characterize PTSD among homeless youth and has identified trauma as a major challenge for them (Stewart et al., 2004; Thompson, McManus, & Voss, 2006), no studies have been published that evaluate and provide recommendations for best practices in treating PTSD among this population. Thus, treatment methods must be drawn from the growing body of literature on adolescent trauma and extrapolated from the guidelines developed for work with adolescents in general. These methods of determining how best to assist homeless youth are obviously problematic; however, until further research can be completed, alternative options are limited.

Services to homeless youth are "low threshold" mechanisms that aim to stimulate opportunities for longer-term interventions. Drop-in centers, shelters, and street outreach services were created to address the needs of homeless young people and often act as a gateway for youth to access specialty services, such as medical, dental, mental health, and substance abuse services. Providers delivering these services have found that when they can engage these often difficult-to-reach youth, developing a trusting relationship with them and offering them a variety of service options improve the outcomes (Fest, 2003). While efforts are further complicated by the mobility and transience of the youth, service providers who cultivate collaborative relationships with these adolescents are in a key position to initiate the process of assessing and treating trauma-related issues.

One perspective that service providers and homeless youth report as being effective in opening dialogue concerning trauma and its effects is a strengths-based approach delivered in the young people's environment (Baer, Peterson, & Wells, 2004; Cauce et al., 2000). Although this framework does not identify specific treatment protocols and is not an evidence-based treatment method, it is described by practitioners as an useful conceptual framework for working with homeless youth (Rew & Horner, 2003; Slesnick, 2001; Thompson, McManus, Lantry, Windsor, & Flynn, 2006). Strengths-based approaches focus on the assets possessed by the client, as well as those found within the environment, to increase optimism for the future (Kidd, 2003; Rew, 2002). Practitioners working from this perspective assist youth in exploring solutions, mobilizing resources, and attaining desired goals, which diminish the sense of futurelessness common among traumatized persons. As the young people begin to experience identifiable accomplishments, their sense of self-efficacy increases and feelings of shame and powerlessness are reduced. Utilizing a strengths-based approach incorporating services that are flexible and nonjudgmental encourages homeless youth to believe that they have the power to effect positive change in their lives, transition out of homelessness, and overcome the symptoms associated with their traumatic experiences (Dejong & Miller, 1995).

Treatment Phases

In most cases, when homeless adolescents receive psychological counseling it occurs during a shelter stay. Typically, homeless adolescents reside in shelters for periods from a few hours to several weeks; many never seek shelter services or do so only sporadically. Their distrust of adults and formal services results in the majority of them receiving no formal counseling services (Meade & Slesnick, 2002). Perhaps the main reason homeless youth do not receive treatment is their view that services are not tailored to their unique needs or circumstances. One study evaluating the service needs of homeless youth found that they respond best to client-centered services that are flexible and realistic concerning expectations (Thompson, McManus, Lantry, et al., 2006).

Regardless of the specific intervention method, the basic needs of homeless youth must be provided before other therapeutic interventions can be introduced (Karabanow, 2003; Kidd, 2003). The ideal situation for providing care to these young people would be to immediately transition them into stable housing where a physically safe environment could be established and direct trauma work could begin. The initial goal of treatment must be the restoration of some degree of safety and control (Wilson, Friedman, & Lindy, 2001). However, the reality is that transitioning off the streets is a gradual process and one that must be initiated and endorsed by the youth. They are also extremely unlikely to seek conventional mental health services as many find it difficult to trust adults to the extent of accepting services (Kufeldt et al., 1992). Therefore, providers must find methods to encounter these young people, build rapport, and develop their trust before attempting formal treatment strategies aimed at ameliorating trauma symptoms.

Engaging Homeless Youth

The first step in working with homeless youth concerning trauma-related issues is beginning to establish communication and trust between young person and provider. Newman (2000) suggests that the goals of therapy with chronically traumatized persons are to assist them to (1) develop trust appropriately; (2) exercise control over their own lives and internal experience; (3) decrease shame; and (4) increase self-esteem and self-care. To prevent further harm to homeless youth, targeting trauma symptomatology requires an indirect approach. Engagement must focus on providers conveying respect, empathy, and a genuine desire to be of assistance while not forcing the young people to discuss traumatic experiences or issues until they voice their readiness to do so (Fall & Berg, 1996; Levy, 1998).

In the initial contact with youth, workers must cautiously approach individuals because of their distrust, anger, and perception that adults are uncaring and unwilling to help (Fall & Berg, 1996). Providers typically begin to establish rapport by providing youth with needed supplies and inquiring about their further needs. This is accomplished by asking individuals questions that demonstrate the provider's knowledge of the homeless lifestyle, such as whether they might need medicated foot powder to attend to "boot rot" (feet that have become blistered or fungal due to damp socks), clean socks, camping gear, or food. Outreach workers also attempt to causally and briefly describe drop-in and shelter services, hours of operation, and services provided. By taking this approach, the worker is trying to convey to the young person that she understands elements of street culture and that she is there to provide client-centered assistance. By not introducing potentially charged topics during the early stages of the encounter, the worker confers control of the situation, relationship, and further discussions on the young person. As youth are more likely to describe symptoms when they have engaged with a caseworker and have more than passing relationships with that caseworker, treatment can begin only after the establishment of a truly collaborative relationship between the service provider and the young person (Barry, Ensign, & Lippek, 2002).

Consonant with the need to demonstrate that the workers will respect the wishes of the homeless young people, providers must appreciate the boundaries set by the young people and cease further engagement attempts when and if requested. The expression of symptomatic avoidance of trauma material could result in youth failing to seek help; they may decline help because disclosure of disturbing memories is difficult or they lack trust that what they reveal will be believed (Pynoos, 1994). However, once communication has been initiated, the workers can gradually move toward assisting the young people with more complex and difficult to overcome problems. Through giving information on available services, the workers present young people with options, from which they can choose those that meet their specific needs and comfort level. Each time outreach workers encounter the same individual, and as the individual gains familiarity with the workers, workers gradually attempt to engage him or her in longer conversations about street experiences, needs, and ideas about what type of assistance is desired (Fest, 2003).

Once the service provider has developed a relationship and engaged a young person, the worker collaborates with him or her to identify strengths, goals, and solutions. Rapport must be established and maintained with homeless youth by allowing them to choose the subject and direction of conversation, focusing on their strengths, and not pushing them to change immediately or make any long-term plans (Fall & Berg, 1996). The focus of interactions centers on understanding the clients' perspectives and drawing upon their strengths (Levy, 1998). Emphasis should be placed on fostering a sense of control, autonomy, and self-efficacy and encouraging youth to establish how they want to interact with providers and what changes they believe are necessary and desirable.

Engaging homeless youth requires developing a working therapeutic relationship. The young people's autonomy, power, and control over themselves and their environments, independent of the traumas they may have experienced, are key (Kidd, 2003). Homeless youth want to feel optimistic and to have the opportunity for accomplishments that give them a sense of worth (Fall & Berg, 1996). Providers are more likely to successfully engage these youth when they acknowledge the strengths, courage, skills, and determination required to survive the homeless lifestyle (Fest, 2003). Being able to listen to young people's subjective experience generates a sense of authentic mutuality. Understanding that these youth must devote a great deal of their emotional resources to securing basic needs and have little energy available to deal with their reactions to ongoing victimization requires that providers proceed cautiously and gently.

Helping professionals must find a balance between respecting the young people's self-determination and providing needed assistance. Providers must acknowledge the role of choice in street involvement and not push youth to conform to "normal" societal structures and expectations. Helping youth understand that accessing services is a positive experience, rather than a surrender of their autonomy and control, is needed before trauma work can begin. As some have noted, individuals who have been traumatized are often ambivalent concerning the need to address increased dependency following victimization and the heightened need for autonomy (Marmar, Foy, Kagan, & Pynoos, 1994). Well-meaning providers must be careful in offering help, so as not to undermine the young people's need to feel in control over their responses to continuing traumatic situations. When circumstances are viewed as uncontrollable, adolescents may respond by shifting interpersonal attachments. This may be evidenced by heightened attachment to other street youth and increased identification with peer groups that act as a protective shield but tend toward aberrant rather than emotionally supportive and helpful relationships (Pynoos, 1994).

Assessment of Trauma Symptoms

A proper assessment of PTSD is required, and inquiry concerning trauma history should be part of any routine assessment of psychological functioning (Perrin, Smith, & Yule, 2000). However, special care must be taken when seeking this information so that homeless youth do not see this as probing for information they are not yet ready to divulge. The alliance building between provider and youth is often tenuous at best; therefore, deeply sensitive or trauma-provoking questions must be asked with caution. Questions must be useful to understanding the young person's needs, without appearing to be voyeuristic, probing, or intruding. One approach to address this difficulty in assessment is to list various experiences that would be traumatic and ask whether the adolescent has experienced any of these. Categories can be developed that allow the individual to answer simply yes or no for each experience (Becker et al., 2004b). For those categories responded to in the affirmative, the clinician could further explore the meaning of the traumatic exposure for the individual and his or her symptomatic responses.

Clinicians increasingly utilize clinical interviews along with several measurement tools when assessing for the presence of PTSD in adolescents. These tools require individuals to recall frightening, traumatic events, as well as ways in which such experiences have affected them. As such, the assessment process can be threatening and may induce anxiety responses. Thus, measurement instruments must not be too lengthy, insensitive, or overly stress inducing (Perrin et al., 2000). Instruments that can be completed in written form may be more acceptable, as they allow the individuals to feel a sense of control over divulging potentially upsetting material in a less intrusive manner than having to describe the experiences verbally.

It is also important to determine the number of events that individuals have experienced, the severity of their symptoms and impairment, and the meaning of the traumatic exposure to them. Encouraging individuals to describe their history of abuse, maltreatment, and victimization can assist the clinician in further understanding the cumulative effects of the traumatic experiences and the resulting damage (Becker et al., 2004b). Although there is no "gold standard" for assessing trauma-related psychopathology, structured interviews or questionnaires cannot substitute for a comprehensive interview with a trusted provider. A sensitive provider can avoid inflicting potential harm and adverse effects during the assessment of trauma-related experiences (Cauce et al., 2000).

Evidence-Based Treatment Strategies

Once a modicum of equilibrium has been attained and the young person is engaged with the clinician, specific treatment approaches can be employed more effectively, easily, and ethically to mediate trauma symptomatology among homeless youth. Research concerning effective treatments of PTSD for adolescents is relatively limited when compared to research on adults, and virtually no clinical outcome studies have been completed that evaluate evidence-based treatment methodologies for PTSD among homeless youth. The few evidence-based interventions for homeless youth are oriented toward HIV and high-risk sexual practices (Koopman, Rosario, & Rotheram-Borus, 1994) and case-management services (Cauce et al., 1994). Thus, no evidence-based treatment options are available for direct application to this youth population, and extrapolations from findings of studies with other populations must be employed to provide guidance for treating homeless youth.

Two well-researched treatment options are described here. These treatment strategies, though not empirically validated for homeless youth, have consistently indicated the most convincing evidence for effective treatment of PTSD among adolescents. Drawing from the evidence presented in research on adolescents with PTSD symptoms, these interventions are presented as possible strategies that may be appropriate to homeless adolescents if their unique lifestyles and needs are recognized. As no studies have been completed that evaluate specific treatment methods for homeless youth, these evidence-based treatment strategies are included as they are the treatments most likely to be effective, appropriate, and feasible for application to homeless youth.

Cognitive Behavioral Therapy

Cognitive behavioral therapy (CBT) is the most studied psychosocial treatment and has been subjected to the largest number of rigorously controlled investigations for PTSD in adults (Foa & Meadows, 1997; Perrin et al., 2000). Although fewer studies have been conducted with adolescents, outcome studies conducted with community and school-based samples of adolescents consistently report that cognitive behavioral treatment approaches have robust effects on improving symptoms of PTSD (Foa et al., 2000; Pine & Cohen, 2002). CBT has shown effectiveness in addressing trauma symptoms associated with diverse stressors, such as grief or loss of a loved one, interpersonal conflicts with peers, separation from parents, and social victimization (Cohen, Mannarino, Zhitova, & Capone, 2003; Green, 2004; Pine & Cohen, 2002). These findings suggest the potential utility of CBT in youth exposed to various types of trauma, such as those experienced by homeless youth.

Cognitive behavioral treatment for PTSD focuses on the reduction of symptoms and the development of positive coping skills, and it aims to increase young people's sense of control and well-being (Perrin et al., 2000). CBT generally blends both cognitive and behavioral interventions, including exposure techniques, exploration and correction of inaccurate attributions regarding the trauma, and stress management/relaxation techniques (Cohen, 2003). The principal goal of cognitive behavioral approaches in the treatment of PTSD in adolescents is to enhance coping by developing new or modified cognitive structures through which the traumatic event may be viewed and placed in perspective. CBT focuses on restructuring thinking through the identification, examination, and alteration of thoughts and beliefs that are maladaptive (Aisenberg & Mennen, 2000). Individuals are guided to develop new or modified perceptions and regain control over the apprehension and anxiety associated with traumatic experiences (Cohen et al., 2003; Green, 2004). While completely eliminating the fear, apprehension, and anxiety associated with the trauma is unrealistic, the development of coping strategies aims to increase the individual's ability to manage, even eliminate, PTSD symptoms (Perrin et al., 2000).

Traumatized youth who are homeless may expend emotional resources anticipating victimization and have few resources to deal with their trauma symptoms. They are likely to reexperience the traumatic events, both past and present, through intrusive images and preoccupation with sounds or circumstances that remind them of the trauma. Some may actively seek out opportunities to engage in reenactments ranging from high-risk, thrill-seeking behaviors to more aggressively dangerous or violent actions as a means of demonstrating their ability to overcome the feelings of victimization (Pynoos, 1994). In violent environments, each exposure may cause immediate reactions that are used to cope and create some sense of control. Avoidance and emotional regulation are typical responses in these circumstances.

Exposure Strategies

Exposure strategies utilized in cognitive behavioral interventions include systematic desensitization, flooding, and implosive therapy (Foa & Meadows, 1997). These methods are used to treat symptoms characterized by their intrusiveness and recurrence, such as nightmares, flashbacks, and exaggerated startle responses. Images of the traumatic events are used to assist the individual to open up memories that have not been dealt with but are connected to many reminders of the experience. These reminders trigger painful memories that the individual has learned to avoid or escape. This method of treatment "forces" a confrontation with situations and stimuli associated with the trauma. It has been found to assist individuals in managing, on a conscious level, emotions accompanying memories or reminders of traumatic situations (Green, 2004). Exposure therapy must be conducted in a safe place where it is permissible for the feared emotional responses to occur. The benefit is viewed as making it possible to reduce reactivity to painful memories and gain control over responses to those memories and associated emotions (Marmar et al., 1994).

Many homeless young people have fled from their parental homes due to abuse and maltreatment; their behaviors of running away and living on the streets may be seen as truly avoidant responses to traumatic events. They are, however, not living in stable housing or safe conditions and are continuously exposed to victimization from a variety of sources. Thus, it may not be feasible to address or treat symptoms such as avoidance and hyperarousal until the youth is in a less dangerous living situation (Stewart et al., 2004). In light of the constant threat to safety encountered by youth living on the streets, this concern seems particularly salient, as ongoing dangers of recurrence may not only exacerbate distress but lead to aggressive, even violent, reactions. In addition, the use of exposure techniques that repeatedly require youth to reexperience traumatic stimuli may increase fragility in them. Fearfulness and mistrust of adults and others may be warranted, even appropriate, given the circumstances of the lives of these young people.

Cognitive Restructuring

Cognitive restructuring is often used to deal with specific issues related to the individual's appraisal of the traumatic experiences. These methods focus on restructuring thinking through the identification, examination, and alteration of thoughts and beliefs that are maladaptive (Aisenberg and Mennen, 2000). The therapist's role is to assist the individual to "correct" misattributions with regard to overresponsibility and culpability for the victimization. This is accomplished by step-by-step, logical analysis of cognitive distortions and working to replace them with more accurate views. Assumptions and perceptions of the world, both before and after the traumatic experiences occurred, are exposed by the therapist's careful facilitation. The aim is for the individual to discover her or his implicit assumptions, thereby making them explicit and modifiable. In actual practice, cognitive restructuring is often conducted in conjunction with exposure therapy so that restructuring of a specific trauma is treated with concurrent flooding techniques (Marmar et al., 1994).

Coping skill development is a primary component of CBT that trains adolescents to recognize "triggers" for anxiety that diminish their ability to feel a sense of control and mastery over their situation (Perrin et al., 2000). Stress inoculation techniques, including relaxation, positive imagery, thought stopping, and positive self-talk, are strategies that can help individuals tolerate the various symptoms of PTSD (Pine & Cohen, 2002). Through training individuals to be aware of situations that stimulate anxiety concerning the trauma and detecting the cues before they become anxiety-provoking, these stress reduction strategies have been shown to facilitate reduction in PTSD symptoms (Sherman, 1998).

For homeless youth who remain in traumatizing circumstances, these CBT strategies may be helpful in diminishing the self-blame prominent in trauma survivors. Therapists facilitate and direct young people's attempts to understand how they came to their various assumptions of how the world works. Therapists who recognize these individuals' victimization and maltreatment by adults and parents who were supposed to protect them will likely not make the mistake of underestimating their trauma-related symptoms and responses. On the other hand, young people may view these strategies as attempts to minimize their fearfulness and mistrust. Addressing cognitive schemas that organize the individual's protection should be addressed with caution, as the predictions about dangerousness of the world may be well-founded and critical to survival (Wilson et al., 2001).

Group Treatment

Another treatment method that may provide helpful assistance to traumatized homeless youth is the use of group support structures. Although few well-controlled studies have been conducted concerning group treatment for PTSD, this intervention method is described here due to the greater feasibility of service agencies being able to provide these services to homeless youth. The rationale for using group therapy methods with adolescents is that it provides a safe, shared, therapeutic environment where trauma survivors can normalize their reactions and provide support for each other while processing their own experiences (Foy, Eriksson, & Trice, 2001). Well-functioning mutual help groups, community support groups, and formal group therapy can provide practical support for the individual temporarily overwhelmed by traumatic experiences. They can reinforce the normative nature of stress reactions, encourage sharing of mutual concerns, address fears and traumatic memories, increase the capacity to tolerate disturbing emotions, and provide opportunities to share strategies for coping (Pynoos, 1994). Group treatment can also provide opportunities to discuss and deal with secondary challenges, such as depression, substance abuse, and other psychological dysfunction.

A recent review of group therapy studies on child and adolescent trauma (Reeker, Ensing, & Elliott, 1997) revealed that two theoretically different models dominated in the 15 studies reviewed. The two models were integrated groups andcognitive behavioral groups. Integrated group therapy typically involved a collection of techniques, such as exploration of feelings, art therapy, and prevention of future sexual abuse. On the other hand, cognitive behavioral groups usually included cognitive processing, assertive training, stress inoculation, and coping-skills training. Other reviews have found that behaviorally oriented group mechanisms are more likely to be effective than nonbehavioral groups (Weisz, Weiss, Han, Granger, & Morton, 1995). The treatment effect sizes for the group intervention studies reviewed by Reeker and colleagues (1997) compared favorably to the effect sizes for individual and group psychotherapy reviewed by Weisz and others (1995).

From these reviews, it appears that the use of a group format is useful for gaining social support and validation by similarly situated others, especially those who have experienced a traumatizing event or events. In addition, groups assist in normalizing the experiences of youth and can relieve some of the self-blame and other negative affects they often suffer (Najavits, Weiss, & Liese, 1996). Groups place a strong emphasis on making the treatment accessible and engaging to maximize involvement, a major difficulty often reported by clinicians working with homeless youth (De Rosa et al., 1999).

Group treatment may require a great deal of ongoing commitment from clients. As the daily life of homeless youth comprises attempts to secure the most basic needs and fend off further victimization, setting and keeping scheduled appointments is not a high priority (Baer et al., 2004; Karabanow, 2003). In addition, these young people are also highly mobile, often staying in the same location for only a few days at a time (Baer et al., 2004). Thus, providers must take these limitations into account and recognize that long-term and lengthy interactions are not feasible or probable. By using an open-group format, however, youth can enter and exit the groups according to their needs, without having to commit to attending groups on a regular basis or for a specified period of time. This modality is a "low-threshold" service that accommodates the transient nature of street youth culture and recognizes the priority of homeless youth, which is to meet their basic needs before addressing other issues.

Insofar as basic environmental safety and stability are prerequisites to discussing interpersonal issues or trauma material (Newman, 2000), modification of current evidence-based treatments, such as CBT, is needed to address the challenges faced by homeless youth. CBT with adolescents often involves, and in some instances requires, collaboration with parents or guardians. It also typically consists of regular therapeutic sessions over relatively long periods of time (Perrin et al., 2000; Pine & Cohen, 2001). These requirements are not practicable for youth who are homeless and lack affiliation with parents or family members. Thus, practitioners who recognize this limitation will not push to have parental involvement.

In addition, individuals who have been and continue to be assaulted or victimized require more than emotional processing and cognitive restructuring; attention must also focus on their physical safety. Safety planning involves developing ways to reduce physical and psychological danger and assess for suicidality, substance use, and involvement in high-risk behaviors, such as survival sex. The current evidence-based treatments for general adolescent populations with PTSD may not wholly lend themselves to the unique circumstances and needs of homeless youth. To avoid the potential for further harm being done to these young people, treatment approaches must be modified to the specific needs and unique concerns of homeless youth by incorporating issues of self-care, safety, and high mobility (Briere & Jordan, 2004).

Practice Recommendations

Given the issues associated with homelessness and trauma, treatment in service settings utilized by homeless youth requires brief, strengths-based approaches aimed at helping them cope with trauma-related symptoms while recognizing their continued exposure to various sources of victimization. Service providers have few empirical research findings that provide guidance for treatment of homeless youth who experience chronic and continuous trauma experiences. Brief encounters are the norm, rather than ongoing and consistent treatment sessions; thus, effectively intervening with these young people is extraordinarily challenging. However, some specific recommendations can be summarized, utilizing the previous discussion. These recommendations include the following:

a. provide basic (food, clothing, safe shelter) needs before attempting other service options
b. engage young people through frequent and casual encounters to develop trusting relationships
c. encourage them to lead the interaction and discussion of their needs
d. provide a safe place to share concerns, challenges, and needs with a strengths-based focus
e. provide referrals to medical care or sexual assault clinics for physical and sexual victimization
f. assess for trauma-related symptoms through gentle, client-centered inquiry
g. provide the most appropriate treatment given agency resources, the individual's engagement, and her or his level of symptom severity (CBT, groups, or both)
    I. Individual CBT techniques:
        1. cognitive restructuring, with sensitivity to the client's current assumptions and experiences of danger and distrust
        2. exposure techniques, only after the client is stably housed and in a safe treatment environment
        3. stress-inoculation techniques, as a way to help the client manage PTSD symptoms
    II. Open support groups to discuss issues of trauma:
        1. provide education concerning trauma, its influence on their lives, and coping mechanisms (such as substance abuse) that may be maladaptive
        2. validate feelings associated with trauma
        3. normalize responses of youth to trauma experiences

Social Policy Implications

The McKinney-Vento Homeless Assistance Act (PL100–77) remains the only major federal legislative response to homelessness to date. This act originally consisted of 15 programs providing a range of services to homeless people, including emergency shelter, transitional housing, job training, primary health care, and education (National Coalition for the Homeless,2006). Amended four times from 1988 to 2002, the changes improved the shelter and housing provisions and educational opportunities for homeless youth and adults. The McKinney-Vento Act focused largely on increasing the development of low-cost housing and addressing issues of poverty. It also extended the Education of Child and Youth programs of the No Child Left Behind Act, which ensured that all homeless children and youth have equal access to the same free, appropriate education as other youth. The policy required a designated homeless education liaison to be available to assist youth with school enrollment issues, transportation, school supplies, and referrals to support services. While school is viewed as one of the few stable and secure places in the lives of homeless youth, the transient nature of their lives allows limited exposure and engagement to educational support services. In addition, the federal regulation does not recognize or provide for services aimed at mental health issues, especially issues concerning victimization and its impact. "Support services" have limited capacity to provide the intensive treatment often required by homeless youth with complex posttraumatic stress due to their ongoing, prolonged exposure to victimization.

Federal and state policies have developed and funded services for homeless youth, but often with little understanding of the culture and lifestyle of homelessness and the specific needs of these young people. This is especially true concerning mental health issues. Services typically focus on basic safety through providing night-time shelters, to prevent injuries and illness due to inclement weather, and distributing basic necessities. Services are seldom coordinated and are often found in a variety of locations; for example, shelters are located in one part of a city, breakfast and dinner are served in various locations each day, and medical services are in other locations and sections of the city. With limited means of transportation to travel between service agencies, young people become lost in the complexities and gaps in services and never receive the services they desperately need.

Policies developed for high-risk youth services have been built on moral or philosophical frameworks that reflect distinct ideological assumptions implicit in various community-based services. For example, some services have been developed based on the belief that homelessness originates in individual psychopathology rather than societal indifference. Others view homelessness as caused by a lack of employment or skills, affordable housing, and other societal structures. Adoption of these various, even competing, perceptions by workers, agencies, and service systems may greatly influence what services are delivered, how homeless youth are engaged, and what barriers they must overcome when seeking formal assistance (Karabanow & Clement, 2004). Homeless youth urgently require basic services (i.e. food, clothing, and safe shelter) and ongoing mental health support if they are to set their lives toward productive, self-enhancing goals and find a useful place in society. Solutions must consider the often deep-rooted conditions and patterns that lead to their homelessness and must involve the community and various levels of government in creative and coordinated responses (Fitzgerald, 1995). Consultation with members of this population is critical to the development of appropriate and useful services that would more likely be utilized. Service development requires making valuable connections with homeless adolescents in an effort to engage them in various services aimed at transitioning them into more stable living situations.

Providing services that appropriately address the needs of homeless youth is often difficult, as these young people exhibit low rates of service utilization. Lack of insurance or affordable care, lack of transportation, and lack of knowledge of the systems of care are primary barriers to their seeking assistance (Yates, Pennbridge, MacKenzie, & Pearlman, 1990). Homeless youth are distrustful of formal services and authority figures, due to their past exploitation and victimization. Many fear they will be reported to the police or child protective services due to status offenses or other outstanding warrants. Other barriers include poor service coordination, inadequate staff availability, limited transportation, location of services far from “hang out” areas, strict eligibility requirements, and endless referrals with limited worker/agency support (Meade and Slesnick, 2002). Policies that provide for services that are more flexible and truly safe for these traumatized young people are needed, as it has been shown that homeless youth are more likely to utilize services they perceive are tailored to their needs. They will access services that are flexible, have less restrictive rules, and require limited disclosure of personal information (De Rosa et al., 1999; Thompson, McManus, Lantry, et al., 2006).

Another major issue in policy decisions concerning the provision of treatment and appropriate mental health services to homeless youth revolves around funding. Basic service programs, as well as extensive and effective programs that target mental health needs specifically, deserve full public and government support. However, budget constraints in these agencies have resulted in providers with less training than is needed. Due to the perilous environment in which these young people live, as well as their high rates of substance abuse and trauma-related issues, service providers must be armed with a wide range of methods appropriate to the treatment of multiple problems. Advanced training is needed for workers to gain the knowledge and experience necessary to successfully engage and assist these adolescents. Ideally, services to homeless youth should employ trained counselors that can deal with pressing mental health concerns from an extensive array of therapeutic approaches (Cauce et al., 2000). Policymakers must provide greater resources so that agencies can provide advanced training for providers working with homeless youth.

Summary

High priority must be given to enabling homeless youth to escape their oppressive problems and to giving them a chance to become competent and effective adults (Kiesler, 1991). Homelessness in youth produces chronic mental health and health problems, as well as deficiencies in educational abilities, and seriously undercuts their opportunities to receive the education necessary to function as adults. Homelessness also places young people at higher risk of encounters with drugs, alcohol, HIV/AIDS, and a variety of sources of violence and victimization. As has been argued (Rafferty, & Shinn, 1991), "In the long run, the monetary costs of neglecting children's needs are likely to substantially exceed the costs of combating poverty and homelessness" (p. 1177). Even though children and youth are often regarded as highly resilient in the face of major distress, they are less resilient in the face of multiple and ongoing stressors. Only through understanding how best to engage homeless youth and "enter their world: can we hope to have an impact on their lives.

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CHAPTER 10

TRAUMA IN THE LIVES OF HOMELESS FAMILIES

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Homelessness is a devastating national crisis that has a significant impact on the health and well-being of adults and children across the United States. Homelessness results in multiple losses, including the loss of place, belongings, loved ones, and a sense of safety and stability. Interpersonal violence in childhood and adulthood only exacerbates the effects of poverty and increases one's risk of homelessness. Experiences of homelessness and trauma result in extremely poor emotional and physical health outcomes that make homelessness a significant public health issue with major ramifications for the broader systems of education and health care. In this chapter, as we move to examine the relationship between poverty, violence, and homelessness in the lives of female-headed homeless families, we will address the impact of homelessness on women and children's health and the systemic changes necessary to mediate the effects of poverty and strengthen society's families.

Families are among the fastest-growing segments of the homeless population (National Center on Family Homelessness [NCFH], 1999). In the United States, nearly 600,000 families and 1.35 million children experience homelessness within the course of a year (National Alliance to End Homelessness [NAEH], 2005). The majority of homeless families consist of a young single mother in her late 20s and her two young children, most often under the age of six years (NCFH, 1999). Faced with a lack of affordable housing, unemployment, and exposure to many forms of violence, poor families often struggle to access and maintain adequate housing for themselves and their children. The lack of systemic resources and opportunities, along with astoundingly high rates of violence, contribute to the loss of safety and stability in the lives of poor families.

The Roots of Family Homelessness

Structural and systemic imbalances underlie family homelessness, and changes to these systems are necessary to the solution (Bassuk, 1991; Bassuk, Weinreb, Dawson, Perloff, & Buckner, 1997; Koegel, Melamid, & Burham, 1995; National Alliance to End Homelessness, 2005; Wood, Valdez, Hayashi, & Shen, 1990). Over the last 20 years, financial assistance for poor families has decreased, rents have increased, the supply of affordable housing has declined, and the minimum wage has not kept up with increased housing costs (Bassuk, 1991; National Low Income Housing Coalition, 2004). Reductions in federally funded housing programs have decreased the availability of public and Section 8 housing options as well (Bassuk, 1991). As of 2004, "there [was] not a single jurisdiction in the country where a person working full time earning the prevailing minimum wage [could] afford a two bedroom rental home" (National Low Income Housing Coalition, 2004, p. 3). Furthermore, there were only four counties in the country where a person could work for minimum wage and afford a one-bedroom apartment (National Low Income Housing Coalition, 2004). As these discrepancies between housing and wages increase, families living in extreme poverty have few resources with which to improve their situations.

Single mothers are particularly vulnerable to homelessness, due to their limited access to higher-paying jobs, child care, and other services and supports. Bassuk et al. (1996) found that "economic resources and social supports are the most critical factors distinguishing [between homeless and low-income housed mothers]" (p. 644). Homeless mothers have an average annual income of less than $8,000, and many of these families live at 63 percent of the federal poverty level for a family of three (NCFH, 1999). Entry-level positions that pay minimum wage are insufficient to provide for a family's basic needs. In addition to being single mothers, a disproportionate number of minority women with children live in poverty in the United States (Children's Defense Fund, 2004; U.S. Census Bureau, 2005). Therefore, single mothers of minority status are at even higher risk of facing homelessness. Poor families are isolated and marginalized, both in society at large and within their local communities. In summary, poor families have little access to the financial supports necessary to survive, and they lack stable and ongoing social supports to rely on for help.

Family Homelessness and Violence

In addition to economic disparities, violence plays a significant role in the lives of families living in poverty. Traumatic events such as childhood sexual abuse, physical abuse, family separation, and domestic violence in adulthood can take a severe toll on poor families, often increasing their risk of experiencing additional traumatic life events. Homeless mothers have extensive histories of violence that impact their ability to navigate already overwhelming circumstances. The impact of this violence is deeply penetrating and far-reaching, damaging a family's emotional, physical, mental, relational, and spiritual well-being.

Focus of the Chapter

Experiences of trauma are common to most people who face homelessness, whether as single adults or within a family unit. It is important to acknowledge that single adults who are homeless are also members of a family, though they may currently be separated from their children, partners, and families of origin. Though all who are homeless suffer the ramifications of poverty and violence, the women and children who represent homeless families, and who account for 40 percent of the homeless population, have a unique set of challenges and mental health profiles that are the focus of the current chapter. In this chapter, we review the literature on the prevalence of violence in the lives of homeless families. We then explore traumatic responses to violence and discuss how exposure to trauma can lead to increased vulnerability to future traumatic experiences, specifically homelessness. We then explore promising practices to address the needs of homeless families, including strategies to understand and address the relationship between violence, trauma, and family homelessness. We conclude with a brief policy review.

Violence in the Lives of Homeless Women

CASE EXAMPLE: ALICE

> Alice is a 26-year-old woman who lives in a shelter with her daughter, Sarah, and son, Matthew. Alice's exposure to violence began in childhood, when her father would hit her frequently. In adulthood, soon after she was married, Alice's husband was imprisoned for theft, and after his release, the marriage became violent. Over the course of three years, Alice left her husband 15 times. Alice's five-month-old daughter, Sarah, is frail, listless, and underweight. She cannot hold down her food, is unable to grasp a rattle, and rarely vocalizes or smiles. Her brother, Matthew, who has moved seven times in his 15 months of life, is painfully shy. After arriving at the shelter, he stopped saying the few words he knew, refused to eat, and had trouble sleeping.

Alice's experience of violence in both childhood and adulthood is a familiar story in the world of homeless families. Researchers have discovered that Alice's experiences of physical abuse within her family of origin and in her intimate adult relationships are common in the lives of homeless mothers. The impact of violence on the lives of these women is far-reaching, and can be seen in their struggles to maintain health and find safety for themselves and their children. The cycle of violence is perpetuated as women and children exposed to the trauma of violence struggle to cope with life stressors and rebuild their lives.

Experiences of family violence are common in the lives of many women, and they cross the boundaries of race, ethnicity, and socioeconomic status. Since the mid-1970s, the pervasiveness of violence against women in our society has become clear (Browne, 1993). In particular, there is heightened awareness of women's vulnerability to experiences of violent trauma, most often at the hands of those closest to them, whom they rely on for safety and support: "women in the United States are more at risk of being assaulted and injured, raped, or even killed by a current or past male partner than by all other types of assailants combined" (Browne, 1993, p. 371). Furthermore, women who report extensive experiences of physical and sexual abuse in their childhoods are more likely to be victims of violence within adult intimate relationships.

For women, the risk of experiencing violence is further exacerbated by poverty. Browne and Bassuk (1997) found that "poverty constitutes a serious risk factor for both child abuse and violence by male partners, particularly for severe and life-threatening attacks" (p. 263). Living in an environment associated with minimal employment and educational opportunities, lack of affordable housing, and increased risk of violence, poor women are at higher risk of victimization than women in the general population. The ability to change or leave a violent environment is limited, and consistent sources of protection from violence are minimal (Browne, 1993). This immobility in the face of violence often leads to repeated victimization.

Research has shown the rates of violence among housed poor mothers to be staggeringly high (Bassuk et al., 1996; Browne, 1993; Browne & Bassuk, 1997; D'Ercole & Struening, 1990; Goodman, 1991), but homeless women experience even higher rates of family violence (Bassuk et al., 1996; Browne & Bassuk, 1997; D'Ercole & Struening, 1990; Wood et al., 1990). Rates of childhood physical and sexual abuse, rape, and physical assault are particularly high among homeless women, which highlights the need to examine the relationship between childhood and adult violence and risk of homelessness.

Research has shown that the rates of childhood experiences of violence are extremely high among homeless mothers. Early comparisons of homeless and housed female-headed families indicated that homeless mothers had experienced significantly more abuse in childhood than housed mothers (Bassuk & Rosenberg, 1988). Subsequent research has continued to demonstrate a significant relationship between childhood experiences of violence and homelessness. Wood et al. (1990) studied 196 homeless and 194 housed poor families in Los Angeles, California, to compare the two groups on many characteristics, including experiences of family violence. Rates of family substance abuse and violence were higher within homeless mothers' families of origin (Wood et al., 1990).

The Worcester Family Research Project studied 220 sheltered homeless mothers and 216 low-income housed mothers, and compared homeless and low-income mothers on a variety of outcome measures, including histories of violent experiences (Bassuk et al., 1996; Browne & Bassuk, 1997). When they examined the specific experiences of childhood violence in the lives of homeless and housed poor mothers, Bassuk and her colleagues found that both homeless and low-income housed women reported significant histories of violence beginning in childhood. In each sample group, the majority of homeless and housed mothers reported experiences of severe physical assault by family members or those who lived in their homes during childhood (Bassuk et al., 1996). Based on data from the Worcester Family Research Project, Browne and Bassuk (1997) found that over 60 percent of the total sample of respondents had experienced some form of severe physical violence during their childhood, and a majority had sustained injuries. Over 40 percent of the homeless and housed women sampled reported having been sexually molested at some point in childhood or adolescence (Bassuk et al., 1996). The women sampled offered few reports of adequate interventions related to these experiences, except for removal from their families for varied periods of time (Browne & Bassuk, 1997). Overall, however, data from the Worcester Family Research Project show that homeless mothers had a higher cumulative experience of violence than poor housed mothers (Bassuk et al., 1996).

In contrast, Goodman (1991) found little difference between homeless and housed mothers in experiences of abuse. However, as in other studies, rates of family violence were found to be very high for all study participants, both homeless and housed; 60 percent of homeless women reported child physical abuse, and 42 percent had experienced child sexual abuse. Regardless of the differences in findings regarding rates of family violence among homeless and poor housed women, it is clear that overall experiences of family violence are extremely high among poor women, which increases a family's vulnerability to experiencing other adverse life events.

Violence continues to plague poor and homeless women into adulthood. Childhood experiences of violence and trauma often set women on a particular path that leads to violence in adulthood. Along with extensive childhood histories of abuse, homeless mothers have high rates of adult partner abuse and general experiences of violence (Bassuk et al., 1996; Bassuk, Dawson, Perloff, & Weinreb, 2001; Browne & Bassuk, 1997; D'Ercole & Struening, 1990; Goodman, 1991; Wood et al., 1990).

Browne and Bassuk (1997) report that "childhood violence is a strong predictor of violence by an intimate male partner" (p. 272). Bassuk, Dawson, et al. (2001) found that women with histories of childhood violence were four times more likely than other women to experience violence in adulthood. Based on data from the Worcester Family Research Project, Bassuk et al. (1996) found that approximately two-thirds of each sample of homeless and low-income housed women had been physically assaulted by a male partner in adulthood. Thirty-two percent of those women had experienced violence at the hands of their most recent partner (Browne & Bassuk, 1997). Browne and Bassuk (1997) found that over one-half of all respondents had sustained some type of physical injury by an intimate partner. Similarly, Goodman (1991) found that 64 percent of homeless women reported experiences of physical abuse by a partner. Nearly one-quarter of these women needed medical attention following these assaults by male partners (Bassuk et al., 1996). When asked about their responses to these violent experiences in relationships, approximately one-third of women who reported having been in abusive adult relationships had obtained a restraining order, and 34 percent of the women who had ended a relationship continued to be threatened and assaulted after the separation (Browne & Bassuk, 1997). Wood et al. (1990) reported that, in their comparison of homeless and housed poor mothers, homeless women reported higher instances of abuse and substance use by their adult partners. In addition to partner violence, poor women were more likely to be victims of random violence (Bassuk et al., 1996). D'Ercole and Struening (1990) interviewed homeless women and compared their experiences of trauma with those of other women in the community. Based on a sample of 141 women, they found that 21 reported having been raped, 42 reported having been both raped and physically abused, and 62 reported having been physically abused.

As documented above, poor and homeless mothers have experienced chronic, prolonged violence across childhood and into adulthood, resulting in physical, emotional, spiritual, and relational injuries that are severe and long lasting. In an examination of the lifetime prevalence of violence in the lives of homeless mothers, Bassuk et al. (1996) found that 92 percent had experienced some form of physical or sexual assault, mostly in familial or intimate relationships. Repeated assaults on physical and emotional integrity allow little time for healing or recovery, which leaves mothers in a fight for their lives and the lives of their children. This takes its toll on the entire family and results in helplessness, fear, and loss of control.

Violence in the Lives of Homeless Children

CASE EXAMPLE: SARAH

> Before becoming homeless, Sarah had been running from her batterer for several years, living with relatives and more than 20 other people. To Sarah, this seemed safer than living in an apartment on her own. As a result, her six-year-old child was bounced around—he moved to another city with his father, he moved back with his mother, he moved in and out of a house with a relative—and eventually stopped attending school altogether.

Like Sarah, many homeless mothers have endured multiple experiences of violence. The prevalence of violence in the lives of homeless mothers results in high rates of violence in the lives of their children. Women deeply embedded in violent relationships are constantly on guard and focused on survival, and therefore, often unable to protect their children from witnessing or experiencing violence.

Homeless children often live in chaotic and unsafe environments, where there is frequent exposure to various forms of violence, including domestic violence, physical and sexual abuse, unpredictable adult behaviors and responses, and dramatic life changes such as moving from place to place, family separations, and placement in foster care. Within a single year in the lives of homeless children, 97 percent move up to three times, 40 percent attend two different schools, and 28 percent attend three or more different schools (NCFH, 1999). Nearly one-quarter of homeless children have witnessed acts of violence within their family, a significantly higher rate than children in the general population (NCFH, 1999). Homeless children frequently worry that they will have no place to live and no place to sleep (NCFH, 1999). They worry that something bad will happen to their family members. More than one-half are frequently concerned about guns and fire (NCFH, 1999). This level of fear and unpredictability can be extremely damaging to a developing child.

Due to often violent and chaotic family environments, more than one-third of homeless children have been the subject of a child protection investigation (NCFH, 1999). Wood et al. (1990) found that homeless mothers were more likely than housed poor mothers to have a protective case opened on the family due to possible child abuse. Twenty-two percent of homeless children are separated from their families, either by placement in foster care or by being sent to live with a relative or family friend (NCFH, 1999). About 12 percent of homeless children are placed in foster care, compared to just over 1 percent of other children (NCFH, 1999). Both homeless and low-income housed mothers report stressors related to their children, including serious physical and emotional issues and having a child placed outside of the home (Bassuk et al., 1996). Just as homeless mothers have experienced histories of violence in their childhoods, the cycle of fear and helplessness begins again with a new generation.

Trauma in the Lives of Homeless Families

Although most people experience trauma at some point in their lives, the severity, frequency, and duration of such experiences and the subsequent impact of the trauma varies considerably. In the lives of homeless families, traumatic experiences are often frequent and severe. Responses to these traumatic experiences—particularly responses to repeated exposure to trauma—can be intense and long lasting, leading to more significant mental health issues.

In a study that included 300 homeless women, North and Smith (1992) found that the majority of the sample had experienced at least one traumatic event, and of those who reported having experienced such an event, almost one-half reported having experienced multiple traumas. The trauma these women face throughout their lives leads to major alterations in their biological responses to stress, which explains their intense responses to reminders of their traumatic experiences and their struggles to cope with life events (Bassuk, Dawson, et al., 2001).

In response to trauma, posttraumatic stress disorder (PTSD) may develop, which represents a more significant and severe response to trauma that continues well beyond the actual event or events and begins to impact daily functioning as survivors try to organize their lives around their symptoms (van der Kolk, McFarlane, & Weisaeth, 1996 Given the very high rates of violence among homeless mothers, it is not surprising that the prevalence of PTSD is higher than in the general population.

High rates of PTSD among homeless and extremely poor women are well documented (Bassuk et al., 1996; Bassuk, Buckner, Perloff, & Bassuk, 1998; Bassuk, Dawson, et al., 2001; Bassuk, Melnick, & Browne, 1998; Browne, 1993;

North & Smith, 1992). Among homeless mothers, 36 percent have experienced PTSD—three times the rate for women in the general population; for homeless and low-income housed mothers with two or more lifetime disorders, the PTSD rate increases to 85 percent (Bassuk, Buckner, et al., 1998).

North and Smith (1992) found that 34 percent of the homeless women in their study met the criteria for a lifetime diagnosis of PTSD. Among homeless women who experienced trauma, over one-half developed PTSD (North & Smith, 1992). Researchers have found a strong correlation between PTSD and violent experiences in childhood. When they experience violent events in adulthood, women with childhood histories of violence are six times more likely than other women to develop PTSD (Bassuk, Dawson, et al., 2001). More specifically, childhood sexual abuse and experiences of random anger from both parents are the strongest risk factors for a diagnosis of PTSD in adulthood (Bassuk, Dawson, et al., 2001).

In addition to childhood and adult experiences of violent trauma, researchers have found that the experience of being homeless is itself traumatic (Goodman, Saxe, & Harvey, 1991). First, homelessness adds an additional layer of vulnerability and deprivation that may increase a family's risk for continued exposure to various forms of violent trauma. Second, the process of becoming homeless involves the loss of belongings, community, and sense of safety. Third, the experience of living in shelters is isolating and can lead to a loss of safety and personal control that can be devastating: "Homelessness, like other traumas, may produce a psychological sense of isolation or distrust as well as the actual disruption of social bonds" (Goodman et al., 1991, p. 1220). Homelessness can also trigger symptoms associated with past traumatic experiences that may hinder a family's ability to move back into stable housing (Goodman et al., 1991). Homeless families are not able to perform the usual routines and rituals, and are often separated from any sense of community. Along with the trauma of social isolation comes the traumatic experience of helplessness and the associated loss of control (Goodman et al., 1991). Like other traumatic experiences, homelessness often renders people helpless and at the mercy of others.

Researchers and practitioners have called into question whether a PTSD diagnosis is sufficient to describe the experience and impact of ongoing pervasive trauma, particularly within care-giving systems (Herman, 1992; van der Kolk et al., 1996). The terms "Complex PTSD" or "Disorders of Extreme Stress Not Otherwise Specified" (DESNOS) have been suggested to describe a set of symptoms associated with prolonged experiences of severe interpersonal abuse (Cook et al., 2005; Herman, 1992; van der Kolk, 2002; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Given the prevalence of chronic interpersonal violence, along with the stress associated with daily survival in an often unsupportive system, the experiences of homeless mothers may well fit the definition of complex trauma.

The case of Alice at the beginning of this chapter is illustrative of the majority of homeless women who have experienced prolonged violence across their lives.

Alice has experienced multiple traumatic events, including violence during childhood and violence in her intimate adult relationships, along with the trauma of being homeless. Trauma has played a significant role in Alice's life and the lives of her children, and the family continues to suffer the ramifications of living in an environment that breeds an ongoing sense of chaos, danger, and unpredictability. Alice's repeated experiences of interpersonal violence shape the ways in which she thinks and behaves, the ways in which she manages her emotions, and her ability to stay connected and attuned to her children, problem solve, form healthy relationships, and assess safety in the outside world.

The ramifications of inadequate diagnoses can be extremely devastating to trauma survivors, especially those who become increasingly involved in social service systems. To adapt to prolonged traumatic experiences, trauma survivors may develop symptoms that mimic other disorders such as bipolar disorder or borderline personality disorder (Luxenberg, Spinazzola, & van der Kolk, 2001). When trauma survivors are diagnosed purely on the basis of presenting symptoms, providers are likely to miss the underlying traumatic experiences that may be the source of the symptoms and the necessary focus of treatment. Poor or inadequate treatment will only serve to weaken a family's resolve and its ability to find and maintain housing, employment, and external supports.

Pathways to Homelessness: The Impact of Complex Trauma

The primary and foundational causes of family homelessness are systemic and related to lack of affordable housing, employment opportunities, and fair wages (Bassuk, 1991), however, the impact of complex trauma associated with long-term histories of violence can also be devastating to women and their families. Chronic trauma impacts all levels of functioning and can result in a range of emotional, physical, and relational issues. Poor families who have experienced chronic trauma are faced with unique difficulties in the face of the already overwhelming obstacles associated with poverty. Experiences of extensive violence can compromise the normal responses to stress and the ability to cope with life events. Due to their histories of abuse, experiences of violence in the present, and subsequent difficulties in establishing and maintaining a sense of safety, traumatized families are far more vulnerable to negative life events, including homelessness. Bassuk, Perloff, and Dawson (2001) found that prolonged assaults to safety throughout the lifespan lead to physical and mental health issues, perpetuate violent relationships, and result in a continued lack of social supports, separation of the family unit, and a subsequent decrease in economic self-sufficiency that, taken together, dramatically increase a family's vulnerability to one-time or repeated episodes of homelessness.

Emotional and Physical Health

Due to extensive chronic trauma in the early lives of homeless mothers, it is important to consider the impact on emotional and physical health in adulthood.

Homeless mothers who grow up in violent families have few opportunities to develop healthy coping skills, secure attachments, and a positive, stable sense of self, because they are too often on alert for threat or danger. Constant focus on danger takes its toll on emotional and physical health, as the body is constantly under stress. Emotional and physical issues such as depression, anxiety, and ulcers are frequently the result. Self-harm and substance abuse are among the ways in which trauma survivors attempt to cope with overwhelming thoughts and feelings and a pervasive sense of danger and unpredictability.

Both homeless and low-income housed women have poor physical health compared to the general population, including higher rates of asthma, anemia, and ulcers (Bassuk et al., 1996). These mothers also report high rates of smoking (Bassuk et al., 1996). Thirty-nine percent of homeless mothers have been hospitalized (Bassuk et al., 1996). Some physical issues may come from injuries associated with violence. Physical issues and complaints may also represent a deeper physiological response to chronic trauma that results in somatic symptoms or "body memories" (Bassuk, Melnick, & Browne, 1998). Traumatic memories may not be stored with associated language and context, but instead remain deeply visceral and experienced at the physiological level (Bassuk, Melnick, & Browne, 1998). This increases one's sense of lack of control over physical sensations and experiences, and may be interpreted as physical issues that require attention and treatment (Bassuk, Melnick, & Browne, 1998). In addition to these physically felt "memories," chronic stress and the body's chemical response to repeated violent experiences and associated triggers and memories take a cumulative toll on the health of body and mind (Bassuk, Melnick, & Browne, 1998).

Along with physical health issues, there is a strong relationship between experiences of violence and increased mental health and substance abuse issues in homeless women (Bassuk, Buckner, et al., 1997; Bassuk & Rosenburg, 1988; Bassuk et al., 1996; D'Ercole & Struening, 1990; Ingram, Corning, & Schmidt, 1996). Experiences of violence can lead to symptoms such as anxiety, feelings of loss of control, fear, guilt, shame, and depression (Browne, 1993). Homeless mothers with histories of violence have had to learn to adapt to their childhood experiences. These adaptations may lead to the development of unhealthy coping mechanisms such as drug use or self harm, along with serious mental health issues that impact the ability to manage work and relationships in adulthood.

In a review of studies of the long-term impact of childhood sexual abuse on adult women, Browne (1993) noted that all areas of functioning are impacted by ongoing childhood abuse, including emotional, physical, psychological, and relational abuse. In adulthood, these women show higher rates of depression, anxiety, substance abuse, and other general impairments in functioning as well as increased vulnerability to future victimization, including battering and sexual assault (Browne, 1993). In a study of 141 homeless women, high rates of violence were associated with increased rates of "depressive symptoms; psychotic symptoms; and hospitalizations for psychiatric, medical, alcohol, and drug problems" (D'Ercole & Struening, 1990, p. 148). Ingram et al. (1996) found that homeless women reported significantly higher rates of childhood sexual victimization and that higher levels of victimization were associated with higher levels of distress.

Bassuk and Rosenburg (1988) found that homeless mothers with extensive histories of violence experienced higher rates of substance abuse and mental health problems than housed mothers. Bassuk et al. (1996) found that "four times as many homeless as housed women reported injecting drugs on at least one occasion" (p. 643). Homeless women were also more likely than housed women to have been hospitalized for emotional or substance abuse issues, and women who had been hospitalized for mental health issues in the two years prior to being homeless were at increased risk of further episodes (Bassuk et al., 1996, Bassuk, Buckner, et al., 1997). Both homeless and low-income housed women had higher rates of PTSD, alcohol and drug abuse, major depressive disorders, and attempts at suicide than did the general population of women (Bassuk et al., 1996). Two-thirds of each sample of homeless and low-income housed women had at least one lifetime psychiatric diagnosis, and 47 percent had at least two lifetime diagnoses (Bassuk et al., 1996). North and Smith (1992) found that homeless women with histories of trauma were more likely to develop major depression, generalized anxiety disorder, and alcohol use disorder. Seventy-four percent of the homeless women in their sample with a history of PTSD had developed symptoms prior to the year in which they became homeless. Wood et al. (1990) found that 32 percent of homeless mothers and 26 percent of housed poor mothers reported frequent use of drugs such as crack and heroin.

There is research to suggest that the combination of childhood abuse and adult mental health and substance abuse can increase a family's vulnerability to multiple episodes of homelessness. In comparison to first-time homeless mothers, mothers with multiple episodes of homelessness have higher rates of major depression or substance abuse; almost two-thirds had struggled with these issues (Bassuk, Perloff, & Dawson, 2001). These women are also more likely to have three or more lifetime mental health diagnoses (Bassuk, Perloff, & Dawson, 2001). Almost one-half had a substance abuse problem, a significantly higher rate than among first-time homeless women (Bassuk, Perloff, & Dawson, 2001). In childhood, twice as many multiply homeless mothers experienced sexual abuse and random, unexplained parent anger (Bassuk, Perloff, & Dawson, 2001).

Mothers struggling with substance abuse and mental health issues such as depression, anxiety, and PTSD have fewer internal resources to manage the day-to-day issues associated with going to work, paying bills, and taking care of children. Mental health issues that result in hospitalizations can lead to family separation, job loss, and possible eviction associated with inability to pay rent. Chronic health issues can have a major impact on a mother's ability to maintain work and have the strength to cope with life stressors. Poor physical and emotional health impacts all areas of functioning and can increase a family's vulnerability to further traumatic experiences, including one-time or multiple episodes of homelessness, as mothers have few reserves to manage the daily difficulties associated with poverty and violence.

Domestic Violence

Poverty and adult violence are inextricably intertwined. Browne, Salomon, and Bassuk (1999) cited statistics showing that women with annual incomes below $10,000 are four times more likely to be victims of violent attacks, most often within intimate relationships. Rates of assaults on women are higher for families living below the poverty line (Browne et al., 1999). Experiences of violence in childhood serve to exacerbate the effects of poverty and violence in adult relationships (Bassuk, Dawson, et al., 2001; Browne & Bassuk, 1997). Survivors may enter into other abusive relationships because they have little sense of what is healthy, little ability to trust themselves or others, impaired ability to accurately detect danger cues, and minimal self-worth, power, or agency.

In their comparison of homeless and housed women, Bassuk et al. (1996) found homeless women were twice as likely to have lost their home due to a male partner who was either abusive or had lost his job. As discussed earlier, many studies have shown that homeless mothers have high rates of abuse by their adult partner (Bassuk et al., 1996; Bassuk, Dawson, et al., 2001; Browne & Bassuk, 1997; Goodman, 1991; Wood et al., 1990). Bassuk et al. (1996) found that approximately two-thirds of each sample of homeless and low-income housed women had been physically assaulted by a male partner in adulthood, and 32 percent of those women had experienced violence at the hands of their most recent partner (Browne & Bassuk, 1997). Similarly, Goodman (1991) found that 64 percent of homeless women reported experiences of physical abuse by a partner.

Browne et al. (1999) cited studies of the impact of partner violence on women's ability to work, and noted high rates of violence among women on public assistance. Issues that can interfere with work include threatening partners, stalking, physical assaults and bruising, more missed days of work, and more mental health and physical health problems that interfered with work (Browne et al., 1999). Browne and her colleagues also found that, in their sample of poor and homeless mothers, more than 40 percent had experienced physical aggression by a male partner from the time of the initial interview through a 24-month follow-up period, and rates of violence were higher among homeless than among poor housed mothers. In their examination of the relationship between partner violence and maintaining work, Browne et al. (1999) found that women who had experienced partner violence in the past 12 months were less able to maintain work over the next year, and "demonstrate significantly higher rates of emotional and medical distress, medical hospitalization, and alcohol or other drug problems" (p. 421). As discussed above, this only adds to the struggle to maintain employment. Women who are unable to maintain consistent work in low-paying jobs lack the opportunity for promotion and higher pay in the future (Browne et al., 1999). Without the ability to maintain consistent work, mothers have increased difficulty meeting the financial needs of the family, including secure housing.

Lack of Support Systems

Early experiences of violence may impact women's abilities to form relationships and solidify support networks later, thus increasing their vulnerability to homelessness in the future (Bassuk & Rosenberg, 1988; Browne, 1993). Early childhood experiences in the family of origin provide the foundation for all future relationships. This is a time when the disruption of relationships or the presence of violence within the family system can be the most damaging to later development and functioning. Anderson and Rayens (2004) found that homeless women had the highest rates of childhood family conflict, and the lowest rates of social support in childhood and adulthood. The ability to form trusting relationships and sustain supportive connections is significantly impaired for homeless mothers with extensive histories of family violence. Attachment theory maintains that childhood histories of violence disrupt the attachment bonds between parent and child, thereby impacting a child's ability to form relationships and utilize supports in adulthood. A disrupted attachment impacts a child's view of self and others long into adulthood, and when children lack the skills necessary to seek and utilize support, their impaired ability to connect can be seen in a lack of adult support networks (Anderson & Rayens, 2004). Women who have experienced chronic violence struggle to identify what is safe and what is not, which often leads to a loss of ability to access help and support, and an increased tendency to enter abusive relationships.

A lack of support networks isolates families, particularly poor families already marginalized by the larger social and economic system. Researchers have found that homeless families have fewer supports than poor housed families (Bassuk, Buckner, et al., 1997; Bassuk et al., 1996; Bassuk, Weinreb, et al., 1997; McChesney, 1992; Wood et al., 1990). Wood et al. (1990) found that two-thirds of their sample of homeless mothers could not identify more than one external support. Bassuk et al. (1996) and Bassuk and Rosenberg (1988) found that homeless mothers had fewer supports than housed mothers a year prior to becoming homeless. Members of the support networks for homeless women had less access to basic resources, which impacted their ability to care for others (Bassuk et al., 1996). Research has shown that homeless mothers tend to have smaller networks of support and more conflicted relationships than housed mothers, thereby increasing their risk for further homelessness (Bassuk, Buckner, et al., 1997). When they interviewed homeless and housed mothers with preschool children, Bassuk, Weinreb, et al. (1997) found that homeless mothers were more socially isolated. McChesney (1992) interviewed 80 sheltered homeless mothers to examine the prevalence and quality of their relationships with their families of origin. McChesney (1992) found that solid support networks for homeless mothers were limited by lack of family member availability, distance from family members, lack of resources due to overcrowding already experienced by other family members, and estrangement from families of origin. Estrangement was high among mothers who had been abused as children (McChesney, 1992). Social support among family members was seen as a buffer to potential homelessness (McChesney, 1992).

In a comparison of the prevalence and quality of social supports among homeless and housed mothers, Shinn, Knickman, and Weitzman (1991) found that, although homeless mothers more frequently reported having a close female relative and friend whom they had seen recently, significantly fewer homeless than housed mothers thought that they would be able or be invited to stay with identified family members. Homeless women reported more people in their support networks, but they often did not believe that these support networks would be helpful in providing housing if needed. Shinn et al. (1991) also found that over three-quarters of homeless mothers had stayed with a family member at some point in the past year, which led them to suggest that "social support can be used up" (p. 1184), and perhaps homeless mothers in shelters believe that they have already used their support networks to capacity.

Family Separation

Wood et al. (1990) reported that more than one-third of homeless mothers interviewed had been placed with other family members or in foster care during childhood (Wood et al., 1990). In another study, approximately one-third of respondents who had experienced violence were removed from their families for some period of time (Browne & Bassuk, 1997). Bassuk et al. (1996) found that, when they compared homeless and low-income housed mothers, more than twice as many homeless women had spent time in foster care during childhood. In a comparison of multiply homeless families to first-time homeless mothers, Bassuk, Perloff, and Dawson (2001) found that women with multiple experiences of homelessness were more likely to have had an out-of-home placement. Goodman (1991) also noted a significant difference between housed and homeless mothers in the area of time spent in foster care as a child. Having been placed in foster care as a child and having had a female caretaker who used drugs are the two most significant childhood predictors of homelessness in adulthood (Bassuk, Buckner, et al., 1997). The connection between family separation and future homelessness may be related to the disruption of parent-child attachment and the documented impact of disrupted attachments on health and well-being, skill building, and problem solving. Disrupted attachments, whether due to abuse and neglect experienced by the child or family separation due to a lack of safety in the home, have a significant impact on future relationships, emotional health, use of social supports, and availability of coping skills. Homeless mothers who enter adulthood without the skills necessary to manage stress are considerably more vulnerable to the destructive impact of violence and poverty, and subsequent experiences of homelessness.

Complex Trauma: Issues for Children

The impact of chronic trauma in childhood is particularly damaging. Children rely on their caregivers to keep them safe, and they have fewer internal coping skills than adults do to manage stress or threat. Infants and young children are in a uniquely vulnerable position because their well-being and course of development depend on their attachments with caregivers. If caregivers are compromised by trauma and by complex issues that have led to homelessness, attachment with their children is adversely impacted. Young children are also negatively impacted by direct exposure to trauma, including domestic violence, abuse, and neglect.

The ways in which a caregiver responds to a child in distress and the level of support offered to that child are vital factors in a child's recovery from trauma (NCFH, 2006). Parents who have been traumatized often have greater difficulties being responsive and sensitive to their children's needs (Osofsky, 1999). If a child's primary caregiver is a victim of violence, suffering with emotional, physical, and/or substance abuse, isolated, or in a violent relationship, it is extremely difficult to be present for and attuned to a child's needs or to foster a sense of safety and security. This leads to an increased sense of helplessness and loss of control on the part of the child, who is then forced to adapt behavior in response to perceived threats. Children's experiences of violence and instability within the caregiving system, either due to abuse and/or neglect or due to unsafe situations that lead to a child's removal, can result in disruption of the fundamental parent-child attachment system in which children learn coping skills, create relationships, and understand themselves and the world. These disruptions have a significant impact on all aspects of a child's functioning and development (James, 1994). Even when primary relationships are adequate, exposure to domestic violence can significantly impact children's functioning. Chronic traumatic experiences lead to an ongoing sense of instability, and threat has a significant impact on children's growth and development, which often results in an increase in physical problems, emotional and behavioral issues, developmental delays, and learning difficulties.

Emotional and Physical Health

Exposure to ongoing traumatic experiences, both within the family and as a result of being homeless, impacts children's physical health. Homeless children are more often in poor physical health (American Academy of Pediatrics, 1996; NCFH, 1999; Rafferty & Shinn, 1991). They are more likely to suffer from acute illnesses such as fever, ear infection, cough, stomach problems, and asthma, as well as chronic diseases such as sinusitis, anemia, asthma, bowel dysfunction, eczema, visual deficits, and neurological deficits (American Academy of Pediatrics, 1996; NCFH, 1999). These appear likely to be related to experiences of trauma (American Academy of Pediatrics, 1996). Nearly 70 percent of infants, toddlers, and preschoolers have chronic illnesses (NCFH, 1999). Weinreb, Goldberg, Bassuk, & Perloff (1998) found that homeless children had more emergency room and outpatient medical visits and were more likely to experience poor health. In a study of homeless and housed preschool children, Bassuk, Weinreb, et al. (1997) found that twice as many homeless as housed children had been medically hospitalized over a one-year period.

For homeless families living in poverty, there is a lack of ongoing routine medical care, lack of access to timely care, and poor nutrition often associated with lack of money to provide adequate meals (NCFH, 1999). Research has shown (Rafferty & Shinn, 1991) that homeless families have less access to quality health care, beginning with prenatal care and continuing as their children grow older. Unhealthy living conditions prior to homelessness can weaken a child's immune system. Subsequent time in shelters also increases the risk for disease and infection (NCFH, 1999). Ongoing issues such as lack of regular health care and lack of immunizations and screening for lead poisoning contribute to the poor health of homeless children (NCFH, 1999). The combination of stress, lack of consistent resources prior to homelessness, and the trauma of homelessness itself is a contributor to poor health (NCFH, 1999).

In addition to physical health complications associated with poverty and homelessness and associated histories of family violence, homeless children have increased emotional and behavioral issues that can impact all areas of their functioning. They have high rates of anxiety, depression, sleep problems, shyness, withdrawal, and aggression (Bassuk & Rubin, 1987; Bassuk & Rosenberg, 1988). In a study of preschool-age homeless and poor-housed children, Bassuk, Weinreb, et al. (1997) found that homeless children had significantly higher externalizing scores on the Child Behavior Check-list (CBCL) and slightly higher internalizing scores. They also found that 12 percent of homeless children had clinical problems such as anxiety, depression, and withdrawal, and 16 percent had behavior problems evidenced by severe aggression and hostility. High scores on the CBCL were most closely predicted by length of time in foster care, experiences of physical abuse, death of a childhood friend, and mother's emotional status (Bassuk, Weinreb, et al., 1997). Experiences of loss or events that lead to emotional or physical separation from a child's primary caregiver have a significant impact on a child's sense of safety and well-being, and the associated helplessness and fear is played out in a child's emotional and physical responses.

Among homeless school-age children, Buckner, Bassuk, Weinreb, and Brooks (1999) found that older children demonstrated more aggressive and acting-out behaviors than younger children did. Overall, homeless children scored well above average on parents' reports of internalizing and externalizing behaviors as well as self-reports of internalizing behaviors. Buckner et al. (1999) also found higher rates of internalizing behaviors among homeless children, and they pointed to the tendency of older children to internalize their problems. Other researchers have discussed the experience of shame, self-criticism, low self-worth, and subsequent depression that may be associated with this type of behavioral presentation (Buckner et al., 1999). Like Bassuk, Weinreb, et al. (1997), Buckner et al. (1999) found that mothers' distress was strongly related to greater behavior problems in their school-age children.

In a study of homeless youths aged 6–17, Buckner and Bassuk (1997) found that homeless children struggled with high rates of mental health problems. Nearly one-third had at least one major mental disorder that interfered with their daily lives, compared to 19 percent of other school-age children. Forty-seven percent of homeless youth had problems with anxiety, depression, or withdrawal compared to 18 percent of other school-age children; and 36 percent demonstrated delinquent or aggressive behaviors, compared to 17 percent of other school-age children (Buckner & Bassuk, 1997). High rates of internalizing symptoms, such as depression and anxiety, were associated with exposure to violence (Buckner, Beardslee, & Bassuk, 2004).

Children living in shelters with their families face a variety of challenges to their well-being and healthy development. The children sometimes display many challenging behaviors and a confusing set of symptoms. Young children may lose previously acquired skills (regression) or may have problems with sleeping (insomnia, restless sleep) and eating (digestive problems). They may be highly distractible, unable to play for more than a few minutes, or their play may be narrow and repetitive. When they receive adequate mental health assessments and services, their behaviors may lead to diagnoses of attention deficit hyperactivity disorder, separation anxiety, major depression, or conduct disorder.

Child Development

The experiences of homeless children, both prior to becoming homeless and once they have become homeless, have a significant impact on growth and development (Bassuk & Rosenberg, 1990; Bassuk & Rubin, 1987; Bassuk, Rubin, & Lauriat, 1986; Rafferty & Shinn, 1991). Studies of homeless children cited by Rafferty and Shinn (1991) have documented development delays, including difficulties with attention, speech delays, immature peer interactions, language disabilities, and cognitive delays. Bassuk and her colleagues (Bassuk and Rosenberg, 1990; Bassuk & Rubin, 1987; Bassuk et al., 1986) noted that homeless children demonstrated significant delays in language development, gross motor skills, fine motor skills, and social/personal growth, and 54 percent of homeless preschoolers showed at least one major developmental lag. Coll, Buckner, Brooks, Weinreb, and Bassuk (1998) found no developmental differences between homeless and low-income housed children, but noted that older children tended to score lower than younger children on various developmental measures, and that proper growth and development occurs too slowly for 18 percent of homeless children, which suggests that, as children experience cumulative damage associated with poverty, the impact may gradually become more apparent.

Academic Achievement

According to reports by homeless mothers, approximately 43 percent of homeless children were failing or performing below average academically, and 43 percent had repeated a grade (Bassuk & Rosenberg, 1988; Bassuk & Rubin, 1987). Additional research has shown that 14 percent of homeless children are diagnosed with learning disabilities, double the rate of other children (NCFH, 1999). According to Rubin et al. (1996), 75 percent of homeless children were performing below grade level in reading, 72 percent were below grade level in spelling, and

54 percent were below grade level in math. Homeless children are far more likely than other children to change schools, are twice as likely repeat a grade, are suspended twice as often as other children, and demonstrate behaviors that significantly interfere with their learning (NCFH, 1999).

Implications for the Field

Homeless families are likely to have experienced some form of interpersonal violence or abuse, and these traumatic experiences impact their thoughts, feelings, behaviors, and relationships. In the time between the onset of traumatic experiences and development of acute stress disorder, PTSD, or complex trauma, many mediating factors can serve either to facilitate healing and recovery or to increase distress. Factors that impact trauma recovery include the following: additional traumatic experiences, past traumatic experiences, biological traits, coping style and skills, family history, level of support, and environmental response (van der Kolk et al., 1996). Each of these factors can have a dramatic impact on a person's ability to recover from trauma without becoming overwhelmed by symptoms or developing unhealthy adaptations to manage his or her distress (van der Kolk et al., 1996). Service providers may not have control over all of these factors; however, they play a pivotal role in recovery based on their capacity to facilitate safe, predictable, compassionate, and informed responses to trauma survivors that buffer the impact of the traumatic experiences.

Ineffective responses may serve to exacerbate symptoms or retraumatize individuals and families. Those who work with homeless families should be aware of the prevalence of trauma and its associated impact on the lives of women and children. This involves understanding the research on trauma in the lives of homeless families and making changes in the ways services are provided. Changes involve the creation of trauma-informed service systems; the inclusion of thorough, trauma-informed child programming; and the provision of stable, long-term external supports for homeless families, families in transition from homelessness, and poor housed families.

The Need for Trauma-Informed Services

The effects of repeated exposure to traumatic experiences can be long-term and pervasive, and can impact all areas of people's lives, including: biological functioning, cognitive functioning, emotional functioning, social interactions/relationships, and identity formation. Simply stated, people who have experienced multiple traumas do not relate to the world in the same way as those who have not been traumatized.

As we have seen, most homeless women and children have endured multiple traumas prior to being homeless and while homeless. Their understanding and perception of themselves, their environment, and the people around them is significantly impacted by these experiences. As a result, these families require specific types of services that are sensitive to their status as trauma survivors.

Service systems must adopt a certain way of responding to the needs of the women and children that keeps in mind the trauma that they have experienced and how this impacts their current functioning in all areas. Adopting a " trauma-informed" approach to service provision means viewing the lives of homeless families through a "trauma lens" and provides a way to understand their behaviors, responses, attitudes, and emotions as a collection of survival skills developed in response to traumatic experiences. Otherwise, the impact of trauma gets lost amid other mental health, substance use, health, employment, and housing issues in the lives of homeless families.

Within shelters, all aspects of programming need to be examined to ensure that the system is sensitive to the needs of families who have been traumatized, including atmosphere and environment; policies and procedures; services; and staffing and training. Creating a trauma-informed space for consumers requires meeting basic needs and creating a safe environment in which routines and responses are consistent and predictable. Along with the need to create a safe service setting is the need to create an emotional environment that enhances the consumer's sense of safety. This includes a demonstrated tolerance for a range of emotions that may be expressed by the consumer. Tolerance for emotional expression enhances the survivor's internal sense of security and ability to regain self-control. Regardless of the response that a trauma survivor exhibits under stress, the provider must understand the individual's reactions in order to provide support. Providers working with trauma survivors should have an understanding of how traumatic experiences affect the brain and the body, and how trauma survivors exhibit different reactions in the present due to their past experiences. Providers need to be able to recognize how extreme responses of dissociation or overreaction are in fact adaptations helpful to trauma survivors while managing their traumatic experiences, but may be ineffective and unhealthy in the present. This requires ongoing training and trauma education for providers that allows them to identify what is happening with the consumer and why she may be responding in particular ways.

When providers understand trauma responses, they can help a survivor better understand her experiences, provide opportunities for her to practice regaining self-control, and help her utilize techniques to de-escalate difficult situations. Important components of support for trauma survivors involve helping them to identify specific triggers; understand what is happening in their brains and bodies; ground themselves in the reality of the present situation; and develop self-soothing techniques and coping skills to manage feelings associated with past traumatic experiences. Keeping in mind the potential triggers for trauma survivors, providers can examine their agencies and programs to identify and eliminate daily practices, policies, or ways of responding to consumers that might result in loss of control or power and feeling retraumatized. In addition to education about trauma and the body, Browne (1993) discussed the need to provide education to homeless families around the impacts of family violence, including discussions about what is considered "abusive" along with strategies to prevent abuse and keep families safe.

Child Programming

For families, the path to homelessness has included serious disruptions in interpersonal relationships, financial stress, and other losses. Some children have experienced trauma associated with loss and instability, whereas others have been exposed more directly to violence. Children's programming is of vital importance to address both the problems that arise in shelter life and the issues that families and children bring to the shelter. Shelter life entails a variety of constraints. For example, families often live in a single room. Children may have given up all their familiar possessions and now have to share playthings with all the children residing in the shelter. Because meals are generally provided by the shelter, children may also miss foods that are familiar. Sometimes parents feel constrained because their parenting practices are observable by shelter staff as well as other parents. Most shelters have rules about discipline practices and supervision of children. For example, if physical discipline of children is prohibited, parents who have relied on physical discipline must learn new parenting skills.

An effective children's program includes coordination with systems of care for children in the community and services within the shelter program. The child advocate must establish a working alliance with both the parents and their children. Even parents who are compromised by stress and trauma can provide important information about their children's well-being and should remain actively engaged in their children's care. Advocates should have a basic understanding of normal child development, so they can screen for problems that might need referral and be aware of the local systems of care available to families, including pediatric, family medicine, early intervention services, mental health, child care, state human services, and school systems. Advocates also need to understand the cultural issues presented by the population served by the shelter. The advocate's proper role is that of screening, needs assessment, and linkage with appropriate resources in the community. Further, the advocate can serve as a resource on "homelessness" for the community concerning the special needs of families residing in shelters.

CASE EXAMPLE: KATHY

Kathy came to the Horizon Shelter following the arrest of her partner for selling drugs. Her partner had been heavily involved in gang activities, and sometimes exposed Kathy and her children to violence. Kathy was a stay-at-home mother for both 18-month-old Keaunna and three-year-old Samuel. They all fled from their home after gunshots were fired into the house, and then temporarily lived with family members. When the shelter advocate first met with Kathy and her children, she noticed that Kathy appeared extremely stressed. Kathy told the advocate that her children were often up through the night and Samuel had gone back to needing diapers after having been fully toilet trained. She said that spanking hadn't helped, and he still wasn't using the toilet. Kathy thought that her children seemed irritable and unhappy, and she had so many things to take care of she didn't know what to do first.

The advocate helped Kathy to develop a list of priorities and began to help her to accomplish her goals. She let Kathy know that children sometimes did regress following family disruption and that Samuel's regression to diapers was likely a sign of his stress. She recommended that Kathy support Samuel with encouraging words rather than spankings. They worked out a plan to support the children, including part-time childcare so that Kathy would have some time to take care of the work necessary to establish a new home. The childcare providers required immunization records, but both children had gaps in their medical care, and Kathy had been using urgent care clinics for their health care. The advocate helped set up a permanent medical relationship for the family, and both children received well-child checkups. When childcare providers voiced concerns about Samuel's aggressive behavior and his sister's withdrawn behavior, the advocate linked Kathy and the children to a community mental health service. Because the mental health agency had not served shelter residents before, the advocate met with the staff to educate them about shelter life and the needs of shelter residents.

A second important component of shelter programming is on-site children/family programming. As previously discussed, children may come into a shelter with a range of difficulties that can manifest in a variety of challenging behaviors, such as aggression toward peers, extreme anxiety, and withdrawal. Parents coping with homelessness may be ill-equipped to help their children navigate shelter life. A comprehensive children's program provides respite from the stress of shelter life, and helps children feel secure and safe. Structured programs can help children gain new skills to cope with the challenges of homelessness. Programming for parents can educate them about the effects of homelessness on children's well-being and provide opportunities to improve parenting skills.

External Support Networks

Homeless mothers who have histories of violence and subsequent issues of mental, emotional, and physical health and substance abuse require specialized support services for themselves and their children in order to achieve long-term success. According to Bassuk, Buckner et al. (1997), "factors that increase social or community supports or resources are protective against family homelessness" (p. 246). Unfortunately, families that are homeless are often living in a constant state of stress and fear that interferes with their ability to access help. Given the isolation experienced by homeless women and children, enhancing connections and creating support networks become extremely important. As service systems begin to address the needs of homeless families, it is imperative that social supports are incorporated into any service planning. Social networks should also be incorporated within shelter settings in the context of mental health and substance abuse treatment planning and when helping families make the transition to stable and permanent housing.

For families who are staying in shelters, the creation and strengthening of support networks can be facilitated by providers who encourage a sense of community both within the shelter and with the outside community (Goodman et al., 1991). Within the shelter community, this involves providing families with opportunities to share their cultural rituals, join together in group activities, and participate in community meetings and support and therapeutic groups. Shelter systems can keep families connected with the outside community by making referrals and connections to trauma clinics, mental health clinics, substance abuse clinics, and other service providers.

Due to the significant mental health and substance abuse issues in the lives of homeless families, shelter systems and mental health and substance abuse providers need to actively collaborate to create integrated treatment plans that involve open communication, joint service planning, and the ability to understand and utilize trauma theory and education in all interactions with homeless families. Unification of these services can help create a treatment community that understands homeless families and serves the full range of their needs, as opposed to treating just a few issues in isolation from others. Such a "service network" helps to provide a sense of safety and predictability for homeless families, who might otherwise be asked to tell their stories repeatedly, only to receive fragmented support.

Transitions are often extremely difficult for traumatized families, as they may trigger feelings of fear, anxiety, and concern about what the future holds. It is essential that external support networks remain in place as families transition from shelter living into more permanent housing. These supports include both out-of-home and in-home services such as individual therapy, family therapy, parent aids, child care services, and stabilization teams. In addition, homeless mothers may continue to require advocates who can guide, educate, and help them navigate the system, maintain housing, and find employment.

Policy Implications

The relationships between violence, trauma, and homelessness are both intimate and destructive. Research has shown that the impact of violence on homeless families is profound, all-encompassing, and life-altering. The foundational systemic imbalances and deficits in the areas of affordable housing, employment opportunities, and sufficient wages set the stage for family homelessness, and experiences of violence and isolation further increase a family's vulnerability to homelessness. Though research has shown that homeless families have significant histories of trauma, service systems continue to demonstrate a lack of understanding of the impact of trauma in the lives of these families. Service providers often work with homeless families without an adequate understanding of trauma and without an awareness of the ways in which they can do their work in a more trauma-informed manner. Women who become homeless are not provided with adequate services and supports to stabilize and rebuild their lives, and children who suffer the ramifications of family violence are largely ignored. In order to effect change, not only do trauma-informed services, child programming, and support services need to be in place as described above, but service systems need to alter their fundamental structure and mode of operation in order to create policies, procedures, and short- and long-term programming for homeless families. Defining and creating trauma-informed policies and procedures and providing adequate adult and child supports are necessary steps toward buffering the impact of trauma on families and decreasing the potential for future homelessness.

Creation of Trauma-Informed Policies and Procedures

Service systems working with homeless families often demonstrate a lack of understanding of the experiences of trauma in the lives of homeless families and the impact of trauma on daily functioning. As discussed previously, the creation of trauma-informed systems is a necessary step in providing effective services for homeless families. This requires systemic changes in the way that services are delivered to homeless families.

There is a call for the creation of standards across settings for the implementation of trauma-informed services. This involves dedication to the training and education of staff, the creation of trauma-informed environments, the establishment of trauma-informed policies and procedures, and thorough assessments of mothers and children with specific questions related to experiences of violence and the provision of trauma-specific services for children and adults. These practices must become a routine and integral part of any service system working with homeless families. Providers at all levels of various systems, whether in shelters or community-based service centers, should demonstrate an understanding of trauma and an awareness of the reasons behind providing services differently for those who have experienced trauma. Service providers should have written policies that involve a commitment to being trauma informed and acknowledge the presence of trauma in the lives of the families served. Daily procedures as well as emergency procedures should be outlined clearly and in a manner that avoids the retraumatizing of families. These policies and procedures should be reviewed on a regular basis, and an ongoing trauma work group should continually monitor and improve services in consultation with outside agencies that have expertise in trauma and trauma-specific services for adults and children.

Access to Supports

Poor women are not given access to supports necessary to remain employed and housed. The root causes of homelessness include a lack of affordable housing, low wages, lack of employment opportunities, and decrease in assistance for poor families. Homeless mothers are often immobilized by lack of opportunity, lack of resources, and lack of support. With assistance, these women can begin to take the steps necessary to obtain employment and secure housing, and begin to create a sense of safety and stability. This involves commitment and coordination on the part of many service providers and advocates to help to change the way that services are provided to homeless families.

A mother's ability to work is intimately connected to the supports that she receives. Homeless mothers need housing supports, access to day treatment and mental health services, access to primary care doctors, access to day care, employment supports when appropriate, domestic violence services, and trauma-specific interventions within individual, group, and family settings. These services must be consistent and long term. Browne et al. (1999) found that recently victimized women had more difficulties maintaining work over the next year, and they pointed to the need for longer-term public assistance and other supports as women attempt to maintain employment in the wake of violent experiences. Browne et al. (1999) explained that their findings regarding the relationship between violence and women's ability to maintain long-term work indicate that "practical supports—such as the availability of child care, a government child care subsidy, job training, and job placement services—increase the likelihood that women will maintain work over time" (p. 421).

Child-Specific Services

Homeless mothers who have experienced violence have children who have also experienced violence. The cycle of poverty, violence, mental health issues, and substance abuse continues with the next generation of homeless children who reach adulthood without the necessary skills to manage and cope with life events. Research has shown the toll that homelessness takes on children's mental and physical health and well-being, as well as on their cognitive development. However, within the homeless world, children's services are often minimally funded or completely disregarded. The need for child-specific services in shelter and transitional settings is great, and yet current funding sources do not support these services. Shelters often depend on volunteers, who are frequently young, untrained, and unreliable. Service providers often do not coordinate with each other.

Homeless children have specific emotional, physical, and educational needs that demand attention in order to prevent continued damage and future difficulties. Therefore, it is imperative that they have access to the same quantity and quality of resources as housed children. Within shelter systems there is a need for sustainable child programming, child assessments, trauma-specific services for children with greater mental health needs, access to physical health care, and opportunities for activities to support age-appropriate growth and development. As homeless families predominantly include mothers and children of various ages, these services must be family oriented, have a developmentally appropriate trauma component for children designed for children all ages, and have a parenting component. Because a subgroup of children will require more intensive services, all programs must establish referral networks in the community that are willing and able to work with homeless children and their parents. Within the community, homeless children need access to additional supports including access to early childhood services such as Head Start. There is a need for increased mental health access, such as witness to violence services, professionals who come to shelters and are supported by shelter administrators, and family reunification and stabilization teams. As outlined in the McKinney-Vento Act, homeless children have a right to the same educational access as housed children. Therefore, there is a need to maintain continuity in school placement and to support homeless mothers in maintaining their children's school attendance.

Concluding Remarks

Homeless families face multiple challenges as they attempt to stay together, obtain permanent housing, and access necessary supports and resources. Poverty and its ramifications severely limit the capacity for healthy growth and development. Lack of affordable housing, low minimum wages, and lack of employment and educational opportunities dramatically impact a family's ability to remain self-sufficient. Poverty breeds isolation and a sense of hopelessness and powerlessness that is often paralyzing to family systems.

In addition to the systemic causes of poverty and homelessness, most homeless mothers have experienced violent trauma in both childhood and adulthood. These experiences of trauma often result in severe emotional and physical health issues and compromised relationships that impact homeless mothers' ability to access and utilize systems of care. Given the prevalence of trauma in the lives of homeless families, it is imperative that service providers understand the impact of trauma on the lives of homeless women and children. Those who best understand trauma dynamics are best able to foster recovery and healing in the lives of these families.

In recent years, some states have created 10-year plans to reduce or eliminate homelessness. This increase in awareness and motivation offers renewed hope; however, there is a need for additional resources, services, and political will to effect change on a broader scale. As a society, it is imperative that we support those with the fewest resources and the greatest need, in an effort to break the cycle of poverty, violence, and homelessness for those who are currently most vulnerable and for the generations of families to come.

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CHAPTER 11

TRAUMATIC IMPACT OF VIOLENCE AGAINST WOMEN

Anne M. Dietrich

The World Health Organization has estimated that in the year 2000, 1.6 million people worldwide died from self-inflicted, interpersonal, or collective violence (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). Society's awareness of violence against women in particular has greatly increased over the past several decades, as violence against women is recognized as a significant public health issue in both industrialized and developing countries. From 10 to 69 percent of women worldwide report *intimate partner violence,* and studies from various countries, including Australia, Canada, Israel, South Africa, and the United States, show that 40–70 percent of murdered women are killed by their partners, usually in the context of an ongoing abusive relationship. Women who are physically assaulted in intimate relationships (including dating relationships) are often psychologically abused and/or sexually assaulted by their partners as well (Krug et al., 2002).

Reported rates of *sexual violence* vary between countries, and range from less than 2 percent in Bolivia, China, and the Philippines to 16 percent in the United States. In various countries around the world, approximately 25 percent of adult women report sexual assault by an intimate partner and up to 33 percent of teenaged girls report that their first sexual experience was forced (Krug et al., 2002). Fifty percent of Canadian women have experienced at least one incident of physical or sexual violence after age 16 (Johnson, 2005).

Childhood sexual abuse is documented in many countries, and this form of childhood abuse is associated with a wide variety of long-term adverse effects. The mean lifetime prevalence of childhood sexual abuse (involving contact forms of abuse) is estimated at 20 percent for females and 5–10 percent for males (Krug et al., 2002).

Although the best-known forms of sexual violence against women include sexual assault and child sexual abuse, other forms include violence against sex-trade workers, genital mutilation, forced virginity examinations, war-related rape, forced marriage (including marriage of children as young as seven years of age), forced abortion, and sexual trafficking. In many countries, violence against women is institutionalized, with little to no recourse for victims (Brack, 2006).

The World Health Organization (WHO) notes that hundreds of thousands of women are bought and sold each year for the purposes of prostitution and sexual slavery (Krug et al., 2002). About half of global sexual trafficking occurs in Asia (Huda, 2006); more than 200,000 Bangladeshi women are reported to have been trafficked during a seven-year period in the 1990s. The special rapporteur on trafficking in persons reports that approximately 30 million Asian woman and children have been trafficked over the past 30 years (Huda, 2006) and it has been estimated that approximately 120,000 women and children are trafficked to Europe each year (Bremer, 2001).

North America is not exempt from this problem: The WHO estimated that 45,000 to 50,000 women and children are trafficked annually to the United States (Krug et al., 2002); however, other estimates are lower, with estimates of 17,500 persons trafficked annually to the United States (Cicero-Dominguez, 2005) The accuracy of estimates is not clear, given various methodological issues in terms of obtaining accurate statistics from various countries. Statistics on sexual trafficking to Canada have not been systematically collected by the Canadian government to date; however, the Royal Canadian Mounted Police (RCMP) estimate that 600–800 persons are trafficked to Canada each year (Human Trafficking and Modern Day Slavery). It is also estimated that from 16,000 to 20,000 Mexican and Central American children are trafficked for the sexual purposes (Cicero-Domínguez, 2005). (The escalation in global human trafficking may be largely attributed to the ease of trafficking using the Internet.)

A certain proportion of victims may respond to sexual or physical violence by harming themselves (e.g., self-mutilation), attempting suicide, or committing suicide. As such, the violence does not necessarily stop for the victim when the traumatic event stops. Moreover, women who have previous histories of abuse are at increased risk of various forms of revictimization (Cloitre, 1998; Dietrich, in press; Messman-Moore & Long, 2000). In a study of adults who were maltreated as children, gender differences were reported for rates of revictimization, with women significantly more likely to experience physical revictimization, sexual revictimization, and various forms of abuse by an intimate partner than males. The only form of revictimization that was higher for males in this study was physical assault by strangers (Dietrich, in press). These results are consistent with a recent survey conducted by Goldberg and Freyd (2006) in the United States, which found that women are more often victimized by persons known to them than are men.

This chapter includes a brief overview of violence against women and an in-depth discussion of three of the most common forms of violence against females:

rape, childhood sexual abuse, and intimate partner violence. The psychological effects of violence against women are discussed and exemplified through three case studies, followed by recommendations for public policy.

Overview of Violence against Women in Relationships

When thinking of violence against women in intimate relationships, *battering* often comes to mind. Battering refers to repeated physical assault of a partner on a cyclical basis; however, in some relationships the abuse may occur occasionally rather than repeatedly, with anger and frustration sporadically erupting into violence. The more severe (battering) type of violence is seen most commonly in clinical samples (i.e., samples of women who seek treatment), whereas the occasional form of violence is found more often in general population studies (Kantor & Jasinski, 1998). In addition to the physical violence, women are often emotionally or psychologically abused and frequently sexually abused and/or stalked within the context of intimate relationships.

Although women from the middle and upper social classes can and do experience partner violence, research shows that women who live in poverty are disproportionately affected by domestic violence (Krug et al., 2002). There is no one "type" of perpetrator of domestic violence, and research suggests the existence of several different types among men who commit intimate partner violence. Violent behavior may result from loss of control, dependency, fears, anxieties, frustrations, and threats to self-esteem. Personality disorders (especially borderline and antisocial) are often common to batterers, and many have a history of attachment disorders that originate within their own families of origin (Kantor & Jasinski, 1998). Males who perpetrate violence against their female partners tend to hold traditional beliefs regarding gender roles (Krug et al., 2002); however, partner violence also occurs in same-sex relationships. The dynamics and patterns of abuse in same-sex relationships are similar to those seen in abusive heterosexual relationships (Harway et al., 2001).

Although research indicates that some women engage in partner violence against males, they do not engage in the same form of severe, escalating violence that is seen in clinical samples of battered women. Moreover, women who are victimized by male partners are more likely to be injured, require medical attention, and fear for their lives than are men who are abused by female partners. Women who do engage in aggressive behavior within intimate relationships often do so in order to defend themselves (Kantor & Jasinski, 1998; Krug et al., 2002).

When women remain in abusive relationships, people may question why they do not leave. The reasons why women remain in abusive relationships are complex, and often involve *traumatic bonding* (Dutton & Painter, 1981). *Traumatic bonding* refers to a particularly strong attachment bond that develops between victims and perpetrators in abusive relationships. The victim often feels quite ambivalent, knowing that the relationship is unhealthy but unable to break the attachment due to the traumatic bond. Many women leave and return to the relationship, only to permanently leave after many such trials. They may be financially dependent on their partners; ongoing abuse may affect their psychological state and functioning (e.g., denial, self-blame, impaired self-esteem, major depression, posttraumatic stress disorder), which may impact on their ability to end the relationship; they may have concerns for their children if they leave, may lack social support or have fears of being ostracized by their loved ones or communities, may hope that their partner will change, and/or may be terrified to leave the relationship out of fear of what their partner will do. Abusers often threaten to hurt the woman, the children, and/or pets should she try to leave, and may carry out those threats. Canadian, American, and Australian women in particular who leave abusive relationships are at a high risk of death at the hands of their partner (Krug et al., 2002).

Older battered women may face additional difficulties that may not be faced by younger women, which prevent them from leaving an abusive relationship. They may lack skills to seek and maintain employment, may have mobility problems due to health issues, and may have grown up in an era where divorce was unacceptable. Additionally, they may be caregivers to abusive partners and stay due to a sense of loyalty. Those who have health or mobility problems may stay as the abusive partner also functions as their caregiver. Older battered women may have less social support through death or isolation from family and friends; they may have no experience dealing with financial or legal matters, may be resigned to a pattern of living that has existed for decades, and may not be aware that choices exist. Moreover, transition houses are not always suitable for older women. As such, older battered women may be less likely to be seen in mental health settings, police settings, and community agencies that provide services for battered women, and many of them suffer in silence (Wolf, 2000).

Children Who Witness Domestic Violence

Between 6 and 15 percent of women surveyed in Canada, the United States, Chile, Egypt, and Nicaragua report that they were physically or sexually abused when pregnant, often with serious effects on the mother (including death) and the developing child, such as miscarriage, injury, stillbirth, and low birth weight (Krug, et al., 2002). Girls who witness domestic violence are more likely to become involved with abusive partners when they grow up, and boys are more likely to perpetrate domestic violence. This may be due to modeling (i.e., children learn how to behave in relationships through observing their parents and internalizing their relationship dynamics), due to the effects of witnessing on the child's sense of self or identity, and/or due to disrupted attachments with caregivers. Bowlby's (1988) empirically informed attachment theory posits that young children develop "maps" or "internal working models" (IWMs) of attachment relationships, which are formed through the quality and type of attachment the child has with his or her caregiver. When insecure attachments are formed during childhood and persist into adulthood, the adult tends to choose an intimate partner in accordance with those IWMs. From the perspective of attachment theory, it is through these IWMs and insecure attachment styles that the cycle of violence may be repeated. It should be noted that attachment styles and IWMs can change with subsequent relationships; for example, an insecure style may change to a secure style with psychotherapy or with healthy attachment relationships with significant other persons.

Although not all children who witness domestic violence evidence problems, many are at higher risk of various difficulties, including emotional, cognitive, physical, social, and behavioral problems. These children may experience excessive anxiety and depression, with low self-esteem and angry outbursts. They may withdraw from family members and from social contact. Children who witness partner violence may have difficulties at school and may have lags in language development. They often have problems with sleep and eating patterns (e.g., eating disorders), may have impaired motor skills, and may regress to behaviors of a younger age (e.g., a five-year-old child may soil his or her pants). These children may also report physical symptoms that have no medical cause. Behavioral difficulties such as aggression, tantrums, acting out, immaturity, truancy, and delinquency have been observed with samples of children who witness abuse. They may have problems interacting with their peers due to poor social skills and an inability to empathize with others, which may lead to rejection by their peers. It is not clear whether these difficulties stem directly from witnessing parental abuse or if they are associated with additional problems found in families with partner violence. Not all children will have these problems, and most children who are adversely affected will not experience all of the above problems (Jasinski & Williams, 1998). Women who are unable to escape the abusive relationship and who are aware of how the abuse affects the children are likely to experience significant guilt feelings, which will exacerbate their psychological distress.

Overview of Sexual Violence

Sexual assault includes any act of unwanted sexual contact, including being pressured or coerced into engaging in sexual activities when the victim does not want to do so. According to this definition, overt physical force is not required for sexual assault to have occurred. Perpetrators of sexual assault may engage in various behaviors. Women may experience males rubbing their genitals against them, especially in crowded places (*frotteurism*) and can be spied on unknowingly (*voyeurism*) when the women are getting undressed or engaging in sexual activity. Some women and girls experience males "flashing" or exposing their genitals (*exhibitionism*). Other forms of sexual assault include coerced or forced sexual molestation, masturbation of self or of the perpetrator, oral sex, attempted rape, and completed rape. When there are two or more perpetrators during a rape, it is called *gang rape.* Some women are subjected to particularly cruel or humiliating acts during sexual assault, such as being raped with objects or otherwise tortured, with the perpetrator feeling pleasure from humiliating or hurting his victim (*sexual sadism*). Perpetrator(s) of any of these types of sexual offense may be unknown to the victim or may be known to her. Sexual assault may or may not involve violence and bodily harm. These perverse forms of sexual offending are referred to as *paraphilias* (*DSM–IV–TR;* American Psychiatric Association, 2000).

Sexual Abuse of Children

Childhood sexual abuse occurs when a perpetrator touches a child sexually or has the child touch him/her sexually, and may include oral-genital contact and penetration. Children are often "groomed"—the perpetrator will befriend the child, treat him or her as special, and gradually gain the child's trust. Physical contact frequently begins in the form of "games," such as tickling the child, and progresses to sexual contact. *Pedophilia* (a paraphilia) refers to an adult having repeated fantasies and/or sexual contact with pre-pubescent children that persists for at least six months *(DSM–IV–TR),* whereas *Hebephilia* or *Ephebophilia* (not an official diagnosis) refers to sexual attraction to adolescent children (see Wikipedia, n.d.).

There is variation in the literature as to the upper age cut-off when defining childhood sexual abuse. Many researchers use 16 as the upper age limit provided the perpetrator is at least five years older than the child; however, there may be instances where this definition is not suitable. When the perpetrator is a family member or a person in a position of trust and/or authority, a 16-year old would be more vulnerable to sexual exploitation than if the perpetrator was not known to the child. Adolescent children who have experienced the actual or psychological loss of a father may be at increased risk of sexual exploitation, as perpetrators may provide the child with attention and feelings of being loved that the father is not there to provide. Children who are raised in environments where there is neglect are at increased risk of abuse outside of the family (Gold, 2000). Similarly, children of any age with an intellectual disability do not have the ability to consent to sexual activity. Moreover, the neurological development of late teenagers is not complete and is associated with deficits in higher cognitive functions, including judgment, decision making, and impulse control, particularly when the teen is under stress (Sabbagh, 2006). Thus, even though late teens look like adults and in many ways behave as such, under certain conditions they do not have mature cognitive skills. Therefore, their ability to consent to sexual activity with older adults is questionable. If they have histories of maltreatment, their ability to consent is further impaired.

Sexual violence against teenaged girls may result in pregnancies, and rates vary between countries. Approximately 5 percent of rape victims in the United States become pregnant, compared to up to 18 percent in Ethiopia and Mexico (Krug et al., 2002). Sexual exploitation at a young age often results in a woman's reduced ability to perceive herself as having control over her sexuality, thereby increasing risk of sexual revictimization (Zurbriggen & Freyd, 2004). Gynecological problems and sexually transmitted diseases may also ensue from childhood sexual abuse. In addition, there are serious psychological effects of violence against women and children.

Additional Forms of Violence against Women

There are additional forms of violence against women that occur internationally. Three of these forms include, but are not limited to, sexual trafficking of women, female genital mutilation, and rape as an instrument of war. This section includes a brief overview of these disturbing forms of violence, which occur on a massive scale.

Sexual Trafficking

Trafficking refers to the organized movement of persons between countries or within countries for the purpose of exploitation. It is estimated that 2 million persons are trafficked each year (United Nations Educational, Scientific and Cultural Organization, n.d.) and women and children are often trafficked for the purpose of sex work. They are made to believe that they will work in a domestic capacity, and later find themselves confined, sometimes beaten, with their passports and papers confiscated. They are forced into prostitution to pay for their purchase price, travel costs, and visa costs (Krug et al., 2002).

Female Genital Mutilation

Millions of girls (as young as three years of age) and women are subjected to female genital mutilation (FGM), usually in the form of female circumcision and often as a religious ritual. This practice is found in the Middle East and Asia, and is widespread in Africa. It is also found among immigrant populations in Europe, the United Kingdom, Australia, Canada, and the United States. It is estimated that between 100 and 140 million females worldwide have undergone FGM (Krug et al., 2002). Female genital mutilation varies from stretching of the clitoris and/or labia to *infibulation*, which involves the removal of the clitoris and labia and the joining together of the vulva across the vagina with thread. FGM is often done under unsanitary conditions by a midwife and may result in the transmission of HIV and other infections. Death may also ensue due to shock or hemorrhage. Long-term effects include sexual dysfunction, genital malformations, delayed onset of menstruation, chronic pelvic complications, and urinary and obstetric complications. Although FGM may be perceived by some as a rite of passage with little negative effect, it has also been reported to result in significant physical and emotional damage (World Health Organization, 2000).

Rape as an Instrument of War

Rape of women and children during armed conflict has been noted as far back as ancient Greek, Hebrew, and Roman times (Ward & Marsh, 2006). In 2002, the secretary-general of the United Nations reported that women and children have become the main targets of armed conflict and they constitute the majority of victims (United Nations Security Council, 2002). High proportions of women in Bosnia, Rwanda, Kosovo, Liberia, the Congo, Burundi, Colombia, Afghanistan, and the Sudan have been raped during armed conflict (Krug et al., 2002). One woman who survived the Rwandan genocide of 1994 was raped by over 500 men while her children were confined in the next room. Amazingly, she lived through the horror.

Rape may be the by-product of social collapse during wartime; however, it is often used as a deliberate form of attack on the enemy. It may be used to instill shame and humiliation, thereby undermining and collapsing social bonds within communities and families. It is used to instill fear and stop resistance by the enemy and has also been used for "ethnic cleansing" (altering the gene pool of the enemy via forced impregnation, genital mutilation, and intentional HIV transmission). In Bosnia, for example, Muslim women who were raped and impregnated were held captive until their pregnancies came to full term so as to prevent abortion. These women were required to raise their children in ignominy (a state of shame or dishonor within the community); some committed infanticide. Women and girls may be abducted and used as sexual slaves for soldiers, and "voluntary" child and women soldiers are often sexually abused by the males. Female refugees are also at high risk of rape as they flee their countries. Many of these adult and child victims of war-related sexual violence end up in the sex trade as the only means to support themselves, given the fact that they are often rejected and abandoned by their communities and families during the war and after it ends (Ward & Marsh, 2006).

Traumatic Effects of Violence against Women

Violence against women and girls can have a wide range of adverse effects, including but not limited to depression, anxiety disorders (including posttraumatic stress disorder), substance-related disorders, dissociative disorders, and somatoform disorders. Chronic maltreatment may affect physical health through direct injury or as mediated by the effects of chronic stress on physiological processes (Schnurr & Green, 2004). Chronic abuse during childhood may also result in various behaviors that increase risk of physical illness, including use of drugs and alcohol, smoking, risky sexual behaviors, and lack of appropriate self-care (e.g., see Felitti et al., 1998). As such, reduced quality of life and life expectancy due to effects on physical health are two significant long-term adverse effects of violence against women and girls.

Posttraumatic Stress Disorder

Individuals who have experienced or witnessed severe traumatic events may experience a constellation of symptoms that result in clinically significant distress or functional impairment. These symptom clusters and the associated dysfunction are called posttraumatic stress disorder (PTSD) *(DSM–IV–TR).*

The symptom clusters of PTSD include the following: Reexperiencing symptoms, such as intrusive distressing memories of the traumatic event, nightmares, and flashbacks; avoidance and numbing symptoms, such as avoiding talking about the event, not wanting to think about the event, feeling emotionally numb or cut off from other people; and hyperarousal symptoms, such as being hyperalert for danger, irritability, problems concentrating, and jumpiness.

According to the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, text revision *(DSM–IV–TR)*, for an event to constitute a traumatic stressor event, it must involve actual or threatened death, physical injury, or threat to physical integrity and must also involve intense fear, helplessness, or horror. Ongoing psychological or emotional abuse does not constitute a traumatic event according to these criteria for PTSD, which is a limitation of the *DSM* system. There is accumulating evidence that childhood psychological abuse is significantly correlated with the symptom criteria, distress, and impaired functioning of PTSD (Teicher et al., 2006). Similarly, physical abuse that does not result in death or a threat to physical integrity would not constitute a traumatic stressor event in the *DSM* system, although it may be experienced as terrifying. An exception to the physical damage criterion is childhood sexual abuse (CSA). Children who are sexually molested without threat of or actual physical injury or death meet the traumatic event criterion for PTSD insofar as the physical invasion of the body by the perpetrator is a threat to physical integrity. In short, the *DSM* emphasizes physical injury over psychological injury when defining traumatic events, and many experts in the trauma field view this as a significant limitation.

Depression is highly correlated with PTSD (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Many women who have had violence perpetrated against them also suffer from at least one major depressive episode and frequently suffer from recurrent episodes or chronic depression. Substance use and PTSD are also correlated (Kessler et al., 1995). Traumatized persons may engage in substance abuse in an attempt to control their symptoms (e.g., become intoxicated in order to sleep or to numb their distress; regularly use tranquilizers in order to calm themselves), and may develop substance dependence disorders (Bremner, Southwick, Darnell, & Charney, 1996; Stewart et al., 2000). The coexistence of two or more psychological disorders is referred to as *comorbidity.*

We should also mention “Complex PTSD” or “Disorders of Extreme Stress Not Otherwise Specified.” In the 1980s to early 1990s, many clinicians observed that individuals who had experienced chronic trauma in their lives (e.g., chronic domestic violence survivors, childhood abuse survivors, war survivors) evidenced a cluster of symptoms that went beyond those seen with PTSD. As part of the field trial on PTSD for the *DSM–IV,* several of these clinicians/clinical researchers conducted empirical research on this phenomenon. The symptoms include the following: difficulties in managing affective arousal (e.g., not able to calm oneself down, engaging in self-harm or high-risk behaviors in order to feel better), memory disturbances and dissociation, impaired identity or sense of self, impaired relationships with others, somatic symptoms (physical symptoms with no known medical cause), and altered belief systems (e.g., intense despair and hopelessness).

Psychiatrist Judith Herman (1992a) termed this symptom constellation "Complex PTSD" and others (e.g., Pelcovitz, et al., 1997) independently termed it "Disorders of Extreme Stress Not Otherwise Specified" or "DESNOS." In spite of research evidence documenting the relationship between chronic trauma and complex PTSD/DESNOS, the proposed diagnosis was not included in the *DSM–IV* and will not likely be included in the *DSM–V*. Although complex PTSD or DESNOS was not included in the *DSM–IV* as a distinct diagnosis, the symptoms are included as part of the associated features to PTSD, which are not required for a diagnosis of PTSD. It should also be noted that the gold standard for assessment of PTSD, the Clinician Administered PTSD Scale (CAPS) (Blake et al., 1998) does not assess for the majority of the associated features.

Herman's perspective, based on clinical and empirical data, is that the vast majority of women who meet the criteria for borderline personality disorder (BPD) have histories of childhood sexual abuse. Herman notes that BPD tends to be a pejorative diagnosis and downplays the traumatic underpinnings of the symptoms and behaviors. Her thesis is that complex PTSD, as an alternative to BPD, places more emphasis on the traumatic origins of the problems these women face and should result in more compassionate and effective treatment of survivors. Others have taken exception to this point of view, based on the finding that not all adults with diagnoses of BPD have reported CSA histories. However, it is not clear whether these individuals have histories of other forms of childhood maltreatment or other trauma. Further research is warranted.

In the next section I will describe three case studies of different traumatic events, and describe the preferred course of treatment for the symptoms and associated difficulties as presented by the individuals. These cases will include single-event sexual assault, chronic childhood sexual abuse, and partner violence. These are offered as snapshot views of potential assessment and treatment applications, but are not meant to be exhaustive with regard to the many treatment strategies available to clinicians. Nor are they intended as the best choice of treatment for a given client or patient. Choice of treatment method involves the consideration of many factors, which is beyond the scope of this chapter. Readers who are interested in a review of empirical studies on effective treatments for PTSD are referred to the text edited by Foa, Keane, and Friedman (2000), and for complex PTSD readers are referred to Cloitre, Cohen and Koenen (2006).

Case Studies

SEXUAL ASSAULT: SINGLE EVENT WITH POSTTRAUMATIC STRESS DISORDER AND DEPRESSION

Shelley is a 25-year-old woman who works as a waitress at a nightclub. One night after work, she was sexually assaulted by a man who had followed her to her apartment. The perpetrator held a knife to her throat during the assault and threatened that he would kill her if she screamed or otherwise resisted him. Shelley felt terrified during the attack, and because she feared for her life, she did not try to fight back or scream. When he left her apartment, she dialed 911 and was taken to hospital, where she was interviewed, examined medically, and treated.

That night when she returned to her apartment, she could not sleep. She kept hearing noises and was unable to relax—she lay awake all night with the lights on in her apartment and a knife under her pillow. She was terrified that the perpetrator would return. During the day, she felt a bit better, but not much. During the rape, she had felt detached from her body and as if time was slowed down (dissociation). These symptoms persisted over the next several weeks. When she was able to fall asleep, she would awaken through the night having "night sweats," and she would sit up in bed, terrified from nightmares of getting raped or otherwise attacked. When her friends and family asked her to talk about what happened, she would not do so. She tried to push all thoughts and memories of the rape out of her mind. She could not face going back to work and so she quit her job. The mere thought of the assault brought forth much anxiety and distress. Shelley found that she was jumpy—the slightest noise would make her jump out of her seat. Usually an avid reader, she found she could not concentrate enough to read even the newspaper each day. She was always on "red alert"—paying very close attention to her surroundings. After a month of these symptoms, Shelley decided to see a therapist who specialized in treating the traumatic effects of sexual assault.

Treatment of Acute PTSD and Major Depression

Treatment for single-incident traumatic events often includes psychoeducation and exposure therapy, such as cognitive processing therapy (Resick & Schnike, 1997), prolonged exposure (Foa, Dancu, & Hembree, 1998), or eye movement desensitization and reprocessing (Shapiro & Forrest, 1998). During the initial phases of treatment, clients undergo a thorough assessment with a focus specifically on PTSD and possible comorbid difficulties, such as major depression.

During the initial assessment process, Shelley was diagnosed with PTSD and major depression. When conducting assessments with traumatized persons, there are specific issues that require the clinician's attention, such as possible exacerbation of symptoms when discussing the event. These issues are beyond the scope of this chapter; however, the interested reader is referred to Briere (1997), Carlson (1997), or Wilson and Keane (2004). Shelley was referred to her physician to discuss whether medication would be useful for the depressive symptoms and also to rule out possible medical reasons for her symptoms.

Psychoeducation forms a significant part of the initial sessions for treatment of PTSD and complex PTSD—the client is provided with information on the index traumatic event (in Shelley's case, sexual assault), PTSD or complex PTSD, any comorbid problems, coping strategies for dealing with symptoms, and the theoretical rationale for the proposed treatment. It is important to provide as much choice as possible for trauma survivors in terms of treatment. Guided relaxation exercises may be incorporated into treatment sessions and/or assigned as "homework" to assist with reduction of hyperarousal.

Exposure therapy is one of the treatments of choice for PTSD with strong empirical support, and involves techniques that help clients face stimuli that they fear, including memories, thoughts, and images. Imaginal exposure to the trauma narrative is conducted within sessions, and in vivo ("real world") exposure activities are assigned as homework between sessions. The theoretical rationale behind exposure therapy is that avoidance of trauma-related stimuli prevents processing of the traumatic event and concomitant emotions, thereby interfering with recovery. Trauma memories are composed of stimuli that were present during the event, physiological and/or behavioral responses at the time of the traumatic event, and meanings that are associated with the event (Foa et al., 1998). These memories are highly distressing to the individual. With repeated imaginal exposure to the feared memories and painful emotions, clients learn to tolerate the negative affect and soon become habituated to the emotions. This is analogous to jumping into a swimming pool. When the individual first jumps in, the water feels cold; however, when the swimmer remains in the pool long enough, the water begins to feel warm and comfortable. The individual has habituated to the temperature of the water. With imaginal exposure, the individual learns to tolerate the emotions and habituates to them. With in vivo exposure exercises (facing safe yet feared stimuli in the individual's environment), clients learn corrective information through absence of harm, and maladaptive cognitions (e.g., "I am incompetent") are modified. High levels of emotional arousal also interfere with cognitions: individuals do not think clearly when they are in extremely emotionally aroused states. With habituation, thinking becomes clearer and cognitive distortions are more easily examined and replaced with healthy cognitions. Shelley showed improvement as sessions progressed—her narrative of the rape was initially fragmented and incoherent; however, by the ninth treatment session it was coherent and fluid, with a clear story line.

Shelley was taught to identify her cognitive distortions (CDs) related to the rape (e.g., "I caused the rape by walking home alone," and "It is my fault because I did not scream or fight back") and to replace the CDs with more accurate beliefs (e.g., "I could not possibly have fought back or screamed. The man held a knife to my throat. If I had screamed or fought, he could have killed me. I was smart to keep quiet"). Success in dealing with feared stimuli in her daily life also assisted her with forming more effective beliefs (e.g., "I am competent and can handle this"). Identifying and challenging certain CDs is also an important aspect of treating major depression, as are increasing the amount of daily activities, increasing social interactions or activities, increasing pleasurable experiences, and promotion of physical well-being through diet and exercise. Clients are assisted with developing goals related to improving depressive symptoms. For example, depressed persons tend to isolate themselves (as do traumatized persons), they stop engaging in pleasurable activities, and they may let their physical health falter. These interventions were incorporated into Shelley's treatment plan.

By the end of treatment, Shelley's symptoms of PTSD and depression had been reduced to subclinical levels (i.e., she no longer met the diagnostic criteria), her CDs had been successfully replaced with more effective cognitions, and her functioning had improved. She contacted her former boss and was able to return to work, where she functioned effectively.

COMPLEX PTSD BASED IN CHRONIC CHILDHOOD SEXUAL ABUSE

> When Bonnie was six years of age, her mother met a man (Joe) whom she later married. Joe gave Bonnie a lot of attention from the start. He would buy her special gifts and take her to fun places, like the carnival. Joe liked to tickle Bonnie. She loved the attention, and she learned to trust Joe. Bonnie hadn't seen her birth father in years, and Joe made her feel important and wanted. It wasn't until Joe started to touch her genitals that Bonnie began to feel afraid and very confused. Joe told her it was their special secret and that if she told anyone that they would take Joe away from her. She had developed a strong attachment to Joe and by the age of seven when the molestation started, she couldn't bear losing her new father figure. So she remained silent. Bonnie was confused because in a way it felt nice to be touched[1] but she was also scared. There was something that felt bad about it, too. When the abuse progressed to more invasive activities, Bonnie would dissociate. At these times, she would feel as though she was floating on the ceiling, and could see Joe raping her on the bed below. These memories were so threatening to Bonnie that many of them remained out of her conscious awareness for years. Bonnie, once an excellent student, began to have behavioral problems and began to fail at school. She could not pay attention in class. She became depressed and withdrawn, had nightmares, and began to urinate in bed when sleeping. She also felt very angry and would "hurt" her dolls in the same way that Joe hurt her (behavioral reenactment through play). Bonnie became fearful of adult males and shied away from them, including her teacher. When he tried to find out what was wrong, she could not trust him enough to tell him. Bonnie kept the abuse a secret for decades.
>
> Bonnie attended therapy in her early 30s after her marriage of five years ended. She found that she was always having problems in her relationships with men—she was unable to trust them, always fearing that they would betray her or hurt her in some way. Bonnie's relationship with her husband had been highly conflicted—they were always arguing. Bonnie had a hard time calming herself down when she was angry or upset. She would yell and scream, sometimes throwing things. When her emotional arousal became too high, she would binge on food or harm herself in some other manner (e.g., she would pinch her legs to the point where they bruised). Bonnie had problems with dissociation when she and her husband had sex. She would feel as though she was "floating" on the ceiling in the bedroom in the same way she had done when Joe abused her many years before. These symptoms

of *depersonalization* or "out of body" experiences occurred whenever she felt threatened. Bonnie also experienced a lot of physical problems, including chronic pain, various gynecological symptoms, difficulties with her digestive system, and symptoms suggestive of lung disease. She underwent a lot of medical testing, but the doctors would tell her that they could find nothing medically wrong with her. Bonnie was severely depressed, and was terrified of being alone. Her symptoms of depression worsened when her husband decided to leave, and she started to have ideas about killing herself. Her despondency increased and one night, when she overdosed on sleeping pills, her neighbor found her and called an ambulance.

Treatment of Complex PTSD Based in Childhood Sexual Abuse

When Bonnie attended her first session with a psychologist she told the therapist that her main presenting problem was depression based in the breakup of her marriage. With chronic childhood abuse, relationship difficulties are often the triggering event that leads clients to treatment. Some clients do not have much knowledge about abuse and may not realize that what they experienced was abusive, believing that all families engage in abusive behaviors. Clinicians should therefore ask direct questions during the intake process about possible abuse, and questions should be phrased using behavioral descriptors.

Results of Bonnie's assessment indicated that Bonnie met the criteria for a diagnosis of PTSD, with problems of affect regulation, identity, relationship functioning, dissociation, somatization, and altered belief systems. Bonnie reported that she would reduce emotional distress or tension by binging and purging and by self-harming. She reported considerable interpersonal conflict, abandonment concerns, and idealization-devaluation dynamics in her relationships. She and her husband always fought; she was terrified of being abandoned and totally alone, and tended to have quick affective swings in which she would adore her husband one minute and hate him the next. Bonnie reported that she would often space out and lose track of her surroundings (*disengagement*), had out of body experiences, especially during sex (*depersonalization*), and significant amnesia (memory impairments). She reported several physical symptoms with no known medical cause (*somatization*), and she suffered from prolonged despair and hopelessness. Treatment for complex PTSD often occurs in phases and generally is a lengthy process, and therapy may last for several years, depending on client presentation.

Stabilization

When treating single-incident, adult-onset trauma, the course of therapy tends to be brief and straightforward, as with Shelley. With complex PTSD, the clients must be stabilized before any processing of the trauma can ensue. If this is not done, the symptoms will intensify and the client will be at increased risk of regression, significant self-harm, and suicide. If clients are in unsafe situations (e.g., in a battering relationship, living on the streets) they need to find safe housing; if they are addicted to substances and living a risky lifestyle, they should receive treatment for the addiction and reduce risk-taking behaviors; if they are highly suicidal and make frequent attempts and/or are highly dissociative, they need to learn skills to manage their emotions (Herman, 1992b).

An excellent and empirically validated treatment for childhood sexual abuse is an approach developed by Cloitre, Cohen, and Koenen (2006), termed STAIR/NST. This is a two-phase approach that includes stabilization via learning affect regulation and interpersonal relatedness skills in phase 1 (STAIR), and processing the trauma narrative in phase 2 (NST). Linehan's *Dialectical Behavior Therapy* (DBT) (1993) and Cloitre, Cohen, and Koenen's (2006) approach are very useful for stabilization. During the first phase of treatment with STAIR/NST, the client is introduced to treatment and learns skills for emotion regulation and effective interpersonal relating. Examples of skills learned during the first phase include exploring how feelings were managed in the client's/patient's family of origin, how abuse influences feelings, identifying and labeling feeling states, skills for managing emotional states, skills for tolerating emotional distress, and assertiveness skills. As with the prolonged exposure diagnosis, homework forms a significant part of the treatment.

During phase 2, processing of the trauma occurs using narrative storytelling (NST; imaginal exposure). The process of phase 2 work is similar to that of prolonged exposure; however, there are many modifications that are important with complex PTSD. In essence, as the clients tell their story of what happened, the clinician helps the client regulate her affective state by putting into practice the interventions of phase 1, and the client continues with the homework exercises of phase 1. With single-event trauma, only one memory is processed. With ongoing trauma, there are typically several memories and it would be impossible to conduct exposure for each memory. As such, the client identifies five of the most important memories to process, beginning with the least disturbing. The five memories chosen are those that have the most influence on the client's current functioning. As Bonnie listened to the tapes over the duration of treatment, she learned that the memory was just a memory and had no real power over her current life, and as her memories became more organized, she had a reduction in her PTSD symptoms. In addition, as her memories became more organized she was able to identify abuse-related interpersonal schemas and distinguish between current and past life circumstances. During the final session, Bonnie's therapist asked her about her experience of change and progress. They identified plans for Bonnie, reviewed risks for relapse, and reviewed strategies to recover from relapse. The therapist provided Bonnie with a list or community resources, and they said goodbye.

A Note on Amnesia

When clients have gaps in their memories of events, it is not advisable to use hypnosis as a memory retrieval technique. Sound research shows that individuals may create new memories when they are in a susceptible state of mind, such as hypnosis, and the veracity of the products of hypnosis may be suspect. Clients may remember more details or incidents when not hypnotized as they become psychologically stronger; however, the clinician should never tell a client that s/he was sexually abused when the client has no memories of the abuse and when there is no independent documentation that abuse occurred. If a client with no known abuse history and no memories of abuse asks a therapist if s/he was sexually abused, a reasonable response would be along the lines of "It is possible that you were abused; however, I cannot know whether you were abused because I was not there." The therapist is encouraged to adopt a stance of "reflective belief" (Van der Hart & Nijenuis, 1999), and the focus of treatment would be on resolution or management of the symptoms with which the client presents.

PTSD, MAJOR DEPRESSION, AND SUBSTANCE DEPENDENCE BASED IN CHRONIC PARTNER VIOLENCE

Kim met Phillip when she was 18. She thought he was okay at first, although he did like to control what she did and where she went, and he was extremely jealous of other men. Phillip would tell her that he did not like her friends, especially her closest friend Sylvia, and he tried to prevent Kim from spending time with Sylvia. Yet he was also very attentive and engaged in caring behaviors, so Kim decided to ignore his controlling actions. They had been dating for a year when the couple decided to get married.

After the wedding, Phillip's controlling behaviors escalated, especially when Kim became defiant. He would take Kim's car keys from her to prevent her visiting her friends and family. He became increasingly psychologically abusive and would criticize everything she did. If she did not have dinner on the table on time, he would erupt into a rage and break dishes. Kim became increasingly terrified of his rages, and was constantly on edge. When Phillip had problems at work, he would come home and take it out on Kim. Once when she was six months pregnant, he grabbed her by the arm and pushed her into the wall, resulting in several bruises. The next day he was highly apologetic and brought her some roses. Kim had been seriously considering leaving and moving to her parents' home, but when he apologized and promised to change, she wanted to believe him. So she stayed, and the abuse continued. When she was eight months pregnant, she awakened in the middle of the night to find an intoxicated Phillip choking her and screaming at her for not ironing his clothes properly. He threatened to punch her in the stomach unless she promised to do everything "right." Following the birth of their first baby, Phillip's abusive behaviors continued. Two more children were born. Kim was not working outside of the home and had no money to support herself and the three children. She could not relax and was always in a state of high anxiety. As the abuse continued she became severely depressed, became increasingly hopeless, and felt totally helpless. She started to believe many of the things that Phillip said to her and blamed herself when he beat her. She was even more terrified to leave, especially since Phillip told her that if she ever tried to do so, he would find her and kill her and the children. Kim knew that he was capable of it.

Kim started to drink excessively and smoked marijuana as it seemed as if the drugs and alcohol would help her to relax and sleep. The alcohol helped to dull the pain and helped her to temporarily "forget" the misery she was in. She stayed with Phillip until her aunt came to visit and got a glimpse of how Phillip was treating her. Her aunt asked Kim if Phillip was hitting her, and Kim started to cry. She was too terrified to speak; however, her nonverbal reaction was enough to let her aunt know that Phillip was indeed hitting her. Kim's aunt told the rest of the family what she had learned. A few months later, Kim and the children fled from the house and went to stay with Kim's parents.

Treatment of Intimate Partner Violence

Kim was diagnosed with chronic PTSD, major depressive disorder, alcohol dependence and cannabis abuse. She agreed to attend an inpatient alcohol dependence program and successfully stopped drinking. During the program she learned some affect regulation skills but continued to have much difficulty with depressed mood, PTSD symptoms, conflicted relationships, poor self-esteem, and some marijuana use, although on a lesser scale. During her individual therapy, her therapist provided psychoeducation, stress reduction and relaxation techniques, and cognitive behavioral therapy for depression (as was done with Shelley in case 1; however, the CDs in this case were not in relation to sexual assault but in relation to partner violence).

Kim started to make some significant progress in treatment; however, during a subsequent session she told her therapist that Phillip was contacting her and he had really changed this time. Kim and the children returned to live with Phillip against the therapist's advice. Soon thereafter, the abuse began again and Kim relapsed into alcohol use. She continued with therapy (which she kept secret from Philip) and she and her therapist developed a safety plan. Kim put together a suitcase with necessary items for herself and the children if she had to suddenly get away from Phillip. The suitcase was well hidden in a location in the house that Phillip never found. Kim had a list of emergency contact numbers for ransition houses, crisis centers, and family and friends who were supportive of her. She contacted the police and made sure they were fully aware of the situation, and she programmed emergency numbers into the phone. She let a trusted neighbor know what was happening so that she could keep an eye on Kim and the children, and she called the local transition house and informed them of her current situation. In addition, she hid some money away and talked to the children so they would know whom to call and which neighbor's house they should go to in case of an emergency. She began a nonresidential rehabilitation program for alcohol dependence and managed to stop drinking. She boosted the program with regular AA meetings during the day when the children were in school and Phillip was at work. She had a plan prepared, outlining what she would do if she ever had to leave Phillip.

Kim continued with her work in therapy, and learned a great deal about how witnessing partner violence affects children. She noticed many of these effects in her own children and this knowledge helped to strengthen her resolve to eventually leave her husband. One day Phillip followed Kim to her therapist's office. He waited until her session was over and then followed her to the elementary school, where she picked up the children. As soon as Kim and the children were inside the front door of their home, Phillip burst into the house in a rage. He beat Kim and, for the first time, he hit the oldest boy when the boy tried to protect Kim. Kim knew that this was it. She was finished with her husband. Phillip finished off a bottle of vodka and passed out downstairs in the family room. Kim grabbed the suitcase from its hidden location, called a taxi, and she and the children went to a local transition house. She contacted the police the next day and had an officer accompany her to her home to obtain more personal items for herself and the children. She also visited a lawyer, had a legal separation agreement prepared, filed for custody of the children, and applied to raise the children in the family home (i.e., Phillip would be required to move out if she was successful).

After one month at the transition house, Kim and the children moved into her parents' home. Phillip began stalking her, and she obtained a restraining order against him. Kim and her therapist focused on reframing her self-blame in such a way that Kim could learn to take responsibility for her own behaviors and learn to place the responsibility for the abuse squarely on Phillip's shoulders. Kim's substance dependence/abuse was well managed and she was actively practicing relapse prevention: she identified high-risk situations for use, avoided those situations, and learned new strategies for managing her distress. Kim continued to work on identifying and challenging CDs, particularly as they related to her role as a wife. She had internalized Phillip's beliefs about how she should act as a wife, but now she replaced those CDs with healthy cognitions that were empowering and that honored her individuality. Once Kim's self-esteem had improved and she was successfully abstinent for several months, she and her therapist engaged in prolonged exposure therapy for her PTSD. Kim found employment. The judge awarded full custody of the children to Kim, and ruled that she and the children were to reside in the family home.

Recommendations for Public Policy

Preventing and stopping violence against women can be approached from many levels, including international, national, regional, community, family, and individual levels. In the United States, the Violence against Women Act (VAWA) was signed into law in 1994 and has since been revised and reauthorized in various forms. This landmark legislation paved the way for funding sources for programs to reduce domestic violence, rape, and stalking and also impacted federal criminal law to reduce violence against women. Various recommendations have been suggested by groups and agencies, many of which may be read in full in the National Advisory Council against Violence's (2001) *Toolkit to End Violence against Women.*

Internationally, the United Nations General Assembly approved the Declaration on the Elimination of Violence against Women in 1993. This was the signal for other international organizations and bodies, such as the World Health Organization, the United Nations Human Rights Council, and the United Nations Development Fund for Women (UNIFEM) (1996-2007) to work toward combating violence against women. In addition, the United Nations Human Rights Council has also prepared documents on recommendations for stopping violence against women.

While progress has been made in the last 15 years in combating violence against women more needs to be done in the areas of public policies that address government funding, public education, professional education and standards, legal practices, the media, and treatment of offenders.

Specifically, increased government funding is imperative for preventing and intervening in violence against women. Funding is required for the following: screening programs in schools to identify children who exhibit signs of abuse, programs aimed at identification of children who witness domestic violence followed by early intervention (after school hours), programs for women who live in poverty (who are at highest risk of domestic violence), outreach workers, modifications of transition homes such that they are suitable for elderly women and the disabled, provision of specialized staff for working with special populations (e.g., the elderly, immigrants/refugees), second-stage housing, crisis lines, sexual assault centers, women's centers, welfare programs, job training programs and educational opportunities for women leaving abusive relationships, and access to medical care and mental health treatment.

Public education may be one of the most effective ways of empowering women and children who are at risk. Examples of such programs include education on the dynamics of intimate partner violence, the effects of intimate partner violence on women and children, actions that abused women can take for the safety of themselves and their children, and information on community resources available to them. For example, women who receive information on traumatic bonding may gain a better understanding of why they stay in the relationship. This information may assist them to stop blaming themselves for the abuse and increase their sense of control through taking action. Education about gender roles and intimate partner violence should be part of the school curriculum to foster prevention.

The media play a significant role in terms of public education and also in shaping attitudes about violence against women. Ideally, the media would refrain from portraying women as sexual objects, and television would avoid programs that are inherently misogynistic and would provide balanced coverage of stories on sexual assault, childhood abuse, and domestic violence.

Training for health care professionals should include screening for domestic violence, as well as continuing education courses post licensure. Education of professionals, including legal professionals, should include information on the cognitive limitations of older teens and the way this may impact on their ability to consent to sexual activity with older adults under certain circumstances. Health programs and practices should meet the diverse needs of women in the community.

It is recommended that legal abortion should be made available for women and teens who have been raped and impregnated. This should include preabortion counseling and the option of postabortion counseling. Supervised access to abusive men's visits to children should be routinely available to families in which abuse has occurred and there is risk of harm to the woman or the children. Increased communication links should be established between child protective services, courts, and domestic violence agencies. Recommendations for perpetrators in terms of postvention should include funding for research and treatment and early identification.

Summary

Violence against women and children takes many forms and is widespread across the globe. Although some forms of violence against women are culture specific, domestic violence, childhood sexual abuse, and sexual assault occur across most cultures. Violence has significant and far-reaching effects on the physical and mental well-being of women and children, and violence within the family is frequently perpetuated through the generations.

One of the most crucial components of violence against women is the attitudes toward women that are inherent in society. Some countries are more enlightened than others in terms of implementing public policies with the aim of prevention; however, the persistence of the problem worldwide indicates that much more needs to be done. In this writer's opinion, viewing women as objects and as inferior to men is a major aspect of violence against women. This view is perpetuated by corporations who use women to sell goods (e.g., using sex to sell cars) and by those who perpetuate the trafficking of humans for financial gain. It is evident in domestic violence (women as subservient to men), and it is evident in sexual assault against both women and children (females as sexual objects or as objects of misogynistic beliefs). In industrialized countries, the media can play an important role in altering the view of women as objects. Equality in terms of educational and career opportunities, as well as salary and rights, also assists in reducing the perception of women as inferior. While much has been accomplished in efforts to eliminate violence against women, much more needs to be done.

Acknowledgments

I would like to thank Lyn Williams-Keeler and Denise Hawthorne for their helpful comments on this chapter.

Note

1. All children require physical touch to develop in a healthy manner. Sexual molestation, when not physically violent, may produce some pleasant sensations for children, for which they tend to feel significant shame and self-blame. The human body is structured to respond

to touch, and any pleasant sensations do *not* indicate that the child enjoyed the abuse or that there is anything "wrong" with the child.

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CHAPTER 12

THE INTEGRATION OF PSYCHOPHARMACOLOGY AND PSYCHOTHERAPY IN PTSD TREATMENT: A BIOPSYCHOSOCIAL MODEL OF CARE

Elaine S. LeVine and Elaine Orabona Mantell

The serious symptoms of posttraumatic stress disorder (PTSD) often require intensive intervention. Interdisciplinary care, which combines an understanding of physical/psychological symptoms and social systems deficits with appropriate therapeutic techniques, psychotropic intervention, and changes in the social environment, is often most effective. As the readers learn in many chapters in this book, the efficacy of a number of psychotherapeutic interventions has been documented to assist in ameliorating symptoms of PTSD (Brewin & Holmes, 2003; van der Kolk, McFarlane, & Weisaeth, 1996). In addition, current research has demonstrated a variety of psychotropic medications that can alleviate various symptoms of PTSD, symptoms of physiological stress arousal as well as anxiety, which in turn may lead to dissociation and memory loss as well as flashbacks, hypervigilance, and hyperexcitability (Albucher & Liberzon, 2002; Hageman, Andersen, & Jorgensen, 2001). Intervention in the social environment is, of course, helpful when support systems can be fortified or when significant others are educated about the course of PTSD and how they can best support the sufferer. While psychological, social, and psychotropic interventions can all be components of effective change, often these treatments are not well integrated for PTSD patients. The biopsychosocial model appears to be particularly well suited for treating PTSD, which is often most successfully ameliorated through the integration of biological concomitants, specific cognitive and behavioral techniques, ongoing education, and training for support in the social environment.

Within the last 10 years, a new specialization of prescribing/medical psychologists has emerged. Their identity originated with a Department of Defense congressional demonstration project, in which 10 psychologists were trained to prescribe. By 2004, laws were implemented in New Mexico and Louisiana so that psychologists could prescribe in the private as well as the public sector. Prescribing/medical psychologists are committed to a biopsychosocial and, as appropriate, spiritual model of care. Their expertise and approach is collaborative, with the focus upon a continuum of health rather than disease and with therapeutic relationship as the key to optimal therapeutic progress. As such, the biopsychosocial model appears to be particularly well suited for treating PTSD, which is often most successfully ameliorated through the integration of biological concomitants, specific cognitive and behavioral techniques, ongoing education, and training for support in the social environment.

Phases of Therapy in a Biopsychosocial Model for Treating PTSD

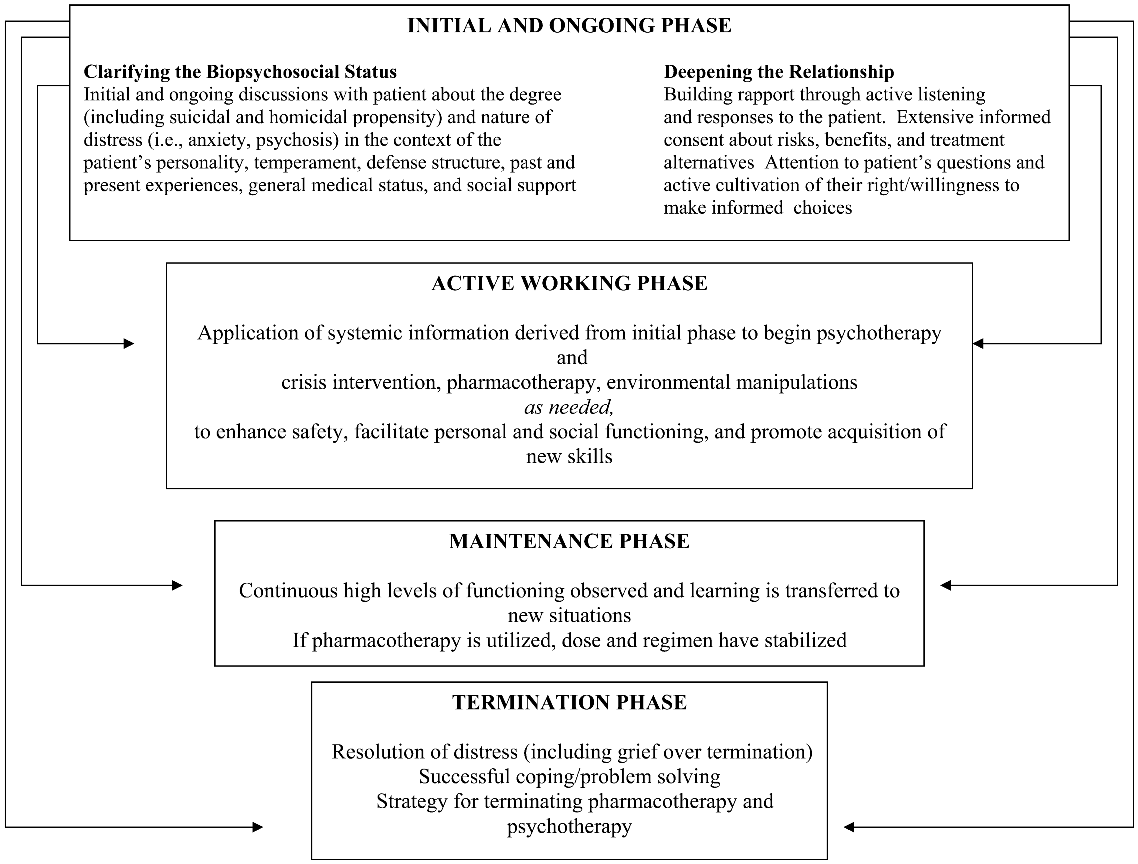
In order to better understand the integrative approach of such a biopsychosocial model, the authors would like to outline basic processes in this biopsychosocial model of care. It is well recognized that the therapy process flows through various phases. These phases are given somewhat different labels but generally refer to the following processes: initial and ongoing phase; active working phase; maintenance phase; and termination phase. Figure 12.1 is a schema of how a patient and psychologist move through these phases. In the sections that follow, this schema is employed to organize constructs of an integrated biopsychosocial model of care for PTSD.

Initial and Ongoing Phase

Practitioners, such as medical/prescribing psychologists, ascribing to a biopsychosocial model of care recognize the importance of building a relationship with a patient and deepening it throughout the therapeutic process. These practitioners use the well-established psychotherapeutic techniques that enhance trust, such as active, nonjudgmental listening, unconditional positive regard, and summarizing and reflecting the patient's comments with careful attention to clarifying statements or direct/indirect expressions of disagreement. This process, as explained in figure 12.2, continues throughout the therapy so that the relationship becomes deeper in understanding and trust over time.

As part of the biopsychosocial model for treating PTSD, practitioners consider holistic factors, such as the patient's desires for change as well as his/her coping and problem-solving skills, level of resiliency, and social support. In a traditional medical model, the most prominent symptoms, such as anxiety or sleeplessness, might be immediately addressed with certain medications. In contrast, those prescribing from a biopsychosocial model seek to clarify with the patient the symptoms that the patient finds most troubling. In addition to seeking an understanding of what the patient chooses to change, the therapist explores the changes that the patient is willing to tolerate, including the willingness to risk the potential side effects of treatment. For example, one patient of spousal abuse might want some psychotropic intervention to assist with underlying

Figure 12.1 Phases of the Therapeutic Process



INITIAL AND ONGOING PHASE

Clarifying the Biopsychosocial Status
Initial and ongoing discussions with patient about the degree (including suicidal and homicidal propensity) and nature of distress (i.e., anxiety, psychosis) in the context of the patient's personality, temperament, defense structure, past and present experiences, general medical status, and social support

Deepening the Relationship
Building rapport through active listening and responses to the patient. Extensive informed consent about risks, benefits, and treatment alternatives Attention to patient's questions and active cultivation of their right/willingness to make informed choices

ACTIVE WORKING PHASE

Application of systemic information derived from initial phase to begin psychotherapy
and
crisis intervention, pharmacotherapy, environmental manipulations
as needed,
to enhance safety, facilitate personal and social functioning, and promote acquisition of new skills

MAINTENANCE PHASE

Continuous high levels of functioning observed and learning is transferred to new situations
If pharmacotherapy is utilized, dose and regimen have stabilized

TERMINATION PHASE

Resolution of distress (including grief over termination)
Successful coping/problem solving
Strategy for terminating pharmacotherapy and psychotherapy

Figure 12.2 **Initial and Ongoing Phase of Clarifying the Disorder and Deepening the Relationship**

Clarifying the Biopsychosocial Nature of the PTSD and Comorbid Disorder(s)	Deepening the Relationship
Ongoing discussions w/patient about the degree (including suicidal and homicidal tendencies) and nature of distress (e.g., anxiety, substance abuse, mood instability) in the context of patient's personality, temperament, defense structure, cognitions, past/present experiences including traumatization, general medical status, and social support	**Building of trust and understanding through active listening and responses to the patient's concerns and extensive informed consent about risks, benefits, and alternative interventions in the context of the patient's goalsand gathered data**
• Differentiating symptoms of distress from identifiable psychological disorder(s), chronic and dysfunctional thoughts/behaviors, reactions to the social environment • Assessing the patient's capacity to achieve goals by the most minimally invasive techniques • Differentiating symptoms of PTSD from underlying medical conditions • Assessing if goals can be achieved first by psychotherapy alone • Ensuring that medication targets the core of the disorder rather than "chasing" symptoms • Adjusting the psychotherapy and/or pharmacotherapy if the diagnosis changes and as patient improves	• Considering the patient's desires for change, the symptoms that are most problematic to the patient and the "side-effects" of behavior changes or medication that cannot be tolerated • Actively collaborating with the patient about risks, benefits, and alternative treatments such as: • Creating a protective environment through frequent sessions, social structures, or inpatient treatment • Considering medication alternatives that have shown empirical support in the treatment of PTSD • Determining whether to initiate prompt versus long-term relief for symptoms • Appropriateness of various forms of psychotherapeutic interventions (e.g., EMDR, Stress Inoculation Training (SIT), cognitive interventions, exposure therapy) • Appropriateness of uncovering (allowing patient to access own strengths) and using medication later in therapy

symptoms as long as the medication's side effects do not include weight gain. Another patient with the same presenting problem might want treatment but be unwilling to risk the "side-effect" of leaving the marriage.

Central to relationship building with patients is continual education about different forms of treatment and their efficacy. For example, in treating PTSD, the potential benefits of behavioral rehearsal in stressful situations, hypnosis, cognitive behavioral restructuring, stress inoculation training, or cathartic techniques may be reviewed with the patient. In addition to this discussion of costs and benefits, practitioners employing a biopsychosocial model will integrate a discussion of the potential benefits, risks, and alternatives to psychotropic interventions, as well as relevant allopathic remedies (e.g., yoga, acupuncture, dietary changes, herbal/vitamin supplements, reflexology, and therapeutic massage).

In these authors' clinical experiences, patients suffering from PTSD tend not to initially reveal details of traumatic events. Because the trauma is often associated with shame or secrecy (Holmes, Grey, & Young, 2005), individuals may initiate treatment or be referred because of some other presenting complaint, such as difficulty sleeping, problems with irritability, or substance abuse. In a traditional medical model, these symptoms may be treated with medication, with minimal and/or no attempt to integrate awareness of causal factors. In contrast, the biopsychosocial, collaborative model seeks to enhance the interaction between the patient's increasing insight, the practice of new skills, and the use of medication, when indicated, to maximize the opportunity for success by marshalling the patient's existing strengths to regain balance. In the integrated biopsychosocial model of care, medication may be used early in treatment to relieve acute symptoms that are incapacitating, or to address conditions for which pharmacotherapy is the treatment of choice (e.g., recurrent or treatment-resistant depression). Otherwise, empirically supported psychological interventions are preferred as a first-line approach to uncover and treat the underlying condition(s) so that the patient can achieve his or her goals with the most minimally invasive techniques and those least likely to incur potentially lethal or troubling side effects. The focus of a biopsychosocial model of care will be to determine if recovery can be achieved by psychotherapy alone or if medication is needed because of acute, disabling, recurring, or otherwise intractable symptoms.

A critical aspect of the initial and ongoing phase is the dynamic clarification of the diagnoses. While PTSD is characterized by a cluster of symptoms, as summarized in the (*DSM–IV–TR;* American Psychiatric Association, 2000), therapists operating from a biopsychosocial model of care recognize that the exact nature of symptoms and the type and degree of distress will reflect the patient's underlying personality, temperament, typical defense structures, cognitions, behaviors, past and present experiences, and degree of social support. For example, individuals with pretrauma rigid personality types are more likely to suffer PTSD than those who are more flexible. The rigid views could be positive views about the self as extremely competent and the world as extremely safe, which would contradict the traumatic event, or rigid negative views about the self as being extremely incompetent and the world as being extremely dangerous, which would be confirmed by the traumatic event (Foa & Rothbaum, 1998). Also, it is logical to postulate that patients with vulnerable temperaments before a trauma, such as highly anxious individuals, will be more likely to experience exacerbation of their premorbid vulnerable temperament traits. Patients whose coping mechanisms involve dissociation may be more vulnerable to PTSD. Dissociative symptoms include emotional numbing, derealization, depersonalization, and out of body experiences. It has been suggested that such reactions reflect a defensive response related to "freezing" in animals (Nijenhuis, Vanderlinden, & Spinhoven, 1998). A number of studies have indicated that dissociation shortly after a trauma is a good predictor of later PTSD (Engelhard, van den Hout, Kindt, Arntz, & Schouten, 2003; Holeva & Tarrier, 2001; and Murray, Ehlers, & Mayou, 2002). Very likely, individuals who have relied upon dissociation for dealing with stress in the past will experience more dissociation during a traumatic event and are more likely to experience PTSD after a traumatic event. Janoff-Bulman (1992) has suggested that previous trauma may be a risk factor for later PTSD after a second trauma, because the patient has not reestablished the sense of a stable and secure world. For these reasons and others, many disorders, such as anxiety, depression, and substance abuse, may accompany PTSD (Schnurr, Friedman, & Bernardy, 2002).

A practitioner operating from a biopsychosocial model of care is careful to differentiate the symptoms of PTSD from underlying medical conditions. Exposure to trauma increases the risk of poor physical health (Schnurr et al., 2002; Schnurr & Jankowski, 1999). Further, Boscarino (1997) reported a direct link between trauma and a broad spectrum of medical conditions in a 20-year follow-up of men initially exposed to severe stress. David, Woodward, Esquenazi, and Mellman (2004) compared male veterans admitted to a rehabilitation unit for PTSD or alcohol dependence; and the results indicated that PTSD subjects were more likely than were their substance abusing counterparts to have diabetes mellitus, heart disease, obesity, and osteoarthritis. Before diagnosing PTSD or other anxiety conditions as the primary diagnosis, it is important to rule out other medical conditions that present with anxiety. These include heart disease, angina, mitral valve prolapse, congestive heart failure, hyperthyroidism, systemic lupus erythematosus, anemia, asthma, chronic obstructive pulmonary disease, and pneumonia.

It is similarly important to differentiate symptoms of PTSD from reactions to or side effects of other medications. Many classes of drugs used for medical as well as psychiatric conditions can cause symptoms of anxiety (such as bronchodialators, psychostimulants, and corticosteroids). Further, rapid discontinuation of some medications may precipitate anxiety (e.g., benzodiazepines, sedative hypnotics). Psychological side effects of over-the-counter medications such as migraine, allergy, cold, pain, diuretic, and stimulant medicines (e.g. NoDoz, Vivarin, Excedrin Migraine, Midol, Aquaban, and Triaminicin) should also be considered. As part of the biopsychosocial approach to assessment and treatment, a nutritional evaluation of dietary factors that could promote or worsen anxiety is necessary. For instance, excessive consumption of foods rich in caffeine, such as coffee, soda, chocolate, and black tea, can be anxiogenic. Use of nicotine through smoking or smokeless intake and use of herbal/dietary supplements, such as products containing guarana, should also be considered as part of the assessment of diet, medications, and lifestyle.

Because the severity of the patient's PTSD or comorbid conditions may change over time, the therapist employing a biopsychosocial model of care constantly reevaluates the impact of psycho- and pharmacotherapeutic techniques, including the type and amount of the psychotropic intervention utilized, especially as it pertains to the patient's background experiences, underlying medical condition(s), and comorbid psychological conditions.

Active Working Phase

With the patient's unique strengths, vulnerabilities, and goals clearly in mind, the prescribing/medical psychologist and patient enter the active working phase of therapy. Aspects of the working phase are summarized in figure 12.3. Extensive research about PTSD indicates that attempts to suppress unwanted thoughts about the trauma usually do not work and, in fact, lead to the suppressed thoughts returning even more strongly (Dunmore, Clark, & Ehlers, 1999; Steil & Ehlers, 2000; and Wenzlaff & Wegner, 2000). Relatedly, Horowitz (1986), a pioneer in the field of PTSD, argues that when faced with the trauma, patients' initial response is "outcry and despair." Gradually, the victim of the trauma tries to assimilate the new traumatic information with previous conceptions of the self. Because of information overload, two opposing processes are at work: defending against the overload by suppression of the trauma and working through the traumatic material so that it can be integrated into self. A number of psychological techniques can reduce the denial and dissociation and thereby facilitate working through the trauma and integrating it into the perception of self. As mentioned previously, the deepening of the therapeutic relationship and discussion of the diagnoses with the patient help create a therapeutic environment in which the patient feels safer to allow the traumatic material to be expressed. Psychodynamic approaches, hypnosis, eye movement desensitization reprocessing (EMDR), stress inoculation therapy, exposure therapy, cognitive therapy, imagery rehearsal therapy, group psychoeducational treatments, and family sessions in which the family is encouraged to talk about the trauma are all therapies that have been used with varying levels of success to facilitate healthy expression of the traumatic experience. In more intractable cases, or when these psychological techniques alone are not sufficient to allow a balanced working through of the traumatic material, the treatment may be supplemented with psychopharmacological interventions.

Pharmacological Treatment of PTSD

While no specific drug or medication combination is known to cure or prevent PTSD, the selective serotonin reuptake inhibitors (SSRIs) have become the initial pharmacotherapeutic treatment of choice for this condition (see table 12.1).

Figure 12.3 Active Working Phase

Application of systemic information derived from initial phase to begin psychotherapy and—*as needed*—crisis intervention, pharmacotherapy, environmental manipulations, to enhance safety, facilitate personal, social functioning and promote acquisition of new skills

— Consider medication and psychotherapy to reduce dissociation and facilitate optimal function

— Therapist and medication as transference objects

— Deepening relationship (ongoing from phase 1)

— Informed consent about psychotherapeutic techniques and pharmacotherapeutic intervention in order to optimize the collaborative process

— Adherence to homework and medication regimen

Selective Serotonin Reuptake Inhibitors: The SSRIs are generally preferred because of their broad range of efficacy in the treatment of PTSD and its comorbid conditions, such as depression, substance abuse, and panic disorders, and because the SSRIs are relatively safe in comparison to the other antidepressants, such as tricyclic antidepressants (which can cause cardiac conduction problems and can be fatal in overdose). Also, a decrease in serotonin has been implicated in the symptomology associated with PTSD as evidenced by fewer paroxetine binding sites on platelets of subjects with PTSD (Fichtner, O'Connor, Yeoh, Aurora, & Crayton, 1995). Currently, sertraline (Zoloft) and paroxetine (Paxil) are the only two SSRIs with FDA indications for the treatment of PTSD. FDA approval is based on results of large, multisite, randomized, double-blind controlled studies. However, it is generally accepted that off-label use of any of the other SSRIs may be equally efficacious. Therefore, selection of a particular SSRI is based on factors such as patient and family history, personal patient preference, side effect profile as related to possible aggravation or amelioration of prominent/disabling symptoms, and factors affecting the likelihood of adherence. Importantly, the off-label use of an SSRI or any other medication, even if common practice, should be discussed with the patient as part of the informed consent process. Other SSRIs that may be considered for off-label use include citalopram (Celexa) and escitalopram (Lexapro). The mixed serotonin agonist/antagonist, m etachlorophenylpiperazine (mCPP), should be avoided because it has been shown to produce flashbacks in a subset of individuals suffering from PTSD (Southwick et al., 1993). Similarly, yohimbine, an alpha-2 antagonist, should also be avoided in patients with PTSD. For instance, in one noteworthy study, Southwick et al. (1997) administered yohimbine intravenously to PTSD subjects and found that 70 percent experienced panic attacks and 40 percent experienced dissociative symptoms, such as flashbacks, while placebo demonstrated no panic attacks and only one flashback.

Table 12.1 Selective Serotonin Reuptake Inhibitors for the Treatment of Posttraumatic Stress Disorder

			PTSD Symptom Benefits			
Chemical Name	**Trade Name**	**Dosage**	**Global Improvement**	**Reexperiencing**	**Avoidance**	**Hyperarousal**
Fluoxetine	Prozac	20–60 mg/d	Yes	Yes	Yes	Yes
*Sertraline	Zoloft	50–200 mg/d	No	Yes	Yes	Yes
*Paroxetine	Paxil	20–60 mg/d	Yes	Yes	Yes	Yes

*FDA approved for treatment of PTSD

Source: VA/DOD Clinical Practice Guidelines Working Group, 2003.

Second Generation Antidepressants: The results of efficacy studies of the second generation antidepressants, also known as "novel" antidepressants, are mixed so that these antidepressants are typically considered second-line agents (see table 12.2). However, a recent 12-week, double-blind, multicenter trial compared the effectiveness of the novel antidepressant, venlafaxine ER (Effexor ER), to the SSRI, sertraline (Zoloft), and to placebo in the short-term treatment of PTSD. Venlafaxine ER (Effexor ER) demonstrated the highest remission rate. The rates of remission reported at week 12 were as follows: 19.6 percent for placebo, 24.3 percent for sertraline, and 30.2 percent for venlafaxine ER (Davidson, 2006). It is possible that the other serotonin norepinephrine reuptake inhibitor, duloxetine (Cymbalta), could have similar benefits, but there are no current data to support this assumption. Of all of the novel antidepressants, buproprion (Wellbutrin) has demonstrated the least efficacy and, according to several anecdotal reports, may even increase symptoms of PTSD (Asnis, Kohn, Henderson, & Brown (2004).

Other Antidepressants: Tricyclic antidepressants (TCAs), such as amitriptyline (Elavil) and imipramine (Tofranil) may be considered third-line agents in the treatment of PTSD (Davidson, 1990, 1993; Kosten, Frank, Dan, McDougle, & Giller El, Jr. (2003) because their characteristic, and sometimes fatal, side effect profile reduces both safety and tolerability (see table 12.3).

Thus, TCAs should be considered after safer and more easily tolerated alternative agents have failed. The monoamine oxidase inhibitors (MAOIs) are also

Table 12.2 Novel Antidepressants for the Treatment of Posttraumatic Stress Disorder

Buproprion	Canive et al., 1998	No change in total CAPS score
Nefazodone	Davis et al., 2000	Significant improvement in CAPS[a], HAM-D[b]
	Garfield et al., 2001	Significant improvement in CAPS, anxiety
	Gillin et al., 2001	Significant improvement in sleep, CAPS
	Hertzberg et al., 1998	CGI scores were "much improved"
	Hidalgo et al., 1999	High response rate; pooled data, 6 studies
	Zisook et al., 2000	PTSD symptoms lessened, CAPS
Trazadone	Hertzberg et al., 1996	Four patients "much improved"
	Warner et al., 2001	Reduction in nightmares; 9 reports priapism
Venlafaxine	Hamner et al., 1998	Case report of positive response
	Smajkic et al., 2001	Significant improvement, Bosnian refugees
Mirtazapine	Bahk et al., 2002	Significant improvement in IES[c], MADRS[d]
	Connor et al., 1999	Clinical improvement in > 50% of patients

Source: VA/DOD Clinical Practice Guidelines Working Group, 2003.

[a] CAPS is Clinician Administered PTSD Scale (1995)

[b] HAM-D is the Hamilton Rating Scale for Depression (1960)

[c] IES is the Impact of Event Scale (1979)

[d] MADRS is the Montgomery Åsberg Depression Rating Scale (1979)

Table 12.3 Tricyclic Antidepressants for the Treatment of Posttraumatic Stress Disorder

Amitriptyline	**Elavil**	Davidson et al., 1990	Effective for core symptoms of PTSD
		Davidson et al., 1993	Significant improvement: IES, CGI, HAM-D
		Cavaljuga et al., 2003	Significant improvement in acute symptoms of PTSD
Clomipramine	**Anafranil**	Muraoka et al., 1996	One case report
Desipramine	**Norpramin**	Reist et al., 1989	Did not show efficacy; no statistics
Imipramine	**Tofranil**	Kosten et al., 1991	Significant improvement, CAPS-2, IES
Nortriptyline	**Pamelor**	Zygmont et al., 1998	Effective for traumatic grief symptoms
		Dow et al., 1997	Improvement in CGE for dual diagnosis
Protriptyline	**Vivactil**	No studies, 1990–2006	

Source: VA/DOD Clinical Practice Guidelines Working Group, 2003.

considered third-line agents because of the potentially life-threatening side effect of hypertensive crisis when combined with foods containing tyramine or when taken in combination with drugs that increase sympathetic transmission, as well as the serious side effect of serotonin syndrome when taken with serotonergic agents. While two of the newer reversible inhibitors of monoamine oxidase type A (RIMAs), meclobemide (Manerix) and brofaromine (Consonar), have shown greater safety than the MAOIs and significant efficacy in the treatment of PTSD (Katz et al., 1994), they are currently not available in the United States.

Antiandrenergic Agents: Because autonomic hyperarousal is one of the common core symptoms of PTSD, medications that decrease sympathetic reactions have been utilized to dampen the response commonly known as "fight or flight." The four most commonly utilized agents are prazosin (Minipress), clonidine (Catapres), propanolol (Inderal), and guanfacine (Tenex). These agents can be beneficial in reducing nightmares, hypervigilance, hyperarousal, and rage (Simon & Gormon, 2004). The data for prazosin (Minipres), however, appear to be strongest. For example, Raskinde (2003) found this centrally acting, alpha1 adrenergic antagonist effective in reducing nightmares, sleep disturbance, and other PTSD symptoms. However, although these agents have held a theoretical attraction based on their sympatholytic properties, their clinical impact has been generally disappointing.

Table 12.4 The Use of Antiandrenergic Agents in the Treatment of Posttraumatic Stress Disorder

Clonidine	**Catapres**	.2 mg (three times/day)
Prazosin	**Minipress**	6-10 mg/d
Propranolol	**Inderal**	40 mg/d
Guanfacine	**Tenex**	.5 mg (three times/day)

Source: VA/DOD Clinical Practice Guidelines Working Group, 2003.

Further, data are emerging for the use of antiandrenergic agents to prevent the development of flashbacks if given soon after the traumatic event. Psychological theories of PTSD are built upon the concept that normal events are stored as verbally accessible memories (VAM) in which the temporal context is included so that the memories can be experienced as happening in the past. Conversely, it is theorized that highly traumatic events may be encoded in a more perceptual, automatic fashion, referred to as situationally accessible memories (SAM). These memories lack temporal context and thus are reexperienced in the present (Brewin & Holmes, 2003). It is hypothesized that beta-andrenergic stress hormones stimulate the amygdala, thereby increasing the storage of intense memories in the hippocampus. Beta-adrenergic blockade with antiandrenergic agents, especially propanalol, is theoretically believed to selectively impair memory for emotionally arousing material without impairment of long-term memory or memory for neutral stimuli (Strange & Dolan, 2004). The use of antiandrenergic agents to reduce the retention of emotionally charged memories is highly experimental, and there are no specific guidelines for their therapeutic use. In fact, there is much debate at this time regarding the advisability of prescribing these drugs for the suppression of memory, since the risks may outweigh the benefits given the current state of the evidence. When they are used in such an off-label manner, informed consent is essential, and thus far, most clinicians have not adopted these drugs in the treatment of PTSD, given the controversy and limited research. When used, however, these medications should be started at low doses and titrated slowly. Frequent monitoring of blood pressure is necessary, particularly in long-term use. Patients should be reminded not to discontinue any of these medications abruptly, to avoid the possibility of rebound hypertension (see table 12.4).

Benzodiazepines: Benzodiazepines may reduce anxiety and improve sleep in PTSD. However, they do not control or eliminate the core symptoms of PTSD. A significant limitation of this class of drugs is their addictive potential. Further, these drugs can cause or intensify depression and worsen anxiety by a phenomenon known as "rebound," which results as the drug wears off. Because of their tendency to produce cognitive blunting and problems with memory, benzodiazepines may also interfere with the therapeutic cognitive processing of the trauma. These drugs may be considered for short-term, adjunctive use but it is best to utilize them sparingly and only after considering or utilizing the first-line agents for long-term treatment of anxiety and sleep problems. As with any use of benzodiazepines, careful monitoring for sedation, abuse, depression, and mental clouding is essential.

Other Psychotropic Drugs: Psychotropic drugs other than antidepressants and antianxiety agents may be necessary to target residual PTSD symptoms and signs. Second generation (newer, atypical) antipsychotic drugs may relieve comorbid, psychotic-like features or anxiety refractory to other agents. These second-generation and third-generation antipsychotic agents include clozapine (Clozaril), risperidone (Risperdal), olanzapine (Zyprexa), quetiapine (Seroquel), ziprasidone (Geodon), and aripiprazole (Abilify). Because of the particularly serious side effects of leukopenia, seizures, and myocarditis/cardiomyopathy, clozapine (Clozaril) is not a first choice among the second-generation antipsychotic drugs. However, all second-generation antipsychotics carry a risk of metabolic syndrome and should therefore be used judiciously in patients with hyperlipdemia, diabetes, hypertension, obesity, and other vulnerable medical conditions. In addition to the risk of metabolic syndrome, first-generation (older, typical) antipsychotic drugs are more likely than second-generation drugs to produce significant motor side effects (tardive dyskinesia and the extrapyramidal syndromes of dystonic reactions, drug-induced Parkinsonism, and akathisia at clinically effective doses) and are also second-line choices to treat psychotic features in PTSD.

Therapist and Medication as Transference Objects

Therapists have long understood that patients may transfer their feelings about others onto the therapist. Therapeutic interpretation of this transference, rather than reaction to it, can facilitate patients' understanding of their underlying dynamics and the way they are approaching others in their world. Interpretation of transference may be particularly relevant for PTSD patients. Many victims of trauma develop altered worldviews with negative appraisals of the self and others (Ehlers & Clark, 2000). Thoughts that others are dangerous or cannot be trusted may perpetuate the PTSD patient's isolation and hypervigilance. The patient may project these feelings onto the therapist. The interpretation of the patient's anger or distrust created by the trauma may help the patient challenge his/her generalizations about an unsafe world. Thus, the interpretation can foster a more appropriate integration of the traumatic event into a productive worldview. In addition to interpreting possible transference to the therapist of the patient's anger and distress about the traumatic event, medication may also be viewed as a possible transference object. For example, a PTSD patient with significant hypervigilance and anxiety may express much anxiety about taking medication. A patient who is very angry because of a traumatic event may be quite pessimistic about a medication's potential value; or a patient who is denying much of the trauma may eschew medication, even though the symptoms appear overwhelming. Also, the tendency for many serotonergic agents to be experienced as anxiogenic, based on the side effect known as "activation," may be misinterpreted by the patient as a worsening of anxiety, and if not considered within the framework of a type of "inoculation" for this common side effect, may lead to further mistrust of the therapist and/or the medication. These scenarios can be predicted through enhanced education and addressed palliatively when necessary, thereby enhancing the therapeutic relationship and the opportunity for successful outcome.

Informed Consent about Psychotherapeutic Techniques and Pharmacotherapeutic Intervention in Order to Increase Patient Autonomy

In addition to offering support and interpretation, psychologists impart information to patients as a way of increasing autonomy. Educating patients may be particularly important in the treatment of PTSD. A requirement of the PTSD diagnosis, according to the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, text revision *(DSM–IV–TR;* American Psychiatric Association, 2000), is the experience of intense helplessness as well as a sense of fear or horror. Related to the concept of helplessness, Ehlers and Clark (2000, p. 45) defined mental defeat as "the perceived loss of all autonomy, a state of giving up in one's own mind all efforts to retain one's identity as a human being with a will of one's own." The concept of mental defeat well reflects the statements of trauma victims who describe themselves as being destroyed, permanently damaged, or ceasing to care whether they live or die. When patients are offered information about PTSD or become educated about PTSD through bibliotherapy, their sense of autonomy is increased, thereby reducing their feelings of helplessness and mental defeat. When a therapist operating from a biopsychosocial model of care educates PTSD patients about the effects and side effects of medications and educates patients on how to monitor their own change, the medication becomes an integral part of the therapeutic process to build autonomy and optimize the collaborative process.

Maintenance Phase

When the major symptoms of PTSD have been ameliorated, the therapist and patient enter the maintenance phase of treatment, which is outlined in figure 12.4. In this important phase, patients are given an opportunity to solidify their learnings and to transfer their skills to new situations. The patient is encouraged to assume more independence in understanding himself or herself and interpreting his or her behavior. In this phase, the PTSD patient may, for example, be encouraged to approach environments and activities that are increasingly similar to the trauma and have previously triggered flashbacks, nightmares, and other symptoms of hyperarousal. For instance, a patient suffering PTSD following a car accident that occurred while driving in a night storm with limited visibility may become very fearful of driving. Seeing cars, hearing about car accidents, and watching them on television may trigger PTSD symptomology. During the action phase, this patient could practice a gradient of activities similar to those of the traumatic event, such as riding in a car in daytime, driving in the daytime, and then driving at night. By the maintenance phase, the patient's success in driving becomes routine, and this successful plateau is recognized and reinforced in the therapy.

During the maintenance phase, the therapist may begin to reduce both the number of sessions and, depending on the length of treatment and current dose, the amount of medication. In doing so, the patient becomes more confident that his or her gains in managing the PTSD have been internalized.

In addition to the potential for recurrence of PTSD symptoms, the PTSD diagnosis is often comorbid with other conditions, such as depression and substance abuse; therefore, it is necessary in the maintenance phase to talk about signs of relapse and how this would be approached. In other words, the patient is educated about symptoms to watch for and the kind of psychotherapeutic intervention and medication that may be helpful if he/she does relapse.

A special issue for the prescribing/medical psychologist employing a biopsychosocial model during this phase is that many patients will report that their medications seem to become less efficacious over time. This phenomenon is sometimes referred to as "SSRI poop out" or simply noted as a loss of effect (Barnhart, Makela, & Latocha, 2004; McGrath, Quitkin, & Klein, 1995; and Quitken, Stewart, McGrath, Nunes, Ocepek-Welikson, Tricamo, Rabkin, Ross, & Klein, 1993).

The causes of the reduced effectiveness, if present, can be varied and so signal a need to review current psychosocial circumstances, since this phenomenon is often observed during times of increased stress and social demands. The phenomenon may also prompt a need for changes in medication and/or psychotherapy. Further, the field of psychopharmacology is growing so rapidly that there may be more effective medications on the market than those prescribed for

Figure 12.4 Maintenance Phase

Gains are solidified and learning is transferred to new situations

- Patient assumes more independence in reinforcing the self
- Number of sessions are reduced
- Medications may be reduced
- May need relapse prevention and intervention
- May need to change medication if no longer effective or new medications are more efficacious
- Discussing long-term side-effects of changes in the psychosocial environment (i.e., divorce) as well as temporary and permanent medication effects (i.e., sexual side effects, tardive dyskinesia)

the patient initially. Therefore, during the maintenance phase, the patient is alerted to signs and symptoms that a medication may need to be changed; and, in some cases, medications may still need to be altered within this phase. The dosage may require adjustment or an alternate medication may need to be prescribed.

During the maintenance phase of therapy, the cost/benefit of personal changes as well as medication effects may need to be reevaluated. For example, a PTSD patient who is feeling very dependent may now be stronger and may need to change the nature of relationships. In other words, relationships formed when the patient suffered serious symptoms of PTSD and was feeling very helpless may no longer be functional. Similarly, as the patient improves, there may be certain side effects to medication (such as the sexual side effect or weight gain) that the patient is no longer willing to tolerate or that are no longer beneficial, as in the case of weight gain by an individual who had initially lost substantial weight due to loss of appetite. During the acute phase of treatment, the patient might have been willing to tolerate these side effects because of the potential gain in overcoming the PTSD symptoms. At a later point, with flashbacks under control, dissociative features resolved, appetite normalized, and relationships improved/discontinued, the patient may reassess the relative cost in terms of side effects in comparison to the benefits of the medication now that the symptoms are more manageable.

Termination Phase

As mentioned previously, a common aspect of PTSD is a shattering of one's assumptions that the world is stable and safe (Janoff-Bulman, 1992). Termination must be handled judiciously as outlined in figure 12.5 so that the patient does not reexperience a sense that the world is dangerously unpredictable and that the patient is alone in coping with difficulties. For the therapist employing a biopsychosocial model of care, the fears of stopping both the psychotherapy and the medication must be carefully addressed in the termination phase. In order to further build the patient's sense of autonomy, the therapist decides with the patient how rapidly this psychotherapy and medication should be discontinued. Information is shared with the patient regarding the recommended length of treatment on a particular medication and the speed with which the medication should be reduced. The patient's readiness for doing this will be integrated into the termination plan. The potential benefit of having periodic follow-up sessions will be decided collaboratively. In addition, if it is determined that it would be wise to continue on the medication for an extended time, the nature of the changing therapeutic relationship will be fully explored in this termination phase. More specifically, the follow-up sessions may involve less dynamic working through of psychological issues or less active cognitive behavioral exercises or exposure and more discussion of how the patient is responding to the medication. Typically, the time between sessions is extended when medications are maintained, and a timeline for tapering is instituted, if this is an option. In some cases, tapering is attempted and unsuccessful and medication is maintained over an extended time.

Figure 12.5 Termination

Successful resolution of reliance upon therapy and any grieving associated with ending the therapeutic relationship, with specific consideration of how quickly psychotherapy and medication should be discontinued

- Assessing how rapidly the psychotherapy and the medication should be terminated
- If changing to periodic medication checks, discussing the nature of the change in the relationship with the patient
- Dealing with fears about stopping psychotherapy or stopping the medication (which may include review of attachment issues and overreliance on pharmacological interventions)

CASE 1

Case 1 is an active duty soldier who served in Iraq and was treated by the second author. His case demonstrates some classic symptoms of a patient who presents with primary symptoms of PTSD, but who first required medication and a deepening of the therapeutic relationship before he could disclose the traumatic events he had experienced. The case exemplifies the importance of understanding various psychosocial stressors and noting how they can change during the therapy process. Psychotropic intervention alleviating primary anxiety symptoms was, of necessity, initiated early in therapy. This case also exemplifies how adopting a biopsychosocial model facilitates working with the adult patient in a collaborative fashion to help establish the type of medication and the type of psychotherapy and to set a course for the mutual monitoring of change.

Identifying Data and Reason for Referral

E.C. was a 30-year-old, white, married male, active duty enlisted airman with 10 years of continuous active duty service working as an aircraft specialist. He was referred to the second author by his primary care physician for assistance with anxiety management after unsuccessful attempts to treat his panic symptoms with paroxetine (Paxil) up to 20 mg/day, escitalopram (Lexapro) up to 10 mg/day and clonazepam (Klonopin) up to .5 mg twice a day. The patient's chief complaint at the time of intake was: "I feel something is wrong with my head.... I don't feel like I'm normal."

Initial and Ongoing Phase

The initial assessment involved determining the patient's biopsychosocial status. During the initial assessment, the patient presented with uncontrollable "anxiety attacks." He complained of unrelenting difficulty with nervousness (especially around crowds), irritability, which seemed to worsen in traffic, and difficulty sleeping. He often avoided going to malls, movie theaters, and restaurants, and was uncomfortable any place there were groups of people. He described frequent feelings of rage toward "slow" drivers because of his previous deployments to Iraq and Afghanistan: "if you slowed down, or worse yet, stopped on a convoy, you were an easy target for attack and could be dead in seconds." He further described difficulty concentrating and symptoms of panic: heart palpitations, gastrointestinal upset, sweating, feelings of unsteadiness, and a sense of impending doom, which occurred spontaneously, several times a day, with each episode lasting approximately 10 minutes. Concomitantly, he described generalized, low-grade anxiety in the form of an overall "keyed up" feeling. However, as is often the case with sufferers from PTSD, despite direct questioning about possible deployment-related traumatic events, he could not (or would not) elaborate on the stresses he had endured during any of his deployments. Other aspects of the biopsychosocial assessment revealed that E.C. had a history of self-mutilation starting at age 14. He was treated by a therapist for approximately one year from ages 15 to 16. He insisted that his cutting behaviors were never a reflection of suicidal or homicidal tendencies, and he had no history of suicide attempts or other self-destructive behaviors. His only other prior contact with mental health services was through military anger management classes that he had taken the year before, as a result of his labile reaction to his divorce from his wife of five years. His only significant medical or surgical history was a two-year diagnosis of hypertension. E.C.'s psychosocial family history revealed that both sisters suffered depression and anxiety. The paternal medical history was positive for myocardial infarction, hypercholesterolemia, and obstructive sleep apnea, while the maternal history revealed hypertension, rheumatoid arthritis and asthma.

His medication regimen at the time of intake consisted of escitalopram (Lexapro) 10 mg daily, hydrochlorothiazide/triamterene (Maxzide) 50–75 mg daily and loratadine (Claritin) 10 mg daily. He had no known drug allergies.

E.C. began drinking alcohol at age 18. He denied use of alcohol or cigarettes for the previous 12 months because he had decided to adopt a healthy lifestyle. He had no history of alcohol-related incidents, including DUIs/DWIs. His caffeine intake was moderate (three 12-oz cans of Mountain Dew per day). He did not take any herbal or diet supplements, over the counter medicines or illicit substances.

Significant social history centered on his middle and high school years, when he was ridiculed by peers for his short stature. E.C. believed that this humiliation was the source of his low self-esteem and self-mutilation. He denied any physical, emotional, or sexual abuse. His history revealed no conduct problems, suspensions, expulsions, or legal infractions throughout high school.

E.C.'s personality style was primarily avoidant, passive-dependent, and obsessive compulsive. He often hesitated in an effort to correct his speech so as not to offend, and he would apologize liberally for "wasting" the therapist's time. In addition to these individual personality dynamics, there were at least two cultural dynamics conspiring to place him in the role of subordinate: the medical culture's expectation that mental health treatments be "prescribed," and the military culture, which required E.C. (who was several grades below the second author in rank) to defer to senior officers. Special attention to the development of rapport and active discussion and explanation of the collaborative therapist-patient role was essential so that E.C. could become comfortable with his new roles as equal partner and esteemed expert on the subject of himself. The deepening of the therapeutic relationship in his case included fostering his risk-taking behaviors while in session (such as his use of "forbidden" language), his willingness to openly voice disagreement, and the practicing of other assertive behaviors directly with the therapist.

As a result of the information gathered during the first session, E.C. was given. working diagnoses of panic attacks with agoraphobia and generalized anxiety disorder. He was informed about the diagnoses and the various treatments available for these conditions, both pharmacological and nonpharmacological. E.C. preferred individual psychotherapy, despite learning that group therapy could be utilized as a useful desensitization activity for his anxiety and agoraphobia, because he considered a group setting too intimidating, and he wished to continue utilizing medications to alleviate the disabling autonomic instability he felt on a daily basis. After some education about the pharmacologic treatment of anxiety, E.C. expressed an understanding of the value of incorporating a serotonergic agent in the pharmacological treatment of his anxiety and stated his preference for cognitive behavioral therapeutic (CBT) strategies (because of his natural proclivity to monitor and record his behaviors such as exercise, number of repetitions, amount of strength training during exercise, etc.).

Active Working Phase

As mentioned previously, E.C. had been placed on escitalopram by a previous healthcare provider. The possible benefits of increasing E.C.'s dosage of the escitalopram were discussed. E.C. did not experience any improvement on the 10 mg dose of escitalopram despite a three-month trial. Moreover, E.C. had a tendency to forget to take his medicine from time to time. Because of these factors, it was mutually elected to switch to fluoxetine (Prozac), a serotonergic agent with a long half-life that would be less likely to result in wide fluctuations of serum fluoxetine levels based on missed doses. E.C. was informed that one of the risks of fluoxetine use is a side effect known as activation, which can feel much like anxiety and therefore could initially appear to worsen his symptoms. E.C. creatively asked whether he could utilize the clonazepam already prescribed by his primary care doctor to alleviate these symptoms. E.C. was commended for his active participation in treatment planning by deducing a palliative strategy for the potential activation by the fluoxetine. The short term use of the benzodiazepine, clonazepam, was indeed incorporated into his treatment plan, and the value of his input in the collaborative process and learning to take increased responsibility for his care and well-being was reaffirmed.

Most of E.C.'s symptoms continued to improve over the following three months of his treatment, and he was able to participate in an anxiety-management psychoeducational group. As he improved, he began to accept more challenges. Also, he decided to remarry. About four months after beginning therapy, E.C.

complained that the fluoxetine was no longer effective, and he felt unable to use previously effective coping techniques to control his anxiety. Buspirone (BuSpar) 20 mg daily was added to his treatment regimen. E.C. showed only minimal response to this pharmacological intervention. He complained of anxiety and depression, worrisome irritability including "road rage," and disturbing nightmares. When the nightmares were probed therapeutically for recurring themes, E.C. was finally willing/able to introduce traumatic incidents that occurred during his first deployment; trauma he had denied during the initial data-gathering stage of therapy.

E.C. reported that he had deployed shortly after September 11, 2004, just two months after the World Trade Center terrorist attack, to a classified location in Iraq. His deployment activities were rapid paced and very stressful. Shortly after his arrival, he was assigned to clean up an aircraft that housed the dead, mutilated bodies of fallen aircrew. "There was blood, and tissues, and bloody IV bags everywhere.... the bodies were taken off and then we had to clean the inside of the aircraft so that they [the air crew] could complete another mission that night." His stress was intensified because he had been participating in a classified mission and therefore could not discuss any of the events or activities of that traumatic event. The deepening of the therapeutic relationship and the experience of relief from pharmacotherapeutic treatment of his general anxiety symptoms allowed him to ultimately reveal this information in order to obtain further relief and targeted support for his PTSD symptoms. He explained that his persistent nightmares were the product of the images he saw during his deployment. Apart from the nightmares, he was amnesic for many of the events of that deployment except for other events in which "shots were being directly fired at [his crew]," requiring him to "take cover" on a frequent basis. E.C. later participated in two other Operation Iraqi Freedom (OIF) deployments, which he described as militarily uneventful but emotionally charged because he received notice from his first wife during his third deployment that she had filed for divorce after their five years of marriage.

This therapeutic uncovering further revealed that in his dreams, he was reliving the ordeals that he had consciously repressed upon his return from deployment and that he had actively denied, despite specific questioning, during the initial assessment. Thus, he had reached a level of recovery in which he could cope with remembering and processing the events that were traumatic to him. At times, he attempted to utilize the old coping strategies and tried to convince the psychologist that "It really wasn't that bad.... there were other guys out there that had it worse than me.... I was just doing my job." In this new stage of treatment, work was done collaboratively with the patient to enable him to understand and agree to talk about these events as a means for treating his anxiety and nightmares. His recall and disclosure of traumatic events relatively late in the therapy process is not unusual for PTSD sufferers, who, as noted earlier, tend to withhold revealing traumatic events based on shame or secrecy , and illuminates why it is important for the diagnostic and rapport-building phase to continue throughout all stages of therapy. E.C.'s diagnostic formulation was appropriately modified to reflect these later emerging symptoms of PTSD.

The integrative, holistic approach to therapy within the context of a reliable, restorative therapeutic relationship allowed the therapist and patient to "piece together" the reasons for the resurgence/worsening of symptoms that went beyond the phenomenon commonly referred to as "SSRI poop out." At the time E.C. first revealed his history of traumatic events during deployment, he was also experiencing new stressors of increased work demands and wedding plans; but, also, he began to take energy supplements to assist his workout and in an effort to lose weight. E.C.'s blood pressure was unstable, and he was encouraged to discontinue the energy supplements based on their anxiogenic and hypertensive properties. The integrative approach included not only a focus on the updated diagnosis of PTSD but also consultation between his primary care physician and the therapist, which resulted in a decision by the primary care physician to add a long-acting form of propanolol (Inderal LA) to E.C.'s current antihypertensive regimen. It was believed that the antihypertensive would also add a palliative, sympatholytic effect in the management of the hyperarousal and rage symptoms E.C. was experiencing as part of his PTSD. Psychotherapy visits were increased in frequency and focused on relaxation and other cognitive behavioral responses to PTSD symptoms, such as controlled, imaginal reexposure. E.C. was instructed on the use of biofeedback techniques to be utilized at home and in the work setting for enhancing relaxation. Finally, a collaborative decision was made to switch from the selective serotonin reuptake inhibitor, fluoxetine (Prozac), 40 mg a day to the serotonin norepinephrine reuptake inhibitor, duloxetine (Cymbalta), 60 mg a day. The decision to switch from rather than increase Prozac was made as a result of the possible interaction effect between Prozac and propranolol, which can result in bradycardia at high doses due to cytochrome P-450 2D6 inhibition.

Maintenance Phase

The combination of psychotherapeutic, pharmacotherapeutic, and educational interventions resulted in overall improved functioning and health status for E.C. His blood pressure stabilized in the normal range, and he was once again able to exert control over his anxiety, although admittedly to a lesser extent with the PTSD symptoms than with the panic and worry. He invited his new wife to attend a therapy session in order to help her learn more about his battle with anxiety, and she was exceptionally supportive of his behavioral exercises and his occasional need to withdraw for private time to refocus his efforts in controlling his symptoms. E.C. was able to discontinue group treatment. His medication regimen remained stable with duloxetine as his only psychotropic agent, but he also continued use of antihypertensives, including propanolol, through his primary care physician. E.C.'s long-term treatment plan was to terminate treatment in three or four sessions, which would be set over an increasing time frame, and to continue with duoxetine, 60 mg, for at least another year. However, the provider was required to move prior to termination so that a therapist transfer was necessary.

Termination Phase

E.C.'s transfer was discussed openly, and the transition was accomplished uneventfully despite the therapist's and patient's mutual wish to have completed the journey together. Fortunately, at the time of transfer, E.C. achieved significant resolution of his most troubling symptoms, including nightmares, autonomic hyperarousal, panic attacks, obsessive worry, irritability, and road rage. He had generalized his relaxation and coping skills to the benefit of his work and home life. E.C. did not, however, believe he could tolerate future deployments, primarily because he feared that they would have a deleterious effect on his new marriage, as they had on his previous marriage. At the time of transfer, he was expected to separate from the Air Force through medical channels, specifically because of his inability to deploy.

CASE 2

Case 2 contrasts with Case 1 in several significant ways. First, the patient is a child who entered therapy with the first author. Second, this child suffered from significant neglect and probably also some biological deficits before incurring trauma from sexual abuse. In this dual diagnosis case, PTSD was secondary to other significant psychological and temperament problems; and progress in managing the patient's global, developmental, and adjustment difficulties needed to be addressed before the PTSD could be brought forth and worked through. Despite these differences, Case 2 is similar to Case 1 in several critical ways. In both cases, the patient (and in Case 2 also the mother of the patient) became active participants in selecting psychotherapy and medication treatment and became experts in analyzing the effectiveness of the treatment modalities. In both cases, medication as well as therapeutic techniques needed to be monitored and modified through the phases of the treatment process.

Identifying Data and Reason for Referral

J.W. was six years old when he was referred to the first author for therapy because of his overall adjustment difficulties. His performance in first grade was very poor. The teacher reported that he did not pay attention and did not complete tasks. The teacher and the child himself reported that he was not accepted by the other children. The teacher also observed that he often came to school "unkempt and smelly." When asked about his hygiene, the mother said that she tried to keep his clothes clean and statedthat he took baths; and she insisted that the smell was because "he had so much gas."

In addition to his school problems, his mother was concerned about his behavior at home. She explained that his tolerance for any frustration was low. He often seemed to not hear what she was saying and he would not follow instructions. He refused to clean up his room. He was often combative with his sister, who was three years old.

Initial and Ongoing Phase

As a part of the initial and ongoing phase of therapy, it was important to determine how J.W.'s presenting symptoms related to his biopsychosocial history. His kindergarten teacher was contacted to gain a better understanding of his earlier school performance. The kindergarten teacher reported that his skills seemed commensurate with the other children at that time. Further, he did turn in assignments. However, she had noted that it seemed he was not paying attention, even though he could complete the work requested of him. Moreover, the teacher also noted poor hygiene and rejection by his peers.

In terms of his psychosocial history, J.W.'s mother reported that she was using crack cocaine at the time of his birth. J.W.'s mother indicated that the father struggled with many learning difficulties and had trouble functioning independently. To the present, J.W.'s father is living with his own mother. The father calls J.W. occasionally but has not been an active part of his life since shortly after J.W.'s birth. The mother reported that she performed well throughout high school.

The mother's use of cocaine during pregnancy and the father's apparent difficulty with school highlighted the importance of considering whether J.W. might be struggling with developmental or learning deficits. Because of the possibility of such deficits, educational testing was implemented. Testing for educational level and attention deficit hyperactivity disorder (ADHD), reports from teachers, and behavioral checklists indicated average IQ and significant symptoms of ADHD.

In addition to this vulnerability from early history, the mother did acknowledge that she was negligent in caring for J.W. and his younger sister because of her earlier drug use. In fact, Human Services were called to the mother's apartment numerous times because neighbors complained that J.W. and his sister were wandering around in the neighborhood barefoot and without supervision. The Human Services reports indicate that the home was very dirty and in disarray. In fact, they had warned the mother on several occasions that the children would be put in foster care if she did not clean up the home. One time, a neighbor found J.W. curled up in a dryer in the laundry room. Towards the end of J.W.'s kindergarten year, a neighbor called Human Services because J.W. and his sister were wandering the neighborhood, and when she attempted to return the children to their apartment, no one was home. At this point, J.W. and his sister were taken into custody and remained in foster care for about six months.

Despite the mother's negligence, J.W. demonstrated a strong bond to his mother. For example, records indicate that when the authorities took him in to custody, J. W. announced, "Clean up that apartment, mother, so I can come home soon." His love for his mother was also evident in how close he sat to her and the warmth with which he responded to her before and after the play therapy session.

The mother did cooperate with Human Services. She attended parenting classes and gained control of her addiction. Unfortunately, during the six months that J.W. was in foster care, he was sexually abused by a 12-year-old boy who was the natural child of the foster parents. J.W. reported that he told the foster mother about these events, but no action was taken. On one visit with his mother, supervised by Human Services personnel, J.W. openly stated that he was upset that an older boy in the home had been touching his private parts. Several weeks passed before Human Services responded and removed J.W. from this foster home. Several incidences of sexual abuse were confirmed.

Therefore, initial assessment indicated that J.W. suffered neglect in the natural home and sexual abuse in the foster care home. The possibility of feelings of abandonment and depression from the lack of appropriate care needed to be explored. Testing and school records also indicated the presence of some developmental delays and ADHD. However, it was important to note that his year in kindergarten was more successful than his first-grade year. His academic performance in his first-grade year, following the sexual abuse, was fraught with adjustment and educational learning difficulties.

In the early play therapy sessions used to develop a relationship and to further clarify the diagnosis of this youngster, the therapist became aware of the strong smell of feces, suggesting encopresis: that the child was withholding his bowel, which would overflow when the sphincter could no longer maintain the feces, thereby soiling his pants with fecal matter. Upon inquiry, the mother did confirm that his underpants were often soiled.

Also during the earlier sessions, J.W. spoke briefly about his problems with his peers. He stated that many of them hit him and teased him at school. He appeared very sad and disillusioned.

The therapist attempted to discuss the sexual abuse with this young patient. Although he seemed to like to play and talk with the therapist, when the subject of the sexual abuse was raised, he spoke in the most cryptic terms. “It’s gross. You don’t wanna know.” When the therapist insisted that she would like to know so that she could help him sort out his feelings, he stated it was just “too gross” to talk about, and he “want[ed] to forget it.”

The patient did acknowledge restless sleep and nightmares. He thought that the nightmares were about being taken away from his mother and the sexual abuse but insisted that he could not remember anything specific about the bad dreams. When the patient was asked about any early neglect, he stated that there had not been any and that he loved his mother.

The patient seemed to be suppressing events regarding early neglect and sexual abuse. His problem of soiling seemed related to an overcontrolling personality style of trying to deal with matters, psychologically and biologically, by “holding in” his experiences. Thus, the patient seemed to rely upon a defense of suppressing painful events and dissociating from painful material. Content from this early therapy, particularly the nightmares, disturbed sleeping, and blocking of memories suggested that the patient was also suffering from PTSD. It was hypothesized that this tendency to “hold in” and dissociate from painful material about his early neglect and the abuse could be interfering with his concentration at school. This hypothesis seemed to be supported by the fact that he performed better in kindergarten, which preceded the sexual abuse, than in first grade.

The Active Working Phase

Since the patient could not or would not talk about the events of early neglect or sexual abuse, much of the trauma was initially worked out metaphorically through the play therapy modality. Issues of violence of one person against another as well as distrust of adults were frequent themes expressed in play. For example, when J.W. was the storekeeper, he refused to help the customer find what the customer needed, and the storekeeper cheated on giving change. In sandbox play, frequent themes of army men and animals overpowering others were played out and initially reflected and later interpreted as to what was happening in the play. Gradually, parallels were drawn to the young patient's life and his feelings of lack of support and distrust of others.

Early in the working stage, the benefits and side effects of medication were discussed with the mother. The therapist and mother agreed to intervene, initially, with psychotherapy alone. A goal was to provide a more protective environment for the youngster by involving the mother in individual sessions so that she would learn more effective parenting techniques. In particular, the therapist worked with the mother to educate her about the effects of sexual abuse and how to respond to J.W. if he indicated concerns about the abuse. In one session, the mother also brought in the maternal grandfather, who was living in the home, to discuss J.W.'s problems in standing up for himself when picked on by neighboring children or cousins. J.W. would allow other children to tease him or pick on him and then later, when alone, would have emotional outbursts or retaliate against his sister. Both the grandfather and mother were instructed in ways to shape J.W.'s behavior to be more assertive. In addition, the grandfather learned how to model appropriate assertive behavior for J.W. The mother and the therapist developed a behavioral program to control J.W.'s encopresis, which involved giving him additional fiber in his diet and putting him on the toilet on a regular schedule.

Over six months, the patient's behavior began to improve. He was less aggressive to his sister, more able to stand up appropriately to cousins and peers at school, and more willing to cooperate. He had managed his encopresis, and consequently, was more accepted by the children at school. However, the patient continued to look somewhat sad, to act in a discouraged manner, and to evidence a short attention span and low tolerance for frustration both at home and at school.

At this point, it was agreed that psychotropic intervention appeared appropriate. Because of his depression and PTSD as well as his ADHD, a trial of a norepinephrine reuptake inhibitor, atomoxetine (Strattera), was instituted. This medication has an FDA indication for ADHD. Because it is a norepinephrine reuptake inhibitor, it also has properties of a tricyclic antidepressant that could help with both mood and symptoms of PTSD. However, checklists completed at school and at home revealed the medication was not effective. The patient's attention at school did not improve; his nightmares did not decrease, and his frustration level at school and at home remained relatively high.

The possible benefits and side effects of a trial of the extended action methylphenidate preparation, Concerta, was discussed with the mother and with the patient. The mother had particular concerns about using a stimulant because of her own addiction to illicit drugs. However, after reviewing costs and benefits, she agreed that the use of the Concerta seemed appropriate. The patient was stabilized on 37.5 mg Concerta daily. One very noticeable change was that J.W. became not only willing but actually anxious to help clean at home (in some ways, the cleaning behavior seemed to be a metaphor for his wanting to make sure that he would not be separated again from his mother). His attention at school improved considerably. However, he was quite behind in academic skills, and this continued to be an impediment to his academic performance throughout his first-grade year.

After J.W. had been on medication for several months, his ability to communicate with the therapist improved. He was clear about the nature of his relationship problems at school, and it was possible to give him concrete suggestions for dealing with these difficulties. In addition, he began to remember some of his dreams. The grandfather, who was living at the home, stayed up very late. J.W. agreed that if he woke up in the night, he would try to tell his grandfather his dreams so that the grandfather could record them. J.W. was very pleased with himself when he was able to bring these dreams in to therapy for discussion. His first dream, as recorded by his grandfather, was as follows:

> This dream scared him. J.W. did not remember very much. He said there was a giant whirlpool. It would suck people into it. When they got out of the whirlpool, they would appear on the sand on the beach. When the people reappeared from being sucked into the whirlpool, they looked like monsters. The people looked horribly disfigured and grotesque. J.W. also mentioned that he got up from the beach and went looking for his mother, but he could not find his mother, and then he woke up.

The dream was processed with J.W. as possibly reflecting how he felt when he was put in to foster care and sexually abused, and it led to a very meaningful dialogue about how people who are sexually abused sometimes feel that they are "damaged goods." Working through the idea that he was damaged (and instead reconceptualizing that something bad had happened to him, but that he was not damaged or bad) was very important to J.W.'s recovery. Shortly after working through the issue, his behavior with other children became much more positive, and he began forming friendships.

About a month later, the mother ran out of medication for several days, and both mother and J.W. noted a quick deterioration in his behavior. J.W. and his grandfather recorded the following nightmare:

> J.W. thought he turned into a mean man/boy. He had had some pills, but his sister took the pills, not him. He dreamt he was hurting little kids. He was wearing all

> black. He said he was between 32 and 38 years old. In his dream, he hit little kids with his hands or used a stick to hit them and scratch them. It scared him that he was hitting and hurting kids for no reason.

Over several sessions, this dream and other content were processed with J.W. as probably illustrating that he was very angry about past neglect and sexual abuse but afraid to express his anger. Relatedly, fears of being separated, again, from his mother and home were also explored. In addition, this dream served as an excellent context for helping J.W. better understand how the medication helped him. The possibility that J.W. might need medication over a long period of time and the fact that he could count on the medication and psychotherapy being available as long as he needed it were discussed. It was emphasized that as he worked through his trauma and learned new behaviors, J.W. might outgrow the need for medication. J.W. became active in discussing the medication effects and side effects. Thus, therapeutic intervention about his dream and about medication facilitated his self-understanding and the development of his autonomy. A critical aspect of the active working phase for J.W. was to focus on his school performance. This required a more systematic tutoring in academic areas in which he had fallen behind because of his previous difficulty focusing at school. The mother also received guidance so that she could be a more effective tutor and guide for J.W.

Maintenance Phase

During this phase, which began about two months into his second-grade year, J.W. began initiating more topics in therapy. Therapy involved more direct communication about what was working well and not well in his life versus working through his issues in a more indirect play therapy modality. The sessions were reduced to every other week.

J.W. had also upgraded his academic skills. While his grades in first grade had been unsatisfactory, in second grade, he achieved Bs in academic classes and "Satisfactory" in those subjects graded pass/fail. As sometimes occurs after medication has been stabilized, there was a necessity to change the medication because of a change in insurance coverage. J.W. was very clear in reporting effects and side effects. A change to dexmethyphenidate HCl (Focalin) was attempted, but the patient reported stomachaches and believed that the medication did not help him as much as the Concerta helped him. The patient was restabilized on methylphenidate, continuous release (Metadate CR).

The Termination Phase

At the time of this writing, J.W. has not terminated therapy because he continues to need assistance in adapting to new stressors and responsibilities. It is postulated that he will need sessions over years. Gradually, sessions will be phased out to longer intervals. Psychotherapy can be terminated when his relationships are age appropriate and he consistently performs successfully at school. Most likely, he will need continued monitoring of ADHD medication throughout his academic years and perhaps into adulthood.

Summary and Recommendations

The hallmark of the integrated biopsychosocial model of care in the treatment of PTSD as employed by prescribing/medical psychologists is the high level of collaboration between the treating therapist and patient. Throughout the therapy process, the therapist and patient work closely together to monitor patient needs and growth and to make appropriate changes in the psychotherapeutic techniques and psychotropic interventions. The therapist's goal is to educate patients about themselves and about the costs and benefits of various psychotherapeutic and drug treatment interventions. Information about human dynamics and psychotropic agents is shared with the patients as they are the ultimate, best experts about themselves. To be most effective, the therapist ascribing to a biopsychosocial model not only considers and talks about the biological effects and side effects of medications but also uses the medication as one more tool to help patients understand their reactions and learn to assess their well-being, thereby spurring a sense of competence in choosing how to overcome problems and to grow, and facilitating patients' hope and autonomy.

In an era of evidence- and effectiveness-based practice, we look increasingly to identify psychotherapeutic models and psychotropic medications that may be utilized for the treatment of PTSD. As explained in this chapter, many medications used to treat PTSD as well as other mental disorders are employed "off label." Drug companies' desires for financial gain do not encourage the research of novel uses of older drugs for which the companies no longer hold patents. Yet, documenting the efficacy of these uses is clearly essential in order to provide reliable, competent care. New research findings and perhaps legislative action may be needed to foster research for validating "off-label" uses that have evolved through clinical practice.

Research regarding the efficacy of combined psychotherapy/psychotropic intervention is mounting (Pampallona, Bollini, Tibaldi, Kupelnick, & Munizza, 2004; Riba & Babn, 2005). Case studies summarized in this chapter demonstrate the effectiveness of the biopsychosocial approach in the treatment of PTSD. Thus, both empirical research and case studies point to the importance of advocating for broader and integrative medical/psychotherapeutic coverage for trauma patients. The department of defense project, which trained psychologists to prescribe, and acts in New Mexico and Louisiana allowing properly trained psychologists to prescribe medication for their patients provide new opportunities for the application of an integrated psychotherapy/pharmacotherapy model. The passage of similar acts in other states will broaden the application of the biopsychosocial model for the treatment of PTSD and other disorders. In addition, third-party payers should recognize the potency of combination strategies and encourage integrative care through their payment and schedule.

While further funding for research and practice from a biopsychosocial model will enhance the treatment of PTSD patients, the biopsychosocial model of care also highlights the complex and unique nature of each patient as well as the "art" behind the science. What is known through science must be applied with wisdom and sensitivity with the greatest respect for patients' abilities to become the wise leaders of their own recovery and growth.

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INDEX

AA. *See* Anesthesia awareness
Abstinence-only programs, 99–100
Accessibility, for the spinal cord injured, 164–65
Action stage, for change, 185
Acute stress disorder (ASD): burn injuries and, 110, 113–14, 121; ill children and parents and, 31, 35; introduction of (*DSM*), 10; motor vehicle accidents (MVAs) and, 10–11
Addiction: homeless youth and, 207–8; stages of change model and, 185. *See also* Alcohol abuse; Substance abuse
ADHD. *See* Attention deficit hyperactivity disorder
Adjustment disorder, 10
Adjustment stages, to spinal cord injury (SCI), 156–57
Adrenergic agents, 37
Afghanistan War veterans, screening for trauma, 173
African Americans: AIDS and, 79; women with AIDS, 83
Aging out, 205
Albany Motor Vehicle Accident Project and, 2–10, 12–13, 15, 17–21
Alcohol abuse: anxiety and, 93; children and, 209–11; homeless youth and, 204, 207–8; partner violence and, 274–76. *See also* Addiction; Substance abuse
Allostatic load. *See* Chronic stress responses
American Pain Society, 49
American Society of Anesthesiologists (ASA), 64, 65
Americans with Disabilities Act, 164
Amnesia, 272–74
Anesthesia awareness (AA), 63–77; causes of, 64–66; cognitive behavioral therapy (CBT) for, 73–74; depression and, 74; disbelief of patients' reports of, 66–67; early psychological intervention, 73; experience of, 66–67; flashbacks and, 73–74; further surgery and, 74; general anesthesia (GA) background, 63–64; management in the immediate postoperative period, 70–71; muscle relaxants and paralysis and, 64–67, 71–73; obtaining patient's account of, 70–71; prevention of, 74–76; psychological effects of, 67–70; psychological intervention in the medium term, 73–74; PTSD and,

67–70, 72–74; SSRI medication for, 74; study of, 71–72; Web site for, 66
Antiandrenergic agents, 293–94
Antidepressants, 292–93
Antipsychotic medications, 37
Anxiety: acute pain and, 47; managing burn pain and, 120–21
Anxiety disorders, 170; burn victims and, 114, 123
Arson, 115
ASA. *See* American Society of Anesthesiologists
ASD. *See* Acute stress disorder
Attention deficit hyperactivity disorder (ADHD), 305–11
Autonomic arousal (fight-flight response), 36, 37
Avoidant behaviors, 207–8

BDI. *See* Beck Depression Inventory
BEARS. *See* Burn Education Awareness Recognition and Support
Beck Depression Inventory (BDI): for depression caused by pain, 56–57; for motor vehicle accidents (MVAs), 15
Benzodiazepines, 37, 93, 294
Bereavement model, 122
Best practices: for homeless youth, 212, 216–22; for medically ill children and their parents, 38–40
Biofeedback, for pain, 51–53, 55
Biopsychosocial model for PTSD, 283–315; active working phase, 289, 301–3, 307–91; antiandrenergic agents, 293–94; antipsychotic drugs, 295–96; benzodiazepines, 294–95; identifying data and reason for referral, 299, 304; informed consent and, 296; initial and ongoing phase, 284, 286–89, 299–301, 305–7; maintenance phase, 296–98, 303, 309; monoamine oxidase inhibitors (MAOIs), 292–93; pharmacological treatment, 289, 292–96; recommendations, 310–11; second generation antidepressants, 292; selective serotonin reuptake inhibitors (SSRIs), 290; termination phase, 298, 304, 309; therapists and medications as transference objects, 296; tricyclic antidepressants (TCAs), 292–93. *See also* Pharmacological interventions
Bladder and bowel control, spinal cord injury and, 144, 150, 160
Borderline personality disorder, 170, 268
Bowel control. *See* Bladder and bowel control
Brain, changes in due to PTSD, 32–33, 54
Brain-based psychotherapy, 148–49
Brief interventions: for ill children and parents, 35; for motor vehicle accident (MVA) victims, 21–22
Brief Symptom Inventory, 145–46
Burn Education Awareness Recognition and Support (BEARS), 116
Burn injury in children, 109–39; accidents, 114–15; acute stress disorder (ASD) and, 110, 113–14; age and, 111; assessing preexisting mental health problems, 114–17; cognitive behavioral therapy (CBT) and, 121–22; compensatory and coping strategies for, 123; diathesis-stress model, 112–13; dose-response relationship and, 110, 112–13; due to child abuse and neglect, 117; electrical vs. thermal injuries, 111; ethnicity and, 112; fire-setting behavior, 115–16; gender and, 111–12; grieving process and, 121–22; hypnosis and, 122; online support, 129; organizations for, 129; pain and anxiety management, 120–21; pharmacotherapy and, 121; policy recommendations, 127–29; positive outcomes, 112; product regulations and design issues, 116–17; PTSD and, 110–14; remission and, 113–14; resources and tools, 117, 119, 122, 123, 129–30; safety tips, 129–31; therapy during acute hospitalization, 120–22; therapy post-acute recovery, 123; treatment of caregivers, 117–19; treatment of children, 119–20

C&P. *See* Compensation and Pension (C&P) interviews
Camps, for ill children, 36, 39
CAPS. *See* Clinician Administrated PTSD
Caregivers, decreasing distress for, 117–18
CARF. *See* Committee on Accreditation of Rehabilitation Facilities
Case studies: anesthesia awareness, 68–70; biopsychosocial model for PTSD, 299–311; burn injury in a child, 124–27; disclosure and, 169, 171, 174–80, 182, 184–91; HIV/AIDS, 80–82, 84–87, 89–90, 92; homeless children, 236–37, 250–51; homeless women, 233; motor vehicle accidents (MVAs), 1, 17; pain and PTSD, 50–51; PTSD in mothers and children with medical illness, 33–34, 37–38; spinal cord injuries (SCI), 143, 149–55; trauma prevention in a hospital, 41–42; violence against women, 268–69, 271–72, 274–75
CBT. *See* Cognitive behavioral therapy
CDs. *See* Cognitive distortions
Centers for Disease Control (CDC), HIV testing revisions, 98
Cervical region of spine, 142
CET. *See* Coping effectiveness training
Change model, 185–86
Changing Faces Social Skills Program, 123
Child abuse and neglect, burns and, 117, 127–28
Childhood sexual abuse; 181, 259, 264–65, 271–72; HIV/AIDS and, 85–87
Children. *See* Burn injury in children; Homeless families; Homeless youth
Children's Oncology Group, Web site, 36
Chronic care model, 184
Chronic stress responses (allostatic load), 32, 91
Client-centered assistance, 214
Clinician Administrated PTSD scale (CAPS), 268; anesthesia awareness and, 67; motor vehicle accidents (MVAs) and, 8–9, 14
Cognitive behavioral therapy (CBT): for anesthesia awareness, 73–74; for burn victims, 121–22; for HIV/AIDS, 81, 90; for homeless youth, 217–21; for motor vehicle accidents (MVAs), 18–21; for pain management, 48, 51–53, 59; for spinal cord injury (SCI), 146, 158–59. *See also* Trauma-focused cognitive behavioral therapy
Cognitive distortions (CDs), 270–71, 275–76
Cognitive restructuring, for homeless youth, 219
Commission on Accreditation of Rehabilitation Facilities (CARF), 51, 56, 164, 165
Communication, provider/patient, 181–82
Community support, 183
Comorbidity: homeless youth and, 208; of PTSD and substance abuse, 92–93
Compensation and Pension (C&P) interviews, 188
Compensatory strategies, 123
Complex PTSD (Disorders of Extreme Stress Not Otherwise Specified), 238, 267–68, 272–73
Complex regional pain syndrome (CRPS), 58
Complex trauma, 208–9
Condoms, 99
Consumer Product Safety Commission, 116–17, 129
Contemplation stage, for change, 185–86
Coping effectiveness training (CET), 158
Coping skills, 159
Coping strategies, 123, 209
Cortisol releasing factor, 37, 91
Costs: of homeless youth, 203; of pain, 47; of spinal cord injury, 163–65; of traffic accidents, 2
CRPS. *See* Complex regional pain syndrome

Deaths: caused by traffic accidents, 2; due to AIDS, 79
Declaration on the Elimination of Violence against Women (UN), 276

Delayed onset PTSD, 5; burn victims and, 113; motor vehicle accidents (MVAs) and, 5, 9–10, 11
Department of Transportation, data on traffic injuries and deaths, 1–2
Department of Veterans Affairs, 158
Depersonalization, 272
Depression, 170, 267; chronic pain and, 47, 49, 56–57; PTSD, substance abuse, and chronic partner violence and, 274–76; sexual assault and PTSD and, 268–71; spinal cord injury (SCI) and, 145–46; traffic accidents and, 13
Desensitization, 17, 55, 118
Diagnostic and Statistical Manual (*DSM-IV*): introduction of acute stress disorder (ASD), 10; introduction of posttraumatic stress disorder (PTSD), 10; revision of definition of posttraumatic stress disorder (PTSD), 27–28, 88, 207, 267, 296
Diagnostic Related Groupings (DRG), 163
Dialectical Behavior Therapy (Linehan), 273
Diathesis-stress model, 112–13
Disability system, pain management and, 48, 55–56
Disasters, Texas City port fire (1947), 109
Disclosure in the primary care setting, 169–202; chronic care model and, 184; community support role, 183; competency issues, 181–84; constructs of self-disclosure and self-concealment, 177–78; disclosure study (Veterans Health Administration), 170–92; gender and, 181; guidelines for inquiring about previous trauma, 190–92; intimate partner violence/domestic violence (IPV/DV) and, 170, 173, 175, 178–79, 181, 184–85; PLISSIT model for professional comfort and, 192–93; positive experiences and, 187; prevalence of presenting in primary care, 172–73; primary care practitioners (PCPs) and, 170, 176; provider/patient relationship and, 175–77, 181–82; providers' concerns about, 178–87; providers' control issues, 184–85; PTSD and, 170–78, 182–83, 193; resources for, 200–202; safe environment and, 189–92; screening vs. disclosure, 170–71; by soldiers deployed to Iraq and Afghanistan, 173; time issues and, 180, 186–87; transtheoretical or stages of change model and, 185–86; underidentification of, 173
Disengagement, 272
Disorders of Extreme Stress Not Otherwise Specified (DESNOS) (complex PTSD), 238, 267–68, 272–73
Dissociation, 155
Distress model, 90–91
Domestic violence, 83, 242. *See also* Intimate partner violence/domestic violence (IPV/DV); Violence against women
Dose-response relationship, 110, 112–13
Doubly homeless youth, 204–5
DRG. *See* Diagnostic Related Groupings
Driving reluctance, 12–13

Eating disorders, 170
Education, early for HIV/AIDS, 99–100
Education of Child and Youth programs, 222
Electroenchalographic (EEG) monitors, for anesthesia awareness, 75
EMDR. *See* Eye movement desensitization and reprocessing
Empathy, 159
Empowerment, 159, 162
Evidence-based treatment, for homeless youth, 216–22
Exhibitionism, 263
Exposure therapy: for homeless youth, 218–19; for motor vehicle accidents (MVAs), 18–19; for violence against women, 270
Eye movement desensitization and reprocessing (EMDR), 158

Family dysfunction, 205
Family system approach, 34, 39
Female genital mutilation, 265

Fibromyalgia, 54
Fight-flight response. *See* Autonomic arousal, 36
Fire-setting behavior, 115–16, 127–28
Fire Solutions, 116
Flashbacks, 187, 207
Forsaken youth, 204
Foster families, 204–5
Frotteurism, 263
Funding issues: for homeless youth, 224; for spinal cord injury (SCI), 163–65

GA. *See* General anesthesia
Gang rape, 263
Gender, disclosure and, 181
General anesthesia (GA), 63–64; types of, 64. *See also* Anesthesia awareness (AA)
Grieving process, 121–22
Group therapy: for HIV/AIDS patients, 93–95; for homeless youth, 220–21; for medically ill children and their parents, 35–36
Guided imagery, for pain, 52

HAART. *See* Highly active antiretroviral therapy
Healing process, 157
Health belief model, 91
Highly active antiretroviral therapy (HAART), 79, 80, 93, 97
Hispanics/Latinos, AIDS and, 79–80
HIV-1 RNA (viral load), 97
HIV/AIDS, 79–107; childhood sexual abuse (CSA) and, 85–87; cognitive behavior therapy (CBT) and, 81, 90; early education and prevention, 99–100; by gender, 80; global incidence, 79; group interventions, 93–95; individual interventions, 96; interpersonal violence and, 83–85; mechanisms linking traumatic stress to HIV risk behavior, 90–91; medical adherence and health outcomes, 96–97; men who have sex with men (MSM) and, 80, 83, 86, 88; normalizing HIV testing, 97–99; physiological indicators of stress, 91–92; policy implications, 97; PTSD and, 88–94; by race in the U.S., 79–80; sexual risk behavior among HIV-positive persons, 80–83; social support for, 95–96; in South Africa (epicenter of), 79; substance abuse and, 82, 85, 90–93; trauma-related stress symptoms and, 87–91
Homeless families, 231–58; academic achievement and, 247–48; access to supports, 253–54; child development and, 247; child programming, 250–51; children and complex trauma, 244–48; child-specific services, 254–55; domestic violence and, 242; emotional and physical health, 239–41, 245–47; external support networks, 251–52; family separation, 244; homeless children, 236–37; homeless women, 233–36; lack of support systems, 243–44; policy implications, 252–55; PTSD and, 237–38, 241; roots of, 232; statistics, 231; trauma and, 237–39; trauma-informed services and, 248–49; violence and, 232–37. *See also* Homeless youth
Homeless youth, 203–29; barriers to services, 223–24; basic needs for, 213; client-centered services and, 213–14; cognitive behavioral therapy (CBT) and, 217–21; cognitive restructuring, 219; complex trauma and, 208–9; costs to society, 203; defined, 204; engaging, 214–16; exposure strategies for, 218–19; funding for, 224; group treatment, 220–21; multiple traumas and, 208–9; policy implications, 222–24; practice recommendations, 221–22; PTSD and, 207–8, 212, 216–17, 219, 221; reasons for, 205–6; runaway defined, 204; services to, 212–13; statistics, 203–4; strengths-based approach and, 213; trauma and, 206–9; trauma symptoms assessment, 216; victimization and, 206; violence and, 236–37. *See also* Homeless families

Hospitalized children, 40–42
HPV. *See* Human papillomavirus
Human papillomavirus (HPV), 84
Hyperarousal, 208
Hypnosis: amnesia and, 273–74; for burn victims, 122; pain management and, 52–53
Hypnotic drugs, 63–64

Imagery, 159
Imaginal exposure therapy, 55
Immune system, stress and, 32
Infibulation, 265
Informed consent, 296
Injuries, caused by traffic accidents, 2
Inpatient rehabilitation, for spinal cord injury (SCI), 162–64
Internal working models (IWMs), 262–63
International Association for the Study of Pain, pain defined, 47
Internet-based interventions: for medically ill children and their parents, 36; for motor vehicle accidents (MVAs), 22
Interpersonal violence, 83–85
Intimate partner violence/domestic violence (IPV/DV), disclosure and, 170, 173, 175, 178–79, 181, 184–85. *See also* Violence against women
Intraoperative consciousness. *See* Anesthesia awareness
Intravenous drug users (IDUs), 91–93
Intrusion symptoms, 119
Intrusive thoughts, 207
IPV/DV. *See* Intimate partner violence/domestic violence
Iraq War veterans, screening for trauma, 173
IWMs. *See* Internal working models

JCAHO. *See* Joint Commission for Hospital Accreditation
Joint Commission for Hospital Accreditation (JCAHO), 49, 74–75
Juvenile fire setting prevention programs, 116

Litigation, pain and, 55
Losses, due to spinal cord injury (SCI), 142–47, 161

Maintenance stage, for change, 185
Major depressive disorder (MDD), 145
Massachusetts Burn Injury Reporting System (M-BIRS), 128
M-BIRS. *See* Massachusetts Burn Injury Reporting System
McKinney-Vento Homeless Assistance Act, 222
MDD. *See* Major depressive disorder
Medicaid, 163
Medically ill children and their parents, 27–45; acute stress disorder (ASD) and, 31; best practices, 38–40; family systems approach to treatment, 34, 39; hospitalized children and, 40–42; identification and early interventions to prevent PTSD, 35–36, 39; Medical Traumatic Stress Toolkit (National Child Traumatic Stress Network), 39; pain control and, 37, 41; pharmacological interventions, 36–37, 39; physiological consequences to PSTD, 32–33; play, drawing, and retelling of the event, 34; preventive group interventions, 35–36, 39; psycho-educational intervention, 35, 39; public policy and, 40–41; research in medical traumatic stress, 28–33; specialty children's' camps, 36, 39; trauma-focused cognitive behavioral therapy (CBT) and, 32, 34, 39
Medical Traumatic Stress Toolkit (National Child Traumatic Stress Network)
Medicare, 163
Memory: PTSD in children and, 33; situationally accessible, 294; verbally accessible, 294
Men, childhood sexual abuse and HIV/AIDS and, 86
Mentoring, 184
Men who have sex with men (MSM), 80, 83, 86, 88. *See also* HIV/AIDS
Mild traumatic brain injury (MTBI), 146

Mind-body relationship, pain and, *52–53*
Minnesota Multiphasic Personality Inventory, 111
Mood stabilizers, 37
Motor Accidents Authority of New South Wales, 21
Motor Vehicle Accident Interview, 13–14
Motor vehicle accidents (MVAs), 1–25; acute stress disorder (ASD) and, 10–11; Albany Motor Vehicle Accident Project and, 2–10, 12–13, 15, 17–21; Beck Depression Inventory (BDI) and, 15; brief intervention for, 21–22, Clinician Administered PTSD Scale (CAPS) and, 8–9, 14; cognitive behavioral therapy (CBT) for, 18–21; commonality of, 1–2; comorbid diagnoses (PTSD and depression), 13; costs of, 2; delayed onset PTSD, 5, 9–10; driving reluctance, 12–13; exposure treatment for, 18–19; guidelines and policies for treatment, 20–21; hardships caused by, 2; injuries and deaths (statistics), 1–2; Internet-based intervention, 22; men's incidence for PTSD, 5; Motor Vehicle Accident Interview (Albany MVA), 13–14; multiple-session treatment studies, 18–19; predictors/risk factors for developing PTSD, 6–7; PTSD and, 3–21; relaxation techniques for, 18–19; single-session treatment study, 18; State Trait Anxiety Inventory and, 15; Structured Clinical Interview for the *DSM-IV* (SCID) and, 14; subsyndromal PTSD, 5, 7, 10; supportive psychotherapy treatment for, 18–20; trauma defined, 3; travel anxiety after, 11–13; Travel Anxiety Questionnaire (TAQ) and, 15; treatment manuals, 21; treatment overview, 15, 17; witness trauma, 3; women's incidence for PTSD, 5, 6
Mourning, 161
MSM. *See* Men who have sex with men
MTBI. *See* Mild traumatic brain injury
Multidimensional treatment, for spinal cord injuries (SCI), 159
Multidisciplinary approach, to pain management, 57–60
Multiple traumas, 208–9
Murders, women by partners, 259
Muscle relaxants (paralyzing drugs), anesthesia awareness and, 64–67, 71–73
MVAs. *See* Motor vehicle accidents

National Burn Repository (NBR), 127–28
National Center for PTSD, 158
National Center on Family Homelessness (NCFH), 231–32
National Child Traumatic Stress Network (NCTSN), 39
National Institute for Clinical Excellence, 21
National Institute of Health (NIH), mind-body approaches to pain, 53
NBR. *See* National Burn Repository
NCTSN. *See* National Child Traumatic Stress Network
Nerve blocks, 54
Neurobiology: of chronic pain, 48, 54; of PTSD, 41
Nightmares, 111, 187, 207
NIH. *See* National Institute of Health
No Child Left Behind Act, 222
Numbing, 207–8
NYU Pain Management Center, 56
"On Being Aware" (Cobcroft and Forsdick), 66

Operant conditioning, for pain management, 48
Opioids, 64
Outpatient rehabilitation, for spinal cord injury (SCI), 163, 164

Pain, 47–62; acute vs. chronic, 47; anesthesia awareness and, 66, 68–70; biofeedback and, 52, 53, 55; in children, 36–37, 41; cognitive behavioral therapy (CBT) and, 51–53, 59; cost of, 47; defined, 47; depression and, 47, 49; disability system and, 48, 55–56; functionality vs. pain relief, 51–52; guided imagery and, 52;

hypnosis and, 52–53; litigation and, 55; managing burn pain, 120–21; mind-body relationship and, 52–54; models of, 48; multidisciplinary approach to, 57–60; physical therapy and, 52; Posttraumatic Chronic Pain Test (PCPT), 50; psychological assessment of, 49-51; psychotherapy and, 53; PTSD and, 49–51, 53–56; relaxation training and, 51–53; somatization and, 51; spinal cord injury (SCI) and, 149; study of the relationship between trauma and pain, 56–57; traumatic onset vs. nontraumatic, 54–57; Worker's Compensation and, 55–56
Paralyzing drugs. *See* Muscle relaxants
Paraphilias, 264
Paraplegia, 141–43
Partial PTSD, 5, 7, 10, 88, 149, 175
Paul Newman Hole in the Wall camp, 36
PCL. *See* PTSD Check List
PCP. *See* Primary care practitioner
PCPT. *See* Posttraumatic Chronic Pain Test
Pedophilia, 264
Pharmacological interventions: for burn trauma, 121; for medically ill children, 36–37, 39; for spinal injuries, 158. *See also* Biopsychosocial model for PTSD
Physical therapy, for pain, 52
Physiological indicators of stress, 91–92
Physiological reactions to PTSD, 32–33, 121, 147–48, 159
PLH. *See* HIV/AIDS
PLISSIT model, for professionals' comfort, 192–93
Policy considerations: for biopsychosocial model for PTSD, 310–11; for burn injuries, 127–29; homeless families and, 252–55; for homeless youth, 222–24; for medically ill children and their parents, 40–41; for motive vehicle accidents (MVAs), 20–21; for persons with HIV/AIDS, 97; for spinal cord injury (SCI), 162–65; violence against women and, 276–78
Positive outcomes, of trauma, 112
Posttraumatic Chronic Pain Test (PCPT), 50
Posttraumatic stress (PTS), spinal cord injury and, 147–55, 160
Posttraumatic stress disorder (PTSD): anesthesia awareness and, 67–70, 72–74; burn injury in children and, 110–14; disclosure and, 170–78, 182–83, 193; guidelines for treatment, 21; HIV/AIDS and, 88–94; homeless families and, 237–38, 241; homeless youth and, 207–8, 212, 216–17, 219, 221; introduction of in *DSM*, 10; modalities for the treatment of, 158–59; motor vehicle accidents (MVAs) and, 3–21; pain and, 49–51, 56–60; percentages for developing, 173; preventing, 39; spinal cord injuries (SCIs) and, 141, 147–55, 158–60; substance abuse and, 92–93; symptoms defined, 207–8; violence against women and, 266–78. *See also* Biopsychosocial model for PTSD; Headings under specific traumas
PPS. *See* Prospective Payment System
Precontemplation stage, for change, 185–86
Preparation stage, for change, 185
Pressure sore, 144, 150
Preventative group interventions, 35–36
Prevention: for burns, 129–31; HIV/AIDS and, 99–100
Previous trauma, inquiring about, 190–92
Primary care practitioner (PCP), 170. *See also* Disclosure in the primary care setting
Prospective Payment System (PPS), 163
Psychodynamic psychotherapy, 158–59
Psychoeducation, 35, 269–70
Psycho-physiological process, 37
Psychotherapy: for burn victims, 121; for pain, 53
PTSD. *See* Posttraumatic stress disorder
PTSD Check List (PCL), 9, 15
Push-out children, 204
Pyromania, 115

Rape: gang, 263; as an instrument of war, 265–66

Recovery rates, 7–9
Rehabilitation, for spinal cord injury (SCI), 161–62
Relaxation training, for pain, 51–53
Remission rates, 7–9, 113
Research, in medical traumatic stress, 28–33
Risk behavior, HIV/AIDS and, 80–83, 97–99
Ronald McDonald Camp Good Times, 36
Routine trauma queries, 189
Runaways, 203–4
Rusk, Howard, "Father of Rehabilitation Medicine," 162
Rusk Institute of Rehabilitation Medicine: Internship Training Program in Clinical Psychology, 143; "Seminar in Personal Functioning," 160–61

Sacral segments of spine, 142
Safety, disclosure and, 189–92
Safety tips, for burn prevention, 129–31
SAMHSA. *See* Substance Abuse and Mental Health Services Administration
SCI. *See* Spinal cord injury
SCID. *See* Structured Clinical Interview for the *DSM-IV*
Screening, vs. disclosure, 170–71
Secondary victims, 149, 161
Selective serotonin reuptake inhibitors (SSRIs), 37, 39, 290
Self-efficacy theory, 90–91
Sexual abuse: of children, 264–65; HIV/AIDS and, 85–88; homeless youth and, 205, 211–12. *See also* Violence against women
Sexual assault, defined, 263. *See also* Violence against women
Sexual esteem, 99
Sexual function, spinal cord injury (SCI) and, 144–45, 150, 160–61
Sexually transmitted infections (STIs), 80, 97
Sexual risk behavior, HIV-positive persons and, 80–83, 97–99
Sexual sadism, 264
Sexual trafficking, 260, 265
Sexual violence: forms and rates of against women, 259–60; overview of, 263–64. *See also* Violence against women
Shriners Burns Hospital (Galveston, TX), 109, 113
Situationally accessible memories, 294
Social support, for persons with HIV/AIDS, 95–96
Somatization, 51, 159, 170, 272
S.O.S. Fires Youth Intervention Program, 116
South Africa, epicenter of HIV/AIDS, 79
Specialty-care medical populations, trauma disclosure in, 170
Spinal cord injury (SCI), 141–68; adjustment process to SCI and trauma, 155–57; bladder and bowel control and, 144, 150, 160; cognitive behavior therapy (CBT) and, 146, 159; complete injury (tetraplegia), 142–43; complications from, 142–43; depression and, 145–46; emotional losses due to, 143–47, 161; funding issues for rehabilitation, 163–65; healing process, 157; mild traumatic brain injury (MTBI) and, 146; partial injury, 142–43; physical losses due to, 142–45, 161; policy considerations, 162–65; pressure sores and, 144; psychological interventions following (multidimensional), 158–61; PTS and PTSD, 141, 147–55, 158–60; rehabilitation and adaptation to, 161–65; secondary victims, 149, 161; seeking help, 157–58; sexual function and, 144–45; spinal cord function, 142; spinal cord regions, 142; statistics on, 146–47; suicide and, 145
SSRIs. *See* Selective serotonin reuptake inhibitors
Stabilization, 272–73
Stages of change model, 185–86
STAIR/NST treatment, 273
State Trait Anxiety Inventory: for motor vehicle accidents (MVAs), 15; for pain, 57
STIs. *See* Sexually transmitted infections
Strengths-based approach, 213, 221

Stress, defined, 147
Structured Clinical Interview for the *DSM-IV* (SCID), 14
Substance abuse, 187; anesthesia awareness and, 65; HIV/AIDS and, 82, 85, 90–93; homeless youth and, 204, 207–8, 224; PTSD, depression, and chronic partner violence and, 274–76; spinal cord injury (SCI) and, 146. *See also* Addiction; Alcohol abuse
Substance Abuse and Mental Health Services Administration (SAMHSA), 35
Subsyndromal PTSD. *See* Partial PTSD
Suicide, 170, 192; homeless youth and, 204; spinal cord injury (SCI) and, 145; violence against women and, 260
Supportive psychotherapy treatment, for motor vehicle accidents (MVAs), 18–19
Surgery, after anesthesia awareness, 74. *See also* Anesthesia awareness

TAQ. *See* Travel Anxiety Questionnaire
Team competency, 183–84
Temperomandibular disorders (TMD), 53
Testing, for HIV, 97–99
Tetraplegia, 141–43
Texas City port fire disaster (1947), 109
Thoracic region of spine, 142
Throwaway children, 204
Time issues, disclosure and, 180, 186–87
TMD. *See* Temperomandibular disorders
Toolkit to End Violence against Women (National Advisory Council against Violence), 276
TRACS/ABA Burn Registry, 127
Transference, 295–296
Transtheoretical or stages of change model, 185–86
Trauma: complex, 208–9; homeless youth and, 206–9; inquiring about previous, 190–92; motor vehicle accidents (MVAs) and, 3–4; multiple, 208–9; stress symptoms and HIV/AIDS, 87–91. *See also* Posttraumatic stress disorder (PTSD)
Trauma-focused cognitive behavioral therapy (CBT), 34, 39. *See also* Cognitive behavioral therapy (CBT)
Traumatic bonding, 261–62
Traumatic stress, defined, 147
Traumatic vs. nontraumatic onset of pain, 54–57
Travel anxiety, 11–13
Travel Anxiety Questionnaire (TAQ), 15
Tricyclic antidepressants, 292–93
Triggers, 207

United Nations Development Fund for Women, 277
United Nations Human Rights Council, 277
University of Texas Medical Branch Blocker Burn Unit, 109
University of Washington Rehabilitation Medicine, 145
Upper lumbar region of spine, 142

Validation, 159
Verbally accessible memories, 294
Veterans Health Administration (VHA): disclosure study, 170–92; screening requirements for military sexual trauma and PTSD symptoms, 171, 182. *See also* Disclosure in the medical setting
Victimization, homeless youth and, 206
Violence against women, 259–81; amnesia and, 273–74; children who witness domestic violence, 262–63; complex PTSD based in chronic childhood sexual abuse, 271–72; female genital mutilation, 265; forms of sexual violence, 259–60; overview of in relationships, 261–63; overview of sexual violence, 263–64; policy recommendations, 276–78; PTSD and, 266–78; PTSD, major depression, and substance dependence based in chronic partner violence, 274–76; rape as an instrument of war, 265–66; sexual abuse of children and, 264–65; sexual assault: single event with

PTSD and depression, 268–71; sexual trafficking, 260, 265; STAIR/NST therapy for, 273; statistics, 259–60; traumatic bonding, 261–62. *See also* Intimate partner violence/domestic violence (IPV/DV)
Violence against Women Act, 276
Voyeurism, 263

Web sites: anesthesiaawareness.com, 66; for burn victims, 129; Changing Faces Social Skills Program, 123; Children's Oncology Group, 36; chronic care model, 184; Committee on Accreditation of Rehabilitation Facilities (CARF), 164; Consumer Product Safety Commission, 117; experiencejournal.com, 36; National Child Traumatic Stress Network, 39; S.O.S. Fires Youth Intervention Program, 116
WHO. *See* World Health Organization
Witness trauma, 3
Wolpe, Joseph, 17
Women: childhood sexual abuse and HIV/AIDS and, 86, 91; minority women and AIDS, 80; motor vehicle accidents (MVAs)/PTSD and, 5, 6. *See also* Homeless families; Violence against women
Worcester Family Research Project, 234–35
Workers' Compensation, pain and, 55–56
World Health Organization (WHO), 277; violence against women statistics, 259, 260

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