

# **DSM-5<sup>®</sup>** **Casebook and** **Treatment Guide** for **Child** **Mental Health**



Edited by

**Cathryn A. Galanter, M.D.**

**Peter S. Jensen, M.D.**

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CASEBOOK AND TREATMENT GUIDE  
FOR  
**Child Mental Health**



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# Preface

**WE** were very excited to have the opportunity to develop the *DSM-5 Casebook and Treatment Guide for Child Mental Health*. Given our shared passion for working with other clinicians to improve mental health care provided to children, we saw this book as one tool that could help in that mission. In the United States, approximately 20% of children and adolescents have diagnosable mental health problems, and 11% of the population is significantly impaired (U.S. Department of Health and Human Services 1999). Of these children in need, 75%–80% do not receive specialty services, and the majority do not receive any services at all. For example, young people who are in treatment for attention-deficit/hyperactivity disorder (ADHD), one of the best-studied conditions, may have received an inaccurate diagnosis (and likely are receiving inappropriate treatment; Jensen 2000), and among children correctly diagnosed with ADHD, most do not receive optimal treatment (MTA Cooperative Group 1999a, 1999b). The Institute of Medicine has estimated that across all of medicine, a 17-year lag exists from the time that researchers develop a new effective treatment to the point of its implementation in the community (Committee on Quality of Health Care in America 2001). In child mental health, these health care gaps appear to be even greater and are getting worse. In the 2001 Surgeon General’s Conference on Children’s Mental Health, David Satcher noted that unmet needs for child mental health services remain as high as they were 20 years ago and that child neuropsychiatric disorders will rise proportionately by half, to become one of the five most common causes of childhood morbidity and mortality across the world by 2020 (U.S. Department of Health and Human Services 2001).

This book builds on the *DSM-IV-TR Casebook and Treatment Guide for Child Mental Health* (Galanter and Jensen 2009) and incorporates new advances and updates from DSM-5 (American Psychiatric Association 2013) and evidence-based assessment and treatment of children’s mental health. We set out to write a book that would begin to address some of the common challenges that clinicians face in diagnosing and treating children. In this book, we present 29 cases written by experts in the field to provide readers with realistic examples of the types of children and adolescents that clinicians may encounter in practice; each case is accompanied by two commentaries from field-leading clinicians (including child and adolescent psychiatrists, psychologists, social workers, and nurses) who draw from the combination of evidence-based interventions, biopsychosocial approaches, a systems perspective, and commonsense thinking. In addition to providing a diagnostic formulation, the commentaries purposely address different treatment approaches—psycho-

therapeutic and psychopharmacologic. Commentaries also address how to integrate these different approaches.

We have grouped the cases into four parts in this book. The 12 cases in Part I, “Classic Cases,” have fairly clear diagnoses. Various experts explain their conceptualizations of a case and their recommendations for treatment. Part II, “Comorbid Complexity,” includes seven cases in which the youth have several diagnoses or the actual diagnosis is unclear. Experts in the field describe how they conceptualize diagnoses and recommend treatment for these complex situations. Part III, “Toughest Cases,” includes five case examples in which the diagnosis is unclear, the patient has not responded to previous treatment, and/or only limited evidence is available on the correct means of treatment. The five chapters in Part IV, “Kids in Crisis,” concern youth who have psychopathology in the context of extreme psychosocial stressors.

The closing section, Part V, “Diagnostic and Treatment Decision Making,” includes two chapters on clinical and research issues in the diagnosis and treatment of child psychopathology. Chapter 30, “Diagnostic Decision Making,” focuses on diagnosis, including the importance of maintaining a developmental perspective, weighing information from different informants, and considering culture, context, impairment, comorbidity, and sub-threshold disorders. Chapter 31, “Research and Clinical Perspectives on Diagnostic and Treatment Decision Making,” considers how a better understanding of the role of clinical decision making can lead to improvements in diagnosis, treatment, and implementation of evidence-based approaches.

We hope that this book can serve as an invaluable tool for trainees, trainers, and clinicians who work in child and adolescent psychiatry. Because it provides points of view from different disciplinary approaches, the book is appropriate for all clinicians of all disciplines—social workers, child and adolescent psychiatrists, psychologists, nurse-clinicians, pediatricians, and others—who are involved in treating children and adolescents with mental health problems.

The book can be used as a teaching tool for clinicians at all levels of training. For the preclinical student, it provides an opportunity to read about a case that pops out of the page. More experienced students, interns, or residents have an opportunity to read how experts in the field conceptualize diagnosis and treatment. Reading each case and the associated commentaries will have the value of meeting with two expert supervisors. For more experienced clinicians, the cases and commentaries can serve as a proxy for a consultation, or second opinion, with two experts in the field. The book may be useful for child and adolescent psychiatrists studying for their board exams because it offers concise, research-based, and clinically applicable perspectives on diagnosing and treating childhood psychopathology. We trust that readers will find the book to be an interesting, educational, and compelling experience, much as we found in preparing it.

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including fairly classic cases illustrating DSM-5 criteria (Part I); cases with comorbid complexity in which it is unclear whether a child has one or more conditions and, if more than one, which came first (Part II); tough cases that reflect the current difficulties in establishing diagnoses and treatment plans (Part III); and cases that illustrate the impact of environmental factors on children's outcomes, thereby raising the question of whether the disorder is internal to the child or should instead (or also) be conceptualized as a problem in the environment (Part IV). In considering the last-mentioned cases—that is, those involving psychopathology in the context of social stressors—depending on one's theoretical persuasions in such instances, one might take a preventive approach, seeking to address environmental factors, much like the public health scientist might approach the prevention of dental disease through water fluoridation rather than ensuring that there is a dentist on every block to fill cavities as they arise, which is an impractical and imperfect solution. In our view, the need for a biopsychosocial perspective for case understanding and management is most easily seen in Part IV but applies to earlier sections of the book as well.

In reviewing all of the cases presented in this book, we realize that some cases might seem to fit under multiple section headings. For example, some of our intended “classic” cases illustrate comorbid complexity, and even seemingly “easy” cases can constitute diagnostic dilemmas. This realization also illustrates the key point that classic cases are often complex and may be approached quite differently by various experts. Moreover, most of the cases demonstrate comorbidities; impairment can be difficult to judge even among experts, and quite different treatments are recommended for the same child. We suggest that in instances where differences are prominent across commentators, the need for further research is especially acute.

We admit that our experts were given a difficult task. They did not have a patient to interview and were unable to reconcile discrepant information from multiple informants. Although checklists and rating scales were summarized in some instances, our expert commentators could not review single response items from these scales or determine through interview whether information was valid or invalid. A vignette collapses an enormous quantity of details from a rich human history. By definition, the case writers presented details most salient to themselves and their own conceptualization of the case, despite a common framework for taking a history and conducting a mental status examination that is commonly taught in psychiatry and psychology. The two commentators were subject to the clinical judgments and filters imposed by the case writer and therefore saw the case only through the case writer's eyes. But so it is in actual practice: We as clinicians all tend to view clinical phenomena within patients and families as a function of how we are trained to see and what we have seen before.

What we expect to see we all see easily, but what we do not expect to see is difficult to ascertain. Hence, we need to continually broaden our vision, not only in obtaining clinical data from multiple informants about the child's presentation, but also in eliciting the child's developmental history as well as all potentially contributing factors that may have given rise to the child's current condition—too often limited to what the field knows now and the models that we have been taught.

# Introduction: Our Conceptualization of the Cases

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**FOR** the *DSM-5 Casebook and Treatment Guide for Child Mental Health*, we asked various experts to prepare a case illustrating a common presentation in child and adolescent psychiatry. Some of these cases are updated from our earlier book, *DSM-IV-TR Casebook and Treatment Guide for Child Mental Health* (Galanter and Jensen 2009), whereas others were chosen to illustrate advances in how our field views diagnosis or in evidence-based assessment and treatment, with the *Diagnostic and Statistical Manual of Mental Disorders*, 5th Edition (DSM-5; American Psychiatric Association 2013) in mind. In addition to the case writers, additional experts, usually one each from child psychiatry and child psychology, were asked to review each vignette and approach the case from a psychotherapeutic treatment perspective and from a psychopharmacologic treatment perspective, respectively. The commentators were also encouraged to address other modalities that might be important for clinical management.

Because the cases presented in this book are only snippets of real cases, variations apparent in commentators' discussions may reflect the lack of complete information that is otherwise obtained from face-to-face interviews. However, incomplete information is also part of real cases. Clinicians are prone to filling in such gaps with assumptions and inferences, based on past experiences and theoretical biases. We believe that in the real world, such differences in diagnostic formulations and treatment recommendations are often a function of the lack of specific targeted research evidence and can signal the need for more research.

We hope readers will consider the differences and similarities across experts' commentaries—an effort that will help to highlight where more data are needed, either from patients themselves or from additional studies of patients represented by the vignettes. In some instances, despite tied hands, psychopharmacologic experts indicated that their preferred approach was psychotherapeutic. In other instances, psychotherapeutic experts indi-

cated preferences for a psychopharmacologic approach. When our experts agreed on overall diagnostic and treatment approaches, we either were impressed with the robustness and maturity of the research in that area or were led to conclude that a single dominant theoretical persuasion underpinned the field's approach to the disorder, with or without much research. Our assigning a given expert or team of experts to prepare one perspective or another is not a statement about their expertise per se and is more a statement of our intention to illustrate these different perspectives toward diagnosis and treatment.

Despite the difficulty encountered by our experts in restricting themselves to one viewpoint or another, we hope that the message throughout this casebook is clear: depending on which clinical discipline and door the patient happens to enter, he or she may hear different perspectives on diagnosis and treatment—sometimes subtle from the clinician's perspective, but rarely subtle from the patient's and family's perspective. In fact, families tend to reify these diagnoses and may shop from one clinician to the next, wondering what the patient's real "diagnosis" is.

Much more problematic is when the clinician diagnostician reifies the diagnosis at the expense of taking a more comprehensive approach to assessment and treatment. DSM-5 is meant to be a communication system for purposes of scientific study, clinical decision making, and even billing practices. Also, it is a system in evolution. As a result of research that has been conducted since the publication of DSM-IV-TR (American Psychiatric Association 2000), DSM-5 includes new diagnoses, such as disruptive mood dysregulation disorder, and some previous disorders have been eliminated or collapsed, as in the changes from pervasive developmental disorders to autism spectrum disorder.

The following illustrates our perspective as editors: Rather than only the three types of attention-deficit/hyperactivity disorder (ADHD) currently described in DSM-5 (i.e., combined presentations, predominantly hyperactive-impulsive presentation, and predominantly inattentive presentation), future research and more distant DSM editions will reveal that there are in fact many different kinds of ADHD, each with different sets of gene combinations and etiological factors, pathways to disorder development, and potential points for prevention or early intervention. By analogy, many different types of cough exist: coughs that are seasonal with a nonpurulent sputum; winter coughs that are associated with high fever; rare coughs that are associated with high fever, bloody sputum, difficulties breathing, and positive smears for pneumococcal bacteria; coughs that are associated with weight loss, decreased appetite, sometimes bloody sputum, and metastasizing masses into other parts of the body; and coughs that seem associated with no known biological factors but appear with other associated habits such as nose wrinkling, grimacing, shoulder shrugging, and so forth. Medical research has demonstrated that all of these coughs appear to have different origins and prognoses and therefore often require different treatments and treatment combinations. As neuropsychiatric and behavioral research advances, so too should our understanding of different psychiatric symptom profiles and correlated factors, yielding new knowledge about etiology, clinical presentation, associated factors, prognosis, prevention, and treatment—the eventual goal of DSM and progress in scientific research.

In preparing this volume, we wished to illustrate the range of different kinds of cases,

From this perspective, clinicians need to consider DSM-5 as a temporary stepping-stone. On the one hand, it temporarily limits the background noise and the field of observations about a complex set of behaviors within a child that may in fact have to do with a vast combination of inborn/genetic, biological/constitutional, developmental/psychological, and environmental/societal forces. In view of our current understanding that etiological factors exert differing degrees of influence within the same disorder across multiple persons with that condition, our use of DSM-5 needs to be treated with both respect and “gentle bemusement”; we must respect its role as a necessary communication system. We must understand that when appropriately used, the diagnostic system can serve as a communication tool among clinicians, researchers, and policy makers and that all research done using any particular definition is more likely to be applicable to patients for whom the same description applies. In addition, policy decisions about reimbursement and medical necessity have some coherence within that diagnostic system, as do scientific statements about prognosis, outcomes, and impairment—as long as we use the system carefully, consistently, and coherently.

On the other hand, the system is imperfect and a work in progress (Jensen et al. 2006). As new research is done, we learn that some disorders that have previously been lumped together might better be split, in terms of their etiological, associated, and prognostic factors, as is currently much discussed concerning the predominantly inattentive type of ADHD versus other forms of ADHD (Diamond 2005). Robins and Guze (1970) provided a much needed standard for the field that has changed only modestly (see Cantwell 1995) since they outlined the core criteria for validating a disorder: an onset of clustering symptoms that frequently co-occur more than other sets of symptoms; a coherent set of associated psychosocial factors; biological and laboratory findings consistent with that system profile; a particular natural course and set of outcomes; family history and/or genetic factors; and response to treatment. The coherence of these factors or lack thereof enables physicians to separate the different types of cough, such as those resulting from seasonal allergies, lung cancer, pneumococcal pneumonia, and nervous tics. The same type of research has been well under way for some time in many areas of child and adolescent psychopathology (Cantwell 1995) and is illustrated in the cases described in this book. As seen in some cases, however, the differences in commentators’ thinking suggest that much more research is needed.

In preparing this volume, we have been left with both the sense of incremental progress and a humbling perspective. Significant strides have been made through the careful application of DSM-III, DSM-III-R, DSM-IV, DSM-IV-TR, and DSM-5 nosologies (American Psychiatric Association 1980, 1987, 1994, 2000, 2013). For some conditions, we now know a great deal about etiology, diagnosis, prognosis, and treatment, and we have much to offer our patients and families. However, in other areas—rare or rarely studied conditions, comorbid cases, and such—research is urgently needed, and we are left with the unavoidable conclusion that our patients have a lot to teach us still. Thus, in the course of our clinical activities with patients and our clinical and basic science research on the difficulties from which patients suffer, it is important that we not take ourselves or our current diagnostic sys-

tems too seriously—yet we *must* take our patients' suffering seriously. We hope and trust that our readers will learn as much from this volume as we have in working with an outstanding group of colleagues in preparing it.

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# PART I

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# Introduction to Classic Cases

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**OUR INTENTION** in Part I was to illustrate “classic” or “easy” cases, yet as we reviewed the experts’ commentaries, we realized that even these so-called easy cases illustrate the complexity of patient presentations in typical real-world conditions. Associated conditions are common with classic cases, whether they be attention-deficit/hyperactivity disorder (ADHD), autism spectrum disorder (ASD), bipolar disorder, or schizophrenia. Even our best-studied disorder, ADHD, often co-occurs with other conditions. As demonstrated in the first two cases—“Trouble Paying Attention: Attention-Deficit/Hyperactivity Disorder” (Chapter 1) and “Trouble With Transitions: Does My Child Have Autism?” (Chapter 2)—subtleties in the wording of the clinical presentation and history may lead to differences in diagnosis. Among clinicians “in the know” about diagnosis, the distinctions among the various presentations of ADHD (inattentive, hyperactive, or combined) may be subtle, as may be the differences among ASD. We as clinicians and researchers may view such disorders as “differences without a distinction,” as evidenced by the replacement in DSM-5 (American Psychiatric Association 2013) of previous DSM terms with “autism spectrum disorder.” However, our clinical appreciation of these subtleties is often lost on parents and caregivers and sometimes leads to confusion, anger, disappointment, and doctor shopping.

For example, the parent of a child with ASD and ADHD may be confused as to which disorder the child “really” has and why the clinician identifies and chooses to treat the attentional and hyperactive symptoms rather than focus on aspects of the child’s ASD presentation. Without careful education and guidance of the parent of what the diagnoses “mean,” and whether the clinician chooses to treat or not to treat inattention symptoms regardless of the primary diagnosis, these diagnostic subtleties can be very confusing to parents looking for firm and fast answers.

Thus, we feel it is incumbent on the diagnostician, regardless of disciplinary roots—child psychiatry, pediatrics, psychology, neurology, or social work—to educate the parent about the sometimes subtle differences among categories and the manner in which the di-

agnoses are used and can be used by other diagnosticians. This simple, often overlooked step is necessary to avoid the confusion experienced by families when different labels are applied to the same child by various diagnosticians over time. Families must also be helped to understand what has been shown to work for the primary condition, as well as what evidence is available about effective interventions for associated problems, such as various medications for inattention, hyperactivity, anxiety, or aggression that often accompanies many disorders.

In discussing the case of “Living in Her Parents’ Shadow: Separation Anxiety Disorder” (Chapter 3), both the psychotherapeutic and the psychopharmacologic commentators generally recommend the same treatments, even though they demonstrate subtle differences in how etiological factors are invoked. It is important to note that although behavioral therapies tend to be recommended in both commentaries, the extent to which child psychiatrists and even many psychologists and social workers have actually been fully trained and supervised in using cognitive-behavioral therapy and exposure therapies is unclear.

The case of “Chatterbox at Home: Selective Mutism” (Chapter 4) epitomizes the lack of treatment studies for some disorders and demonstrates that diagnosticians often must rely on inferred evidence from related fields. Thus, because we know that anxiety disorders are treated with a combination of methods, including psychotherapy and cognitive-behavioral therapies, the commentators draw on this research in discussing the optimal treatments for the patient.

In the case of “Everything Bothers Her: Major Depressive Disorder” (Chapter 5), the case presenters use a wide range of questionnaires in the evaluation of this youth’s depression. The rating scales even span disruptive behaviors and obsessive-compulsive symptoms. This case nicely illustrates the overlap of inattentive symptoms common to both depression and ADHD, leaving commentators in some cases to make the diagnosis of ADHD, predominantly inattentive type. Note also that the commentators astutely speculate whether the patient’s ADHD symptoms may be the result of a co-occurring condition and thus collaboration with her school is warranted and medication for ADHD may be helpful. Available treatment algorithms, such as the Texas medication algorithms for depression and ADHD, do offer guidance (Hughes et al. 2007; Pliszka et al. 2006), yet the ultimate decision in most instances comes down to the clinician’s determination of what he or she feels is the etiology of the child’s depression. Is the ADHD etiological or incidental? Is the depression severe and is it the most impairing problem that must be currently treated, or is it the ADHD?

“Excessively Silly: Bipolar Disorder” (Chapter 6) presents the case of a 9-year-old girl with bipolar disorder who, not surprisingly, presented with comorbid conditions. It is interesting to note that in this classic presentation of bipolar disorder, the commentators have very similar diagnostic impressions and treatment recommendations. Also of interest is that the use of rating scales with well-established thresholds for mania may be of help in such cases.

Also worth noting in this case is the important role of psychoeducation and family support over and above the formal treatments employed by the clinician. Although it may be easy for us to take parental psychoeducation and support as a “given” and for granted, it is not clear that we always do this as intensively or intelligently as we might. Systematic parent

education and support programs, such as Fristad's psychoeducational psychotherapy (PEP; Fristad 2006) or Pavuluri's Rainbow Program (West et al. 2014), are important components. Such programs seem likely to lead also to better medication adherence and long-term family adjustment and accommodation to a child's chronic disabilities.

In "Life of the Party: Chronic Marijuana Use" (Chapter 7), the case of a marijuana-abusing teen is presented. The commentators tend to disagree on the question of the severity of the marijuana use disorder but converge on their recommendations of a range of psychosocial and supportive interventions. This case also raises the interesting question of how to best assess and treat ADHD in a substance-using teenager. Interestingly, both clinicians recommend medication management if it is warranted and if it is done with careful attention to the risk of diversion.

In "Jerking Movements: An Adolescent With Psychosis" (Chapter 8), the commentators agree that the child is severely impaired, yet readers should note that many putative symptoms of childhood and adolescent schizophrenia, such as odd behaviors and even hallucinations, can occur on a continuum with normality and as a function of cultural context, making such symptoms difficult to identify as true "symptoms" without the use of multiple informants and abundant contextual and developmental information. From a cultural perspective, it is interesting that this young man's parents were more concerned about his "jerking movements" than his more classical psychotic symptoms. This case also highlights the need for creative methods of engaging families that take culture into account.

In "She Just Won't Eat a Thing: Anorexia Nervosa" (Chapter 9), the experts demonstrate differences of opinion regarding the diagnostic subtype (anorexia nervosa, restricting type vs. anorexia nervosa, binge-eating/purging type). Although the commentators operated on the assumption that anorexia has important biological determinants, their recommended treatments tended to be therapeutically agnostic—that is, the use of behavioral approaches to restore the child to a metabolically safe state. Notice also the lack of evidence for any effective psychopharmacologic treatments.

In "I Just Can't Stop: Tourette's Disorder" (Chapter 10), the commentators agree on the presence of Tourette's disorder but differ somewhat on the presence or absence of associated or comorbid conditions. When the disorder is appropriately diagnosed, however, either psychopharmacologic or psychotherapeutic (habit reversal training) interventions can be effective.

In "He's Always Exhausted: Disordered Sleep in an Adolescent" (Chapter 11), subtle diagnostic discriminations are made by the commentators pertaining to the possible presence of persistent depressive disorder. Sleep disorders have been increasingly researched over the last decade. Their diagnosis becomes increasingly important as effective approaches can be applied; in addition to environmental strategies, medications can now be employed with these disorders. Of note also is the use of daily diaries as a means to track symptoms. Such approaches increasingly have a role in better understanding a particular symptom and in monitoring the onset, frequency, and determinants of and factors associated with these types of symptoms and also can be very useful in tracking aggressive and bipolar symptoms. The case commentators emphasize the recommendation and need for



motivational methods in working with patients and parents. Patients' willingness and readiness to change is an important area that clinicians must assess, particularly when motivation is low or when interventions are complex and arduous.

The last case in Part I, "The World Is a Very Dirty Place: Obsessive-Compulsive Disorder" (Chapter 12), raises issues of whether *abrupt, dramatic-onset* obsessive-compulsive disorder (OCD) merits a comprehensive workup for pediatric acute-onset neuropsychiatric syndrome (PANS). There are varying opinions on this from our field leaders. A paper from the 2013 PANS Consensus Conference lays out recommendations for assessment and makes the case for considering alternative medical explanations for the abrupt, dramatic-onset cases (Chang et al. 2013). OCD is relatively common, and there is no evidence at this time supporting an extensive medical workup or interventions for the majority of children presenting with OCD. The evidence, including findings from one of the major multisite NIMH studies, indicates the benefits of using cognitive-behavioral therapy, medication, or both. Even though "evidence-based treatments" exist, finding an expert who can provide these treatments with fidelity can still prove challenging.

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# CHAPTER 1

## Trouble Paying Attention

### Attention-Deficit/Hyperactivity Disorder

Stephen P. Hinshaw, Ph.D.

#### Case Presentation

##### Identifying Information

Alicia is an 8½-year-old, second-generation Mexican American girl who lives with her parents and 11-year-old brother. She attends her local public school and is in third grade in a regular education classroom. Her father is a small business owner, her mother works half-time in a day care center, and the family lives in a middle-class neighborhood of a moderate-sized city.

##### Chief Complaint

Alicia's parents saw a newspaper advertisement for a study of children "who may be having trouble paying attention." This ad caught their eye because at the most recent parent-teacher conference, Alicia's teacher stated that Alicia might have attention-deficit/hyperactivity disorder (ADHD) and recommended that the parents have her evaluated.

##### History of Present Illness

Alicia's parents are drained from the nightly struggles with Alicia over homework and discouraged by her passivity, lack of focus, and "spaciness." She seems not to care about doing well academically. Her parents complain that the more they cajole, beg, and threaten punishments, the less responsive Alicia seems to be. Now in third grade, she is showing marked variability in her school performance, ranging from grades of B down to D. Her performance in reading is noted to be particularly poor.

Since Alicia was in kindergarten, teachers have complained of a pattern of her "seeming to not listen," "poor concentration," and "wandering about." Her teachers also have commented on Alicia's undirected and unfocused activity in the classroom, plus a style characterized as "daydreamy." When Alicia was in second grade, as expectations for homework increased substantially, her parents began to get into nightly battles with her about completing such work; they continue to be exasperated by her struggles with attention, focus, and motivation.

Alicia has never had close friends. Other children do not openly dislike her but rather seem to ignore and even avoid her because she will not stay with a game or activity for long. She tends to tune out when others are talking. In group activities, the leaders must constantly prompt her to give eye contact and stay on task, which annoys the other children in the group. On the girls' soccer team, her teammates sometimes tease her for not following the coach's directions and for occasionally "spacing out" during matches.

## Past Psychiatric History

Since kindergarten, Alicia has had difficulty with daydreaming and wandering about. She has persisted with typical preschool anxieties for several years longer than most of her peers. For example, she still worries about nightmares and storms and about whether she will be safe when her parents go out for the evening and leave her with a babysitter.

## Medical History

Alicia had several ear infections at age 2 years, some of which were quite protracted, requiring several rounds of antibiotics. Tubes for her ears were considered but never inserted.

## Developmental History

Alicia was born at 36 weeks through assisted vaginal delivery and weighed 6 lbs 1 oz. She reached nearly all major milestones within normal time frames. Her speech was mildly delayed in that she was still using two- to three-word phrases by almost age 2½ years. By age 3½, when she was evaluated for preschool, her expressive language had improved and was considered to be within normal limits, although her output was small. She also had difficulties with following multipart directions, although it was never clear whether this issue related to a lack of focus or to her not having really heard the request or to an underlying language processing problem. Her pediatrician and preschool teachers noted some awkwardness of gait; this issue has shown improvement over time.

## Social History

Alicia lives with both parents. Her father is age 38. His family immigrated to the United States from Mexico when he was age 4. He has an associate's degree; his current employment is running a car repair shop. His family describes him as a "people person." Alicia's mother, age 37, comes from a large extended family that emigrated from Mexico several generations ago. She received a high school diploma and has obtained certification, through part-time attendance at a community college, in preschool education.

## Family History

Alicia's father had difficulty learning to read as a child, but it was not clear whether this problem was related to a learning disability or his second-language-learner status. He has no evident psychiatric disorders at present. The paternal grandmother was reported to have suffered from de-

pression back in Mexico. Alicia's mother has multiple phobias; for example, she does not drive a car and is afraid of elevators. She appears mildly dysphoric but does not meet criteria for dysthymia or major depression. Alicia's maternal aunt was recently diagnosed as having "adult ADHD," following a long history of school failure and multiple, transitory jobs throughout her adult life. Alicia's great-grandfather died of suicide after several mental hospitalizations.

## Mental Status Examination

Alicia was reluctant to maintain eye contact or to discuss school or homework situations. No gross neurological signs were present. Her sensory, perceptual, and cognitive functions were intact. She brightened when the examiner got her to discuss her pets at home and her eventual desire to be an animal trainer. There were often marked delays in her making verbal responses to the clinician's questions; she seemed preoccupied with internal thoughts or anxieties, and she often needed a question repeated several times before emerging with an answer.

The initial evaluation included obtaining parent and teacher rating scales, a developmental history from the parents (which yielded the information presented earlier in this case presentation), a structured interview with them, and an examination of Alicia, which included a brief office neurological examination as well as cognitive and attention testing.

## Rating Scales and Additional Information

Alicia's parents and her second- and third-grade teachers completed the Swanson, Nolan and Pelham—IV Questionnaire (SNAP-IV; Swanson 1992). Her clinicians still used this rating scale given that the ADHD criteria in DSM-5 (American Psychiatric Association 2013) are nearly identical to those of DSM-IV-TR (American Psychiatric Association 2000). Results were consistent across raters: Alicia was scored as positive for either seven, eight, or nine of the nine inattention symptoms listed in DSM-5, depending on the informant, and she was scored as positive for only zero, one, or two of the nine DSM-5 symptoms of hyperactivity/impulsivity.

Self-report on the Children's Depression Inventory, 2nd Edition (Kovacs 2011) showed a mild level of depressive symptomatology. The parental structured interview revealed evidence for several specific phobias (dogs, dark), but Alicia did not meet criteria for any other anxiety disorders.

During a classroom observation, the clinician noted that Alicia was a loner in the class: Alicia initially engaged in the assignments or group projects directed by the teacher but quickly became disengaged when the teacher was reading instructions or giving directions, often staring out the window or occasionally talking with peers. Finally, during a videotaped parent-child interaction in the clinic, the initial free-play portion was marked by positive interchange. Once, however, the instructions called for the parents to ask Alicia to perform academic tasks, she became sullen and resistant, and the parents began to cajole and beg her to perform. Their exasperation at her lack of responsiveness was readily apparent. Parent-child communication and discipline, including more effective management strategies, should become a focus of treatment efforts.

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# Psychotherapeutic Perspective

James Waxmonsky, M.D.  
William E. Pelham Jr., Ph.D., ABPP

## Diagnostic Formulation

To diagnose ADHD, clinicians should seek information from informants who have observed the child at home and school. This can be done efficiently through the use of rating scales (Pelham et al. 2005). For Alicia, parents and teachers reported seven or more symptoms of inattention and two or fewer symptoms of hyperactivity/impulsivity. Therefore, Alicia meets DSM-5 Criterion A for the inattentive presentation of ADHD. It is also important to obtain an estimate of the child's impairment at home, at school, and with peers, because this information predicts future functioning better than symptom counts do (Pelham et al. 2005). The Children's Impairment Rating Scale, a brief visual analogue scale on which parents and teachers rate a child's functioning in key domains, can be used to quickly measure functional impairments (Fabiano et al. 2006). Structured observations of classroom behaviors and parent-child interactions may provide additional evidence of impairment but are not routinely needed to establish a diagnosis (Pelham et al. 2005). Alicia's teachers and parents reported attention problems that have an impact on home, school, and peer relationships (e.g., problems finishing classwork, completing homework, staying focused in conversations with peers, and attending during soccer). These problems date back to kindergarten, interfere with her functioning across settings, and are not accounted for by another mental disorder. Therefore, DSM-5 Criteria B–E for ADHD are met. At times, she is able to function well (she makes occasional Bs in school), suggesting a moderate severity. Neuropsychological tests, although not routinely necessary to establish an ADHD diagnosis, may be helpful when concern exists that symptoms of another disorder may be impairing attention or impulse control. In this case, the Conners Continuous Performance Test (Conners 1995) documents evidence of attentional impairments that are unlikely related to anxiety.

If parents report concerns over depression or anxiety, a brief screen is useful to determine if further evaluation is necessary. Alicia's Child Behavior Checklist (Achenbach 1991a) profile and parental report suggest some internalizing symptoms, but direct interview of the parents and child did not find that Alicia's worries impair her daily functioning. Initial treatment efforts should focus on the disorder producing the most impairment, which in Alicia's case is ADHD. However, it will be important to monitor her for worsening anxiety.

Given Alicia's academic struggles and increased behavior problems during academic tasks, standardized achievement and intelligence tests should be given. Furthermore, it is important to know whether Alicia is receiving any classroom-based behavioral interventions or other special education services and what impact they have had.

Because up to half of children with ADHD will meet criteria for oppositional defiant disorder or conduct disorder (MTA Cooperative Group 1999), any child with ADHD should be screened for these disorders. Alicia argues with her parents during homework, likely because of the repeated prompts she needs to stay on task. However, she does not demonstrate other symptoms of these disorders. She should continue to be monitored for the emergence of other disruptive behaviors because ADHD is a risk factor for their development.

No clear evidence exists that the ADHD presentation (e.g., inattentive vs. hyperactive-impulsive) or the presence of comorbidities influences treatment response for ADHD (Pelham and Fabiano 2008). Therefore, the assessment process should emphasize functional impairments.

## DSM-5 Diagnosis

- **F90.0 Attention-deficit/hyperactivity disorder, predominantly inattentive presentation, of moderate severity**
- **F40.228 Specific phobia about natural environment (storms)**
- **Rule out specific learning disorder, with impairment in reading**

## Treatment Recommendations

Ideally, any treatment plan for a child with ADHD should be derived from evidence-based principles, recognize that ADHD is a treatable but chronic problem, and involve the cooperation of parents, teachers, and clinicians. Behavioral modification (BMOD) therapies are the only evidence-based psychosocial approach for ADHD, as supported by more than 175 studies, with the largest benefits on classroom measures of behavior (e.g., teacher ratings of impairment, behavior counts in school) (Fabiano et al. 2009). BMOD is as effective as medication for improving child and parent functioning (e.g., academic achievement, peer relations, quality of parent-child interactions) (Fabiano et al. 2007; Pelham et al. 2014). Adding behavioral therapy to medication improves the chances of a successful treatment response at substantially reduced medication dosages (Pelham et al. 2014) and is preferred by families over medication alone (Pelham and Fabiano 2008). After 36 months in the Multimodal Treatment Study of Children with ADHD (MTA), children treated with BMOD improved as much as those treated with medication in all domains (Jensen et al. 2007), with few appreciable differences up to 8 years later (Molina et al. 2009). Because children with comorbid anxiety symptoms exhibited an enhanced response to BMOD in the MTA (Jensen et al. 2001), Alicia is an excellent candidate for BMOD. When considering

treatment-naïve patients such as Alicia, clinicians should be aware that initial treatment with medication may decrease future uptake of behavioral services, but behavioral treatment does not decrease the likelihood of subsequent medication use (Pelham et al., in press).

By focusing on functional impairments during the diagnostic process, the clinician will have compiled a list of target behaviors usable as treatment goals. For Alicia, this list would include needing instructions repeated during class, staying on task, and completing assignments. The antecedent and consequent conditions that influence these behaviors should be identified. For example, does Alicia have greater difficulty attending when she sits close to the window? The list of target behaviors can be converted into a daily report card (DRC) to create daily and weekly goals that the teacher tracks to give feedback to Alicia and her parents. For example, classroom DRC goals might include “needs three or fewer reminders per day to complete seatwork” and “completes assignments accurately within designated time.” Alicia’s access to free-time classroom activities might be made contingent on completion of her daily goals, and her parents should provide a reward at home for a positive DRC. The initial DRC goals should be achievable so Alicia can experience the benefits of good behavior, with goals increasing in difficulty over time. The DRC also provides parents with daily feedback while simplifying the level of detail that teachers need to provide to parents. (For more information about developing a DRC, see [http://ccf.fiu.edu/for-families/resources-for-parents/printable-information/psychosocial\\_fact\\_sheet-updated-1214.pdf](http://ccf.fiu.edu/for-families/resources-for-parents/printable-information/psychosocial_fact_sheet-updated-1214.pdf).) A DRC can serve as a stand-alone intervention or be part of a larger package of school-based interventions through either a 504 plan or an individualized education program (IEP). For a sizable percentage of ADHD youth, low-intensity behavioral interventions such as a DRC are sufficient to optimize classroom functioning (Fabiano et al. 2007; Pelham et al., in press) and therefore are a reasonable initial intervention. However, it is important to remember that because of the chronicity of ADHD, maintenance treatment is typically necessary. Behavioral services need to be monitored and modified in accordance with the child’s response and functioning.

To address Alicia’s impairments at home (e.g., arguing during homework), the clinician might recommend that Alicia’s parents participate in a group-based parent training course using any one of the evidence-based programs (Pelham and Fabiano 2008). These courses emphasize praising good behavior and developing structured behavioral plans for recurrent negative behaviors. Alicia’s problems with peers appear to be relatively minor and secondary to her inattentiveness. Thus, the prescribed interventions at home and school may be sufficient to improve her peer relationships. However, her social functioning should be monitored across settings.

After these initial interventions, the clinician can assess the need for additional treatments. If a learning disability is found, Alicia may need specialized educational supports at school. If BMOD does not improve Alicia’s anxieties, an evidence-based treatment for anxiety should be implemented. If peer problems worsen, Alicia may need a more intensive social skills program that allows her to practice learned skills with other children under clinical supervision, such as at a therapeutic summer camp. Medication is another consideration. Adding medication and enhancing the intensity of behavioral treatments have

both been found to improve functioning when systematically applied (Pelham et al., in press). The choice between medication and a more intensive behavioral intervention will depend on parental preferences, availability of resources, and the severity of the child's problems.

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# **Psychopharmacologic Perspective**

Laurence L. Greenhill, M.D.

## **Diagnostic Formulation**

In summary, Alicia is an 8½-year-old Mexican American girl with a 4-year history of lack of focus, variability in school performance, poor reading performance, daydreaming in school, battles over homework, lack of friends, and not attending during team sports. These behaviors are consistent with a DSM-5 diagnosis of ADHD, predominately inattentive presentation (ADHD-I). ADHD is grouped with the neurodevelopmental disorders and is characterized as a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development. The child must have demonstrated six (or more) symptoms for at least 6 months to a degree that is inconsistent with developmental level and that have negative impacts directly on social and academic activities. Alicia also has a history of persistent preschool anxieties, including worries over storms, and difficulty separating from parents. Other symptoms of concern include a history of delayed language milestones, difficulties in following multipart directions, problems with reading, poor social skills, and rejection by peers. She has a history of chronic ear infections, requiring several rounds of antibiotics. The father had difficulty learning to read as a child, and the mother is afflicted with multiple phobias, unwilling to drive a car or to take elevators. Alicia's maternal aunt has adult ADHD, based on chronic school failure and multiple transitory jobs.

Alicia's ADHD-I diagnosis is supported by the positive symptom criteria count of six inattention symptoms (of the nine listed in DSM-5) as endorsed on the SNAP-IV Rating Scale and by her history: First, the long-standing complaints that the parents have "nightly battles with Alicia over homework" endorse DSM-5 Criterion A1f, "often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort." Second, the finding that Alicia frequently stares out the window endorses Criterion A1h, "is often easily distracted by extraneous stimuli." Third, the report that Alicia exhibits "daydreaminess" when the "teacher is reading instruc-



tions or giving directions” and Alicia’s “difficulty remaining focused during lectures” satisfies Criterion A1b, “often has difficulty sustaining attention in tasks.” Fourth, Alicia’s tendency to tune out when others are talking and the fact that others need to constantly prompt her to make eye contact serve to endorse Criterion A1c, “often does not seem to be listening when spoken to directly.” Fifth, her frequently reported behavior “losing focus on homework soon after she begins” and teasing from her peers for “not following the coach’s instructions” satisfy Criterion A1d, “often does not follow through on instructions and fails to finish schoolwork.” Sixth, her inability to follow multipart directions supports Criterion A1e, “Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks).”

In contrast, only one hyperactivity-impulsivity symptoms is described, which is Alicia’s tendency to “not stay with a game,” suggesting DSM-5 Criterion A2h, “often has difficulty waiting his or her turn.”

As for other criteria, Alicia’s impairment occurs in more than one setting (classroom, at home, and on the sports field), the symptoms caused trouble before age 12 (problems first appeared in kindergarten), and the symptoms were not better explained by another DSM-5 disorder.

On rating scales, Alicia’s parents and two teachers endorsed seven of nine inattention symptoms and two or fewer symptoms of hyperactivity-impulsivity, supporting a diagnosis of ADHD-I. Also confirmatory were the Child Behavior Checklist and Teacher Report Form (Achenbach 1991a, 1991b), which revealed *T*-scores in the clinical range for attention problems and for anxious-depressed behavior. Alicia demonstrated significantly elevated omission error rates on the Conners’ Continuous Performance Test (Conners 1995) and clinically significant reaction time variability, also supportive of a serious impairment in attention. Similarly, Alicia was sullen and resistant toward her parents when they asked her to perform academic tasks during the videotaped parent-child interaction in the clinic.

## DSM-5 Diagnosis

- **F90.0 Attention-deficit/hyperactivity disorder, predominantly inattentive presentation**
- **Rule out separation anxiety disorder**
- **Rule out specific phobia about natural environment (storms)**
- **Rule out specific learning disorder, with impairment in reading**

## Suggested Diagnostic Assessment Tools

Instruments that can facilitate assessment of level of severity of the primary symptoms:

1. *ADHD: SNAP-IV* (Swanson 1992) is a rating scale for ADHD in which a parent or teacher rates children on the basis of DSM-IV-TR symptoms; the scale can be used with DSM-5.

2. *Anxiety*: The Multidimensional Anxiety Scale for Children (March et al. 1997) is a validated self-report on anxiety symptoms.
3. *Depressed mood*: The Children's Depression Rating Scale—Revised (Poznanski et al. 1985) is a clinician-rated scale used as a screening and diagnostic tool and a measure of severity of depression in children.

## Treatment Recommendations

ADHD is a disorder that begins in childhood and has a worldwide prevalence of 5.4% of the school-age population (Polanczyk et al. 2007). It also causes disability and impairment in 4.5% of the adult population (Kessler et al. 2006). ADHD-I and associated comorbid disorders are optimally treated with a multimodal treatment approach that uses a combination of psychoeducation, parent guidance and support, consultation to the teacher(s), and pharmacologic and psychotherapeutic interventions (MTA Cooperative Group 1999).

Stimulant medications have been shown to be effective in reducing the symptoms of ADHD in studies over periods as great as 14 months, as shown in the MTA study (MTA Cooperative Group 1999). Various preparations of methylphenidate or amphetamines have been approved to treat the symptoms of ADHD in preschoolers (Greenhill et al. 2001), school-age children (Pliszka 2007), and adolescents (Wilens et al. 2006). Although used in the basic short-acting formulation in the MTA study (Greenhill et al. 2001), dopamine reuptake blocking agents are available in long-duration preparations, such as osmotic-release oral system (OROS) methylphenidate (Concerta) or mixed salts of amphetamine (Adderall). These preparations can be given once daily, in the morning by the parent, so the child will not require dosing at school. These medications have robust efficacy for extending attention span, increasing seatwork productivity, improving completion of academic tasks, and increasing cooperativeness during academic tasks. The primary adverse effects are reduction of appetite, associated weight loss or lack of weight gain, and delay in sleep onset if the medication is taken too late during the day (Greenhill et al. 2006). If the stimulants are not effective or have too many adverse events, or if the child has comorbid substance use disorder, another pharmacologic option to consider for treatment of ADHD, inattentive type, is the noradrenergic reuptake blocker atomoxetine (Strattera) (Pliszka 2007).

Alicia and her parents will need psychoeducation regarding the nature, phenomenology, comorbidity (particularly of ADHD-I and anxiety disorder), and expected course and outcome of ADHD-I. As for all newly diagnosed children and families, Alicia's family should be referred to an organization such as Children and Adults with Attention Deficit Disorders (CHADD), a national advocacy and support group.

Because evidence indicates that Alicia may have a reading disability, she is a candidate for a neuropsychological screen to rule out a reading disorder or other processing disorder (Pliszka 2007). Neuropsychological testing could also provide information on whether there is evidence of impairment in executive functioning, given her problems with following instructions, daydreaming in class, and withdrawal when the teacher is giving directions.

Alicia's teacher may be contacted about implementing an IEP tailored to improve Alicia's classroom attentiveness to directions. The teacher can move Alicia's seat next to the teacher's desk to be able to refocus Alicia with a physical touch or gesture.

Psychotherapeutic interventions to be considered include behavioral intervention techniques found useful during the MTA study, such as the DRC, whereby the teacher sends home a daily positive note, for parental reinforcement, for each day that the child reaches a behavioral target (MTA Cooperative Group 1999). Alicia's parents should be referred for parent training to strengthen their understanding of behavioral principles. They then can create a contingency management plan at home to reinforce prosocial behaviors.

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# CHAPTER 2

## Trouble With Transitions

### Does My Child Have Autism?

Susan Bacalman, M.S.W.

Robert L. Hendren, D.O.

### Case Presentation

#### Identifying Information

Arthur, a 10-year-old boy, lives with his parents, an older sister, and a younger brother.

#### Chief Complaint

Arthur's parents are seeking a second opinion about possible diagnoses of attention-deficit/hyperactivity disorder (ADHD) and obsessive-compulsive disorder (OCD). They mention having recently read an article describing autism that gave them new insight regarding possible causes for their son's behavioral problems.

#### History of Present Illness

Arthur's behaviors of concern have been present since early childhood. He is easily distracted, fidgety, always out of his seat, and unable to wait his turn. The compulsive and rigid behaviors that he has exhibited since he was much younger have become more pronounced. He does not do well if there are changes in his routine. He becomes upset if his mother does not always drive the same route, and he flies into a rage if she changes their afternoon schedule. Arthur's early preoccupation with cars has intensified. At school he responds angrily if rules are not followed exactly as he thinks they should be.

Arthur's parents feel that his play behavior has always been unusual. He is more interested in taking toys apart than engaging in pretend play. Arthur makes no effort to interact with children in the neighborhood and does not know how to respond when they approach him. He struggles to share and take turns at school. His teacher and the principal view his behavior as oppositional. His parents, however, suspect that he has difficulty understanding the give-and-take in relationships.

## Past Psychiatric History

Arthur's parents had vague concerns during his first year because it was difficult to get him to smile back at them. Also, he did not look at them when babbling during his first year and continues to have poor eye contact. He never pointed to things of interest and from early on has had a limited range of facial expressions. His parents note that from the time he was a toddler, he seemed less emotionally expressive and "harder to read" than his siblings. As a preschooler he did not enjoy playing dress-up or other imaginative games. He did not seek his parents' praise when he made elaborate constructions with his Lego blocks. He displayed no empathy toward children who may have injured themselves while playing or who were emotionally upset, and he made no efforts to comfort them.

When he entered kindergarten at age 5, Arthur behaved aggressively toward classmates when they invaded his physical space. He appeared not to understand how to engage with other children in conversation or in play. He did not participate in group games such as hide-and-seek and did not join in when the other children were pretending to be superheroes. At recess he usually went off by himself. As Arthur progressed through the early elementary grades, his behavior problems worsened. He was frequently suspended from school because he would become agitated and aggressive, especially in loud and overstimulating settings such as the playground at recess.

## Medical History

Over the years, Arthur's parents obtained several evaluations for him, including psychoeducational testing. A psychiatrist prescribed several trials of medications, including clonidine, stimulants, and paroxetine. None were effective, and each caused unpleasant side effects.

A neurologist evaluated Arthur at age 6 because his parents reported that he periodically "spaced out." The results of the electroencephalogram and hearing and vision tests were normal. The neurologist noted motor clumsiness, difficulty holding a pencil correctly, and poor handwriting.

## Developmental History

Arthur was the product of a normal, full-term pregnancy and uncomplicated delivery. No problems were noted during his early infancy. He walked at age 12 months and began using single words between 24 and 28 months. He rapidly progressed from using single words to using complex sentences. Although grammatically correct, his speech had a stilted and pedantic quality. He often greeted other people by asking them what make and model cars they owned and then reeled off a list of facts about them. His parents often had to prompt him to respond to others' comments and to look at them while speaking.

Finding adequate educational services for Arthur has been difficult. On numerous psychoeducational assessments, his IQ has been in the average range with superior to gifted abilities in information and block design. Despite Arthur's high cognitive abilities, he was withdrawn from a regular classroom because of his behavior problems, including inattention and impulsivity, and placed in an alternative program for children with severe behav-

ior disturbances. He was lost in this program and was easily targeted for teasing by his more socially competent classmates.

## **Social History**

Arthur's parents are college-educated professionals. There are no significant family stressors and no history of abuse or neglect.

## **Family History**

A second-degree relative on the paternal side has ADHD. No other psychiatric or learning problems are present in either parent or the extended family.

## **Mental Status Examination**

Arthur was an appropriately dressed, attractive 10-year-old boy. He appeared restless, fidgeting in his seat. He was not interested in answering questions and instead asked the interviewer what type of car she drove. Once she responded, he immediately listed all of her vehicle's design features and commended her on her choice. When Arthur talked about the technicalities of cars, his eye contact improved and his tone of voice became more expressive. Otherwise, it was difficult to engage Arthur in conversation. He acknowledged that he did not have many friends but could not explain why this was so. Given his limited range of facial expressions and inability to describe his feelings, it was difficult to assess the quality of Arthur's mood. He denied ever wanting to hurt himself, and his mother never observed him losing interest in favorite activities. Sleep and appetite were normal. Arthur denied hearing voices or seeing things that were not present, and his mother never observed him responding to internal stimuli.

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# **Psychotherapeutic Perspective**

Laura Schreibman, Ph.D.

## **Diagnostic Formulation**

Arthur meets criteria for autism spectrum disorder (ASD) on the basis of evidence of persistent deficits in social communication and interaction as well as his restricted patterns of



behaviors and interests presenting early during development. His parents had become concerned about some odd behaviors as early as age 12 months, such as failure to make eye contact, lack of smiling, and absence of appropriate nonverbal behaviors (e.g., pointing to objects). He subsequently exhibited other unusual behaviors such as compulsive, ritualistic behaviors; lack of interest in pretend play with toys; difficulties with transitions and changes in routine; lack of interest in other children; failure to participate in social group games; absence of sharing or turn taking; and insensitivity to or lack of awareness of needs of social/communicative partners.

Since early childhood Arthur has failed to develop normal peer relationships appropriate to his developmental level and has not shown expected levels of social or emotional reciprocity. Moreover, he has shown persistent preoccupations with restricted patterns of interest that are abnormal both in intensity and focus (e.g., his obsession with cars) and an inflexible adherence to specific, nonfunctional routines or rituals (he does not tolerate changes in schedule or his mother's changes in driving routes). In addition, the disturbance causes clinically significant impairment in social functioning, as evidenced by Arthur's pronounced difficulties in social interaction, absence of friendships, aggression, oppositional behaviors, and inflexibility and/or rage in response to changes in routines. The description of his approaching an examiner by asking her the make of car she drives and pursuing that topic with far more detail and persistence than is socially appropriate is an excellent example of the egocentric, insensitive social interactions typical of individuals with ASD and average or above average intelligence. The fact that Arthur is the subject of teasing by peers is a common consequence of the disordered social functioning of children with ASD. Significantly, he does not have a history of clinically significant delay in language development, cognitive development, or acquisition of other (nonsocial) adaptive behaviors. Although his language is not delayed, Arthur does show deficits in the ability to describe his emotions. Motor clumsiness is also mentioned in Arthur's evaluation, and this characteristic is often noted in individuals with ASD.

Differential diagnosis from DSM-5 social (pragmatic) communication disorder (American Psychiatric Association 2013) is possible primarily because Arthur not only shows deficits in social communication but also demonstrates an absence of interest in social communication and social-emotional reciprocity, as well as highly restricted interests, insistence on sameness, and inflexible adherence to routines. Schizophrenia in childhood is ruled out because of the absence of delusions, hallucinations, and disorganized speech. Also, schizophrenia in childhood is preceded by years of normal development, whereas Arthur exhibited symptoms in very early childhood.

The additional diagnosis of ADHD is made, given the significant clinical impact of the ADHD symptoms on Arthur's functioning.

## DSM-5 Diagnosis

- F84.0 Autism spectrum disorder
- F90.2 Attention-deficit/hyperactivity disorder, combined presentation

## **Treatment Recommendations**

Treatment should be preceded by a thorough evaluation of Arthur's current needs to determine treatment targets. Several areas of his functioning need to be addressed. Arthur needs direct intervention for his social deficits, inappropriate social initiations, lack of behavioral control (outbursts, aggression, and oppositional behavior), compulsive and ritualistic behaviors, and issues with self-control.

One area of concern is the parents' difficulty in dealing with their child's behavioral outbursts, behavioral rigidity, compulsiveness, and oppositional behavior. Parent behavioral training would likely be beneficial in assisting the parents to improve Arthur's behavior in the home and community settings. Thus, instruction in behavioral management for the parents with the assistance of an in-home behavior specialist is recommended.

Intervention in the classroom setting is also recommended. Ideally, Arthur should be transitioned from his current highly structured classroom to a less structured classroom. A clear description of individualized education program (IEP) goals, including social goals, should be obtained and addressed first within a more highly structured and individual format; as Arthur attains these goals, the transition to a less structured classroom should be possible. A shadow aide in the classroom should facilitate this transition, with the goal of fading the aide as soon as possible. Programmed consistency with the behavioral procedures being implemented by the parents in the home is very important to help generalize behavioral improvements across the environments.

Perhaps the most critical need for individuals with ASD is training in elements of social interaction. These individuals often need training in basic social discourse skills, such as the proper distance to stand from someone, eye contact with a social partner when engaging in discourse, and of course the discourse itself. Instruction is needed in avoiding persistence on a specific (often compulsive) topic, changing topics, asking questions of the social partner, and attending to the answer. Instruction in how to read facial expressions of others is also important. Such instruction is highly recommended for Arthur both on an individual level and as part of a group experience. His participation in a social group program would help him learn a variety of specific skills with a variety of social interaction partners. This program should facilitate acquisition and generalization of skills, reduce Arthur's stigmatizing social eccentricities, and reduce teasing by peers.

Self-management techniques would likely help Arthur with several behavioral issues. Self-management has been used effectively with a variety of populations, including individuals with developmental disabilities and those with ADHD (Apple et al. 2005; Gureasko-Moore et al. 2006; Hinshaw 2006; Newman 2005; Schreibman and Koegel 2005). Generally, the procedure involves choosing a target behavior (the choice is ideally made by the client but can be made by a caregiver, as might be expected in cases of developmental disability) and then teaching the patient to identify an occurrence of the behavior, record the behavior, evaluate performance, and then self-reinforce. For a child such as Arthur, self-management would likely prove useful in addressing behaviors such as social approaches, initiations, and topic shifts, as well as controlling excess motor activity, following directions, reducing rituals, and other behavioral targets.

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# Psychopharmacologic Perspective

Lawrence Scahill, M.S.N., Ph.D.

## Diagnostic Formulation

Arthur's history of marked social communication deficits, isolation, and restricted interests is consistent with the DSM-5 diagnosis of ASD (American Psychiatric Association 2013). (Incidentally, his history is also consistent with a DSM-IV diagnosis of Asperger's disorder [American Psychiatric Association 1994].) In practice, many clinicians would use the term *high-functioning ASD*. The differential diagnosis would include the current diagnoses of ADHD and OCD. There is no clear description of anxiety symptoms, but this may be worth further inquiry. Depression, bipolar illness, and psychosis appear to be ruled out.

Despite the historical diagnosis of OCD, the clinical picture is not consistent with that diagnosis. Although Arthur's preoccupation with cars may be considered *obsessive*, it is not an unwanted obsessional concern. Children with OCD describe the intrusion of unwanted and bothersome thoughts that are difficult to dislodge. By contrast, Arthur likes thinking and talking about cars. His insistence on routines is also better explained by ASD than OCD. Given the boy's history, the diagnosis of ADHD is not surprising. Although inattention, hyperactivity, and impulsiveness are not core features of ASD, these behaviors are relatively common in this clinical population.

In the past, many clinicians might have been reluctant to apply the diagnosis of autism to a child with normal intelligence. Indeed, early epidemiological studies indicated that a high percentage of children with autism were intellectually disabled. Because of better sampling of the general population and broadening of the diagnostic criteria in DSM-IV and DSM-5, it is currently estimated that 6.2 per 1,000 children have ASD, and approximately 30% are intellectually disabled (Elsabbagh et al. 2012).

## DSM-5 Diagnosis

- F84.0 Autism spectrum disorder

## Treatment Recommendations

Currently, there are three primary approaches for the treatment of ASD: educational interventions, behavioral interventions, and medication.<sup>1</sup> Education is often the place to begin treatment planning. Arthur has failed in school for several years because of his medical condition. The school apparently views him as a boy with ADHD, disruptive behavior, and emotional disturbance. Thus, when he did not succeed in the mainstream classroom, he was placed in a special education environment for children with behavioral problems. Federal law specifies that children with a medical condition that interferes with academic progress are entitled to special education services in a least restrictive and appropriate setting. Arthur's placement does not appear to be consistent with this mandate. Arthur's parents need information and coaching on how to call for a formal meeting with school personnel to develop an IEP. In Arthur's case, the focus should be on his social disability, which is central to the diagnosis of ASD. His school placement should promote his social skills, not simply for his enrichment but also because his social disability is fundamentally interfering with his academic success. It is likely that at least some of Arthur's behavioral problems are due to his social deficits that lead to derailment of everyday interactions with peers. Thus, placement in a school where he is lost in the shuffle at best and also is teased and bullied is not addressing an essential component of his medical condition. In some instances, the selection of placement may require visiting programs in the home school district or neighboring districts. Because Arthur's IQ is in the normal range, the parents will need to be vigilant about avoiding placements that are primarily for lower-functioning children.

Behavioral interventions are typically focused on specific maladaptive behavior (e.g., aggression) or specific skill building (e.g., language or everyday living skills). In Arthur's case, the situations and circumstances that precede his aggression, explosive outbursts, and noncompliance at school and home need to be determined. In addition, the frequency, duration, and intensity of these behaviors need to be better understood. Finally, the consequences of his maladaptive behavior should be documented. For example, if his tantrums result in escape from environmental demands, his tantrums are being inadvertently reinforced. This type of *functional analysis* should be performed in school and at home.

Medication therapy for children with ASD remains an underdeveloped science. Until recently, few medications have been evaluated in large-scale randomized trials. In the current state of the art, medications are directed at target behaviors rather than the social disability of ASD. Common targets include irritability, hyperactivity, anxiety, and repetitive behavior. In Arthur's case, an important first step would be to have his parents and teacher

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<sup>1</sup>A wide range of complementary and alternative treatments for ASD have been proposed, such as megavitamin therapy, vitamin B<sub>12</sub> injections, oral vitamin B<sub>6</sub>, sulforaphane, N-acetylcysteine, gluten-free diets, chelation, and hyperbaric oxygen, to name a few. Although the benefits of these treatments have been described in anecdotal reports and small studies, the treatments have not been well studied, and the rationale for some treatments is unclear.

complete a behavioral rating scale such as the Aberrant Behavior Checklist (ABC) to help identify target symptoms. The ABC is a 58-item scale consisting of five subscales: Irritability (aggression, tantrums, and self-injury), Stereotypies, Social Withdrawal, Hyperactivity, and Inappropriate Speech (Kaat et al. 2014). The ABC provides normative data for populations with developmental disabilities (Brown et al. 2002), and specific subscales are sensitive to change (Research Units on Pediatric Psychopharmacology [RUPP] Autism Network 2002, 2005).

If Arthur's IEP results in a more appropriate placement in a timely manner, it would be wise to hold off on medication until the classroom change has been made. His behavioral problems may look different in a more appropriate school setting. If the time lag for placement in a new school program is likely to be prolonged, considering medication in his current situation would make sense. The history suggests that hyperactivity was a prominent problem in Arthur's past. If it is a current problem as evidenced by a high score ( $>25$  for boys in this age group) on the Hyperactivity subscale on the ABC from a parent and his teacher, another stimulant trial may be worth considering. A large-scale study conducted by the federally funded RUPP Autism Network (2005) showed that methylphenidate was indeed superior to placebo for the target problem of hyperactivity in children with ASD. The magnitude of benefit, however, was only about 20% over placebo. This difference is considerably lower than the level of improvement associated with methylphenidate in typically developing children with ADHD. The  $\alpha_2$ -adrenergic agonist guanfacine may also be useful for reducing hyperactivity in children with ASD and is usually less sedating than clonidine (Scahill et al. 2015).

The case presentation also mentions a past trial of paroxetine, a selective serotonin reuptake inhibitor (SSRI). Although the SSRIs are commonly used in children with ASD, the empirical support for their use in this population is meager. The rationale for using paroxetine in Arthur's case is the perceived safety of the SSRIs and their demonstrated efficacy for the treatment of children with OCD. In a federally funded trial of citalopram in 149 children with ASD, the active drug was no better than placebo for reducing repetitive behavior (King et al. 2009). Given the differences in types of repetitive behavior observed in children with ASD and those of children with OCD, the underlying neurobiology may also be different.

In addition to the functional analysis mentioned above, the ABC Irritability subscale provides an index of severity of tantrums and disruptive behavior. A score greater than 23 on the 15-item Irritability subscale is the threshold for considering a potent medication such as risperidone. In a study of 101 children with autism, the RUPP Autism Network (2002) showed that risperidone was superior to placebo for reducing tantrums, aggression, and self-injury. Seventy percent of the children randomly assigned to receive risperidone improved, showing an average reduction of 50% on the Irritability subscale score. This medication is now approved by the U.S. Food and Drug Administration for the treatment of irritability. A subsequent study conducted by the same investigators compared risperidone only to risperidone plus parent training. After 6 months of treatment, combined treatment with medication and parent training was superior to medication alone in reducing irritability (Aman

et al. 2009). The parent training intervention was based on the principles of functional analysis described above (identification of antecedents and consequences of disruptive behavior). Noting that risperidone is a potent medication, it should be used only for children with serious behavioral problems. For young children with disruptive and noncompliant behavior, parent training alone has been shown to be efficacious (Bearss et al. 2015).

In conclusion, several initial steps are needed to forge Arthur's treatment plan. First, the clinical team, family, and school personnel need to resolve Arthur's school placement. In the meantime, a functional analysis of his explosive behaviors both at home and at school should be undertaken immediately. For the team to gain better insight into the severity of Arthur's disruptive behavior and hyperactivity, a parent and a teacher should complete the ABC. Children with autism with an ABC Irritability score greater than 23 are candidates for risperidone treatment (0.75–1.5 mg/day in two divided doses). Risperidone is also likely to reduce hyperactivity. However, if the ABC Hyperactivity subscale score is high (>26) and the Irritability scale score is not (<20), a trial of guanfacine or methylphenidate would be more appropriate. The results of the functional analysis could also point to specific behavioral interventions that could be implemented in combination with either medication. The impact of the medication and behavioral intervention could be reconsidered in 3–4 weeks via a review of target problems and readministration of the ABC.

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# CHAPTER 3

## Living in Her Parents' Shadow

### Separation Anxiety Disorder

Andrea M. Victor, Ph.D.

Gail A. Bernstein, M.D.

### Case Presentation

#### Identifying Information

Susan, age 7 years, was referred for an evaluation by her pediatrician because of concerns regarding anxiety and school refusal.

#### Chief Complaint

“Susan is afraid I will forget her at school,” her mother stated.

#### History of Present Illness

For the past 3 months, Susan has had fears about separating from her parents to go to school, and these fears have become progressively worse. She has extreme distress on Sunday nights when thinking about going to school the next day. Susan has trouble falling asleep because she is plagued with worries about bad things happening to her parents while she is at school. Specifically, she worries that her mother will get into a car accident or that a burglar will break into their house and kill her mother. She worries that her father, a construction worker, will be injured or killed on the job. Susan also worries that bad things will happen to her when separated from her parents and her parents will not be there to protect her. She expresses concern that she will get sick at school and vomit in the classroom and that her mother will forget to pick her up after school. When it is time for school, Susan actively resists going by hiding under the bed, locking herself in the bathroom, or clinging to her mother as she begs to stay home because she has a stomachache. Several times on the way to school, Susan has threatened to jump out of the car if forced to attend school and has tried to get out of the moving car on one occasion.

If Susan's parents are successful in getting her to school, she usually settles down within 30 minutes of arrival in the classroom. However, Susan intermittently appears sad and tearful. At



those times, she tells her teacher that she needs to call home to make sure that her mother and father are safe. Susan frequently asks to go to the nurse's office because of stomach pain and feeling faint, in hopes that she will be sent home from school. She spends an excessive amount of time with the nurse and needs frequent reassurance that she is healthy.

Susan's mother works in a retail store and cannot take Susan to work with her on days that Susan refuses to attend school. Therefore, her father takes Susan with him to the construction site when she refuses to go to school, and she sits in his truck for up to 8 hours while he works. Her parents are considering the option of Susan's mother quitting her job so she can homeschool their daughter. Her parents have also stopped going out to dinner or the movies on Saturday nights because Susan has severe tantrums when a babysitter arrives.

While at home, Susan is reluctant to play in her bedroom alone; instead, she constantly shadows her parents around the house. Sometimes she agrees to stay in her bedroom alone if her dog is with her. Most evenings, Susan starts out in her own bed. However, she invariably slips into the master bedroom and climbs into her parents' bed, stating that she is afraid she will fall asleep and never wake up. Susan reports scary dreams of monsters capturing her and locking her in a cave so she cannot escape and of her parents being swept up by a tornado and never returning. In the past, she enjoyed sleeping at her grandparents' house but recently refused to do this, stating that she needs to stay home with her mother in case her mother gets ill or lonely.

Susan also worries that she is not as smart as her classmates, that the girls at school do not like her, that a fire will burn her house down, and that her family does not have enough money to pay their taxes. However, these worries are not as severe as those related to separation from her parents, and Susan is able to control these worries. These worries do not interfere with Susan's sleep and concentration and are not associated with somatic complaints.

## Past Psychiatric History

Susan has never participated in therapy or had a trial of psychotropic medication.

## Medical History

Susan was small for gestational age, weighing 5 lbs at term. She was prone to illnesses as an infant. Recent medical evaluation and physical examination by her pediatrician indicate that she is physically healthy, despite her intermittent complaints of stomachaches, nausea, and feeling faint.

## Developmental History

As an infant and toddler, Susan was slow to warm up to new people and approached novel or unfamiliar situations with distress or avoidance. She showed prolonged separation reactions for up to 90 minutes when left at day care during her preschool years.

## Social History

Susan lives with her biological parents, 3-year-old sister, and 17-year-old brother. Her mother recently returned to work as a manager of a retail store, and her father is employed as a con-

struction worker. There is no history of abuse or neglect. Susan is currently in second grade at a small parochial school that she has attended since kindergarten. She gets along well with peers but has limited contact with them outside of school.

## **Family History**

Susan's mother has a history of panic disorder. Her father has been diagnosed with recurrent major depression and is being treated with antidepressant medication. Susan's older brother has social phobia and dropped out of high school because of impairing fears and avoidance of social and performance situations.

## **Mental Status Examination**

Susan was nicely dressed and well groomed and appeared her stated age. She sat on her mother's lap during the evaluation and engaged in minimal eye contact with the interviewer. When asked direct questions, Susan provided limited responses and often looked to her mother to answer for her. She became visibly distressed when the interviewer suggested that her mother return to the waiting room so that Susan could be interviewed alone for a few minutes. Susan cried and grabbed her mother and would not allow her mother to leave the interview room without her. She expressed worries that her mother would not return if she went to the waiting room and left Susan to talk to the interviewer alone. Susan's mood was described by her mother as "nervous and irritable" when anticipating separation and at times of separation. Susan's affect was anxious. Her thinking was logical and coherent. There was no evidence of psychosis. Susan stated that she would jump out of her mother's moving car if required to go to school.

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# **Psychotherapeutic Perspective**

Anna Swan, M.A.

Heather Makover, M.A.

Hannah Frank, B.A.

Philip C. Kendall, Ph.D., ABPP

## **Diagnostic Formulation**

Susan, a 7-year-old girl, presented with symptoms consistent with a DSM-5 (American Psychiatric Association 2013) diagnosis of separation anxiety disorder (SAD) and problems with school refusal. She experiences distress on separation from her parents, worries that

harm will befall them, is afraid that she will be forgotten when away from her parents, refuses to go to school in response to her separation concerns, becomes distressed when she is home without her parents, will not sleep alone during the night, and reports stomach pain and faintness when away from her parents at school. It appears that her separation anxiety has been present since preschool. Importantly, Susan's symptoms are reported to interfere meaningfully with her academic, social, and family functioning (e.g., she has intermittent school attendance; she has limited contact with peers outside of school; and her parents' employment and social lives are negatively affected because of Susan's SAD).

Because anxiety disorders are highly comorbid with mood, conduct, and other anxiety disorders (Kendall et al. 2010), Susan's evaluation should include a thorough assessment, allowing the diagnostician to differentiate between SAD and common comorbid concerns. The Anxiety Disorders Interview Schedule for DSM-5—Child/Version, child and parent interview schedules (Albano and Silverman 2016) would be appropriate. To differentiate among anxiety disorders, the diagnostician needs to understand the content of Susan's fears. For example, children with generalized anxiety disorder (GAD) often worry about the safety of themselves and their family, but these worries do not interfere with separating from parents or caregivers. Children with social anxiety disorder (social phobia) may view their parents as safety figures and fear being away from them in social situations. Children with SAD fear that something bad will happen to them or their parents, resulting in permanent separation. In addition to SAD, Susan is also experiencing generalized worrying and shyness, suggesting symptoms of GAD and/or social anxiety disorder that do not currently cause meaningful impairment but warrant monitoring. A risk assessment for suicidal and parasuicidal thoughts and behaviors should also be conducted given Susan's history of threatening risky behavior when nervous (e.g., jumping out of a car).

A multi-informant assessment would be helpful to obtain and balance data from Susan, her parents, and her school teacher. Specifically, in Susan's case, the following assessments would be beneficial: self-, parent-, and teacher-report measures of anxiety (see Settapani et al. 2014) and related emotional concerns (e.g., depression); parent- and teacher-report measures of Susan's behavior; an index of academic achievement; and a physical examination to rule out medical factors that may contribute to her symptoms. Finally, given Susan's family history of maternal panic disorder and paternal depression, assessment of parental psychopathology may be beneficial. It is recommended that child assessments be administered before and after treatment, with some measures of anxiety being administered weekly to both Susan and her parents to track progress (e.g., the DSM-5 Level 2—Anxiety—Parent/Guardian of Child Age 6–17 measure; <http://www.psychiatry.org/psychiatrists/practice/dsm/dsm-5/online-assessment-measures>).

Both biological and psychosocial factors likely play a role in Susan's behavior. Susan may be predisposed to unwanted anxious arousal given her family history of depression, panic disorder, and social phobia, as well as her behavioral inhibition as a young child. Susan may also have been exposed to her parents' anxious and depressed affects, as well as parental modeling of avoidance in anxiety-provoking situations. Finally, Susan's parents behave in a manner that allows her to avoid school and other anxious situations (e.g., they pick her up when the nurse

calls; they let her sleep in their bed; they allow her to go to work with her father instead of working on classwork). This pattern of parental accommodation to Susan's avoidance is powerful in both contributing to and maintaining her maladaptive anxiety, which then interferes with her mastering age-appropriate developmental challenges.

## DSM-5 Diagnosis

- **F93.0 Separation anxiety disorder, accompanied by school refusal**
- **Rule out social anxiety disorder**
- **Rule out generalized anxiety disorder**

## Treatment Recommendations

### Psychological Treatment

Cognitive-behavioral therapy (CBT) is considered a well-established treatment for youth anxiety disorders (Hollon and Beck 2013; Walkup et al. 2008) and is a first-choice treatment for Susan. The Coping Cat Program, a time-limited, empirically supported CBT program with an accompanying child workbook (Kendall and Hedtke 2006a, 2006b), is primarily used for treating SAD, GAD, and social anxiety. Numerous independent studies have supported the short-term (e.g., Kendall et al. 2008; Walkup et al. 2008) and long-term (Benjamin et al. 2013) efficacy of CBT treatments.

CBT for anxiety (e.g., the 16-session Coping Cat Program; Kendall and Hedtke 2006a, 2006b) includes having Susan identify her somatic reactions to anxiety, identify and challenge her anxious thoughts, problem solve in anxiety-provoking situations, develop a plan to cope with the anxiety-provoking situation(s), practice her coping plan, engage in exposure tasks, evaluate her efforts at managing anxiety, and administer self-reward as appropriate. The therapist facilitates progress by “normalizing” anxiety, providing imaginal and in vivo exposure tasks (for a practical discussion of exposure tasks, see Peterman et al. 2015), orchestrating role-play opportunities, teaching relaxation skills, modeling coping behavior, and rewarding effort. Treatment gains are also facilitated by out-of-session activities, such as practicing skills learned in session, completing workbook tasks, and engaging in exposure tasks. Parents consult and collaborate with the therapist throughout treatment, and two sessions are devoted entirely to parent collaboration and training. Susan's parents would be oriented to the treatment components, educated about avoidance and how it can increase anxiety, and encouraged to model coping. Susan's parents may also be asked to participate in exposure tasks (e.g., appropriately responding to Susan's physical complaints and avoidance behavior) and to conduct them during the week (outside of the session). For example, the therapist would use in vivo exposure tasks and reward systems to help Susan return to school and would encourage her parents to set limits on Susan's avoidance to help her separate from them to go to school and other places.

## Treatment Goals

Several treatment goals would be established for Susan. Susan will demonstrate improved coping skills by learning to identify anxious thoughts, to use appropriate coping thoughts and problem-solving strategies, and to self-reward for effort. All anxiety will not go away, but Susan will be able to manage her anxious arousal. As a result of applying these skills, Susan will show a reduction in avoidance, reassurance seeking, and distressing anxiety. Susan will also be able to identify the physiological changes she experiences in association with her anxiety, and she will demonstrate a reduction in her avoidance of school, as evidenced by her return to school for partial and full days and by a reduction in phone calls made to her parents during the school day. As treatment progresses, Susan's parents will require her to remain in school for the entire school day. Susan will also show an increase in self-efficacy, as evidenced by a reduction in avoidance of and distress about separating from her parents and an increase in her perceived ability to handle separation. For example, Susan will be able to stay at home with a babysitter and play in a separate room from her parents without disproportionate distress. Last, Susan will have an increase in social and extracurricular activities. For instance, Susan will have a greater number of play dates with peers and will join an after-school activity (e.g., Girl Scouts). Susan will also demonstrate an increased tolerance for interaction with unfamiliar children and adults.

## Additional Interventions

If academic difficulties are identified in Susan's assessments, further testing may be warranted. Limitations in cognitive functioning may detract from her treatment outcome or warrant developmentally appropriate modifications. Given Susan's physical symptoms, including stomach pain and feeling faint, a medical evaluation would be wise to rule out medical problems. Additionally, if Susan's parents are currently experiencing distressing psychological symptoms, they should be provided with appropriate referrals for focused evaluation and treatment. Susan's therapist would be wise to monitor the parents' emotional and behavioral responses throughout treatment given their respective mental health histories and the likely impact they have with Susan. Similarly, appropriate referrals for evaluation and treatment may need to be provided for Susan's brother. If Susan's treatment is unsuccessful (partially or completely), the following recommendations may be useful. The number of treatment sessions could be extended, with a focus on furthering treatment gains beyond the initial accomplishments. Augmenting CBT with medication, such as a selective serotonin reuptake inhibitor (SSRI), should also be considered (Walkup et al. 2008). Additional treatment sessions for Susan's parents may provide a more optimal environment for Susan to show and maintain her progress. If parent psychopathology is severe and/or interfering, there may be reason to consider postponing Susan's treatment until after her mother or father receives treatment. Finally, the team might provide Susan's parents with additional parent training, helping them with setting limits, providing rewards, granting developmentally appropriate autonomy, and being supportive of Susan's independence and bravery. This approach would be akin to the greater focus on the parents' role in CBT treatment that is designed for younger children.

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# Psychopharmacologic Perspective

Rachel G. Klein, Ph.D.

## Diagnostic Formulation

The main presenting problem is Susan's anxiety about attending school, which can be a manifestation of various concerns, such as performance anxiety, social anxiety, or separation anxiety. In Susan's case, severe separation anxiety is salient as evidenced by morbid thoughts about her parents' welfare, her overwhelming wish to contact her mother whenever school attendance has been forced, somatic symptoms in school that have led to requests to return home, and nightmares that reflect threats to the family. Unlike many children her age, Susan is able to articulate negative events that might befall her mother and cause her anguish. At times, Susan is capable of staying in class, but she remains anxious and asks to return home. This presentation is not unusual—children with moderate to severe separation anxiety may enter situations they dread but then become highly distressed. School is not the only setting that provokes separation concerns in Susan, as attested by her strong negative reaction when her parents used to go out in the evening, something they stopped doing. In addition, as is typical of children with separation anxiety, Susan has difficulty sleeping in her own bed and wanders into her parents' room because of her fear of dying when alone at night. Concerns about death and dying are common in separation anxiety. Thus, there is clear documentation for a diagnosis of SAD in this 7-year-old girl.

Susan's parents have capitulated with regard to school, allowing her to spend her days on the father's job, and with regard to sleep, permitting Susan to stay in their bed. These are examples of parents accommodating their child's anxiety by protecting her from anxiety-provoking situations. This parental behavior is often interpreted as reflecting the parents' own anxiety about separating from the child and as serving the parents' needs for closeness to, and control of, the child, thus placing implicit blame on parents. If this were the case, parents would resist and sabotage therapeutic efforts for their child. Clinical experience challenges that this parental attitude is to be anticipated in treating children with separation anxiety. Parental overindulgence typically represents an expedient, but understandable, maneuver that relieves parents from inflicting pain on their child. Parents lack knowledge of the specialized skills that are required to enable children to overcome disabling anxiety. Consequently, one should not fault parents for allowing their child to avoid highly distressing situations.

Many children with separation anxiety have another anxiety disorder. The rate of comorbidity varies depending on the type of sample studied and the assessments used (Pine and Klein 2015). Susan is reported to worry about her school performance, peer acceptance, and family finances. It is possible that Susan uses worries about school performance and her standing with her peers to justify her resistance to school. Children with separation anxiety often know that their worries are not sensible and may make up “reasonable” worries to explain their avoidance. This is especially true of boys, who often are reticent to acknowledge what they perceive as a weakness. A classic example is Little Hans, Freud’s only case description of a child (Freud 1909/1955). Hans, who had separation anxiety, avoided going outside without his mother and claimed that it was because of his fear of horses. Susan’s early social reticence suggests behavioral inhibition, a temperamental variant. Typically, behavioral inhibition predicts later social anxiety but not separation anxiety (Clauss and Blackford 2012). For Susan, this early temperament suggests that her beliefs that she is not being liked by peers may reflect social anxiety. A detailed clinical investigation is needed to clarify these clinical dilemmas. For example, is Susan generally concerned about her performance? Does she display perfectionistic expectations in other settings? Does she have concerns about children’s views of her outside of school? However, worries about family finances are not consistent with separation concerns, and if they reached clinical significance, one would consider a diagnosis of GAD, provided that other clinically significant nonseparation worries were elicited. The impression is that these specific worries do not affect Susan significantly. Consequently, a diagnosis of generalized anxiety is not judged likely.

Scales of anxiety for children do not contribute meaningfully to diagnosis or management of clinical cases (although they have a role in research and training settings). The only purpose that scales might serve would be to point inquiry to elevated anxiety not reported during the clinical evaluation. On the basis of high ratings, the clinician would obtain further information to determine their clinical import.

## DSM-5 Diagnosis

### ■ F93.0 Separation anxiety disorder

## Treatment Recommendations

Psychopharmacologic treatment of childhood anxiety disorders is consistent with all other child psychopharmacology in that agents effective in adults are subsequently used in children. The well-documented efficacy of SSRIs in adult anxiety disorders has led to their use in children with anxiety disorders. Multiple placebo-controlled trials document the efficacy of SSRIs in children with anxiety disorders. It is clinically relevant that improvement with SSRIs, relative to placebo, has been detected after 3 weeks of treatment. Trials have included children with generalized, separation, or social anxiety disorder (Beidel et al. 2007;

Birmaher et al. 2003; Research Unit on Pediatric Psychopharmacology [RUPP] Anxiety Study Group 2001; Rynn et al. 2001; Wagner et al. 2004; Walkup et al. 2008). Therefore, no studies yet inform on the psychopharmacology of SAD specifically. However, in the large 8-week study by the RUPP Anxiety Study Group (2001), fluvoxamine's efficacy was not specific to any single disorder. Venlafaxine, a related compound, does not appear to be a competitor to SSRIs (Rynn et al. 2007).

Because efficacy and side-effect differences across SSRIs are not likely, clinicians' choice must rely on other considerations. Some compounds are available in generic form, and these might be a first choice if cost is a consideration. Long-acting SSRIs are a plus when adherence to daily medication is not likely; however, these may present disadvantages if side effects emerge, because these effects are more likely to linger after cessation than with short-acting preparations.

Behavioral disinhibition (outbursts, nastiness, rages, impulsive behavior) may occur with SSRIs. Therefore, it makes sense to initiate treatment with a short-acting SSRI. If the family is unreliable, a switch to a long-acting SSRI is reasonable. Dosages vary across children. Because some children respond to minimal doses, the initial dose should be very low (e.g., 2 mg/day of fluoxetine, 6.25 mg/day of sertraline); however, other children will require relatively high doses. Gradual increments offer the opportunity to establish the lowest dose at which side effects emerge. Some benefit typically appears within 3–4 weeks, with further benefit resulting from continued treatment. There is always the question of how long to maintain a child on medication. In the case of Susan, because she has reportedly been plagued by anxiety for a long time, the goal would be to have her experience an extended symptom-free period. If treatment with an SSRI is helpful, treatment for at least 6 months seems indicated. Discontinuation should preferably occur during a nonstressful period, such as during the summer when there is no school. Medication reduction should be gradual, to allow for observation of possible symptom recurrence. The previous effective dose should be reinstituted whenever partial return of symptoms occurs and should not be delayed until there is significant worsening. After total discontinuation, the child should be followed because a lag of several weeks or a few months between drug cessation and relapse is not unusual.

Clinical care does not rely exclusively on published studies but is determined also by clinical experience. My recommendation is to attempt behavioral treatment before initiating medication in patients with SAD. Even for a child with severe anxiety, there might be great improvement from systematic behavioral treatment that emphasizes exposure and involves working with the parents, child, and school. A caveat is in order. In the 12-week Child/Adolescent Anxiety Multimodel Study (CAMS; Walkup et al. 2008), there was no difference between CBT and placebo after 4 weeks of treatment. Only between 8 and 12 weeks did CBT show an advantage. This period coincides with major focus on behavioral exposure. Behavioral therapy, without the cognitive component of CBT, has been found to be highly effective in social anxiety (Beidel et al. 2000). Clinical experience suggests that this is true also for separation anxiety and that the benefits of exposure therapies appear quickly; thus, if no improvement appears within a few weeks, medication need not be de-



layed. Medication is also indicated for children whose behavior is normalized (i.e., who attend school, sleep in their bed, etc.) but who retain significant anxiety. Clinically, I have observed marked improvement with the addition of medication to such cases.

Psychosocial treatment with the family optimizes the benefits of medication in children with SAD. Details of such efforts are not offered because this discussion is about psychopharmacology. In a way, this is a pity because pharmacotherapy does not simply involve writing a prescription. Regardless of the treatment, parents have to be educated about the child's difficulties. In addition, especially in the treatment of SAD, the parents must be involved in treatment. Although medication may improve anxiety during separation, it may not affect the anticipatory anxiety about impending separation, which maintains avoidance.

My recommendation to use behavioral treatment prior to medication does not reflect a bias against medication for children with psychiatric disorders. This recommendation is specific to treatment of SAD. For example, in the case of treating children with attention-deficit/hyperactivity disorder, I do not hold this view at all.

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# CHAPTER 4

## Chatterbox at Home

### Selective Mutism

Bruce Black, M.D.

### Case Presentation

#### Identifying Information

Emily, age 5 years 2 months, lives with her parents, 7-year-old sister, and 2-year-old brother.

#### Chief Complaint

Emily was brought in by her parents, who reported that “Emily does not speak in most social situations outside our home or with strangers in our home.”

#### History of Present Illness

Emily’s parents report that Emily “has always been this way.” They became increasingly concerned when she started her third year of preschool and still had never spoken in school. She started preschool at age 3 years 2 months and did not speak at school for the entire year. She was described as generally withdrawn, isolated, and reluctant to participate in most activities. The following year, she attended a different preschool and was placed in a prekindergarten class. Initially, she was withdrawn and isolative, but after several months, she gradually began to join in play and participate in group activities, still not speaking. She had one-on-one playdates at her house and spoke freely to her classmates while at home but continued not to speak to them in school. At birthday parties, including her own, she did not speak to anyone. Several times in the late fall, she whispered to two classmates and a young teaching assistant on the playground. However, after returning from Christmas vacation, she did not speak to anyone at school for the remainder of the year.

During the summer after that second year of preschool, in response to her parents’ frequent pleas, Emily promised them that she would speak in preschool in the fall. Although she returned to the same prekindergarten with the same teachers, most of her classmates had entered kindergarten in other schools. After 1 month, she still had not spoken to anyone. Her parents and teachers felt that she was becoming progressively more inhibited and withdrawn. The lead

teacher in the classroom reportedly “nagged” Emily to speak to her, asking her direct questions and then saying, “I know you can tell me.” Her parents also frequently encouraged her to speak. Both teachers and parents offered her rewards if she would speak in school, but with no impact.

Emily has never spoken to unfamiliar adults; is markedly reluctant to speak to extended family members, even at home; and does not speak to her parents in public places “if she [thinks] someone might hear her.” She is very reluctant to participate in any activities in which she might draw attention to herself. For example, she asked to join a friend’s T-ball team. One of the parents reported, “Emily did fine in the practice and warm-ups, where everyone was doing the same thing and no one was paying attention to her, but at game time she refused to go up to bat and did not respond in the outfield even when the ball hit her.”

Emily has seen three different child psychotherapists, without apparent benefit. Her parents report that the psychotherapists “played with Emily and tried to get her to speak to them” but did not offer the parents any advice on what they could do to help Emily speak. One of the psychotherapists reportedly told the parents that selective mutism is caused by trauma and that Emily must have been traumatized, despite their lack of awareness of any traumatic events, or, if not, that she could not be suffering from “true selective mutism.”

A speech therapist attempted to work with Emily in school, but Emily would not speak to her. (She did speak to the speech therapist freely after the therapist spent several hours playing with her in her home. The therapist characterized her speech and language functioning in that setting as developmentally appropriate and unremarkable.)

Emily has mild phobias (dogs, water) that do not meet the criteria for simple phobia because of a lack of impairment. Her history does not suggest depression, elimination disorders, or any other psychiatric or developmental difficulties.

## Past Psychiatric History

Emily’s past psychiatric history was described in the previous section.

## Medical History

Emily’s medical history is unremarkable.

## Developmental History

Emily’s developmental history is otherwise unremarkable.

## Social History

Emily is the middle of three children in an intact family. Both parents work as professionals. Emily has no known history of traumatic events.

## Family History

Emily’s mother described herself as “very shy” as a child but said she “outgrew” her shyness by adolescence. She was not mute. Emily’s maternal aunt was also very shy as a child. Em-

Emily's maternal grandfather was overanxious and alcoholic, as were several maternal cousins. The family's psychiatric history is otherwise unremarkable.

## Mental Status Examination

Emily was unobtrusively observed talking and playing with her mother and 7-year-old sister in the clinic waiting room. Her speech and language functioning appeared to be grossly normal. Her affect and the form and content of her speech and play were unremarkable. Her parents were then instructed to take her into the examiner's office while he was out of the room and to sit on a couch and look through *I Spy*, a children's hidden-picture book. After they had been in the office for 5–10 minutes, the examiner entered the room but pretended to take no notice of them and avoided looking at them. Emily continued to talk freely with her family and was quite animated in her enjoyment of finding hidden pictures in the book. The examiner then began to gradually increase his attention toward her, first glancing occasionally toward her, then moving his chair gradually in her direction, then making comments on her activity ("Wow, Emily's good at 'I Spy'") without looking toward her, then making momentary eye contact, then making comments directly to her ("You sure are good at that") and asking simple questions ("I love *I Spy* books; don't you?"). As the examiner's attention and attempts to interact with Emily gradually increased, she appeared increasingly tense and apprehensive, avoided his gaze, looked frequently to her mother, and stopped speaking. She made no verbal reply to the examiner's comments or questions.

## Structured Assessment Measures

In addition to performing the clinical interview and examination, the examiner obtained further details of Emily's clinical history through the use of standardized parent and teacher questionnaires and symptom rating scales, supplemented with specific selective mutism questionnaires (Black 2001a, 2001b).

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# Psychotherapeutic Perspective

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## Diagnostic Formulation

Emily's case description is not atypical for young children with selective mutism. As is evident in the case report, Emily's development appears normal in all respects except for her

lack of speech in school, social events, and situations involving unfamiliar adults and children. No significant medical or learning issues have been reported, and the parents deny any history of trauma. Indeed, early speculations on the etiology of “elective mutism,” the DSM precursor to selective mutism, suggested that a history of trauma may precede the diagnosis. However, research on selective mutism does not support this theory. More likely, Emily is experiencing an early and extreme form of social anxiety (Albano et al. 2003). Her unwillingness to produce speech in certain settings is likely a form of anxious avoidance, as opposed to a symptom of trauma. Although some children with selective mutism experience social anxiety exclusively circumscribed to settings where speech is expected, Emily’s anxiety also manifests when she is the center of attention or is required to perform nonverbally. A comprehensive evaluation of both her withdrawal and prosocial behaviors in a variety of settings is necessary to clarify her symptomology.

A thorough assessment of a child with selective mutism involves a careful review of the child’s developmental history, a clinical evaluation, and possibly a speech and language evaluation (Albano and Hayward 2004). In Emily’s case, the speech therapist reported developmentally appropriate and unremarkable speech. Additionally, intelligence testing may be indicated, typically in the form of a nonverbal evaluation, along with tests examining graphomotor abilities, receptive language, and audition. These evaluative strategies are recommended to screen for any potential speech, hearing, or learning issue that may have an impact on the child’s speech production.

Many parents of children with selective mutism can provide a video or audio recording of the child’s speech in the home setting so the therapist can see and hear the child interacting with others. In lieu of a recorded sample, observation of the child in multiple settings and with familiar and unfamiliar people will likewise provide good information about the child’s response to others and the process of shutting down and becoming mute. Suggested settings for observation include the classroom or a school setting, the therapist’s waiting room, and a play situation. Much like what was reported in the case description, the clinician should observe Emily’s speech and interaction habits in a comfortable setting with her family and then observe changes in her behavior as unfamiliar individuals enter the room and attempt to interact with her. Also of importance is observation of the parental response to this anxiety-provoking situation, to see if they are unintentionally reinforcing Emily’s avoidant behaviors or, preferably, facilitating her interactions.

Because Emily is too young for a child-focused diagnostic evaluation, in our clinic we would administer a semistructured interview to her parents to evaluate the full range of Emily’s anxiety and related disorders of childhood. The Anxiety Disorders Interview Schedule for DSM-5, Parent Version (Albano and Silverman, in press), could be administered to the parents and supplemented with a behavioral observation as described in the previous paragraph. In addition, the teacher-rated School Speech Questionnaire (Bergman et al. 2002), the parent-rated Selective Mutism Questionnaire (Bergman et al. 2008), the Multidimensional Anxiety Scale for Children (March et al. 1997), and a rating scale such as the Child Behavior Checklist (including the Teacher Report Form; Achenbach 1991) would allow the clinician a comprehensive view of the child’s functioning.

Emily presents with a family history of shyness and anxiety in her mother and mother's relatives. In addition, Emily evidences mild fears of dogs and water and demonstrates an inhibited temperament in her preschool settings. Inhibited temperament, such as that evinced by Emily, has been identified as a risk factor for anxiety disorders (Rosenbaum et al. 1991). As noted in the case summary, Emily does speak to peers during playdates at her house, and she did converse with her speech therapist during a home visit. Hence, her anxiety related to speech is strongly associated with settings outside of her home. Most problematic is her speech-related anxiety at school. Notably, when children with selective mutism are able to communicate nonverbally in school, their anxiety often dissipates in the absence of any expectations to speak. Some, however, continue to be anxious even when there is no expectation to speak, presumably because of more diffuse social anxiety. This distinction is important in extricating selective mutism symptomology from social anxiety disorder (American Psychiatric Association 2013). Additional assessment is necessary to rule out social anxiety disorder for Emily.

## DSM-5 Diagnosis

- **F94.0 Selective mutism**
- **Rule out social anxiety disorder (social phobia)**

## Treatment Recommendations

When children are very young, as in Emily's case, the treatment plan must involve a predominantly parent- or family-focused intervention to facilitate generalization across settings. Given the large and consistent evidence base for the treatment of anxiety disorders in school-age children and adolescents (see Silverman et al. 2008) and the impressive research support for parent-focused treatments for young children with disruptive behavior disorders, Emily's best chances for success lie within a parent-focused, operant-based approach to working with her anxiety and resistance to speaking outside of her home.

One of the first steps in treatment is to conduct a functional analysis of when and where Emily's speaking occurs or desists. This analysis must also involve a careful assessment of people's responses to Emily's reticence. As noted in the case description, her parents and teachers have cajoled, bribed, and pleaded with Emily. This approach tends to overwhelm the child with selective mutism and can beget intensified anxiety as well as oppositional behavior. Treatment then should begin with psychoeducation for the parents and instruction in the application of reinforcement principles, specifically in how to shape Emily's speech production. Historically, Emily's parents may have responded to her lack of speech by enabling her to communicate nonverbally and by speaking for her on occasion. Thus, she likely has a history of being negatively reinforced for withholding speech. To counter this learning history, it is pertinent to train parents to use effective prompting techniques that would facilitate Emily's verbal responses to questions.



The principles and procedures found in *Parent-Child Interaction Therapy*, Second Edition (McNeil and Hembree-Kigin 2010), are applicable in training parents to promote speech in children with selective mutism. Parent-Child Interaction Therapy (PCIT) is a parent-focused, in vivo coaching program that shapes parental responses as a means of reinforcing children's desirable behavior and extinguishing their undesirable behavior. When adapting PCIT to selective mutism treatment, parents should be coached to reinforce all approach behaviors (e.g., "great eye contact," "thank you for answering") while ignoring avoidant behaviors. Between-session practice is essential to the generalization of speech across settings, so parents should also be trained to independently lead speech-related exposures using PCIT skills. These exposures may include child-led surveys, scavenger hunts requiring the child to ask people questions, and simple on-the-spot contingencies (e.g., "If you ask the waiter for the ice cream, then you can have it; if not, we can try again another time").

It is recommended that in addition to working with parents in shaping the child's behavior and using reinforcement in an appropriate and powerful manner, the clinician provide psychoeducation for the teacher and school personnel. The clinician should also design an unobtrusive reinforcement system for use in the classroom. For example, the teacher can implement a "speaking card" that the teacher tapes on the young child's desk and marks with a check or smiley face whenever the child makes an utterance. After receiving a certain number of checks, the child earns a reinforcer in the classroom that day (e.g., gets to feed the class fish; is at the head of the line for recess), and at the end of the day, the card goes home with the child for continuity and communication to the parents.

If shaping and other operant procedures are not met with success within a reasonable time period, alternative, creative exposures should be used. As an intermediary step toward verbal communication, Emily's parents could create audio and video recordings of her speaking comfortably, which she could then play for others in school. Talking to teachers on the phone, playing hide-and-seek using two-way radios, and chatting via videoconferences are all fun and effective ways of facilitating speech when face-to-face communication is too challenging. Family factors must also be considered in treatment-refractory cases. More intensive family approaches with a focus on the parents' issues and resistances should be explored. Some parents report that they cannot "deprive" the child of desired reinforcers or otherwise cannot work through the initial phase of treatment, especially when they struggle to tolerate their child's experience of anxiety during exposures.

Last, a referral to a child psychiatrist for a medication evaluation should be considered in refractory cases. Evidence supports the use of medications in children with selective mutism and related anxiety disorders (Black and Uhde 1994). The combination of operant procedures and medication is indicated for children who are resistant to psychosocial treatment for various reasons, such as comorbidity, severity of the mutism, length of time that the child has not spoken, and severity of the child's anxiety.

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# **Psychopharmacologic Perspective**

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## **Diagnostic Formulation**

Emily demonstrates the hallmark symptom of selective mutism: a persistent failure to speak in new and public settings such as school and the playground despite speaking normally in familiar settings such as her home. Emily's mutism in multiple settings reflects an overwhelming anxious response elicited by unfamiliar social situations. That she has "always been this way" suggests an early onset consistent with an inhibited temperament, which is a risk factor for anxiety. The family history of shyness points to both a genetic vulnerability and an environment that supports an anxious response to social stimuli that may include parental support for social inhibition or modeling of inhibited behavior.

## **DSM-5 Diagnosis**

- **F94.0 Selective mutism**
- **Rule out social anxiety disorder (social phobia)**

## **Rationale for Diagnosis**

Emily meets criteria for selective mutism and possibly social phobia. Additional questioning will determine the extent to which Emily is more globally socially avoidant in social situations because of fear of embarrassment.

Lack of speaking in social situations can sometimes be attributed to an autism spectrum disorder or a communication disorder. An autism spectrum disorder is unlikely in Emily's case because of observations of normal social interactions with parents, appropriate reciprocal interactions with siblings and peers at home, and the absence of stereotyped interests and behavior. Similarly, a communication disorder, such as social (pragmatic) communi-

cation disorder, is ruled out on the basis of her normal communication in the home. The lack of a history of trauma excludes the possibility that her mutism is a symptom of post-traumatic stress disorder.

## Epidemiology

Selective mutism affects less than 1% of school-age children (Bergman et al. 2002). The majority of children with selective mutism also meet criteria for social phobia. The clinical picture may be further complicated by the presence of simple phobias, separation anxiety disorder, oppositional defiant disorder, or speech and language problems (Sharp et al. 2007). Up to 70% of children with selective mutism have an immediate family member with a history of social phobia (Black and Uhde 1995). No evidence is available to suggest that selective mutism is caused by traumatic events.

## Comorbidity

Like the majority of children with selective mutism, Emily exhibits symptoms of social phobia. Social phobia is characterized by fear and avoidance associated with social and performance situations in which embarrassment may occur (e.g., playing in a T-ball game). Other conditions may also co-occur.

## Screening/Diagnostic Tools

The diagnosis of selective mutism requires a review of medical and psychiatric symptoms, as well as cognitive, audiological, and speech and language function (Dow et al. 1995). Rating scales support diagnostic impressions and monitor symptom change over time. Additionally, parents and teachers are encouraged to record a child's behavioral changes, such as increasing nonverbal behaviors (e.g., eye contact) and speech in all contexts.

## Treatment Recommendations

Psychoeducation is recommended to teach Emily's family about potential genetic, biological, and psychosocial contributors to symptom severity; available treatment options; and appropriate expectancies for improvement. Behavioral therapy involving Emily, her parents, and schoolteachers should include a functional analysis of behavior, gradual reinforcement of verbal and appropriate social interaction, and ignoring of avoidance behavior including mutism. Pharmacotherapy with a selective serotonin reuptake inhibitor (SSRI) is also suggested for Emily.

## Rationale for Treatment Choices

Before treatment is initiated, Emily's family would benefit from education about selective mutism and explanation about why previous assessments and treatments failed. A behavioral or cognitive-behavioral intervention with a knowledgeable and experienced clinician

is recommended because these treatments are useful for children with selective mutism and are considered the first-line treatment (Cohan et al. 2006). Medication typically is not the first-choice intervention for young with selective mutism but is commonly used when psychosocial interventions prove inadequate or children are ineffective. Medication may be a first-line treatment in early-onset and severe selective mutism to facilitate engagement in psychosocial interventions.

Large-scale treatment studies of children with selective mutism have not been conducted. Information regarding pharmacologic treatment comes from a small double-blind placebo-controlled trial (Black and Uhde 1994) and from case studies or case series (see Kumpulainen 2002). The rationale for SSRI treatment is based on the efficacy of these agents for childhood anxiety disorders, including selective mutism (Reinblatt and Riddle 2007; Seidel and Walkup 2006); the failure of nonmedication interventions to consistently demonstrate significant benefits; and the fact that social and academic impairments are associated with chronic mutism. Several case studies demonstrate clinical benefits and minimal risks for patients taking SSRIs. Interestingly, some studies have noted that early-onset selective mutism is more treatment responsive than late-onset selective mutism (e.g., Dummit et al. 1996).

## **Psychopharmacologic Treatment**

For children as young as Emily, few data are available to guide medication choice or a titration schedule for SSRIs. In general, the child should receive an SSRI at a low dosage, often as low as 25%–50% of adult starting dosages for anxiety or depression. The dosage of medication can be increased every 5–7 days over the first month of treatment to maximize treatment response while minimizing side effects. Although some children respond well to low dosages, other children will require higher dosages. For example, in the absence of side effects and continued symptoms, upward adjustment after the first month of treatment to fluoxetine 20–30 mg/day, fluvoxamine 100–150 mg/day, sertraline 100–150 mg/day, or citalopram 30–40 mg/day is warranted to achieve a high-quality response. Further upward adjustment is possible for those children who remain symptomatic but have demonstrated improvement with previous dosages and minimal side effects. Close monitoring for both benefit and side effects is required in this age group. Common side effects include behavioral activation, gastrointestinal problems, and headaches.

## **Plan If Medication Treatment Fails**

If children do not respond as expected to medication and psychosocial treatment, a review of the evaluation or a consultation may be useful. For children whose diagnosis of selective mutism is confirmed after reevaluation, more aggressive pharmacologic treatment may be indicated. A child who is unresponsive or only partially responsive to low or medium adult dosages of an SSRI may be given higher dosages if he or she has few or no side effects. If dosage increases are not possible because of side effects and treatment response is minimal, switching to another SSRI is a possible next step. Given the absence of a clear evidence base, pharmacologic algorithms for refractory or partially responsive depression or anxiety may serve as a guide to the treatment of youth with selective mutism.

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# CHAPTER 5

## Everything Bothers Her

### Major Depressive Disorder

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#### Case Presentation

##### Identifying Information

Sally is a 13-year-old eighth grader referred for a psychiatric evaluation by her pediatrician. She lives with her parents and her brother.

##### Chief Complaint

Sally reports that she is “feeling really low due to trouble with my friends.”

##### History of Present Illness

Sally reports that she has been feeling down since seventh grade, claiming, “It all started when I had a big fight with my best friend, Karen. After that, all my friends turned against me.” Eventually, she and Karen reconciled, but by that time Sally felt much more insecure in her friendships. In spite of these problems, she finished the year with a B+ average. Over the summer, she spent most of her time at home “just watching TV.” Her parents were concerned and encouraged her to get in touch with friends, but she said, “They’re probably all away,” and did not contact them.

When school started this year, Sally was hopeful that things would be better. She spent time with her friends but often worried whether they liked her. Her mother noticed a cycle in which Sally worried about whether her friends still liked her and “pestered them,” and this behavior led to her friends backing off a bit. Sally also began to struggle in school during the semester. She complained of “spacing out” while in class or doing homework. Al-

though she maintained her grades, she required significantly more time and effort than previously. Sally also began to have difficulty falling asleep at night. Before falling asleep, she worried about her friends and how she was falling behind in school. She had difficulty getting out of bed in the morning because she was so tired, had stomachaches, and was worried about whom she would talk to at school. During this same time, she had a bigger appetite and often craved sweets and junk food.

In the late fall, because of their concern about her increased isolation, sleep schedule, and falling grades, Sally's parents took her to her primary care doctor. After asking Sally several questions, the doctor explained that she had depression and recommended that she start medication. He prescribed fluoxetine. By the time she was taking 20 mg/day, her mood had brightened and her worries had been decreasing. Her symptoms did not alleviate completely, however, and she continued to have trouble with her attention, so her primary care doctor gradually increased the dosage to 50 mg/day. At this dosage, her anxiety and depression improved a great deal, but Sally experienced minimal benefits for her social problems, self-esteem, and attention. She had also gained 12 lbs. Her primary care doctor recommended paroxetine and referred her to a local therapist. Because Sally's symptoms had not resolved after 3 months of treatment with paroxetine and weekly supportive psychotherapy, her primary care doctor referred her for this evaluation.

## Past Psychiatric History

In kindergarten and first grade, Sally had a tough time starting school. She worried about her parents getting hurt or forgetting to pick her up; she had anticipatory distress, reluctance to go to school, and reluctance to be alone at home; and she had associated physical symptoms, especially fear of vomiting. These symptoms resolved midway through first grade and did not return. She has always been a bit shy with peers and adults but always socially appropriate.

Sally occasionally has difficulty with attention in school. Her mother explained that past report cards often had comments calling her "dreamy," but because she had always received very good grades, her parents had not been particularly concerned. She had never been overactive, impulsive, or disobedient. When Sally was asked about her attention, she laughed and said, "I always zone out! My friends have been calling me 'space cadet' since we knew what it meant." She and her mother also have noticed that occasionally she gets lost in conversations. She does not have a history of any other affective or anxiety disorders or further eating or sleep difficulties. Additionally, she and her mother deny disruptive behavior or learning difficulties, eating or elimination problems, personality or substance use disorders, tics, or obsessive-compulsive and related disorders.

## Medical History

Sally has no contributory medical problems. She is not sexually active and has a good understanding of the risk of sexually transmitted disease.

## Developmental History

Sally was delivered at 38 weeks by Cesarean section because of her mother's preeclampsia and fetal distress. Otherwise, her development was unremarkable.

## Social History

The family has moved several times because of her father's job. After the most recent move 4 years ago, the family enrolled Sally at a small private school that would be more "nurturing and provide Sally with individual attention." The family's functioning is remarkable for mild family conflict over how best to handle Sally's social difficulties and her normative to elevated sibling conflict with her younger brother, Adam.

## Family History

A brief, two-generational family history of psychiatric illness reveals major depressive disorder (MDD) in Sally's father, mother, mother's sibling, and maternal grandmother and obsessive-compulsive disorder in Sally's maternal grandfather.

## Mental Status Examination

Sally presented as a casually dressed, mildly overweight youngster who was cooperative with the interview. Her speech was normal in rate, tone, and volume. Her psychomotor status was marked by considerable fidgeting. Sally described her mood as "good." Sally's affect was euthymic. Her thoughts were logical and goal directed. There was no evidence of thought blocking, insertion, or deletion, or ideas of reference. No perceptual abnormalities were noted. Her sensorium was clear, cognitive functions were grossly intact, and insight was preserved. Sally denied current suicidality or homicidality.

## Screening Questionnaires

Sally and her parents filled out a set of rating scales in advance of their visit. Her doctor chose rating scales in the public domain, but other excellent scales are available. On the Patient Health Questionnaire Modified for Teens (PHQ-9 Modified; REACH Institute 2010), Sally endorsed feeling down, trouble falling asleep, feeling tired, overeating, feeling bad about herself, and trouble sleeping. Her total score of 15 indicated major depression, moderately severe. On the Screen for Child Anxiety Related Emotional Disorders (Birmaher et al 1999), Sally endorsed items indicating elevated social anxiety. On the Swanson, Nolan and Pelham—IV Questionnaire (SNAP; Swanson 1992), Sally's teacher endorsed items indicating attention-deficit/hyperactivity disorder (ADHD), and her parents also endorsed attentional difficulties. Sally did not endorse any items suggesting psychopathology on the Child and Adolescent Trauma Survey (March et al. 1997, 1998) or the Multidimensional Anxiety Scale for Children Obsessive-Compulsive Screen (March et al. 1997). On a family measure administered to both Sally and her mother, the family scored high in family affiliation, medium in family control and



parent-child conflict, and low in family conflict. The Stages of Change Index (McConaughy et al. 1983) indicated that Sally had some motivation to change but reluctance as well.

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## Psychotherapeutic Perspective

Kevin Stark, Ph.D.

Leah Wang, M.A.

Sarah Koenig, M.A.

## Diagnostic Formulation

During kindergarten and part of first grade, Sally experienced separation anxiety disorder. Children who experience separation anxiety disorder are at heightened risk for developing depression or other anxiety disorders (Lewinsohn et al. 2008). Currently, Sally is experiencing symptoms consistent with a diagnosis of MDD, including dysphoria, difficulty concentrating, social withdrawal, initial insomnia, somatic complaints, fatigue, and increased appetite and weight gain. Determination of the presence and nature of comorbid conditions is limited by insufficient information. Possible comorbid anxiety diagnoses include social anxiety disorder (social phobia) or generalized anxiety disorder (GAD). Consistent with both GAD and social anxiety disorder, Sally fears that she will be rejected and thus avoids social situations. Sally's social worries could be exclusive to the nature of her ongoing relationships (GAD) or related to worry of negative evaluation or embarrassing herself (social anxiety), and this must be clarified. Either way, we do not know whether Sally recognizes that her social fears are unreasonable or excessive. Sally also has somatic symptoms associated with her worries about both friends and grades that are consistent with GAD. In addition, although there is some evidence that Sally is experiencing symptoms of ADHD, these symptoms could also be due to anxiety, agitation from the depression, fatigue, or even an undiagnosed language disorder. Sally's functioning is impaired, and symptoms are not due to a medical condition.

## DSM-5 Diagnosis

- F32.1 Major depressive disorder, single episode, moderate, with mild anxious distress

- F90.0 Attention-deficit/hyperactivity disorder, predominantly inattentive presentation, mild (provisional)
- F93.0 Separation anxiety disorder (past history)
- Rule out social anxiety disorder (social phobia)
- Rule out generalized anxiety disorder

## Assessment

Assessment is useful for making diagnoses; gauging onset, duration, and severity of symptoms; and guiding development and evaluating effectiveness of treatment. In this case, the addition of a diagnostic interview (Schedule for Affective Disorders and Schizophrenia for School-Age Children—Present and Lifetime Version [K-SADS-PL]; Kaufman et al. 1997) would allow the clinician to make an accurate assessment of the onset, presence, and severity of symptoms. Crucially, a thorough assessment would clarify whether symptoms that occur in both MDD and GAD are present only when Sally is depressed and also would resolve the differential diagnoses potentially contributing to Sally's socially anxious symptoms.

A neuropsychological assessment is recommended for diagnostic clarification with respect to ADHD. As part of a comprehensive assessment, Sally's executive functioning and performance on tasks requiring selective and sustained attention, auditory processing, working memory, and receptive language would be evaluated.

Given the history of parental depression, it is important to assess Sally's parents' current adjustment and past episodes. The duration and severity of parents' depressive episode(s), Sally's age(s) at occurrence, and effectiveness of treatments should be examined. Depressed parents are more punitive, critical, and emotionally unavailable (Downey and Coyne 1990), and they model and reinforce beliefs that support a depressive disorder (Garber and Martin 2002). Therefore, supplemental questions for Sally to evaluate the impact of her parents' depression would be useful.

For treatment planning, measures should be administered to assess coping and emotion regulation skills and problem solving. Furthermore, a projective measure could be used to elicit information about Sally's belief system. Measures of symptom severity should be completed throughout treatment to assess improvement in depression, anxiety, and inattention. In addition, parental and teacher perspectives could be evaluated over time with self-report instruments.

## Case Conceptualization

Case conceptualization guides design and implementation of treatment (Persons and Tompkins 2007) and increases therapeutic effectiveness for depressed youth. Sally's core beliefs (unlovability and helplessness) contribute to and maintain her depression. They filter what she attends to, activate relevant memories, and guide constructions of her perceptions. Sally's core beliefs developed through interactions with her depressed parents and have been reinforced by her environment over time. Negative parenting behaviors, including irritability and hostility toward the child, as well as disengagement, have been shown to be as-

sociated with maternal depression (Lovejoy et al. 2000). During critical developmental periods, criticism, excessive punishment, and emotional unavailability made Sally feel unlovable. The family's several moves made it difficult for her to build and maintain friendships. This, along with recent peer conflict, created additional learning experiences confirming her thoughts that she is unlovable.

Helplessness developed similarly. Sally's interactions with her depressed parents and moves that uprooted her from school and disrupted friendships were contributing factors. Because of her social anxiety, Sally also believes that she is inferior in social situations and that people do not like her, which leads to more helplessness. Thus, Sally's core beliefs from her depression contribute to and interact with her negative sense of self in social situations, thereby adding to her social anxiety. Overall, helplessness causes Sally to give up on friendships, schoolwork, and other endeavors prematurely.

Sally's belief system contributes to her social difficulties. She is hypersensitive to signs of rejection and makes errors in her thinking, which lead to interpretations that support her core beliefs. Sally is flooded with thoughts of impending social catastrophe that reduce her capacity for reflection and cause a cycle of clinging to peers for reassurance. Friends are annoyed by Sally's clinging, she perceives this and distances herself, and ultimately friends stop reaching out. Believing that she is unlovable may also lead Sally to be abrasive, such as responding to an unintentional sign of rejection with irritability. Her primary appraisal of social situations is that she is likely to be rejected and cannot do anything about it. The secondary appraisal is that she does not know how to stop rejection or cope with the ensuing emotional upset.

Sally does not engage in recreational activities beyond watching TV, perhaps because her parents never modeled or reinforced coping and emotion regulation skills. Consequently, she does not do anything pleasurable to help get her out of her head. Sally also does not engage in soothing and relaxing activities or activities that expend energy such as exercise. Similarly, she is not seeking social support. She tries to cope by eating unhealthy foods that cause her to gain weight and get upset and thus does not do anything to elevate mood or reduce anxiety. Sally does not appear to use problem solving either; it is not apparent whether she has the skills but does not apply them because of the helplessness belief (performance deficit) or whether she has a skills deficit.

The current role of the family in Sally's depression and anxiety is unclear. It is unknown whether her parents are currently depressed. They are aware that she would benefit from treatment and have supported two trials of medication and supportive psychotherapy. Sally's parents accommodate her social anxiety by allowing her to avoid interpersonal situations; however, we do not know whether they challenge her to be active or support her mastery of schoolwork and other things. Given Sally's difficult birth, it is possible that her mother is overprotective, which could contribute to the daughter's social anxiety.

## Treatment Recommendations

The treatment of choice for Sally would be cognitive-behavioral therapy (CBT) for depression in combination with medications prescribed by a psychiatrist. The overarching goal of

the CBT would be to provide Sally with experiences that restructure her core beliefs to “I’m lovable and efficacious in general and in social situations.” Therapy would also emphasize acquiring coping, emotion regulation, and problem-solving skills to elevate mood and reduce stress. In addition, exposure activities would be used to restructure core beliefs and habituate her to anxiety.

Therapy would begin with psychoeducation about Sally’s diagnoses based on the assessment, as well as about the benefits of CBT. Sally’s motivation would be evaluated, and motivational interviewing would be used if necessary. Her experiences in supportive therapy would be evaluated to identify what she likes and dislikes, which could then be integrated into her current treatment plan. Sally and the therapist would collaboratively set goals. The initial focus of treatment would likely be the depression because Sally needs some symptom relief to be able to complete the exposures that are part of the anxiety treatment. Treatment for depression would begin with behavioral activation, using the five broad categories of coping skills that are part of the ACTION treatment program to elevate mood and reduce tension (Stark et al. 2010). Following a mood rating at the start of each meeting, coping skills would be used to demonstrate their impact on mood and to restructure helplessness. Emphasis would initially be placed on completing fun and distracting activities, followed by soothing and relaxing activities, and then activities that involve expending energy. Self-monitoring using activity schedules would be implemented to increase engagement in the aforementioned pleasant activities and to identify activities that have a powerful impact on mood. As coping skills training progresses, Sally would be taught to identify negative thoughts and to replace them with coping thoughts.

Next, Sally would be taught problem solving as a method for eliminating and reducing the adverse impact of stressors and unpleasant affect and for increasing engagement in pleasant activities. As Sally overcomes stressors and unpleasant affect, the helplessness core belief would be restructured.

As Sally’s mood lifts and her confidence improves, she and her therapist would collaboratively build a hierarchy of exposures for social situations. The exposures should initially be completed in the presence of the therapist so that the two can gauge her success and revise the hierarchy. Additionally, the therapist could use the outcome of the in-session exposures to restructure Sally’s beliefs that she is unlovable, helpless, and vulnerable in social situations. If Sally’s mother or father has recovered from depression, that parent should be taught to be Sally’s CBT coach who guides her in real-time skills application and helps her complete exposures between meetings. As Sally’s mood continues to improve and her belief system becomes less rigid, the therapist would teach Sally how to restructure her core beliefs, intermediate beliefs, and automatic thoughts.

If Sally is experiencing ADHD, the therapist, with permission, should consult school staff to establish appropriate accommodations in her academic environment. Consultation with the school may also be helpful as a means of fostering the development of friendships. In addition, with permission, it would be useful to consult with Sally’s psychiatrist about the impact of the stimulant medication used to treat ADHD and any medications used to treat depression and anxiety.

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## Psychopharmacologic Perspective

Graham J. Emslie, M.D.

**FROM** a psychopharmacologic perspective, this case raises many important issues, including diagnostic and treatment challenges. The patient is a 13-year-old female living with her parents and younger brother. She had a prior history of anxiety (primarily separation and social anxiety) and attention problems. Beginning in seventh grade, she had what appears to be a minor depression with partial remission. She has multiple characteristics that make her at risk for depression: family history of depression (two first-degree and two second-degree relatives) and comorbid conditions (anxiety and attention problems, as well as a minor depression) during seventh grade. During eighth grade, she had a major depressive episode treated with two selective serotonin reuptake inhibitors (SSRIs) (both of adequate duration and dosage) and supportive therapy, which resulted in partial remission of her depression. Probable sequelae from the depression include increased social difficulties and school problems, decreased self-esteem, and sleep difficulties. At the time of the referral, she has moderate depression, increased social anxiety, and attention difficulties.

This case illustrates the importance of accurate diagnosis, taking into consideration interactions of comorbid conditions, causes and consequences of illness, and need for a rational evidence-based approach to treatment.

### Diagnostic Formulation

Sally's case is well described. The case presentation includes all the elements of an evaluation (e.g., present and past history of symptoms, developmental history, social history, family psychiatric history, mental status examination), and well-validated scales were used. Although it is not possible to make an exact diagnosis from the information provided, this is probably more information than is usually obtained, and I suspect that the inferred diagnosis is correct.

DSM-5 (American Psychiatric Association 2013) includes specific diagnostic criteria for separation anxiety disorder, ADHD, and MDD. On the basis of the information presented, Sally does not meet criteria for ADHD combined presentation. To be diagnosed with ADHD predominantly inattentive type, she should have six of nine criterion symptoms with onset prior to age 12. Similarly, to be diagnosed with MDD, she should have at least

five of the nine criterion symptoms. Does it matter if she is one symptom away from meeting full criteria for these disorders? I think not, although no controlled treatment trials have been reported for subsyndromal disorders, so discussion of treatment options would have to take this consideration into account. The scales used in Sally's case provide supportive information on diagnosis and severity of depression, ADHD, and anxiety, as well as information about the family context. The PHQ-9 Modified includes all nine criterion symptoms of MDD. In addition to their use in baseline assessment, severity measures are used in ongoing treatment to monitor response to treatment. Reliability of self-report measures of depression in adolescents is generally good; however, at times, clinician-rated measures utilizing information from both parent and child will be needed.

The presence of comorbid conditions raises important concerns for pharmacologic management. In clinical samples, 70%–80% of adolescents with MDD have at least one comorbid psychiatric disorder. Failure to identify comorbid conditions is a frequent cause of treatment failure. Identifying them in acute situations may be difficult because of the acuity of the primary disorder; therefore, they need to be continually assessed as treatment progresses. Questions to consider include whether the two disorders are separate (e.g., ADHD onset prior to MDD) and how they influence each other (e.g., ADHD leading to discouragement in school and then to MDD). At times, prolonged mood disorders will result in neurocognitive deficits that can be indistinguishable from ADHD; however, in these cases, the onset of the ADHD symptoms would follow the onset of the primary disorder (e.g., MDD). The associations between anxiety and depression are even more complex because they appear to have a developmental progression, with anxiety disorder occurring earlier and depression later in some individuals.

Finally, in the assessment prior to treatment, the clinician needs to consider both precipitants and consequences of the disorder. Sally had some social difficulties prior to the onset of depression, yet the depression worsened the problem with social withdrawal. Even if her depression is treated, it is unreasonable to assume that social relatedness would automatically return to premorbid baseline. The same is true for the patient's difficulties with self-esteem, attention, and sleep.

## DSM-5 Diagnosis

- F32.\_ Major depressive disorder
- F90.2 Attention-deficit/hyperactivity disorder, inattentive presentation
- Rule out social anxiety disorder (social phobia)

## Treatment Recommendations

### Primary Disorder (Depression)

Treatment recommendations are relatively straightforward if the assessment described in my diagnostic formulation section is accurate. Treatment guidelines and algorithms for

treatment of depression, ADHD, and anxiety are available (Birmaher et al. 2007; Cheung et al. 2007; Connolly et al. 2007; Hughes et al. 2007; Pliszka 2007). Generally, the guidelines synthesize the increasing evidence base, on what is known empirically and what is lacking adequate data, to allow clinicians choices.

The focus of this commentary is on psychopharmacologic management, which is only one component of an intervention and is unlikely to be effective without a well-established physician-patient-family relationship. Although the therapeutic alliance is a well-known contributor to positive outcome, it is frequently neglected.

Psychopharmacologic treatment focuses on strategic management of the primary disorder, including assessment of side effects, management of comorbid conditions, and management of associated symptoms. Typically, precipitants and consequences of the disorders do not require psychopharmacologic management, although there may be some exceptions. In addition, rational medication management generally involves one intervention at a time (with exceptions), with a preference for monotherapy. Finally, increasing evidence indicates that measured care, in which the clinician systematically measures symptoms, functioning, and adverse effects across time, improves outcome (Trivedi et al. 2007).

If it is assumed that Sally has MDD (first episode) and has had two adequate trials of an SSRI, and the current medication trial has not resulted in remission, then the choices are to switch or augment. A National Institute of Mental Health–funded large adult treatment trial exemplifies this approach (Rush et al. 2006; Trivedi et al. 2006) (for further discussion, see Hughes et al. 2007). For adolescents, current recommendations would be to switch to a non-SSRI or augment with lithium or bupropion. Although no studies have examined third-line treatment options, Brent et al. (2008) demonstrated that a non-SSRI (specifically, venlafaxine) may be effective for youth with treatment-resistant depression. Generally, switching is for minimal responders or nonresponders or for patients experiencing side effects, whereas augmentation is for patients who feel they have some response they wish to maintain but not quite full response or remission. One caveat is that distinguishing side effects from continued or worsening depression can be difficult. For example, antidepressants may cause apathy, sleep disturbance, or appetite changes, but these symptoms are also present in depression, making the distinction between ongoing or worsening symptoms (due to insufficient treatment) versus side effects of medication difficult.

## Comorbid Condition (ADHD)

In Sally's case, the clinician would consider treatment of possible comorbid ADHD, using the treatment guidelines for ADHD, with the most effective treatment being a stimulant. If one initiates only one intervention at a time, the initial question, then, is which intervention to initiate first: treating the comorbid ADHD or changing the depression treatment. Given the severity of Sally's depression (PHQ-9 score of 15), the initial treatment should focus on treating depression; the treatment of ADHD with a stimulant should be started later.

## Associated Symptoms

Occasionally, pharmacologic management is used to treat associated symptoms that may require treatment until the primary disorder is treated. Often, such symptoms are not direct criterion symptoms of the disorder (e.g., aggression in a patient with MDD), but even criterion symptoms (e.g., severe sleep disturbance, severe irritability) sometimes require additional treatment. The general rule is to stop these treatments once the underlying disorder improves. Thus, the first treatment is to treat the underlying disorder, but this treatment may be insufficient, so another medication may be added for the specific concern. Some data from studies of adults with depression and insomnia suggest that treatment with a hypnotic and an antidepressant is superior to treatment with an antidepressant alone in reducing symptoms (Fava et al. 2006).

## Continuation Treatment

For treatment of depression, continuation treatment for 6–9 months following response is recommended. In addition, during continuation therapy, aggressive treatment of residual symptoms is recommended because of increased chance of relapse. Treatment of residual symptoms can be with pharmacology, with specific psychotherapies (e.g., CBT, interpersonal therapy), or with both.

In summary, accurate diagnosis and assessment are essential; treatment should be rational, systematic, and sequential; and different modalities of treatment should be integrated as needed to achieve an optimal outcome.

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# CHAPTER 6

## Excessively Silly Bipolar Disorder

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### Case Presentation

#### Identifying Information

Heather is a 9-year-old girl attending third grade at a local private school. She lives with her mother, 11-year-old sister, and maternal grandfather.

#### Chief Complaint

According to Heather's mother, over the past few months, Heather has been very irritable and nervous. She has not been sleeping well, and teachers have been complaining about Heather's excessive activity and silliness at school.

#### History of Present Illness

Heather's mother described Heather as a generally happy child, who gets along well with her relatives. She is well liked at school and has several friends in the neighborhood. However, for the past 3–4 months, according to the mother, Heather's mood has been mostly "up." Heather frequently laughs and giggles for no apparent reason. At school, she seems too energetic and she giggles so much that she is unable to recite the morning prayer and Pledge of Allegiance. Heather's mother said that teachers have complained about Heather's excessive silliness and describe times when she talks so fast that she is difficult to understand. Her mother reported that Heather has so much energy that she sometimes takes 2–3 hours to fall asleep, and when she awakens at 6 A.M., she continues to be very active and does not appear to be tired despite sleeping 2–3 hours less than usual. Her mother also reported that at times Heather talks so fast and jumps from one subject to another so quickly that it is

hard to follow what Heather is saying. Heather tells her mother that her “thoughts are going around and around in my head.” She has been learning Bible verses at school and sometimes walks around the house chanting Bible verses and is unable to stop. Heather is focused on becoming a singer, actress, or model and keeps asking her mother to find out how she can get on the television program *The Voice*. Her mother described Heather as being quite insistent about appearing on television and said that Heather really believes she will be a “star.” She is slightly hypersexual and crawls onto adults’ laps in a flirtatious manner and has begun kissing her mother on the mouth, which is very unusual for Heather. She has been more irritable and argumentative over the past few months. Heather’s frustration tolerance is low; at times she “explodes” when she cannot have what she wants, and sometimes she is aggressive with her sister. Heather and her mother both denied that Heather has suicidal and homicidal ideations. Her mother reported that the above-noted symptoms may last from 3 to 7 days a week, with minimal in-between euthymic periods. Heather’s mother is unaware of any event that may have precipitated this change in Heather’s mood and behavior.

Both Heather and her mother denied current depressive symptoms. However, Heather has experienced two episodes of major depression in the past (see “Past Psychiatric History,” below).

Heather can also be anxious. Over the past 7–8 months, she has experienced 10 panic attacks. She endorsed all associated symptoms, including palpitations, sweating, shaking, shortness of breath, choking, chest pain, nausea, dizziness, chills and hot flushes, numbness/tingling, derealization/depersonalization, fear of losing control, and fear of dying. Each attack lasts about 20 minutes. Some of the panic attacks have been unexpected. Both Heather and her mother denied that these symptoms are impairing or that Heather has changed her behavior in response to the attacks.

Heather stated that “ever since I can remember,” she has not liked to be separated from her mother. When her mother is away from home, Heather often worries that her mother will “have an accident, not come back, or run away.” Heather also worries every day that she herself will be killed or kidnapped. She does not have a tantrum or cry when her mother leaves the house, but she always begs her mother to stay home. She admitted that during the last school year, she pretended to be sick on several occasions to stay home. Heather often follows her mother from room to room. On most nights, Heather cannot sleep alone and sleeps with her mother. Heather also reported having nightmares, almost every night, involving a separation theme.

Her mother indicated that Heather worries more than other children her age and that Heather has multiple worries about things happening at home and school most days of the week. The worries are about future and past events. Heather stated that she cannot control her worries, and her mother reported that Heather often experiences muscle tension and stomachaches. Her mother stated that Heather is very self-conscious, worries a lot about competence, and needs much reassurance. Heather has recently been especially worried about her school performance and has been extremely anxious when taking tests, saying that her mind “goes blank” during the test.

## Past Psychiatric History

When Heather was 5 years old, she was depressed for 8 months. When she was 8 years old, she became depressed again. She told her mother that she felt “like she wanted to cut herself.” She had taken the scissors and thought about cutting her throat. She endorsed feeling sad most of the day, every day; not being interested in her usual activities; having difficulty falling asleep and feeling tired during the day; loss of appetite; inability to concentrate; and decreased self-esteem. Heather denied ever having attempted suicide. The first episode of depression subsided without treatment. For the second episode, Heather was treated with cognitive-behavioral therapy (CBT) for 7 months. Heather was also treated with sertraline 50 mg/day for 4–6 weeks, but her mother discontinued this medication, stating that it made Heather “worse.” While taking sertraline, Heather began to experience panic attacks, which persisted after the medication was discontinued.

Heather’s mother also reported that prior to the onset of depressive symptoms, Heather exhibited difficulty paying attention to tasks, being easily distracted, being forgetful, frequently losing her belongings, having difficulty following through with instructions, and fidgeting. However, Heather never was hyperactive or impulsive. Her mother reported that the inattention tends to be persistent but worsens when Heather’s mood becomes silly or “up.”

Heather has no history of other psychiatric disorders, including psychotic disorders, disruptive behavior disorders, obsessive-compulsive disorder, posttraumatic stress disorder, autistic spectrum disorders, psychosis, and substance use disorder.

## Medical History

Heather has no history of medical problems.

## Developmental History

Heather’s mother reports having had a normal pregnancy and delivery, and Heather had normal achievement of developmental milestones.

## Social History

Heather lives with her biological mother, 11-year-old sister, and 81-year-old grandfather. Her biological mother has full custody, and her biological father has limited involvement with Heather. He has weekly supervised visits with Heather, although recently Heather has not wished to see her father. Her mother described Heather’s father as alcoholic and added that he has been verbally abusive to Heather in the past.

Heather is enrolled in the third grade at a local private school. Her mother reported that Heather is a good student, although recently her grades have been affected by her manic symptoms. According to her mother, although Heather is usually “popular” with peers and has no problems with making friends, she started a new school this year and has not yet established any close friendships. Heather and her mother report no history of physical or sexual abuse.

## Family History

Heather's mother has been diagnosed with bipolar I disorder, social anxiety disorder (social phobia), posttraumatic stress disorder, panic disorder, and alcohol use disorder. She was treated for postpartum depression after Heather's birth and has had multiple psychiatric hospitalizations.

Heather's father has a history of major depressive disorder, as well as alcohol and cocaine use disorders.

Heather's 11-year-old sister has been diagnosed with bipolar I disorder and unspecified anxiety disorder.

## Mental Status Examination

Heather is a 9-year-old girl who appeared her stated age. She was dressed provocatively, wearing a sheer animal print blouse, which exposed part of her midriff, and a bright scarf.

Heather was friendly, outgoing, and cooperative with the interview. She was distractible but seemed to make an effort to pay attention to questions. She was very talkative and at times drifted to an unrelated topic, but she responded well to redirection. Heather was restless and fidgeted in her seat and had more difficulty staying in her seat as the interview progressed. She described her mood as "good" and "happy," and her affect was congruent. Her speech was rapid at times but not pressured. Heather denied hallucinations and suicidal or homicidal ideation. Heather was aware that she has been getting into trouble at school because she is "too silly" and has "too much energy inside" but stated that she cannot control this behavior.

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# Psychotherapeutic Perspective

Mary A. Fristad, Ph.D., ABPP

## Diagnostic Formulation

The assessment of bipolar disorder should include a detailed, longitudinal summation of the onset, offset, and duration of manic and depressive symptoms in relation to stressful life events, a medical history (including psychotropic and other medication utilization), a developmental history, assessment of school adjustment, and a three-generational family his-

tory; information regarding symptoms should be elicited from both the child and the parent (Danner et al. 2009). Heather's case meets these criteria. Self-report inventories, such as the Parent General Behavior Inventory—10 Item Mania Scale (Youngstrom et al. 2008), are effective screening devices, and rating scales are useful for documenting symptom severity, but neither can be used to make a diagnosis of bipolar disorder (Danner et al. 2009). However, mood rating scales and self-report inventories—clinician-rated forms completed during office visits and mood charts that Heather and/or her mother complete at home—are useful for monitoring treatment response and to track changes in diagnosis.

Heather's presentation illustrates several features common to childhood-onset bipolar spectrum disorders (bipolar I, bipolar II, cyclothymic disorder, other specified bipolar and related disorder). First, she has multiple symptoms of anxiety, including panic, separation, and generalized anxiety disorders. Second, her symptoms manifested at an early age, with her first depressive episode notable by age 5. Third, when treated with a selective serotonin reuptake inhibitor (SSRI) for a depressive episode, Heather deteriorated. Fourth, Heather appears to have preexisting attention-deficit/hyperactivity disorder (ADHD), inattentive type, the symptoms of which appear worse when Heather is manic. Clear exacerbation of the “overlap” symptoms of distractibility and increased goal-directed activity is needed to count these as symptoms of both ADHD and bipolar disorder. Fifth, Heather has a significant family history. Her father has a history of major depressive disorder, and her mother and sister have been diagnosed with bipolar I disorder.

Heather has had two past episodes of depression. Currently, she is exhibiting manic symptoms, including both euphoric and irritable mood, grandiosity, decreased need for sleep, increased talkativeness, flight of ideas, distractibility, psychomotor agitation, and hypersexuality.

## DSM-5 Diagnosis

- F31.12 Bipolar I disorder, most recent episode manic, moderate
- F90.0 Attention-deficit/hyperactivity disorder, predominantly inattentive presentation
- F93.0 Separation anxiety disorder
- F41.1 Generalized anxiety disorder
- Z62.820 Parent-child relational problem (poor relationship with father, who has been verbally abusive in the past and is diagnosed with alcohol and cocaine use disorders)
- Z65.8 Other problem related to psychosocial circumstances (mother who has had multiple psychiatric hospitalizations and is diagnosed with alcohol use disorder; sister who is also diagnosed with bipolar I disorder)

## Treatment Recommendations

First, Heather should receive a medication evaluation (as discussed by Kowatch, in his commentary later in this chapter). Second, Heather and her family should begin family psychoeducation plus skill building (Fristad and MacPherson 2014). Treatment of pediatric bipolar and related disorders should include family involvement; psychoeducation about etiology, symptoms, course, medications, risk and protective factors, and effective treatment; skill building, especially communication, problem-solving, and emotion regulation skills; and relapse prevention (Fristad and MacPherson 2014). Three evidence-based treatments have been tested for children Heather's age: individual family psychoeducational psychotherapy (PEP; Fristad 2006), multi-family PEP (Fristad et al. 2009), and the RAINBOW program (West et al. 2014). Heather and her mother might first participate in a multi-family group and then follow up in individual family therapy, or they might begin immediately with the latter, depending on what services are available in their community. Group and individual family interventions have different pragmatic and clinical advantages and disadvantages (Fristad 2006). Heather and her family should work with a therapist familiar with childhood-onset bipolar disorder to avoid the many misattributions about symptoms that can occur when a therapist does not have such knowledge (Mackinaw-Koons and Fristad 2004). Heather has had suicidal ideation previously; this should be carefully monitored throughout treatment.

The stability of Heather's mother and sister needs to be considered. Because multiple family members with bipolar disorder can be stressors for one another (family mood charting can illustrate this), all family members in the home should receive comprehensive care. Family sessions can address how members can cope best with their own symptoms and the stressors inherent in the home. As a part of this approach, Heather and her family should be assisted in establishing family routines around meals and sleep.

Heather is currently estranged from her father, who may not be stable currently. Inviting him to a family therapy session might provide an opportunity to assist him in resuming active treatment for his substance use disorder and depression.

Heather's psychotherapy should also address her anxiety symptoms. Comorbid anxiety disorders are a negative predictor of outcome (DelBello et al. 2007), so minimizing their impact will be critical to her overall success. CBT is recommended to treat both separation and generalized anxiety disorders. If CBT successfully reduces Heather's anxiety, medications (SSRIs) to target anxiety can be avoided, which is desirable because SSRIs can trigger manic symptoms. Also, her ADHD, inattentive type, should be targeted. Medication management of her inattentive symptoms may be required after her mood is stabilized. Heather and her family will also need to understand how these symptoms typically manifest and how they can be managed at home.

As part of Heather's psychosocial intervention, school-based functioning should be monitored. Heather historically has been a good student and has done well with academics, behavior, and social interactions. However, these areas of functioning have been affected by her current illness. Additionally, her ADHD, inattentive type, quite likely has

negative impacts on her school performance. Thus, communication between the mental health team, family, and school professionals may be helpful to generate an intervention strategy for Heather at school. In particular, I recommend providing school staff with educational material (for resources, see [www.thebalancedmind.org/learn/education-issues](http://www.thebalancedmind.org/learn/education-issues)) and deciding on a prearranged “cool-off” setting, the use of which either Heather’s teacher or Heather can initiate.

Finally, Heather’s mother may benefit from joining an online support group (see [www.thebalancedmind.org/connect/support-groups](http://www.thebalancedmind.org/connect/support-groups)). Heather, her sister, and her mother may all benefit from learning more about their disorders (see “Resources” in Fristad et al. 2011).

If these interventions are not successful in ameliorating Heather’s symptoms, medication readjustment should be considered. Additionally, Heather and her mother should work with their therapist to update treatment goals (see Fristad et al. 2011, pp. 82–83, 97) and continue to implement and test the efficacy of interventions they devise collaboratively in therapy.

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## **Psychopharmacologic Perspective**

Robert A. Kowatch, M.D., Ph.D.

### **Diagnostic Formulation**

This 9-year-old female has the classic symptoms of mania—euphoria, irritability, increased energy, pressured speech, decreased need for sleep, racing thoughts, grandiosity, and hypersexuality. Because DSM-5 (American Psychiatric Association 2013) does not include separate criteria for children and adolescents with a manic episode, the adult criteria must be used.

### **DSM-5 Diagnosis**

The criteria for manic episode in DSM-5 include 1) evidence of a mood disturbance, 2) three or more manic symptoms, 3) a functional impairment caused by the mood symptoms, and



4) exclusion criteria that the manic symptoms are not due to the direct physiological effects of a substance or a general medical condition.

DSM-5 manic episode requires “persistently increased goal-directed activity or energy” (Criterion A). Heather’s mother reported that although her daughter “has so much energy that she sometimes takes 2–3 hours to fall asleep,” the shortened sleep time did not stop her from being very active or make her appear to be tired.

Heather’s mother reported that Heather had a change of mood for several months, which included frequent laughter and giggling for no apparent reason; that she has been more irritable and argumentative; and that her frustration tolerance was low, “exploding” when she could not have what she wanted. Therefore, DSM-5 criterion for a “distinct period” of a mood disturbance of sufficient duration is met.

The following are the DSM-5 Criterion B symptoms for mania and what the patient’s mother reports:

1. Inflated self-esteem or grandiosity: Heather is focused on becoming a singer, actress, or model. Her mother says that Heather really believes she will be a “star.”
2. Decreased need for sleep: Heather takes 2–3 more hours to fall asleep but awakens active and energetic.
3. More talkative than usual or pressure to keep talking at times: Heather “talks so fast and jumps from one subject to another so quickly that it is hard to follow what Heather is saying.”
4. Flight of ideas or subjective experience that thoughts are racing: Heather described her thoughts as “going around and around in my head.”
5. Distractibility: During the mental status examination, it was noted that Heather was distractible but seemed to make an effort to pay attention to questions.
6. Increase in goal-directed activity or psychomotor agitation: Heather recently began crawling onto adults’ laps in a flirtatious manner and has begun kissing her mother on the mouth.
7. Excessive involvement in activities that have a high potential for painful consequences: These symptoms are difficult for a 9-year-old child to carry out and are not reported in this case.

Heather’s illness is causing “marked impairment” in several domains. At school, she seems too energetic, and her silliness interferes with her reciting the morning prayer and Pledge of Allegiance. She talks so fast that she is difficult to understand, and her grades have been affected. Since starting her new school, she has not established close friendships. If an adult demonstrated these same symptoms in the workplace, he or she would be sent home or to the emergency room. Heather’s symptoms are noticed at home and school and affect her functioning. It is not clear if her manic symptoms are why she has no friends at school, but this is a possibility.

DSM-5 also requires that the episode not be attributable to the physiological effects of a substance (e.g., drug of abuse, medication, other treatment) or to another medical con-

dition. Heather is not taking medication and has no medical disorders, and there is no history of substance abuse.

The patient has had several prior episodes of major depression, and there is a strong family history of bipolar disorder. The best predictors of childhood pediatric bipolar disorder are early onset of depressive episodes (Luby and Belden 2008) and a family history of bipolar disorder (Birmaher et al. 2010).

## **Comorbid Disorders**

Children and adolescents with bipolar disorder commonly present with co-occurring psychiatric disorders, including ADHD and anxiety disorders (Pavuluri et al. 2005; Sala et al. 2012). Heather has symptoms of panic disorder, separation anxiety disorder, and generalized anxiety disorder. She also has symptoms of ADHD—difficulty paying attention to tasks, being easily distracted, being forgetful, frequently losing her belongings, having difficulty following through with instructions, and fidgeting.

DSM-5 does allow for the addition of specifiers to a diagnosis of bipolar disorder. One of these is “with anxious distress.” These specifiers, however, were included for increased specificity and do not replace comorbid disorders that are important to recognize and treat. It is possible to diagnose Heather with bipolar disorder with the specifier “with anxious distress” and also include any other DSM-5 disorders.

## **DSM-5 Diagnosis**

- **F31.12 Bipolar disorder, current episode manic, moderate severity, with anxious distress**
- **F93.0 Separation anxiety disorder**
- **F41.1 Generalized anxiety disorder (provisional)**
- **F90.0 Attention-deficit/hyperactivity disorder, predominantly inattentive presentation (provisional)**

## **Treatment Recommendations**

The first thing to consider before starting medication for a manic episode in a young patient is whether the patient is at the point at which symptoms and dysfunction require pharmacotherapy. Heather is symptomatic at home and school. The overall strategy when treating children and adolescents with bipolar disorder is to stabilize mood first and then treat other comorbid disorders, such as ADHD or anxiety disorders, as necessary after mood is stabilized. If a child or adolescent presents with a “classic” euphoric mania without psychotic symptoms, as Heather does, then a trial of lithium may be helpful. Often, however, it is difficult to maintain a child on lithium for extended periods of time because of the associated weight gain, exacerbation of acne, and hypothyroidism (Kowatch et al. 2011). The

second-generation antipsychotics, although efficacious, may also cause significant side effects that must be recognized and managed effectively. These side effects include extrapyramidal effects, tardive dyskinesia, obesity, hyperlipidemia, increased prolactin levels, and cardiac QTc changes. Some evidence indicates that children and adolescents may be more susceptible to these side effects than adults. A review of these adverse effects is beyond the scope of this section, but Correll and colleagues have published several reviews on this topic (Correll 2011; Correll et al. 2009).

For children with bipolar disorder and co-occurring ADHD, mood stabilization with a traditional mood stabilizer or an atypical antipsychotic is a necessary prerequisite prior to initiating stimulant medications (Biederman et al. 1999). A typical dose of such stimulants for a child with bipolar disorder and ADHD would be methylphenidate 18–36 mg/day or extended-release dextroamphetamine and amphetamine mixed salts 5–10 mg/day. Treatment for Heather's anxiety symptoms is best approached with CBT because SSRIs tend to cause increased mood cycling over time (Goldsmith et al. 2011).

If the provisional diagnosis of ADHD is confirmed, treatment for the ADHD is recommended after Heather's mood is stabilized.

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# CHAPTER 7

## Life of the Party

### Chronic Marijuana Use

Paula Riggs, M.D.

#### Case Presentation

##### Identifying Information

Brad is a 17-year-old seeking outpatient treatment for his marijuana abuse. He lives with three roommates and is working at a fast-food restaurant.

##### Chief Complaint

Brad reported, “I hit my girlfriend when I was high. She was pressuring me to get a job, but I said that I couldn’t because I’m a ‘pothead.’ I never thought of my marijuana use as a problem, but I got scared when I hit her. I mean, I’ve never lost control like that before.”

##### History of Present Illness

Brad says that he started using marijuana at age 14 when his older brother passed him a joint and encouraged him to try it. His marijuana use escalated to daily use over the next year. In the past year his pattern of use escalated to smoking “a couple of bowls or a joint during the week and maybe two or three joints on weekends with a couple of shots of tequila.” He has been living with three male roommates for the past 8 months after his mother “kicked him out of the house” because of his marijuana use. He dropped out of high school at that time and got a job at a fast-food restaurant so he could pay his portion of the rent. He added, “I wouldn’t have been able to graduate anyway because I had missed so much school and I was failing most of my classes. Plus, I didn’t really care about school or whether I graduated or not.” He says he and his roommates all smoke marijuana together and usually have parties at their house on weekends.

Brad had never really thought of his marijuana use as a “problem” because he “wasn’t that into alcohol or other drugs” and he had heard that “you can’t really get addicted to marijuana.” However, he acknowledges that he is not really sure if he could quit even if he wanted to. He added, “I tried to quit once but started smoking after a couple of days because

I got really stressed out. Smoking weed is how I cope with things. I don't really feel normal if I'm not high." When asked to reflect on whether he thinks his marijuana has caused any problems in his life, he said that it "has definitely caused problems with my mom and girlfriend." My girlfriend says it "makes me lazy." He added, "I also think it affects my motivation. I just don't care that much about things I used to care about."

His primary reason for seeking treatment at this time is because his girlfriend said she would break up with him "if I didn't get help for my marijuana addiction."

On psychiatric review of symptoms, Brad denied current mood or anxiety symptoms. He was somewhat fidgety and distracted during the interview. After asking the clinician to repeat the question the second time, Brad added, "Sorry, I've never been very focused; my girlfriend is always complaining that I don't pay attention." His score on the ADHD Rating Scale IV (ADHD-RS; Zhang et al. 2005) was 35, predictive of attention-deficit/hyperactivity disorder (ADHD). Brad's symptoms in the clinically significant range were poor frustration tolerance; poor organization, concentration, and attention; procrastination/delays in initiating tasks requiring sustained mental effort or organization; frequent loss of things; distractibility; forgetfulness; tendency to interrupt others; and fidgetiness.

Brad endorsed two symptoms of conduct disorder—lying and truancy—in the past 6 months.

## Past Psychiatric History

Brad denies prior mental health or substance abuse treatment. He thinks he might have been diagnosed with ADHD when he was in the second grade, but he was never treated because his mother "doesn't believe in drugging kids with medications."

In elementary school he remembers "getting into trouble a lot for disrupting class or talking too much." He recalls being very "hyper" in elementary school. He says that he is "still kind of hyper" but has been able to control it in the past few years. He says that he has always been a procrastinator and has never been very focused or organized.

## Substance Abuse History

Brad began smoking cigarettes at age 11 and currently smokes three-fourths of a pack per day. He began smoking marijuana with his older brother (1½ years older) when he was 14 years old and progressed to daily smoking by age 15. He escalated to smoking marijuana several times per day after his mother "kicked him out" of the house because she continued to find drug paraphernalia and bags of marijuana in his room after he lied about quitting. His current roommates all smoke and "deal" marijuana. He began drinking alcohol at "parties" at age 15. He says that his normal pattern of drinking is to get drunk with his friends or roommates on Friday and Saturday nights—drinking five or six beers over the course of an evening and maybe two or three shots of tequila. He has never been a daily drinker and denies ever experiencing blackouts or withdrawal symptoms. He has driven a car while under the influence of alcohol and marijuana on several occasions but has never been stopped for driving under the influence. He denies the use of any other drugs.

## Medical History

Brad denies significant medical illness. He has a history of environmental and seasonal allergies. He has had no surgeries. He has a small 1-cm well-healed scar lateral to his right eyebrow—the result of his having fallen off his bicycle at age 10. He reports no loss of consciousness in that fall and denies other head injuries or seizures.

## Developmental History

To Brad's knowledge, he is the product of a normal pregnancy and delivery and he had no delays in developmental milestones. His mother smoked cigarettes during the pregnancy but, to his knowledge, did not drink alcohol or use other drugs. He was a B/C student in elementary school, with worsening grades in middle school. Chronic truancy, failing grades, and drug use at school led to his transfer to an alternative high school in ninth grade. He dropped out of high school at age 17, but he plans to get his GED so he can get into culinary school next fall.

## Social History

Brad says that his father was always “very strict” and verbally abusive to Brad, his brother, and his mother. He would “get mad over nothing, especially if he was drunk.” His parents separated about 4 months ago and are going through a divorce. Brad has spoken with his father once on the phone since his father moved out. He says he has never been close to his father. He has always been closer to his mother, but increasing conflicts related to his drug use have seriously strained his relationship with his mother in the past year.

## Family History

Brad's father has a history of alcohol use disorder but has been in recovery and abstinent for the past year. His mother was dependent on nicotine and quit smoking a year ago when his father stopped drinking. His older brother, age 19, is currently in jail for possessing and selling methamphetamine; he also has alcohol abuse and cannabis dependence.

## Mental Status Examination

Brad arrived at a scheduled clinic intake appointment on time, dressed in jeans, a white T-shirt, and high-top basketball shoes. He was tall, with a lean athletic build. On mental status examination, he was alert and oriented to person, place, and time. He was somewhat distracted and absentmindedly drummed his pencil on the table throughout the interview. Nonetheless, he engaged with good eye contact during the interview and appeared euthymic with normal range of affect. He denied depression and rated his mood as 2 when asked to rate his mood on a scale from 1 (*no depression*) to 10 (*suicidal, hopeless*). His performance on the Digit Span task suggested some impairment in short-term, working memory; however, he was able to complete the task accurately on the second attempt with slight prompting. Brad denied a history of mania, psychosis, or other symptoms of thought disorder.



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# Psychotherapeutic Perspective

Yifrah Kaminer, M.D., M.B.A.

## Diagnostic Formulation

Brad clearly meets seven of the 11 DSM-5 criteria for cannabis use disorder (American Psychiatric Association 2013): increased tolerance; unsuccessful efforts to cut down or control cannabis use; recurrent cannabis use resulting in failure to fulfill major role obligations at work, school, or home; continued use despite having persistent or recurrent social or interpersonal problems caused by the effects of cannabis (i.e., conflicts with his mother and girlfriend); important activities are given up or reduced because of cannabis use; recurrent cannabis use in situations in which it is physically hazardous (e.g., driving while under the influence); and continued use despite knowledge of having a persistent psychological problem that is likely to have been caused or exacerbated by cannabis (i.e., lack of motivation).

Brad has been regularly drinking alcohol during the weekend. He reports several episodes of driving under the influence without legal consequences. Because no other alcohol-related symptoms have been reported, he does not meet the minimum of two criteria for alcohol use disorder. On the basis of Brad's report of past history and the psychiatric evaluation, he most likely meets criteria for ADHD. However, to confirm a present ADHD diagnosis, the clinician needs to repeat the assessment of comorbid psychiatric disorders after a drug-free period of at least 2 weeks. The rationale is to prevent confusion with masked symptomatology attributed to the consequences of cannabis use on attention, concentration, and memory or potential withdrawal symptoms from marijuana, including poor frustration tolerance, fidgetiness, and tendency to interrupt others.

## DSM-5 Diagnosis

- F12.20 Cannabis use disorder, severe
- F10.10 Alcohol use disorder, mild
- F90.2 Attention-deficit/hyperactivity disorder, combined presentation

## Treatment Recommendations

Adolescents with substance use disorders (SUDs) constitute a heterogeneous population characterized by differences in the type/combination of substance(s) used, severity of use, consequences, and presence of comorbid psychiatric disorders. Marijuana is the most com-

mon illicit substance used by adolescents diagnosed with SUD in the United States. The majority of adolescents with cannabis use disorders are diagnosed with one or more comorbid psychiatric disorders (Dennis et al. 2004). Clinical consensus suggests that comorbid disorders in youth should be treated simultaneously (Kaminer 2015; Libby and Riggs 2008). This approach has been empirically tested in adolescents with ADHD (Wilens and Zulauf 2015) and depression (Hersh et al. 2014).

DSM-based diagnostic formulation including severity level is not sufficient to determine a patient-treatment match. The clinician needs to examine the youth dysfunctionality on the basis of a multidimensional severity assessment, such as the Global Appraisal of Individual Needs, the Teen Addiction Severity Index, or the Personal Experience Inventory (Winters and Kaminer 2008), before making decisions regarding the following: 1) triage and placement in an appropriate treatment setting (as delineated in the *American Society of Addiction Medicine Patient Placement Criteria for the Treatment of Substance-Related Disorders*, Second Edition, Revised [ASAM PPC-2R]; Mee-Lee et al. 2001; see also Fishman 2011) and 2) an optimal treatment plan according to a continuity of care and adaptive treatment-oriented model (Bukstein et al. 2005; Kaminer and Godley 2010).

Several interesting facts are included in Brad's case description. First, because it is highly unusual for an adolescent to seek treatment when there is no legal contingency attached, Brad's seeking help indicates motivation for treatment. However, this will be his first episode of treatment after 2 years of daily intensive drug use. Adolescents often are not ready to engage in treatment and change drug use during a first attempt to recover. Second, if Brad does respond to treatment and stops his heavy marijuana use, he will likely manifest withdrawal symptoms. Cannabis withdrawal has been recognized for the first time in DSM-5. This diagnosis requires that three out of seven symptoms develop within approximately 1 week after cessation of heavy and prolonged cannabis use. A decision regarding placement in a treatment setting needs to take into consideration the patient's motivation and a potential withdrawal syndrome (Mee-Lee et al. 2001). Third, Brad presently lacks a support system because his family forced him out of his home. Therefore, the clinician needs to determine whether Brad has any non-drug-using friends or other family members who could provide him with basic needs (i.e., shelter, food), at least during the treatment and continued care phase.

ASAM PPC-2R provides a "crosswalk" of levels of care and dimensions that is used to determine an appropriate setting for a patient based on the individual's placement on the dimensions. The following levels of care are available for adolescents: early intervention, outpatient treatment, intensive outpatient treatment/partial hospitalization, residential/intensive inpatient treatment (clinically managed low-intensity residential, medium-intensity residential, high-intensity residential/inpatient treatment), and medically managed intensive inpatient treatment.

Intensive outpatient treatment may be appropriate for Brad, according to his placement on dimension 1, acute intoxication and/or withdrawal potential; dimension 3, emotional, behavioral, or cognitive conditions and complications—as evidenced by Brad's mild to moderate impairment in social functioning, ability to self-care, and course of illness predictive of frequent monitoring or interventions (e.g., including drug urinalysis and psychotherapy); dimension 5, relapse, continued use, or continued problem potential—as

evidenced by Brad's significant risk of continued use or relapse; and dimension 6, recovery environment—as evidenced by Brad's environment that is impeding recovery. A major concern is Brad's need to change living arrangements to stay away from apartment mates who use and deal drugs. He can either return home, which needs to be negotiated with his parents; find a home with a nonuser; or as a last resort move to a higher level of care, which in his case would be clinically managed low-intensity residential treatment.

As noted in ASAM PPC-2R, an indicated level of care may not exist or be accessible in a patient's community. Also, there are treatment menu variations in programs within the same level. The treatment-pivotal components that are recommended for Brad include integration of personal and family or community reinforcement interventions complemented by periodic drug urinalysis (Fishman 2011). For example, on the personal level, the recommended intervention includes cognitive-behavioral therapy for handling high-risk situations for drug use and for providing skills to enhance anger management, as well as motivational interviewing to improve engagement. All interventions may rely on the treatment manuals developed for the Cannabis Youth Treatment study (Dennis et al. 2004), which can be downloaded free of charge (available at: <http://store.samhsa.gov/list/series?name=Cannabis-Youth-Treatment-Series-CYT>). Finally, the clinician needs to evaluate the necessity of and resources available for consulting Brad on school, employment, peer relationship, anger management, and potential legal issues.

Treatment of Brad's psychiatric comorbidity should be provided regardless of the level of care. Nevertheless, the clinician needs to determine whether such treatment is available in the assigned level of care or program given feasibility of resources. Alternatives need to be addressed if psychopharmacologic treatment for ADHD is necessary. Pharmacological intervention should consider the liability associated with diversion or abusive pattern of stimulant use (Bagot and Kaminer 2014).

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## **Psychopharmacologic Perspective**

Oscar G. Bukstein, M.D., M.P.H.

### **Diagnostic Formulation**

Brad's marijuana use is clearly the focus of his presentation. His self-referred status is the exception to the rule, because most youth are taken for evaluation and treatment of substance

use problems by their parents or other authority figures. Similarly, Brad acknowledges problems with his marijuana use and displays some motivation and reported desire for treatment, which are not typical of most adolescents with similar problems.

## **Tobacco**

Brad reports an early onset of tobacco (cigarette) use and currently smokes three-fourths of a pack per day. At this level of daily use, Brad would likely manifest some withdrawal symptoms after cessation of cigarette use. Largely because tobacco becomes a legal substance for individuals at age 18 and because of the relatively short duration of use, adolescents rarely suffer from consequences of use or endorse other symptoms of tobacco use disorder except occasional attempts to quit. Brad is likely not to be motivated to quit.

## **Alcohol**

Brad endorses a relatively common adolescent pattern of binge drinking two times a week. His endorsement of driving while intoxicated fulfills a DSM-5 criterion of alcohol use disorder (“recurrent alcohol use in situations in which it is physically hazardous”). He reports no other consequences or symptoms of alcohol use disorder; therefore, he falls under the two-criteria threshold for a diagnosis.

## **Marijuana**

Brad’s endorsement of problems in his life related to escalating marijuana use in the past year includes relationship problems with his mother and girlfriend, sometimes involving aggression (DSM-5 cannabis use disorder criterion 6: “continued cannabis use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of cannabis”); problems with school and job loss (i.e., DSM-5 substance abuse criterion 5: “failure to fulfill major role obligations at work, school, or home”); and driving under the influence (criterion 8: “recurrent cannabis use in situations in which it is physically hazardous”). Three criteria meet the diagnostic threshold (requiring two or more criteria) and support a cannabis use disorder diagnosis at a mild severity level. Brad’s endorsement of poor motivation and aggression tied to marijuana use likely meets criterion 9: “use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by cannabis.” Two other criteria — criterion 3, “a great deal of time is spent in activities necessary to obtain cannabis, use cannabis, or recover from its effects,” and criterion 2, “a persistent desire or unsuccessful efforts to cut down or control cannabis use” — appear equivocal and require additional information. Finally, the therapist needs to investigate the remaining criteria: whether cannabis is taken in larger amounts or over a longer period than planned (criterion 1); whether important social, occupational, or recreational activities are given up or reduced because of use (criterion 7); and evidence or endorsement of tolerance (criterion 10) and/or withdrawal (criterion 11). Meeting four to five criteria would place the severity of Brad’s cannabis use disorder at a moderate level, and meeting six or more would place Brad’s disorder at a severe level.

For all youth reporting substance use or suspected of substance use, inquiry into each of the DSM-5 criteria for each substance used is essential for making the correct diagnosis. Although not part of diagnosis, ascertainment of quantity and frequency of use is also important. With tobacco and alcohol, this is relatively straightforward. However, determination of quantity of use is often difficult with cannabis because the drug is often shared, the potency of the drug varies, and the drug is used on multiple occasions through the day.

## Other Comorbid Psychiatric Disorders

Brad's report of a childhood history of ADHD and some current symptoms (a "major procrastinator," trouble "finishing" things, impatience, observed distractibility and difficulty with short-term memory during the interview) suggest a probable current diagnosis of ADHD, which is not surprising given the frequent comorbidity of ADHD in adolescents being treated for SUDs. His ADHD-RS score of 35 also supports an ADHD diagnosis. Because of modest endorsement of any symptoms of hyperactivity and/or impulsivity, Brad's ADHD subtype diagnosis is for the predominantly inattentive presentation. ADHD is commonly associated with conduct disorder and/or oppositional defiant disorder, but the case presentation does not give information about the presence or absence of symptoms or behaviors meeting these disruptive behavior disorder criteria.

Although Brad denies other common psychiatric comorbidities with SUD, such as depression, bipolar disorder, and anxiety disorder(s), screening for these disorders is essential to any comprehensive diagnostic evaluation. Prior to or concurrent with the development of a treatment plan, the clinician should further clarify Brad's diagnoses by 1) asking additional questions about alcohol and nicotine criteria; 2) using ADHD rating scales for other informant (parent, teacher); and 3) screening for or surveying for other deviant behaviors, such as antisocial behaviors, sexual history, and other risk-taking behaviors.

## DSM-5 Diagnosis

- F12.10 Cannabis use disorder, mild
- F90.0 Attention-deficit/hyperactivity disorder, predominantly inattentive presentation
- Rule out alcohol use disorder
- Rule out tobacco use disorder

## Treatment Recommendations

Brad's motivation, insight, and absence of previous treatment for SUDs suggest that a lower level of care, such as outpatient or intensive outpatient treatment, might be sufficient. Drug and alcohol treatment professionals often use specific adolescent criteria developed

by the American Society of Addiction Medicine (Mee-Lee et al. 2001) to assist in determining level of care. The “Practice Parameter for the Assessment and Treatment of Children and Adolescents With Substance Use Disorders,” developed by the American Academy of Child and Adolescent Psychiatry, offers a guide to basic principles of treatment (Bukstein et al. 2005). Pertaining to assessment, the use of toxicologic methods (e.g., urine drug screens) both at baseline assessment and ongoing during treatment is an important element, designed to provide an objective check on adolescent self-report. Despite the presence of comorbid disorders, adolescents with SUDs should receive specific treatment for their substance use. Because longer duration of treatment is associated with several favorable outcomes, maintaining adolescents in some form of treatment for 90 days or more appears optimal.

In treating an adolescent with SUD(s), the clinician should develop a treatment plan that utilizes modalities that target 1) motivation and engagement; 2) family involvement to improve supervision, monitoring, and communication between parents and adolescent; 3) problem-solving skills and social skills, as well as relapse prevention; 4) comorbid psychiatric disorders through psychosocial and/or medication treatments; 5) social ecology in terms of increasing prosocial behaviors, peer relationships, and academic functioning; and 6) adequate duration of treatment and follow-up care (Bukstein et al. 2005). Self-support groups such as Alcoholics Anonymous and Narcotics Anonymous can be encouraged as adjuncts to the listed modalities.

Although no specific pharmacotherapies have been developed to target marijuana use disorders, clinicians should always consider appropriate pharmacologic treatment of comorbid psychiatric disorders. The potential diagnosis of ADHD in Brad’s case should prompt consideration of medication management of the ADHD. The research literature is equivocal at best in supporting medication treatment of ADHD in the presence of SUD. In a study of osmotic-release oral system methylphenidate (OROS MPH) for adolescents with combined SUD and ADHD, Riggs et al. (2011) found no differences between the OROS MPH and control groups on self-reported measures of ADHD and substance use, although parent report indicated a small benefit for the OROS MPH group on ADHD symptoms. Similarly, Thurstone et al. (2010) found no differential benefit for ADHD and SUD in a randomized control trial of atomoxetine. Nevertheless, in each of these studies, the medications were given safely without evidence of abuse. In adolescents with ADHD and active SUD symptoms and behaviors, nonstimulant agents (atomoxetine or bupropion) may be preferable to stimulants. For patients with poor response to nonstimulant agents, stable treatment, and/or merely a history of SUD or recreational/experimental substance use (assuming a nonamphetamine SUD), the use of extended-release or longer-acting stimulants with lower abuse liability and diversion potential is recommended.

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# CHAPTER 8

## Jerking Movements

### An Adolescent With Psychosis

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#### Case Presentation

##### Identifying Information

David is a 17-year-old boy who lives with his biological parents, a brother, and a sister. He attends ninth grade in a regular education classroom in a public school. He has lived in the United States for 10 years after emigrating from a country in West Africa.

##### Chief Complaint

David's mother brought him to the pediatric emergency room because he has been talking to himself and "jerking a lot" with sudden body movements. Soon after, he was admitted to the hospital's early-onset psychosis inpatient unit.

##### History of Present Illness

For the past few weeks, David's family has observed him talking to himself. These "conversations" become very intense, and he sometimes appears to be arguing with someone when no one is around. At other times, his siblings have witnessed him laughing to himself. His family has been even more concerned about his "jerking." David has been experiencing jerky movements of different parts of his body, which started around the same time he started talking to himself. His family has noticed that he has been staying up later than usual. When told to go to bed, he says that he is not sleepy. His appetite has been the same. He has been spending more time at home than with his friends.



While being interviewed by the child and adolescent psychiatrist, David was clearly responding to internal stimuli, having a conversation with himself and laughing at times. He would ask others, “Don’t you hear what they said?” and express surprise that nobody was hearing the voices. He admits to having a “phone somewhere inside my head” through which his cousin Brian talks to him. In these “phone calls,” Brian is frequently mean to David, calling him a coward or other names or cursing at him. This upsets David, causing him to feel sad. Brian also tells David that he is dirty, smells bad, and needs to get clean. As a result David washes his hands and takes showers many times a day. Additionally, David also believes that he has an ear infection that is making him “stink.” As a result he keeps paper or cotton in his ears to prevent other people from smelling the odor.

David believes his thoughts are being read by others as if they are being broadcast on a television. During the initial interview, he closes his eyes and tries to communicate with the psychiatrist through his thoughts to prove that he is right.

During the evaluation, he has jerky movements in different parts of his body, such as his arms and neck. The movements get worse when David is nervous or anxious. Both David and his parents deny that David has any depressed, irritable, or elevated mood, other than the sadness caused by Brian’s comments.

## Past Psychiatric History

David’s symptoms started 2 months earlier, after he graduated from eighth grade and went out to celebrate with his friends. He smoked K2 (synthetic marijuana) multiple times within one night and drank alcohol. Two days later David started talking to his cousin Brian through the “phone” in his head. He also started experiencing jerky movements in his legs, appearing initially as abnormal gait; these movements, which were episodic in nature, eventually progressed to his torso. He experienced no loss of consciousness, tongue biting, or urinary or bowel incontinence. His parents took him to an emergency room at a different hospital, and he was admitted to a neurology service. The neurological workup included a neurological examination, noncontrast head computed tomography (CT) scan, and an electroencephalogram (EEG); all results were found to be within normal limits. While on the neurology service, David was started on risperidone for the jerky movements and psychotic symptoms, leading to improvement. With the support of his parents, he discontinued the risperidone after discharge and did not follow up with his outpatient appointments. His symptoms returned, leading to the current admission on the early psychosis inpatient unit. Of note, when his family initially described this neurology service admission, they revealed only the neurological symptoms and not the psychiatric component.

David and his parents deny any psychiatric symptoms prior to David’s use of synthetic marijuana.

## Substance Abuse History

David admitted to smoking marijuana once per week and using synthetic marijuana only once up to his first admission to the neurology service. He drank alcohol on occasion and

denied use of any other recreational drugs. David denied use of drugs and alcohol after his recent discharge from the neurology service.

## Medical History

David was diagnosed with otitis externa on his neurology service admission but otherwise had no history of medical disorders, including no history of seizures or head trauma.

## Developmental History

David's mother received prenatal care and had no perinatal complications. David achieved his milestones on time and did not experience difficulties in any specific developmental domain.

## Social History

David lives with his parents, a 19-year-old sister, and a 25-year-old brother. He was born in West Africa and attended English-speaking school until third grade. He and his family immigrated to the United States after he completed third grade. His father is a college graduate with a degree in architecture and works as an architect. His mother is a high school graduate and works as a receptionist in a doctor's office. David and his family report that he was doing well in school, earning As and Bs. When he first moved to the United States, he had to repeat a grade because of the "language barrier." He enjoys the performing arts and loves drama. He admits to having several friends. He is close with his siblings.

## Family History

David's parents deny family history of mental illness or movement disorders.

## Mental Status Examination

David sat on a couch next to his mother; he was dressed casually in street clothes and had fair hygiene. He had no atypical features and appeared his stated age. He had repetitive jerky movements in his arms and neck. These movements increased in frequency when David was asked a question. He cooperated with the interview but was guarded and made intermittent eye contact, mostly looking away from the interviewer. His speech was soft, low in volume, and of regular rate. His affect was notable for being blunted, although he appeared nervous on repeated questioning. He reported his mood to be "fine" except upset sometimes when "Brian" tells him upsetting things. His thought process was disorganized, and significant thought blocking was present. During the interview he appeared distracted and at times responded to derogatory comments that he heard from "Brian." He believed that the interviewer can read his thoughts. He did not report any suicidal or homicidal ideation, intent, or plan. He had poor insight. He was oriented to time, place, and person. His remote memory was intact; however, he did poorly on serial 7s and was unable to spell *world* backward.

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# Psychotherapeutic Perspective

Michael Garrett, M.D.

## Diagnostic Formulation

David meets criteria for schizophreniform disorder (illness less than 6 months, delusions, hallucinations, thought blocking, and blunted affect). Although two-thirds of patients with an initial schizophreniform diagnosis subsequently develop a chronic psychosis, roughly one-third recover. The good premorbid functioning, sudden onset, and predominance of positive symptoms in David's case correlate with a better prognosis. From a psychological viewpoint, in psychosis, instead of thinking painful thoughts and feeling painful emotions associated with difficulties in life, the patient experiences thoughts and feelings as altered *perceptions* of reality that are located outside the boundary of the self. Instead of David thinking "I am no good," he *hears* the hallucinated voice of Brian saying "You are no good."

David's delusion that he has a bad smell is an example of a common psychotic mechanism that Segal (1957) called a "symbolic equation" and others have termed a "concrete metaphor," a form of thinking readily observed in young children who are in what Fonagy and Target (1996) have described as the "equivalence mode." Figuratively speaking, a person might express dismay by saying, "That situation really stinks," or thinking, "I stink as a person." In psychosis, thought shifts toward concrete metaphor in which two things or situations that share a common property are regarded as the same. The therapist would consider David's belief that he literally has a bad smell as a concrete experience of what in a nonpsychotic person would be experienced as the figurative metaphor, "I stink as a person." This regression to concrete thinking has a defensive utility. When David is focused on the concrete problem of a smelly infected ear, he is spared the deeper emotional distress that would come with clear thinking about the dire state of his interpersonal world, clear thinking that preserves the emotional connections between words and memories that compose figurative speech.

The fact that David smoked K2 two days before the onset of his psychosis suggests that biological factors were important in the onset of his disorder. Although little is known about the interaction of biological and psychological factors in psychosis, the clinician might assume that the mental boundaries that differentiate between thoughts, feelings, and perceptions that are taken for granted in ordinary mental life depend on biological substrates for their proper operation and that these "ego boundaries" break down in psychosis (Federn 1953) when this biological substrate is disturbed. The clinician might assume that before David used K2, manifestations of David's poor self-esteem remained within the psychological boundary of the self in the form of painful thoughts and feelings, but when K2 disrupted the biological substrates maintaining this psychological boundary, painful mental content flooded across a damaged boundary so as to be perceived as a derogatory "voice" rather than a derogatory thought. David's

belief that others can read his mind reflects this experience of the self as having a permeable boundary such that no experience is assuredly private and all experience is potentially public.

## DSM-5 Diagnosis

### ■ F20.81 Schizophreniform disorder

## Treatment Recommendations

A practitioner of psychodynamic therapy for psychosis (PDTp) would assume that David's psychotic symptoms are meaningful expressions of his mental life that can be psychologically interpreted (Arieti 1974; Greenberg 1964; Karon and VandenBos 2004). A practitioner of cognitive-behavioral therapy of psychosis (CBTp) would assume that David's distress is mediated by his delusional beliefs about his psychotic experiences (Beck et al. 2009; Wykes et al. 2008). In an integrated, two-step approach to the psychotherapy of psychosis that combines CBTp and PDTp (Garrett and Turkington 2011), CBTp techniques can be used first to help the patient challenge his delusions, after which PDTp can be used to elucidate their psychological meaning. CBTp can help establish the literal falsity of delusional beliefs, allowing the patient to then consider the emotional truth contained in the psychotic symptom and to come to an alternative psychodynamic explanation of the psychotic experience. David's psychotic symptoms include auditory hallucinations ("voice"), puzzling "jerky" movements, the delusions that he has a bad smell and that the interviewer can read his mind, and a thought disorder.

Judging from the derogatory "voice" and David's delusion that he has an ear infection that makes him stink, his therapist can assume that David has very low self-esteem. The therapist would aim to understand over the course of therapy how David's intensely negative view of himself has come about. Immigration predisposes to psychosis. Even though David had been in the United States for 10 years before becoming psychotic, the facts that he has been held back a year in school for "language difficulties" and is a 17-year-old in ninth grade suggest difficulties with age-appropriate social competencies in school and with peers. In psychological terms, David's self-criticism and poor self-esteem have been projected outside the boundary of the self into the accusatory "voice" of Brian.

The therapist might first use CBTp techniques to help David question his delusional beliefs about the "voices." The therapist might "normalize" the "voice" hearing experience by relating it to ordinary mental life. David's hearing Brian's "voice" can be seen as a distressing variant of the ordinary neuropsychological mechanism of inner speech that all human beings possess, which allows an internal dialogue between one part of the mind and another. For example, in a moment of embarrassment, we might say to ourselves, "You idiot!" We issue ourselves evaluatives and directives, and "voices" do the same. David's "voice" of Brian appears to be primarily of the evaluative type, calling him names and telling him he smells. The therapist might share a personal example in which the therapist experienced a hallucination of everyday life (e.g., hearing someone on the street call the therapist's name, but no one is there). The therapist might ask when the "voice" tends to appear and whether David has developed any coping mechanisms to diminish the impact of the "voice." This ap-

proach aims to establish that the “voice” is not an independent actor, but that its activity is contingent on the patient’s state of mind—that is, related in some way to the patient’s thoughts and feelings. The therapist might build on David’s puzzlement that others do not hear Brian’s “voice” as a way of questioning David’s beliefs.

Some of the distress that psychotic individuals experience comes from their belief that the “voices” are omniscient and omnipotent and outside their control. By using CBTp techniques, the therapist might help David doubt the power and independent identity of the “voice,” thereby mitigating its negative emotional impact on his self-esteem, which in turn would open the possibility using PDTp techniques to talk with him about how his negative self-image arose from his real social interactions with people, leading to his psychotic symptoms. In PDTp the therapist would try to translate the concrete metaphor that forms the basis of David’s delusion into more ordinary communication with David about his life, thoughts, and feelings.

The therapist would assume that David’s jerky movements are nonverbal expressions of something meaningful. To discover their meaning, the therapist would want to know David’s and his family members’ associations to the movements: What comes to their minds when they think about these movements? The fact that the family is more concerned about the jerky movements than about the “voices” suggests that the movements may have a particular expressive meaning within the family. The family’s apparent support for David’s initially discontinuing treatment would be an important variable for the clinician to understand.

David improved when taking risperidone. Medication can reduce agitation and restore the boundary between thoughts, feelings, and perceptions, leading to clinical improvement. Although programs such as Open Dialogues aim to minimize the use of neuroleptics, no mental health system has yet developed an approach to psychosis that never requires medication. However, given the long-term side effects of neuroleptics, clinicians should strive to reduce overall neuroleptic exposure (Ho et al. 2011). Psychotherapy might help avoid upward dosage creep and polypharmacy, and under optimal conditions, it might support a patient’s wish to taper and stop medication, an achievable outcome in some cases.

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## Psychopharmacologic Perspective

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### Diagnostic Formulation

David’s presentation is not uncommon on an inpatient adolescent psychiatric unit. Approximately 10%–15% of people with a primary thought disorder will experience their first

episode of the illness before age 18 (Schultze-Lutter et al. 2015). Whenever a young person presents for psychiatric care with a first episode of psychosis, medical conditions potentially causing or worsening psychotic symptoms must be identified and addressed. In David's case, especially given the history of abnormal movements, special consideration should be given to Wilson's and Huntington's diseases, both medical conditions that typically emerge in adolescence and involve abnormal involuntary movements and psychosis. A serum ceruloplasmin can screen for Wilson's disease. Huntington's disease is unlikely considering the lack of family history. Given that the neuroimaging and EEG were negative, a new-onset seizure disorder is unlikely. Abnormal involuntary movements are not uncommon in patients with psychotic symptoms, and they may serve as a risk biomarker for developing psychosis (Mittal et al. 2008). After medical causes are ruled out, the differential moves to the family of psychotic disorders in DSM-5 (American Psychiatric Association 2013).

The proximity of David's symptom onset to his synthetic marijuana use prompts the consideration of a substance-induced psychosis. However, in David's case, this diagnosis is ruled out because of the length of time between his last use of the substance (2 months ago) and his currently active psychosis (Criterion C for substance-induced psychotic disorder in DSM-5). Youth who present for care of psychosis after using illicit substances containing tetrahydrocannabinol (THC) are at a significant risk for developing a primary thought disorder. THC is a dose-dependent risk factor that, when added to genetic predisposition or other risk factors, can contribute to hastening the onset of an individual's first episode of psychosis. Ongoing use after the onset of psychosis has been shown to worsen the illness itself, resulting in treatment resistance and greater loss of function. Unfortunately, both early onset and treatment resistance are predictive factors for poor long-term outcome for patients with psychotic disorders. Patients with first-episode psychosis and their families need to be educated that sobriety from illicit substances is imperative to obtaining sustained symptom relief (Goerke and Kumra 2013).

David currently meets DSM-5 criteria for schizophreniform disorder. He has experienced delusions and hallucinations for a significant portion of time for greater than 1 month but less than the 6-month requirement for a schizophrenia diagnosis. Diagnoses of schizoaffective disorder and mood disorder with psychotic features are less likely given the lack of mood symptoms observed by his family. The specifier "with good prognostic features" would be appropriate considering the sudden onset, David's excellent premorbid social and occupational functioning, and his minimal affective blunting and flattening.

## DSM-5 Diagnosis

### ■ F20.81 Schizophreniform disorder

## Treatment Recommendations

Psychoeducation and treatment engagement for the patient and family are paramount to successful recovery from a first episode of psychosis. Dopamine antagonists remain the cor-

nerstone of positive symptom resolution; however, a comprehensive approach to the young person with psychosis is essential. Family involvement is necessary for treatment adherence because of the cognitive deficits that accompany this illness and the subsequent difficulties in executive functioning. Youth with psychoses typically lack insight and often fail to see the need to take medication, especially once symptoms improve. Family education and support are crucial to ensure treatment compliance, prevent relapse, and prevent caregiver burnout.

Second-generation (atypical) antipsychotics are the first-line choice for medication management of psychosis in youth. Studies have consistently shown that the risk for extrapyramidal side effects (EPS) from antipsychotic medications are greater in adolescents than adults. There may be greater risk for EPS in certain racial or ethnic groups (Tenback et al. 2015); because David is African American, his clinician should be particularly watchful for EPS. Risperidone, an atypical agent, was an appropriate initial choice, and David responded well to this medication. Low doses can often be effective for those experiencing a first episode (McGorry et al. 2013), and they reduce the risk of side effects, such as fatigue, weight gain, and EPS, that contribute to discontinuation. Quetiapine is another atypical antipsychotic agent that could be considered given its low propensity for EPS; however, higher doses of this medication are often required to control positive symptoms and may result in significant fatigue and weight gain. Because of olanzapine's propensity for metabolic side effects, current guidelines recommend reserving it for those patients who do not respond to a first-line atypical antipsychotic medication (Yeisen et al. 2015). Clozapine should be used for patients who do not experience resolution of symptoms after two adequate trials of atypical antipsychotics (Kumra et al. 2008). Long-acting injectable atypical antipsychotic medications may be considered and offered to patients and families as a tool to improve adherence (McClellan and Stock 2013).

Unfortunately, atypical antipsychotics do not ameliorate the negative and cognitive symptoms of psychosis. Adjunctive treatments are being explored. Medications that reduce inflammation are being studied. Omega-3 fatty acids, in particular eicosapentaenoic acid, have resulted in symptom reduction when used in conjunction with antipsychotic medication for psychosis. Nonsteroidal anti-inflammatories, the antibiotic minocycline, and other glutamatergic agents also show promise (Keller et al. 2013). Vitamin D deficiency has been correlated with severity of psychosis, and therefore supplementation should be considered (Yüksel et al. 2014). Regular exercise and a healthy diet are beneficial to maintaining overall mental health and minimizing weight gain experienced when being treated with antipsychotic medication (Curtis et al. 2015).

David's case highlights the need to educate young people presenting with new-onset substance-induced psychosis about the risk for relapse if medications are prematurely discontinued. Current guidelines indicate that individuals being treated for first-episode psychosis should continue taking antipsychotic medication for at least 12 months (McGorry et al. 2013). After that time, if symptom resolution persists, a slow wean can be initiated. However, given the high risk of relapse in this population, the patient and family should be educated on the risks and benefits of discontinuing medication. If medication is weaned, the

patient should remain in close contact with a mental health provider because of this high risk of relapse. Ongoing engagement in mental health care by the patient and caregivers is the best predictor of sustained recovery. This ongoing relationship will promote sustained sobriety and will prevent relapse of psychosis, both of which are key in improved functional outcomes for patients with psychosis (Hughes et al. 2014).

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# CHAPTER 9

## She Just Won't Eat a Thing

### Anorexia Nervosa

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#### Case Presentation

##### Identifying Information

Caroline is a 16-year-old high school junior living with her mother.

##### Chief Complaint

Caroline presented for outpatient treatment after a 1-week medical hospitalization. She was brought to the hospital because, according to her mother, “It has gone too far; she just won’t eat a thing.”

##### History of Present Illness

Caroline has a history of dieting and exercising excessively since she was age 13 years. With the help of a nutritionist, she maintained a stable but low weight until this past winter, when she entered a national karate tournament. To prepare, Caroline began to engage in “respectable workouts,” including hundreds of push-ups and hours of aerobic exercises. She restricted her food intake “to be a better competitor and to feel better about myself,” and lied to her mother and nutritionist about what she was eating.

Caroline thought her weight loss “didn’t show” because of water retention. She became more rigid about her food intake, eating no more than 600 kcal/day. Her eating habits became ritualized; she cut her food into very small pieces, moved them around on her plate, and chewed each bite 20 times before swallowing.

Over the past 6 months, Caroline has had intermittent low-mood states, reporting that “some days I feel numb.” Other symptoms include fatigue, occasional dizziness on standing, trouble concentrating in class, decreased interest in activities, a tendency to isolate from others, disrupted sleep (awakening three or four times per night), anxiety, and feelings of guilt (“whenever I eat”). For 2 months, she “just didn’t want to wake up in the morning,” but she denied ever planning to hurt herself. She also endorsed recent onset of symptoms such as the need to wash her hands for a full 10 minutes after eating and the need to re-color coordinate her closet multiple times a week.

## Hospital Course

Caroline was admitted to the adolescent medicine service of her local general hospital because of her low weight (86 lbs at 5’4”, body mass index [BMI] = 14.8 kg/m<sup>2</sup>), medical complications, and rapid worsening of symptoms.

An initial medical evaluation revealed that Caroline had significant orthostatic hypotension and low serum levels of potassium and sodium. No other medical complications of anorexia nervosa (AN) were detected, and there was no indication of other significant medical illnesses that might be contributing to her weight loss (Walsh and Attia 2011). Caroline was given intravenous fluids for 24 hours to assist rehydration and to correct the electrolyte disturbances. She was given a standard hospital diet containing 1,800 kcal, to which she objected strenuously, feeling that any more than 1,000 kcal/day would be far too much. The medical and nursing staff assured Caroline that this diet was absolutely required to assure her physical stability and made it clear that she would not be able to leave the hospital until she was able to consume the prescribed diet.

Caroline and her parents met with a child and adolescent psychiatrist with expertise in eating disorders who would treat her after discharge. The psychiatrist emphasized to Caroline and her family that Caroline had a very serious disorder that sometimes results in death (Franko et al. 2013). The physician explained that the illness should be treated aggressively and reviewed a range of options with the family. Caroline remained in the hospital for 1 week, during which her electrolyte levels normalized and her symptoms of orthostatic hypotension abated. She gained 4 lbs while hospitalized and was discharged at 90 lbs.

## Past Psychiatry History

Caroline reported that her struggle with food, body image, and weight began around age 12, during the decline of her parents’ marriage, a time of much “yelling and silence.” Her father was always angry, and her mother was often sad. She noticed a decline in her mother’s appetite, especially during family dinners, and “in support” of her mother, Caroline also began eating less during meals. However, at night she would sneak junk food into her room “as a comfort thing.” She gained about 12 lbs that year and reached her current height and highest lifetime weight, 136 lbs.

The summer after her 13th birthday, Caroline’s parents divorced and she was “forced” to move to another town with her mother. On starting her new school, Caroline felt pressure to make new friends and maintain her status as an athlete. She decided to eat “healthy” and

“push myself to the limit in sports.” Four months into the new school year, Caroline had become the only eighth grader to make varsity soccer, was training for her black belt in karate, was maintaining straight As, and lost 16 pounds to a weight of 120 lbs. She was proud of losing “what my mom called ‘my baby fat’” and enjoyed the positive attention she received from her peers. Caroline continued to “cut out nonessential food groups” and tried to eliminate “all body fat” through exercising. By the end of the school year, she had achieved her goal weight of 115 lbs but felt that she could stand to lose “just a little” more. A typical day would include three fruits, 4 oz of juice, one-half cup of cereal with skim milk, a plate of lettuce, and “maybe” one slice of bread. Whenever she felt that she had eaten too much, she made herself vomit. She recalls feeling guilty and ashamed after purging but less so than after digesting a full meal.

Around this time, friends began to express concern, but Caroline was certain she did not have a problem and believed they were jealous. At 102 lbs, she stopped menstruating but rationalized that “that happens to many athletes.” Her mother became concerned and threatened to send Caroline “to a shrink.” Caroline increased her food intake slightly and gained 3 lbs. On her pediatrician’s recommendation, she started to see a nutritionist, who helped her maintain 105 lbs until the middle of her junior year.

## Relevant Medical History

Menarche occurred at age 12. The patient was amenorrheic for 5 months at age 14 and has not menstruated in the past 6 months. At a recent emergency room visit, she had a low pulse (35 beats/minute) and abnormal electrolyte levels. The patient has also noted that her hair has begun falling out.

## Developmental History

Caroline was on target for meeting developmental milestones.

## Social History

Caroline is an only child whose parents divorced when she was age 13. She lives with her mother, an attorney, and sees her father, a stockbroker, once a month. Her father remarried last year, around the time of her relapse. He is now an avid marathon runner.

Caroline is a junior in high school and an A student in honors classes. She is a star athlete (currently suspended from participation) at school. She is well regarded by her peers but feels that she has not developed a close circle of friends since changing schools at age 13.

## Family History

Caroline’s mother believes that she was depressed when living with her ex-husband but was never treated. She contends that she has never been critical of her daughter’s figure but is obsessed with maintaining a size zero herself. She reports, “I am a vegetarian and don’t eat large quantities of food.” Caroline’s father is recovering from alcoholism and has been sober for 3 years.

## Mental Status Examination

At 5'4" and 90 lbs, Caroline is a markedly thin young woman despite wearing numerous layers of sweaters. Initially, Caroline reported no distress about her current weight and said she had agreed to hospitalization only to appease her mother. She explained that everyone is overreacting and pinched the skin on her abdomen in an attempt to show how "fat" her stomach was. The patient defended her medical status, saying that her current eating and exercise regimen is "healthy" and that she has "not made [herself] sick" in more than 2 years.

Initially, Caroline denied anxiety or depression. She stated that she is troubled by food-focused thoughts, constant distraction, and exhaustion, but that she gains weight more rapidly than others do and is terrified of reaching "triple digits." The patient believes she can best recover at her own pace and feels that 99 lbs is a good goal weight. There was no evidence of thought disorder, and apart from distortions in her body image and attitudes about eating, health, and weight, her overall judgment and insight appeared intact.

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# Psychotherapeutic Perspective

Daniel Le Grange, Ph.D.

## Diagnostic Formulation

Caroline is a 16-year-old high school junior, a straight-A student, presenting with a 4-year history of food, shape, and weight concerns. Menarche occurred at age 12, when Caroline weighed 136 lbs and reached her full height of 5'4" (BMI=23.3, just below the 90th percentile for age and sex). At presentation, she weighed 90 lbs (BMI=15.4, <5th percentile for age and sex) and had secondary amenorrhea. Caroline has a history of exercising excessively; although she is a good athlete at school, she also engages in intense workouts at home. She has a history of at least one recent visit to an emergency room, where she presented with a low pulse (30–40 beats/minute) and abnormal electrolytes, and in the past month, she was admitted for 1 week to a specialized inpatient eating disorders unit after eating <600 kcal/day and weighing 86 lbs. At this admission, Caroline presented with significant orthostatic hypotension and low serum levels of potassium and sodium but no indication of any other significant medical illness. She was discharged once medically stable and having gained 4 lbs on a daily intake of 1,800 kcal.

Caroline denied purging in the past 2 years, although she endorsed past subjective binge-eating episodes followed by self-induced vomiting. The frequency of these episodes

could not be established. At present, she demonstrated marked fear of certain foods and weight gain. She also reported eating rituals but no other ritualistic behaviors. Caroline showed little appreciation of the severity of her medical status. However, she acknowledged that constant food-focused thoughts are distracting. She stated that her ideal weight is 99 lbs. Caroline endorsed intermittent low mood over the past 6 months, complaining of fatigue, poor concentration in class, decreased interest in activities, social isolation, and disrupted sleep (frequent awakening after falling asleep). In addition, she reported not wanting to wake up in the morning but did not endorse any suicidal ideation.

Caroline's mother endorsed some eating disorder symptoms, and her dad is recovering from alcoholism. Caroline described her parents as having had marital difficulties around the time that her eating difficulties began. Her parents divorced soon after Caroline turned 13, at which time she and her mother moved to another town. Caroline does not have a close circle of friends in her new school, even though this move was more than 3 years ago. Her latest relapse in eating disorder symptoms coincided with her father's remarrying. Caroline visits with her father once per month, but the degree to which he is involved in her current treatment (outpatient clinician and nutritionist) is unknown. The case presentation does not report whether Caroline is taking any psychotropic medicines at this time.

Caroline meets DSM-5 (American Psychiatric Association 2013) criteria for AN: not maintaining weight at or above a minimally normal weight for age and gender, fear of gaining weight or becoming fat, and a disturbance in the way one experiences one's body weight or shape. Caroline has the restricting type of AN, as opposed to the binge-eating/purging type, because there is no evidence of regular objective binge-eating episodes or purging behavior during the current episode. However, both abnormal electrolytes and a history of excessive exercise should allow the clinician to revise the current subtyping. Caroline also has secondary amenorrhea, which is commonly associated with AN, although it is not required for DSM-5 diagnosis. She endorses several symptoms in keeping with a diagnosis of a depressive disorder, as well as some significant obsessive-compulsive behaviors; these disorders frequently co-occur with AN. Further inquiry should allow the clinician to rule out whether either of these disorders is a primary diagnosis.

## DSM-5 Diagnosis

- F50.01 Anorexia nervosa, restricting type
- Rule out depressive disorder
- Rule out obsessive-compulsive disorder

## Treatment Recommendations

The ideal treatment team for adolescent AN would comprise the following: a therapist (psychologist, child and adolescent psychiatrist, or other mental health professional) to conduct family-based treatment (FBT; Lock and Le Grange 2013), a child and adolescent

psychiatrist to rule out any comorbid disorders, and a pediatrician to monitor a patient's medical status. The team is most effective if all members are part of a dedicated eating disorders service and participate in weekly case reviews. The therapist will record the patient's weight at the outset of each meeting, which sets the tone for each session, whereas the pediatrician will monitor medical stability at each visit.

FBT should be adjusted to accommodate the facts that Caroline 1) is an only child and 2) lives essentially in a single-parent family. The therapist should consider whether and how the father and his spouse might be involved in treatment. This involvement will depend on 1) the amicability of the parents' divorce, 2) the nature of Caroline's relationship with her father and his spouse, and 3) the distance involved. The therapist's initial recommendations are for parental supervision of all meals and for the patient to remain home for about 2 weeks. Involving the mother's parents in these tasks, if possible, should be considered. Given indications of the mother's concerns with her own weight, the therapist should assess the extent to which this is an issue and address it from the outset.

FBT has been shown to be the most promising therapy for adolescents with AN. Several randomized controlled trials (RCTs) have demonstrated that parents are a resource in restoring their adolescent's weight and supporting a return to healthy adolescent development (e.g., Eisler et al. 2007; Le Grange et al. 2014; Lock et al. 2010; Robin et al. 1999; Russell et al. 1987). FBT is conducted in an outpatient setting, is theoretically agnostic, and makes no assumptions about the etiology of the eating disorder. Instead, it attempts to capitalize on the strengths that parents bring to the recovery of their offspring. Interventions focus initially on weight restoration before turning to psychosocial or developmental concerns. FBT has been manualized and consists of three clearly demarcated phases (Lock and Le Grange 2013).

## Phase 1: Parental Control of Weight Restoration

During phase 1 (sessions 1–10), the therapist focuses on the dangers of severe malnutrition associated with AN and emphasizes the need for parents to take immediate action to reverse this process. The therapist carefully reviews the development of the eating disorder while highlighting the devastating effects on the patient's medical and psychological well-being. The therapist stresses these concerns to support the development of a parental alliance around the goal of weight restoration. To avoid counterproductive adolescent-parent power struggles over eating, the parent is advised to refrain from engaging in *any* discussions about eating while showing sympathy for the adolescent's struggle. Throughout this phase, the therapist continues to carefully review with the parents the weekly efforts around helping their daughter gain weight while showing the patient support and understanding for her struggle around this issue.

## Phase 2: Returning Control Over Eating Back to the Adolescent

The therapist transitions to phase 2 (sessions 11–16) after 1) the patient clearly accepts her parents' expectations for adequate food intake and 2) steady weight gain is evident. The par-

ents are encouraged to help their child take more control over eating once the patient and parents demonstrate less anxiety around mealtimes and regarding the goal of weight gain. Also during this stage of treatment, the parents are asked to begin to encourage their daughter to engage in other adolescent activities, such as socializing with friends. Before the patient participates in other activities, the parents must feel reassured that these would not provide opportunities for exercising or skipping a meal.

### **Phase 3: Adolescent Development and Treatment Termination**

When the patient is maintaining a healthy weight on her own, the treatment focus shifts away from the eating disorder. During phase 3 (sessions 17–20), the therapist examines the impact that AN has had on establishing a healthy adolescent identity, considering that the patient's development might have been severely interrupted by the eating disorder, and reviews the normal stages of adolescent development.

Involving divorced parents or assisting single parents in FBT is outlined in detail in the treatment manual (Lock and Le Grange 2013). Should FBT not be effective with a specific family, the only other psychotherapy that is supported by research evidence is adolescent-focused therapy (Le Grange et al. 2014; Lock et al. 2010).

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## **Psychopharmacologic Perspective**

Angela S. Guarda, M.D.

Weronika Gondek, M.D., FAPA

### **Diagnostic Formulation**

Caroline is a 16-year-old girl who presents with a BMI of 15.4 and AN of the binge-eating/purging type. Her eating disorder behaviors include restricting food intake, exercising excessively, and self-induced vomiting. She exhibits marked body image disturbance and fear of fatness despite low weight. Additional symptoms include amenorrhea, bradycardia, orthostatic dizziness suggestive of dehydration, and worsening depressive and obsessional



symptomatology. Premorbid history is significant for perfectionism and high academic achievement. Family history is notable for depression, dieting, and weight concern in her mother and driven exercise behavior in her father. Life stressors include parental divorce and her father's remarriage, a move, and adjustment to a new school.

AN is a driven behavioral syndrome characterized by dieting to the point of starvation in the context of an increasingly overvalued fear of fatness. As it progresses, preoccupation with food and weight escalates into a consuming passion, accompanied by a narrowing and stereotyping of behaviors. Excessive time is spent engaging in ritualized eating and exercise, and social isolation and avoidance of social eating increase. Poor insight, rationalization, and lying to disguise anorectic behaviors are typical. Patients are ambivalent about recovery and repeatedly subvert attempts by others to encourage weight gain (Guarda 2008). All these characteristics are evident with Caroline.

Predisposing risk factors are both genetic and environmental. Perfectionistic, obsessional traits are overrepresented in at-risk families, and patients with AN are often academic and athletic overachievers. Onset is usually in adolescence, and the disorder exhibits a marked female predominance. Family stressors, involvement in competitive sports, and positive feedback for her initial weight loss may have escalated Caroline's behavior. Self-starvation is accompanied by physiological and psychological complications, including delayed gastrointestinal transit times and increased depressive and obsessional symptoms that further sustain disordered behavior and cognitions. Episodic binge eating can emerge as a consequence of starvation, and purging behaviors such as Caroline's self-induced vomiting can result in potentially life-threatening electrolyte imbalances. Although she denies recent vomiting, Caroline's hypokalemia suggests otherwise.

Frequent comorbid psychiatric conditions include depression and anxiety disorders. Starvation can cause a syndrome identical to major depression, complicating determination of whether Caroline's worsening depression is truly comorbid or is secondary to her starved state. If her mood normalizes with weight gain, this would support the diagnosis of unspecified depressive disorder rather than major depression.

The diagnosis of AN is made on clinical grounds. Exhaustive medical workups to rule out other etiologies of weight loss is not indicated when criteria are met, unless there is suspicion for a medical differential diagnosis.

## DSM-5 Diagnosis

- F50.02 Anorexia nervosa, binge-eating/purging type, severe
- F32.9 Unspecified depressive disorder (likely secondary to starvation)
- Rule out perfectionistic and obsessional personality traits
- Malnutrition, secondary amenorrhea, orthostatic hypotension, dehydration, hypokalemia, hyponatremia

DSM-5 criteria remain similar to DSM-IV-TR criteria (American Psychiatric Association 2000) with a few notable changes. The diagnosis has been broadened to include in-

dividuals previously characterized under the heterogeneous DSM-IV-TR category of eating disorder not otherwise specified.

The first criterion (low body weight) should be examined in the context of age, sex, developmental trajectory, and overall physical health and was reworded in DSM-5 to emphasize “significantly low weight” rather than “less than 85%” of expected weight. DSM-5 offers additional level-of-illness severity criteria based on BMIs for adults or on BMI percentiles for children and adolescents. Level of severity may be increased to reflect clinical symptoms, degree of functional disability, and need for supervision (Call et al. 2013).

The second criterion was expanded to include either expressed fear of weight gain or persistent behavior that interferes with weight gain. This change is helpful in identifying individuals who deny a fear of fatness although they exhibit morbid eating restraint.

The final DSM-5 modification involves elimination of the amenorrhea criterion because research suggests that it is not a good marker of illness severity and has little prognostic value (Attia et al. 2013).

Because denial of illness and minimization of symptoms are typical, collateral information from family members regarding a patient’s eating, exercise, and preoccupation with weight and shape is helpful in distinguishing AN from other psychiatric conditions that may cause weight loss (e.g., anorexia of depression and anxiety disorders). Most patients with AN endorse a desired weight in the anorectic range ( $BMI < 18$ ). A simple, practical five-question screening tool, similar to the CAGE for alcohol abuse, is the SCOFF questionnaire (Morgan et al. 1999).

## Treatment Recommendations

The treatment of adolescents with AN is primarily behavioral rather than pharmacologic (Guarda 2008). No medication has significant impacts on weight, behavioral, or psychological aspects of the disorder enough to support its recommendation in children. Behavioral treatment has two phases: weight restoration and relapse prevention. The initial focus is on blocking eating disordered behaviors, normalizing food intake, and restoring weight. Following weight restoration, interventions should target relapse prevention. As in other behavioral conditions (e.g., substance abuse), relapse is common, but long-term prognosis for most adolescents is good with specialty treatment.

Research suggests that for adolescents with AN, family therapy is superior to individual therapy. Family therapy focuses on assisting parents to feed their child by appropriately enforcing consequences and rewards on the basis of the child’s eating and exercise behavior rather than focusing on interpreting the behavior or searching for “root causes.” Medical instability (e.g., serious or repeated electrolyte imbalances, syncope, seizures, severe bradycardia) or failure to gain weight is reason for inpatient hospitalization, preferably in a behavioral specialty program for eating disorders. Such programs are able to restore weight for the majority of patients, using behavioral and group therapy approaches and oral nutrition.

Pharmacologic treatment for AN has proven challenging, with no consistent empirical evidence supporting the efficacy of medications in promoting weight gain, targeting

eating disordered cognitions, or improving depressive or obsessional symptoms (Hay and Claudino 2012). Few RCTs of medication interventions have been performed in children. Controlled studies in adults have more commonly addressed the effect of medication on weight restoration than on relapse prevention. Additionally, the high lethality and ego-syntonic nature of AN present ethical and methodological challenges to RCT designs and hamper subject recruitment, randomization, and adherence (Guarda 2008). RCTs have studied medications used to treat comorbid anxiety or depression, to address rigid or idiosyncratic thought content in other disorders, and to affect weight or appetite. Early antidepressant studies focused on tricyclic antidepressants (TCAs), but TCAs are rarely used now and are not recommended in children because of cardiac risks. Selective serotonin reuptake inhibitors (SSRIs) are of interest in AN because dietary restriction decreases tryptophan availability and brain serotonin levels, which may contribute to the hyperactivity, obsessional, and depressive symptomatology that accompanies starvation. Although SSRIs are often used clinically, results of the best-designed RCTs of SSRIs have been disappointing. The most extensively studied SSRI is fluoxetine, but both in the acute underweight and in the relapse prevention phases of treatment, results are inconclusive, with no clear effect on psychological outcome or weight gain (Sebaaly et al. 2013). Although Caroline presents with depressive symptomatology, treatment with an antidepressant while still underweight is unlikely to improve her prognosis. If her mood remains low once her weight is normalized, most experts would agree that a trial of an antidepressant is warranted and may have an impact on comorbid anxiety or depressive symptomatology even though the data do not yet clearly support this.

Additional negative trials in patients with active AN who are underweight include a pilot RCT of alprazolam for meal-related anxiety (Steinglass et al. 2014) and small RCTs of cyproheptadine, zinc, lithium, tetrahydrocannabinol, naltrexone, cisapride, and recombinant growth hormone. Interest has focused on the atypical neuroleptics to augment weight gain because overvalued fear of fatness can reach near-delusional proportions. Initial case reports and a couple of small RCTs indicated favorable responses to these agents (Flament et al. 2012); however, two recent meta-analyses concluded that they had at best a marginal effect of limited clinical significance (de Vos et al. 2014; Kishi et al. 2012). A large five-center randomized outpatient placebo-controlled trial of olanzapine in adults with AN is under way and will hopefully provide more definitive conclusions. At this time use of neuroleptics in adolescent AN cannot be recommended given their side effect profile, including the risk of metabolic complications.

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# CHAPTER 10

## I Just Can't Stop

### Tourette's Disorder

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Bradley S. Peterson, M.D.

#### Case Presentation

##### Identifying Information

Justin is an 11-year-old boy who lives with his parents and his 13-year-old sister. He is in a regular sixth-grade class at the local public school.

##### Chief Complaint

Justin was referred by his pediatrician for a psychiatric consultation because of repetitive behaviors and emotional distress. At the first consultation session, only Justin's parents met with the child psychiatrist, and the parents sat far apart on the couch. The tension between them was immediately evident, and their manner of interacting was a forced cordiality. They described their concerns, with Justin's mother doing most of the talking.

##### History of Present Illness

Justin's mother explained that when Justin was 6 years old, he started blinking more forcefully and frequently than usual. It was spring, and his parents thought he was having seasonal allergies. They gave him a nonprescription allergy medication, and the exaggerated blinking improved over the next several weeks. When it returned a few months later, however, they took him to see his pediatrician, who referred him to an ophthalmologist. The ophthalmologist thought Justin might have mild blepharitis and treated him with a lubricant and an antibiotic cream. The blinking improved for a couple of months but then worsened again. Several months later, Justin also developed frequent sniffing, followed by repetitive nose wrinkling, mouth stretching, and throat clearing. His parents took him back

to his pediatrician, who performed a complete physical examination, including a detailed neurological examination. The results were normal, other than the repetitive behaviors themselves, and the pediatrician reassured the family that Justin just had some “nervous twitches” and would outgrow them.

Over the past 5 years, however, Justin's repetitive behaviors have become more numerous, frequent, and forceful. Additional behaviors have included snorting, head shaking, shoulder shrugging, and finger snapping. These behaviors usually do not interfere directly with his activities, except they slow him down when he is doing schoolwork. For example, when he reads he may lose his place because of his head shaking, and his writing is interrupted by the urge to put down his pencil and snap his fingers. Justin is often unaware that he is making the movements or noises, but sometimes he feels them coming on and can suppress them temporarily. He has also become increasingly self-conscious about them, and although he has many friends at school, a couple of boys have started to make fun of him. They imitate his blinking and call him “bobblehead” and “Miss Piggy” in reference to his head shaking and snorting.

Recently, Justin came home from school in tears. His movements and noises had been worsening over the previous few months, and they were particularly severe that day. When his mother asked him what was wrong, he shouted, “I just can't stop! I wish I was never born!” The next morning his mother called the pediatrician, who saw him later that week and recommended a referral to a child psychiatrist.

The psychiatrist asked Justin's parents if anything else might be upsetting Justin. A long pause ensued before Justin's father finally said, “Things haven't been so good between my wife and me lately.” Several months earlier, Justin's mother learned that her husband was having an affair. They have tried not to argue in front of their children, but they know the children sense that something is wrong.

When asked about Justin's schoolwork, his parents said that he has been struggling. In the past he was generally a B student, but this year he has been getting more Cs and some Ds. His teacher has commented that he often does not listen in class, and his parents find that he needs close supervision to complete his homework. He does not have trouble staying seated in a restaurant or movie theater, but he frequently gets up from doing homework to go to the bathroom or get a snack. He fidgets sometimes but is not overactive. Reading is especially challenging for him, and he often has to reread a sentence a few times to make sure he understands it.

Justin's parents did not think he had any obsessive-compulsive symptoms, but when Justin himself was interviewed in the second consultation session, he revealed that he has several. For example, when he is walking and turns one way, he feels the need to turn the opposite way “to make it even.” He often reties his shoelaces several times so that the level of tightness feels “just right,” and he adjusts his socks repeatedly so that they come up to the same level on his calf. He also has an intrusive thought that his parents will be killed in a car accident.

Neither Justin nor his parents expressed any other major concerns. His parents have found him to be somewhat more withdrawn over the past few months, but his eating and

sleeping habits are good, and he still enjoys a variety of activities, including ice hockey, karate, and playing video games. Other than that day when he came home from school in tears, he has not voiced thoughts of not wanting to live. He can be a bit of a worrier and needs some extra preparation to manage transitions, but he responds well to reassurance. He does not tend to be oppositional or defiant and has no history of aggression or conduct problems. He has not been exposed to alcohol or drugs and has no history of trauma. He has no history of manic or psychotic symptoms.

## **Medical History**

Justin's physical health has generally been good. Between ages 7 and 10, he had a few episodes of strep throat (confirmed by culture) and was treated each time with antibiotics. His parents do not think his repetitive behaviors were particularly worse around the time of those episodes. He also has mild asthma, for which he occasionally uses an inhaler, but otherwise he takes no medications.

## **Developmental History**

The pregnancy with Justin was uncomplicated, but the labor was prolonged, and forceps were required. On delivery, Justin had some difficulty breathing and was monitored in the neonatal nursery for a couple of days before being discharged home with his parents. He was an "awesome" baby who interacted appropriately and fed and slept well. His language and gross motor development have been normal, but he has some trouble with fine motor skills, and his parents described his handwriting as "atrocious."

## **Social History**

Justin's parents have been married for almost 16 years. His father works for an insurance company, and his mother is a teacher. They were "college sweethearts" and married shortly after graduation, but over the years they have drifted apart emotionally, and since Justin's mother discovered the affair, they have been discussing separation. Justin's sister is described as an "overachiever" and a "hard act to follow" for Justin; she is a straight-A student, excels at sports, and is popular with her classmates. Justin is described as "less intense" than his sister and "a little sensitive," but until his tics became much worse a few months ago, he was doing reasonably well socially and academically. He makes friends easily, and his friends' parents have often commented on how polite and well behaved he is when he visits.

## **Family History**

Justin's parents initially denied any family history of psychiatric illness. On further inquiry, however, Justin's father reported that he has a long-standing facial twitch that used to be more severe, as well as several "habits" such as blowing on his fingers, biting his lips, and cracking his knuckles. In addition, Justin's mother described herself as an "anxious person" and a "perfectionist," and she has a number of counting rituals and checking behaviors.



## Mental Status Examination

On mental status examination, Justin was shy but cooperative. Although he exhibited frequent blinking and head shaking, as well as occasional throat clearing and snorting, he was not generally restless or fidgety. His affect was initially anxious and constricted, but he became more relaxed and expressive as the interview progressed, smiling and laughing at appropriate moments. He described his mood as usually “normal,” except he feels “sad” when classmates tease him. Sometimes his repetitive behaviors bother him so much that he wishes he were dead, but he has never thought seriously about killing himself. His thought content was notable for themes of low self-esteem; he feels that he is “weird” and “bad at school.” He also endorsed some obsessive-compulsive symptoms, as described previously.

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# Psychotherapeutic Perspective

Douglas W. Woods, Ph.D.  
Christine A. Conelea, Ph.D.

## Diagnostic Formulation

Justin's symptom presentation is consistent with a diagnosis of Tourette's disorder, which is characterized by the presence of multiple motor and one or more vocal tics for at least 1 year. Because of elevated comorbidity rates found in those with Tourette's disorder, additional diagnostic work should be done to assess and differentially diagnose attention-deficit/hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD), and major depression.

Justin meets DSM-5 criteria (American Psychiatric Association 2013) for Tourette's disorder given his multiple motor tics (i.e., blinking, mouth stretching, head shaking, shoulder shrugging, and finger snapping) and vocal tics (i.e., sniffing, throat clearing, and snorting), at least some of which have persisted for more than 1 year since onset. Justin's presentation is characteristic of Tourette's disorder, with an onset between ages 4 and 6, a changing tic repertoire, and symptom worsening through pre- to mid-adolescence (Leckman et al. 1999). Justin also describes a *premonitory urge*, which is an unpleasant feeling or sensation preceding a tic that frequently occurs in those with Tourette's disorder. The Yale

Global Tic Severity Scale (Leckman et al. 1989) and the Premonitory Urge for Tics Scale (Woods et al. 2005) would be useful for assessing the severity of Justin's Tourette's disorder and premonitory urge, respectively.

Various factors may have contributed to the onset or maintenance of Justin's Tourette's disorder. Suggestive of a strong genetic component, Justin's father appears to have an undiagnosed tic disorder, and his mother may have OCD (for a review, see Deng et al. 2012). Given the lack of documented temporal correspondence between the repeated strep infections and tic onset or exacerbation, a diagnosis of pediatric autoimmune neuropsychiatric disorder associated with streptococcal infection (PANDAS) is unlikely (Church et al. 2003).

In addition to the potential etiological factors, a number of variables may be responsible for Justin's current symptom exacerbation. First, given that tics can be reactive to contextual factors (Himle et al. 2014), the relational difficulties between Justin and his parents, the marital stress between Justin's parents, and the negative school environment stemming from peer teasing and declining school performance may contribute to tic exacerbation. Second, it is possible that the tics themselves are being strengthened by the reduction of the aversive premonitory urge following tic occurrences. This negative reinforcement hypothesis is believed to maintain, in part, some tics (Capriotti et al. 2014).

Efforts should be made to clarify possible comorbid diagnoses. Justin reported a number of repetitive behaviors (e.g., evening up his turns, adjusting socks, retying shoelaces) that could be classified as either complex tics related to Tourette's disorder or compulsions related to OCD. The distinction between the two is not always clear; generally, however, repetitive behaviors preceded by either physiological signs of anxiety or specific aversive cognitions (e.g., "something bad will happen to me") are more consistent with an OCD diagnosis, whereas repetitive behaviors preceded by a vague tension or somatic sensation are more consistent with a Tourette's disorder diagnosis (Miguel et al. 1997). For example, if Justin's repetitive behaviors are preceded by the intrusive thoughts of harm coming to his parents, the symptoms may be consistent with an OCD diagnosis. At present, there is not enough information available to make an OCD diagnosis. If a diagnosis of OCD is conferred after further assessment in this case, the "tic-related" specifier for OCD should be used.

Justin appeared to be exhibiting dysphoric mood, although it did not appear to have risen to the level of a major depression diagnosis. Given the temporal relationships, a variety of psychosocial factors likely contribute to the negative mood, including parental marital problems, falling grades, teasing because of tics, frustration with the uncontrollability of the tics, and possible problems with OCD.

Symptoms of ADHD were suggested, but the clinician should consider how the tics, possible OCD symptoms, and potential mood concerns may be contributing to Justin's difficulties in sustaining attention while listening in class, reading, and doing homework. The clinician also should assess for a potential undiagnosed learning disability, which often co-occurs in individuals with Tourette's disorder (Freeman and Tourette Syndrome International Database Consortium 2007).

## DSM-5 Diagnosis

- F95.2 Tourette's disorder
- Z60.4 Social exclusion or rejection
- Z55.9 Academic or educational problem
- Z62.898 Child affected by parental relationship distress

## Treatment Recommendations

Assuming that Justin has only a Tourette's disorder diagnosis, a course of Comprehensive Behavioral Intervention for Tics (CBIT; Woods et al. 2008) would be recommended. CBIT follows a three-pronged approach: psychoeducation about Tourette's disorder, implementation of strategies to reduce tic-exacerbating events in Justin's environment, and incorporation of methods to successfully manage specific tics. Psychoeducation about the phenomenology, etiology, onset, course, and comorbid conditions associated with Tourette's disorder should be provided to Justin and his parents. Such education may be useful in decreasing family stress about the nature of the disorder, normalizing Justin's experiences to some extent, and providing hope for successful management.

Following a comprehensive behavioral assessment of how various environmental factors impact Justin's tic expression, efforts to reduce the impact of tic-exacerbating events in Justin's environment would be implemented. On the basis of the case description, interventions would include family therapy to overcome communication difficulties between Justin and his parents, marital therapy to decrease the stress-inducing marital conflicts, teacher and peer education about Tourette's disorder to decrease negative perceptions and improve social functioning (Woods et al. 2003), stress management training to help Justin cope with stress-inducing situations, and elimination of any potentially rewarding social consequences Justin gets as a result of tics (e.g., removal from teasing peers, not having to complete a difficult homework assignment, statements of concern following a particularly noticeable tic).

The final element of CBIT would involve specific tic management procedures. Habit reversal training involves awareness training, competing response training, and social support training. Awareness training consists of describing the tic and early warning signs of tic occurrence (e.g., sensations or behaviors preceding a tic), detecting tic occurrences, and identifying high-risk tic situations (Woods et al. 2008). Competing response training consists of teaching the child to engage in another behavior for a period of time (i.e., 1 minute) contingent on tic occurrence or associated early warning signs. Social support training involves teaching a significant other in the patient's life (usually a parent in the case of a child) to praise the successful use of competing response exercises and to prompt the child to use a competing response when such a response is not implemented upon a tic occurrence.

Studies in adults (Wilhelm et al. 2012) and children (Piacentini et al. 2010) have found that compared with a psychoeducation and supportive therapy control condition, treatment with eight sessions of CBIT is significantly more effective at reducing tics and tic-related impairment. Furthermore, some research suggests that a positive response to CBIT may also be associated with long-term reductions in anxious and other behavioral problems seen in children with tics (Woods et al. 2011), suggesting that CBIT may be helpful in addressing some of Justin's other issues.

Should behavioral therapy be ineffective or only partially effective at reducing tic occurrences, we would refer the patient for a medication evaluation. Likewise, if a patient's tics were so severe that he or she was at risk of injuring himself or others, or if the patient were avoiding social situations entirely because of the tics, a medication referral would be recommended prior to behavior therapy.

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## **Psychopharmacologic Perspective**

Barbara J. Coffey, M.D., M.S.

### **Diagnostic Formulation**

In summary, Justin is an 11-year-old boy with a 5-year history of multiple motor and vocal tics consistent with a diagnosis of Tourette's disorder. In addition, he has a history of inattention in school, fidgetiness, restlessness, and difficulty completing homework assignments, which is suggestive of ADHD. He also has repetitive behaviors such as redoing, intrusive thoughts, and a need for symmetry/evening up, which are suggestive of OCD; because time spent and/or level of distress about these behaviors is not specified in the history, it is not clear whether Justin would meet criteria for the full disorder or a subthreshold condition, both of which are common in clinically referred youth with Tourette's disorder (Coffey et al. 2000). Justin's tendency to worry suggests the possibility of a generalized anxiety disorder. His difficulty with reading, weak fine motor skills, and poor handwriting raise the possibility of a specific learning disorder with impairment in reading and a developmental coordination disorder. Finally, Justin is described as somewhat withdrawn in the past few months, with evidence of significant distress and sadness about the social impact

of his tics, and perhaps about the conflict and distance between his parents, as evidenced by his statement that he wishes he were dead. Therefore, an adjustment disorder with depressed or mixed anxiety and depressed mood should be considered in the differential diagnosis.

From a biopsychosocial perspective, there are several potential biological contributions to Justin's present illness. Given protracted labor, forceps delivery, and early respiratory distress, Justin's early neurological development could have been rendered vulnerable, contributing to the development of Tourette's disorder; there is evidence to suggest that prenatal and perinatal factors such as birth trauma can influence the onset and severity of tics (Leckman et al. 1990). Family history of probable Tourette's disorder in father and anxiety, possibly OCD, in mother suggests a genetic diathesis for the development of a tic disorder or Tourette's disorder in Justin (Pauls 2003). From an epidemiological perspective, Justin's increase in tics at age 11 is typical of what is known about the developmental course of Tourette's disorder, as this is often the age at which tic severity peaks (Leckman et al. 1998). From a general medical perspective, Justin's asthma and possible seasonal allergies could manifest in throat clearing, sniffing, and coughing, which could also contribute to his tic symptoms. Finally, given no reported abrupt or explosive increase in tics or OCD symptoms in temporal association with laboratory-documented streptococcal infection, PANDAS or pediatric acute neuropsychiatric syndrome (PANS) is unlikely.

From a psychosocial perspective, Justin's history indicates that he is a typically developing 11-year-old, with many friendships, age-appropriate interests, solid intelligence, and good past academic performance. However, despite his strengths and apparent coping abilities to date, Justin is now showing signs of impairment in social, academic, and emotional areas, which are leading to teasing by his peers and difficulty completing schoolwork and resulting in emotional distress and loss of self-esteem. The conflicts between his parents and the father's extramarital affair have only added to the level of Justin's emotional vulnerability.

## DSM-5 Diagnosis

- F95.2 Tourette's disorder
- F42 Obsessive-compulsive disorder (full vs. subthreshold)
- F90.0 Attention-deficit/hyperactivity disorder, predominantly inattentive presentation
- F82 Developmental coordination disorder
- Rule out generalized anxiety disorder
- Rule out adjustment disorder with depressed or mixed anxiety and depressed mood
- Rule out specific learning disorder with impairment in reading
- Streptococcal pharyngitis, past, in remission

- Asthma, mild
- Rule out seasonal/environmental allergies

## Suggested Diagnostic Assessment Tools

The following instruments can facilitate assessment of level of severity of Justin's primary symptoms:

1. The Yale Global Tic Severity Scale (Leckman et al. 1989) is a clinician-administered continuous scale that includes measures of domains of tic number, frequency, intensity, complexity, and interference, as well as a tic-related impairment scale.
2. The Children's Yale-Brown Obsessive Compulsive Scale (Scahill et al. 1997) is a clinician-rated measure of obsessive-compulsive symptoms.
3. The Swanson, Nolan, and Pelham Rating Scale, Fourth Edition (Swanson 1992) is a rating scale for ADHD based on DSM-IV (American Psychiatric Association 1994) symptoms, as rated by parent or teacher.

## Treatment Recommendations

Tourette's disorder and associated comorbid disorders are optimally treated with a multimodal treatment approach, using a combination of psychoeducation, parent guidance and support, consultation to the teacher(s), and pharmacological and psychotherapeutic interventions (Jankovic 2001).

Justin and his parents will need psychoeducation regarding the nature, phenomenology, comorbidity (particularly with OCD and ADHD), and expected course and outcome of Tourette's disorder. Family referral to the Tourette Syndrome Association, a nationally based advocacy, research, and support group is indicated, as it is for all newly diagnosed children and families.

Additional evaluation that might be helpful to clarify the differential diagnosis would be a neuropsychological screen to rule out a specific learning disorder in reading or other processing disorder, given Justin's difficulty with reading and his recent academic decline. Neuropsychological testing could also provide information on whether there is evidence of impairment in executive functioning, given his distractibility and difficulty completing homework assignments.

From the pharmacological perspective, the only medications currently labeled with an indication for Tourette's disorder are haloperidol and pimozide. However, given their relative risk for significant adverse effects, particularly in long-term treatment, such as tardive dyskinesia, cognitive blunting, and weight gain, they are usually not recommended for first-line use in patients with mild to moderate tic symptoms. Instead, first-line treatment of mild to moderate Tourette's disorder is usually with an  $\alpha_2$ -adrenergic agonist, such as guan-

facine or clonidine. Substantial evidence supports their efficacy in the treatment of Tourette's and chronic tic disorders, despite the fact they are prescribed off-label (Scahill et al. 2006). Guanfacine or clonidine would have the additional potential benefit of reducing Justin's restlessness and fidgetiness. The primary adverse effect is sedation, which can be mitigated by initiating treatment with low doses and slow titration.

Other pharmacological options to consider, if the diagnosis of ADHD inattentive presentation is confirmed, include the addition of a stimulant to the  $\alpha_2$ -adrenergic agonist to address the selective vigilance component. A meta-analysis reported that methylphenidate-based stimulants may benefit ADHD symptoms while neither worsening nor benefiting tics (Bloch et al. 2009).

Psychotherapeutic interventions to be considered include CBIT (which includes habit reversal therapy), which is supported by a growing evidence base as having efficacy in treatment of tic disorders (Piacentini et al. 2010). Justin's parents should also be offered a couples evaluation and potential therapy to address their marital conflicts, which are undoubtedly having an impact on Justin.

Finally, consultation with Justin's teacher is indicated, so as to develop and implement an individualized education program tailored to Justin's specific needs on completion of the neuropsychological testing. At the very least, Justin needs extended time on homework and classroom assignments to address his repeating behaviors.

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# CHAPTER 11

## He's Always Exhausted

### Disordered Sleep in an Adolescent

Jess P. Shatkin, M.D., M.P.H.

#### Case Presentation

##### Identifying Information

Henry is a 15-year-old male 1 month into his sophomore year of high school. He lives with his parents and 13-year-old brother in a three-bedroom house in the suburb of a major city.

##### Chief Complaint

Henry complains of insomnia and feeling exhausted during school.

##### History of Present Illness

Henry's parents brought him for a psychiatric evaluation because of his chronic complaints of insomnia and excessive sleepiness during school. Although he has never before seen a psychiatrist and is very opposed to this visit, Henry has been in therapy with a psychologist twice before because of irritability and defiant behavior, both of which have been periodic problems for most of his life. Henry's parents describe him as somewhat of a "loner" who prefers to be at home with family rather than out with friends.

Henry's difficulties with sleep have waxed and waned for as long as his parents can recall. They report that he has often had difficulty falling asleep at night and is tough to awaken in the morning. This past summer Henry did not attend his usual camp but stayed home and worked doing part-time landscaping in the afternoons. Because he did not have a set wake time, his usual bedtime shifted from around 11:00 P.M. to around 3:00 A.M. Now that school has started for the year, Henry has found it "impossible to fall asleep at 11" and "nearly impossible to wake up in the morning." He has been tardy six times this month and finds himself regularly nodding off during his morning classes.

In addition to having trouble falling asleep and awakening on time for school, Henry notes that he feels “exhausted” much of the day, but particularly while at school. He has trouble concentrating, especially for his morning classes, and feels sluggish until mid-afternoon. There has been no change to his appetite and no recent weight gain or loss. Henry describes his mood as generally “okay,” but his parents note that Henry’s mood is “up and down... lazy... as he’s always been.” They report that he is often irritable during the school week, “nicer on the weekends,” and generally easier to be with in the evenings. His parents also express concern because “Henry just doesn’t seem to be motivated.”

Long-standing difficulties with Henry at home include his refusing to help out around the house, frequently teasing his younger brother, not taking responsibility for his own actions, arguing with little provocation, and being quick to anger. Henry’s parents report that they often “walk on eggshells” for fear of upsetting him. His parents are relieved that Henry’s “attitude” is rarely evident to those outside of the home and that they have infrequently heard concerns about his behavior from teachers or other parents. Finally, his parents note that in recent weeks Henry has become less conscientious about his schoolwork and has missed some assignments.

Henry’s sleep log indicates that although he gets into bed by midnight, he cannot fall asleep before 2:00–3:00 A.M. While lying in bed, he plays games on his phone, texts with friends, or watches television programs on his laptop computer. At the insistence of his mother, he has tried to take melatonin and chamomile tea to fall asleep, but these remedies have not been helpful. Henry must awaken by 6:45 A.M. to get to school at 7:30 A.M. In the morning, he has a very difficult time getting up and uses three alarms, which is still often not sufficient to awaken him on time. He acknowledges feeling generally frustrated, bad tempered, and tired until mid-afternoon. Henry has taken to drinking two cups of coffee each morning, one at home and another at school, and a third by mid-afternoon, which helps “only a bit.” He does not nap. On the weekends, Henry still goes to bed around 3:00 A.M. but does not generally awaken until around 2:00 P.M.

## Past Psychiatric History

As noted, Henry did see two different psychologists and was diagnosed with oppositional defiant disorder (ODD) on each occasion. He was treated with play therapy for 3 months at age 7 years and with talk therapy for 2 months at age 12 years, but neither treatment had any impact on his behavior. Henry has no history of alcohol or substance abuse, although he does have some friends who smoke cigarettes and marijuana.

## Medical History

Henry had moderate childhood asthma that was treated symptomatically. On rare occasions, he experiences exercise-induced asthma for which he will use albuterol. He occasionally takes a multivitamin, but he does not use any herbal medications or dietary supplements.

## **Developmental History**

Henry's parents described him as a somewhat colicky child who was often difficult to put down for bed. No other significant developmental difficulties are noted.

## **Social History**

As noted, Henry has been late for school many times in the previous month. He is generally a B+ student, but his parents are concerned that his grades may be starting to drop. He knows many people his age and feels socially comfortable at school, but he has few close friends and is generally somewhat reserved outside the home. He enjoys computer games, movies, and listening to music.

## **Family History**

Henry's mother has a long-standing history of insomnia and has periodically suffered from depression. Henry's maternal grandmother struggled with depression for many years.

## **Mental Status Examination**

Henry was cooperative but not particularly friendly during the evaluation, which took place on a weekday morning. He was visibly tired and yawned frequently. He acknowledged a general lack of motivation. There were no other significant findings.

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# **Psychotherapeutic Perspective**

Reut Gruber, Ph.D.  
Merrill S. Wise, M.D.  
Gail Myhr, M.D., C.M.

## **Diagnostic Formulation**

The assessment of Henry's difficulty initiating sleep begins with a careful review of his hour-by-hour activity pattern and sleep schedule, from his arrival at home after school until sleep onset. Details of Henry's bedtime routine, caffeine/alcohol/drug use, exercise habits,

and sleep environment may elucidate sleep hygiene factors contributing to his difficulties. Common causes of daytime sleepiness include insufficient nocturnal sleep, inadequate sleep hygiene, and the side effects of medication. Less common but important causes include obstructive sleep apnea/hypopnea, narcolepsy, hypersomnolence disorder (idiopathic hypersomnia), restless legs syndrome, and circadian rhythm sleep-wake disorders (CRSWDs; Wise and Glaze 2013). Validated questionnaires can be used to assess the extent of Henry's sleep hygiene issues and screen for common pediatric sleep disorders (see Gruber et al. 2014, Appendix 2, [www.cacapcpea.org/uploads/documents//Position\\_Statement Appendices.pdf](http://www.cacapcpea.org/uploads/documents//Position_Statement Appendices.pdf); Storfer-Isser et al. 2013). Physical examination helps identify potential medical causes of his sleep disorder and associated sequelae (Wise and Glaze 2013). Sleep-wake data should be assessed for 1 week. Henry would be asked to keep a sleep diary (see Gruber et al. 2014, Appendix 1, [www.cacapcpea.org/uploads/documents//Position\\_Statement Appendices.pdf](http://www.cacapcpea.org/uploads/documents//Position_Statement Appendices.pdf)) for at least 7 nights, recording important data such as the clock times for "lights off" and "lights on" (estimating time spent in bed sleeping), sleep latency, time spent awake after initial sleep onset, and nocturnal events. The log would also furnish information about naps, sleepiness during the day, and sleep hygiene. During this week, Henry would be asked to sleep as usual for 4 nights and then follow an ad lib sleep regimen for 3 nights (i.e., go to bed when he is sleepy and wake up naturally, ignoring demands posed by school and family). If he falls asleep easily, sleeps continuously, and wakes up rested on an ad lib schedule, the diagnosis of CRSWD delayed sleep phase type is supported. Conversely, if he still has difficulty falling asleep on an ad lib schedule, the diagnosis of insomnia disorder is suggested. Such distinctions will help determine differential diagnoses and treatment planning for Henry.

Wrist actigraphy, using a small device attached to the wrist, can nonintrusively record data from an accelerometer, permitting concurrent objective verification of sleep log data during the 7-night test period. Polysomnography is not routinely indicated for evaluating patients with difficulty initiating or maintaining sleep, or who have a possible CRSWD, unless other factors suggest a co-occurring breathing-related sleep disorder or narcolepsy.

CRSWD is often comorbid with other psychiatric disorders, so a thoughtful differential diagnosis is essential. Because irritability is commonly associated with depressed mood, a careful psychiatric review of systems would clarify whether Henry's irritability is a feature of ODD or reflects an underlying persistent depressive disorder (dysthymia).

Henry meets diagnostic criteria for a DSM-5 diagnosis of CRSWD, delayed sleep phase type (American Psychiatric Association 2013). He has a history of a delay in the timing of the major sleep period (more than 2 hours in relation to the desired sleep and wake times), resulting in symptoms of insomnia and excessive sleepiness. When allowed to set his own schedule (i.e., when his sleep and wake times coincide with his endogenous circadian rhythm), Henry exhibits age-appropriate sleep quality and duration. When subjected to externally desired sleep and wake times, however, he shows prominent symptoms of sleep-onset insomnia, difficulty waking, and excessive early-day sleepiness. These issues cause clinically significant distress and impair his functioning in school and with his family.

Henry's case highlights the overlap and bidirectional relationships that exist among sleep processes, mood, attention, behavior, and motivation. Henry's irritability, inatten-

tion, poor school performance, and lack of motivation and interest could have been precipitated by his chronic sleep deprivation and the mismatch between his internal circadian rhythm and the times of day during which he is expected to perform (the so-called circadian dyssynchrony effect). In addition, Henry's family history of depression might have predisposed him to a depressive disorder, which would contribute to sleep-onset difficulties above and beyond the challenges caused by his delayed sleep phase.

Sleep processes are affected by external cues and stimuli. Factors that affect sleep regulation or that encourage later bedtimes and longer hours of nighttime arousal can disrupt or shorten sleep and perpetuate sleep problems. In Henry's case, 1) excessive use of electronic devices at bedtime hinders his sleep, as such devices are associated with excessive light exposure and overstimulation; 2) excessive daytime consumption of caffeine (in an effort to stay awake) increases arousal and interferes with his ability to fall asleep; and 3) inconsistent bedtimes during the week versus the weekend interfere with the regulation of his sleep patterns. Collectively, these behaviors, known as *poor sleep hygiene*, perpetuate insomnia.

Henry's case highlights the importance of considering concurrent mental disorders (e.g., persistent depressive disorder) along with CRSWD, delayed sleep phase type (Gruber and Sheshko 2008). Sleep disorders are often accompanied by mood, emotional, and cognitive changes that must be addressed. Similarly, persistent sleep disturbances are established risk factors for the subsequent development of mental illnesses and substance use disorders and can hinder the effectiveness of psychotherapy.

## DSM-5 Diagnosis

- G47.21 Circadian rhythm sleep-wake disorder, delayed sleep phase type
- F91.3 Oppositional defiant disorder, mild
- F34.1 Persistent depressive disorder (dysthymia) (provisional)

## Treatment Recommendations

Treatment objectives for Henry are to 1) entrain his clock to an earlier sleep time, 2) improve his sleep hygiene, 3) provide sleep education, and 4) motivate him to make the changes required to improve his sleep. Given the interaction between sleep and mood, and the fact that sleep problems can hinder the success of psychotherapeutic strategies (e.g., cognitive-behavioral therapy), the clinician should initially focus treatment efforts on Henry's sleep and only later determine his need and/or readiness for cognitive-behavioral therapy targeting depression (for more on treatment of pediatric sleep disorders, see Gruber et al. 2014). Excessive daytime sleepiness that persists after normalization of Henry's sleep-wake schedule and total sleep time would necessitate reevaluation for other possible sleep disorders such as narcolepsy or hypersomnolence disorder. A comprehensive treatment

plan could ameliorate his daytime challenges and/or prepare him for a psychological intervention aimed at addressing his other cognitive and emotional challenges.

## Entraining the Circadian Clock

A choice should be made from among interventions that aim to modify Henry's sleep-wake schedule itself (chronotherapy) or engage mechanisms that can reset his circadian timing system (bright light therapy, melatonin). A reasonable approach in Henry's case would be to start with phototherapy, to realign Henry's circadian phase. If phototherapy alone is unsuccessful, melatonin could then be introduced to advance Henry's sleep phase and to induce and maintain his sleep. Chronotherapy poses a challenge in adolescents such as Henry because activities need to be planned around the treatment schedule.

**Phototherapy.** Bright light exposure can enhance morning alertness and realign the circadian phase by shifting melatonin release earlier. Early morning light exposure (2,500–10,000 lux) may be delivered via a light box at approximately 15–20 inches from the light for at least 30 minutes and up to 2 hours based on the circumstances and in collaboration with the family/patient. Alternatively, children and adolescents in particular may find a lighted hat or visor easier to use.

**Melatonin.** Melatonin treatment can advance the sleep phase by augmenting the secretion of endogenous pineal hormone, while also working as a hypnotic to relieve sleep-onset insomnia by inducing sleep. Melatonin (1–6 mg) can be administered 30–60 minutes prior to the usual sleep-onset time. Despite the logical potential of melatonin for treating CRSWDs, the clinical effectiveness and guidelines for its use have not been firmly established. Melatonin is an over-the-counter agent that is not approved or regulated by the U.S. Food and Drug Administration (FDA).

**Chronotherapy.** Chronotherapy targets the sleep-wake schedule by progressively delaying the sleep and wake times by approximately 2–3 hours every 2 days, until appropriate earlier bedtime and wake time have been reached and are thereafter maintained.

## Sleep Hygiene

Addressing inadequate sleep hygiene is crucial. Recommendations for Henry include 1) maintaining consistent sleep and wake times 7 days and nights per week while engaging in bright light exposure each morning to promote better circadian cycling; 2) reversing the existing associations between bed and wakefulness by going to bed only when sleepy and reserving the bed only for sleeping; 3) keeping cell phones, computers, and televisions out of the bedroom; and 4) avoiding caffeinated products within 6 hours of bedtime.

## Sleep Education and Implementation of the Treatment Plan

Henry and his family should be educated regarding 1) sleep physiology as it relates to the rationale behind the recommended treatment strategies (Gruber and Sheshko 2008; Gruber

et al. 2014) and 2) the impact of sleep quality and quantity on all aspects of Henry's functioning. Once the rationale for the intervention has been explained, concrete strategies should be developed for implementing treatment.

## **Motivation**

Altering Henry's circadian rhythm will require significant lifestyle changes because he will need to sleep at times when he was previously awake. Treatment should be a collaborative effort in which motivation is explicitly targeted, perhaps through the use of motivational interviewing. In addition, a relapse-prevention plan is important because motivation may decrease and old habits may resurface following treatment.

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# **Psychopharmacologic Perspective**

Anna Ivanenko, M.D., Ph.D.  
Heide Hullsiek Rollings, M.D.

## **Diagnostic Formulation**

Henry's presentation is consistent with a primary diagnosis of CRSWD, delayed sleep phase type. This type is characterized by a persistent pattern of disruption in both sleep initiation and morning waking beyond the conventional or socially acceptable times to fall asleep and wake up. This sleep-onset delay would typically not be present if Henry were able to follow his preferred sleep schedule, which is hours later than the environmental expectations of his life, such as his school schedule. This pattern of sleep disorder can cause significant functional impairment, potential mood symptoms such as depression or irritability, and behavior problems that have impacts on children's and adolescents' social and academic lives (Adolescent Sleep Working Group et al. 2014). Because of the delay in falling asleep and the need to wake at desired times to attend school, it is common for these patients to show excessive daytime sleepiness. Secondary dependence on substances that enhance alertness, such as caffeine, may also develop.

There are two biological factors that contribute to a sleep-wake phase delay in adolescence associated with puberty and to this patient's sleep pattern. The first is a delay in mel-



atonin secretion at night that shifts sleep onset up to 2 hours later. The second is developing altered sleep drive, with pressure to fall asleep occurring more slowly.

The diagnosis of CRSWD, delayed sleep phase type, is made solely on a patient's clinical history with careful evaluation of sleep-wake patterns throughout the week, including periods of free-running sleep preferences, which may include weekends or holidays. Other intrinsic sleep conditions that may cause delayed sleep onset should be considered and excluded; these include restless legs syndrome and sleep-disordered breathing. An overnight sleep study (polysomnogram), although not required, may be used to further exclude other sleep disorders such as obstructive sleep apnea. A 2-week sleep diary is commonly used to identify sleep patterns over a period of time, and a wristwatch device called an actigraph may be used to evaluate sleep-wake rhythms to further support the diagnosis.

Poor sleep hygiene and excessive caffeine use are known to contribute to sleep onset delay and should be part of the patient's case formulation. Henry currently reports playing games on his phone, texting with friends, and watching television shows on his computer that keep him highly engaged and stimulated at night and that interfere with sleep onset. He also drinks several cups of coffee in the morning and later in the day that keep him more alert in the evening and disrupt the process of sleep initiation.

CRSWD, delayed sleep phase type, is different from insomnia disorder, although the two disorders can have common features, including delayed sleep onset. Patients with delayed sleep phase type of CRSWD can typically maintain sleep with little disruption in sleep maintenance but have a shift in sleep cycle. If allowed the freedom to maintain preferred late sleep and wake times, these patients would wake up refreshed and without excessive sleepiness. In contrast, patients with insomnia disorder frequently experience difficulties maintaining sleep, with frequent awakenings and difficulty awakening in the morning at preferred wake times.

Sleep disorders are more frequently reported among children and adolescents with co-existing psychiatric conditions. Henry carries a diagnosis of ODD, which can have an impact on his sleep problems because of his difficulties adhering to consistent routines such as sleep hygiene, following rules including bedtimes set by parents, school expectations, and parental limit setting. ODD commonly co-occurs with limit-setting sleep disorder, which can exacerbate existing sleep disorders. Limit-setting sleep disorder is a condition that occurs when parents or guardians of the child are not able to establish appropriate sleep behaviors or enforce bedtime limits (American Academy of Sleep Medicine 2014). When these limits are not met, the patient may experience further sleep delay.

## DSM-5 Diagnosis

- G47.21 Circadian rhythm sleep-wake disorder, delayed sleep phase type
- F91.3 Oppositional defiant disorder

## **Treatment Recommendations**

The treatment of CRSWD, delayed sleep phase type, consists of behavioral and pharmacological interventions as well as light therapy. The main goal of these therapies is to manipulate the circadian clock by resetting the sleep-wake schedule and advancing the sleep phase. The earlier version of chronotherapy involved a gradual delay of bed and wake times by 3-hour increments until the desired schedule was achieved (Doghramji and Ivanenko 2014). Many adolescents with the severe delayed sleep phase type of CRSWD find it easier to delay their bedtime and rotate their sleep cycle around the clock than to change their bedtime in the opposite direction. However, this approach requires a great deal of support from both family and school because while the patient is reversing his or her circadian cycle, there are periods of time when the patient will be sleeping during the day and staying awake at night.

Sleep phase advance therapy is usually recommended for those with less severe CRSWD, delayed sleep phase type (<4-hour delay), and involves gradual advancement of bedtime until the desired sleep schedule is reached. It may require more time, but it is less disruptive to the entire family and will not cause school tardiness (Rosen 2012). Henry would be instructed to go to bed at the time he usually falls asleep (about 3:00 A.M.) and then advance bedtime 20–30 minutes earlier every few days while keeping the same wake time (in Henry's case at 6:45 A.M.). His sleep schedule should be kept consistent throughout the entire week, including on weekends and holidays. Henry should be instructed to avoid naps and maintain healthy sleep hygiene.

Melatonin administration has been shown to reduce the wake-promoting drive from the circadian system and therefore improve the sleep schedule. Higher pharmacological doses of melatonin (1–6 mg) have demonstrated sedative hypnotic effects in pediatric populations of patients with sleep onset problems and can be successfully used in the context of treating CRSWD, delayed sleep phase type (Rosen 2012).

Melatonin is not regulated by the FDA and is available without a prescription in a variety of formulations, strengths, and purities. Although melatonin is considered a safe and effective intervention for the treatment of sleep onset problems, potential side effects have been reported and may include headache, dizziness, nausea, increased blood pressure, and reduced seizure threshold.

Light therapy is one of the best-studied methods of shifting circadian rhythms. It involves timed administration of light (ideally 2,500–10,000 lux) in the morning for sleep phase advancement and in the evening for sleep phase delay (Rosen 2012; Wyatt 2007). Henry would benefit from exposure to a therapeutic light for 30 minutes to 2 hours on awakening in the morning. It is not necessary to look directly at the light source. The patient can read a book, watch television, or engage in other activities while being near a light-emitting device. Commercially available portable visors enable children to receive light therapy while maintaining other daily activities.

Finally, symptoms of ODD and other disruptive behaviors should be addressed in treatment as potential confounding factors that may affect treatment compliance and contribute to future relapse.

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# CHAPTER 12

## The World Is a Very Dirty Place

### Obsessive-Compulsive Disorder

Susan E. Swedo, M.D.

#### Case Presentation

##### Identifying Information

Andy is an athletic 8-year-old who was thriving in second grade before he began having complaints of “not being able to stay clean.”

##### Chief Complaint

Andy’s parents brought Andy to the clinic to discuss his recent behavior changes.

##### History of Present Illness

Andy’s mother and father accompanied him to the appointment and reported that Andy’s symptoms began 1 week earlier, on a Saturday morning, when he refused to get dressed because he had “nothing clean” to wear. His mother, who had just finished doing Andy’s laundry, went to get the basket of freshly washed clothes. When his mother entered Andy’s bedroom, she was shocked to see that he had strewn clothes all over the floor of the room and was even more surprised when he explained, “They’re all dirty. I can’t wear them!” His mother knew that the clothes could not be dirty because she had taken away all of Andy’s soiled clothes the previous evening; however, because he was so clearly upset by the situation, his mother decided not to confront the irrational behavior, and she simply told Andy to choose a clean outfit from the laundry basket. Andy pulled the sleeves of his pajamas down over his hands and proceeded to pick through the basket, discarding one garment after another because of “dirt” or “a stain.” In exasperation, his mother finally chose an outfit

for him and ordered him to put it on “right this minute” and go downstairs to breakfast. Andy began to cry (not typical for him) but agreed to get dressed. He appeared for breakfast 25 minutes later, wearing one of his older brother’s shirts over his pajamas. He explained that he had tried to put on the outfit his mother had chosen but had dropped it on the floor and it had become “too dirty” to wear. Andy’s younger sister broke into laughter at this explanation, which provoked further tears from Andy. His mother finally convinced him to sit down at the breakfast table and eat. She noticed that Andy pulled his pajama sleeves down over his hands before picking up his cereal spoon and then ate only one bite of cereal and another of toast before declaring that he “wasn’t really that hungry” and asked to be excused from the table. Andy remained in his room for the rest of the day, refusing lunch because “I’m just not hungry” but joining the family at dinner for only a few minutes before asking to be excused “to watch the TV show you promised I could see tonight.”

Andy’s parents were not overly concerned by his behavior on Saturday, because he often spent hours in his room, playing video games and watching TV. However, on Sunday morning, after another battle over “dirty” and “clean” clothes and his refusal to eat brunch because “I’m still not hungry,” Andy’s parents became concerned that something was wrong. Their concerns mounted further when Andy refused his best friend’s invitation to play at the park because “The park is filthy! I’ll never be able to get clean if I go there.” His parents felt that something was definitely wrong.

Andy’s parents scheduled an appointment with his pediatrician on Monday morning. The physician took a careful history, which revealed that Andy was not only concerned about wanting to stay clean but also fearful that his food was contaminated (“Dirt could have fallen onto my plate”), which was why he had refused to eat any meals over the weekend. Andy also complained of feeling ill: “My head hurts this morning, and my stomach hurt all weekend.” The pediatrician’s diagnosis was obsessive-compulsive disorder (OCD), manifested as contamination fears and avoidance rituals. He told Andy that he must start eating and drinking again and suggested that Andy try bottled water and Ensure or another canned meal replacement because “they’re manufactured under sterile conditions” and would be safe from contamination. He also recommended that Andy start treatment immediately with a selective serotonin reuptake inhibitor (SSRI), but after hearing of the potential risks of that therapy, Andy’s parents opted to hold off on treatment until they could obtain a second opinion. Andy’s physician was able to secure an appointment for later that week with an experienced child psychiatrist.

Accompanied by his parents, Andy entered the psychiatrist’s office reluctantly and pretended not to see the doctor’s outstretched hand. He perched on the edge of the chair, fidgeting constantly and glancing anxiously about the room. After a few moments, he got up and went to stand by the window, staring glumly outside. Andy’s parents reported that his symptoms had worsened over the course of the week, with the contamination fears generalizing to the point that the whole house had become “dirty.” Andy’s brother and sister seemed to have become a source of contamination, and Andy refused to leave his bedroom unless they were away at school. Even then, Andy would venture no farther than the hallway bathroom, where he spent 30–45 minutes at a time washing his hands to rid them of

imagined contaminants. His food contamination fears had worsened to the point that his mother had to wash the bottles and cans in front of him and then hand them to Andy using a “Cleanest” (Kleenex) tissue. Andy used a series of tissues to wipe down each bottle or can before opening it, and then took only a few swallows before worrying that a speck of dirt could have fallen into the drink and made it “dirty.” His mother felt that he was getting sufficient fluids and calories, however, because she offered the drinks and supplements frequently.

## **Past Psychiatric History**

The psychiatrist takes a complete psychiatric history from Andy’s parents. The history reveals only that Andy has been quite happy throughout his young life.

## **Medical History**

The complete medical history reveals that Andy has always been quite healthy. The only abnormality noted on physical examination was slight left-sided cervical lymphadenopathy and mild erythema of the oropharynx, prompting Andy’s physician to obtain a rapid strep test, which was negative.

## **Developmental History**

Andy is on target for meeting developmental milestones.

## **Social History**

Andy lives with his parents, brother, and sister.

## **Family History**

His family medical history was positive for depression in his mother’s sisters and maternal grandmother, and a paternal uncle was reported to have Tourette’s disorder. Andy’s older brother had seen a physician for an eye blink tic when he was 7 years old, but it had resolved spontaneously after a few months and he now had no symptoms. The family had no history of OCD, although the father recalled a brief period of excessive worries (a need for symmetry and concerns about harm coming to his parents) when he was “just about Andy’s age.”

## **Mental Status Examination**

Andy is a pleasant, cooperative boy who appeared his stated age and developmental stage. During the examination, he appeared somewhat sad and anxious, but he answered questions willingly, with normal rate and volume of speech. He denied any perceptual abnormalities. His intelligence seemed to be average to above average. His insight was good, and his judgment was without obvious impairments.

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# Psychotherapeutic Perspective

John Piacentini, Ph.D., ABPP

## Diagnostic Formulation

Andy's presenting complaints of germ and dirt fears are consistent with a diagnosis of OCD. In fact, contamination-related obsessions and compulsions are among the most common symptoms of OCD in childhood. Andy's fear of contamination is not limited to one specific setting or item but has generalized from clothing and food to the whole house, including other family members, and beyond (e.g., the park). Such generalization is also common, and Andy's case demonstrates that the illness may progress from subclinical to near incapacitation in relatively rapid fashion.

DSM-5 (American Psychiatric Association 2013) requires that for a diagnosis of OCD, a person's symptoms must be time-consuming (1 hour or more per day) or cause marked distress or significant functional interference. Although the total time taken by Andy's symptoms is not specified, both distress (crying, physical complaints) and interference (refusing playdates, staying in his room, not eating) are apparent. Andy's limited insight into his symptoms is not atypical; DSM-5 does not require that children recognize their symptoms as excessive or unreasonable.

In addition, the medical history and examination did not identify any medical explanations for Andy's symptoms. Andy's sudden onset in conjunction with evidence of a recent sore throat suggests that his symptoms may have been triggered by an autoimmune reaction to a streptococcal infection (pediatric autoimmune neuropsychiatric disorders associated with streptococcus, or PANDAS) (Murphy et al. 2004). However, the negative strep test did not support this hypothesis. Andy's symptoms also do not appear better accounted for by another psychiatric disorder. Among the most common differential diagnoses for OCD in children and adolescents are generalized anxiety disorder, tic disorders, and autism spectrum disorder. In contrast to patients with OCD, patients with generalized anxiety disorder tend to have worries that are more related to real-life concerns and, with the possible exception of excessive reassurance seeking, are not accompanied by ritualistic behaviors. Distinguishing complex motor tics from OCD-related compulsions (e.g., tapping, counting, arranging) can be difficult, especially given the common co-occurrence of the two disorders. Tics are often expressed in response to premonitory sensory urges and can be distinguished from the obsessions underlying ritualizing. In contrast to the ego-dystonic nature

of obsessions, the perseverative thoughts and behaviors associated with autism spectrum disorder have a more syntonetic and functional nature. Autism spectrum disorder is also characterized by social functioning deficits not found in OCD.

OCD is reasonably common in childhood, with a lifetime prevalence of 1.0%–2.5% and a mean onset age of about 8–11 years (Rapoport et al. 2000). Although comorbidity is common, Andy's presentation does not suggest the presence of any concurrent psychiatric problems. However, this may be a function of his young age, and Andy remains at increased risk for the development of additional disorders (most likely another anxiety disorder, depressive disorder, or tic disorder) over time. Family history of subclinical OCD in the father and tic disorders in other family members provides additional confidence in Andy's diagnosis, given the family genetics of these disorders.

Accurate evaluation of OCD requires a careful developmental and illness history. Although Andy's parents first noted his OCD symptoms a week before his evaluation, these, or similar, symptoms likely were present at a subclinical level for a longer period of time. The Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS; Scahill et al. 1997) is a semistructured clinician-rated instrument used to establish OCD severity and provide a comprehensive list of current and past symptoms. The CY-BOCS takes 30–45 minutes to administer and provides a psychometrically sound method for assessing symptom improvement over the course of treatment. As seen in Andy's case, OCD often negatively impacts psychosocial functioning. Similar to the CY-BOCS, the Child Obsessive-Compulsive Impact Scale—Revised (Piacentini et al. 2007b) includes brief, parallel parent- and child-report rating scales that can be used to document baseline OCD-related impairment and improvement over time. Documentation of past or current psychiatric comorbidity, using a clinical interview such as the Anxiety Disorders Interview Schedule for DSM-IV, Parent Version (Silverman and Albano 1996) or a valid and reliable parent-report global behavioral checklist is also important, given the extent to which other symptoms might impact OCD treatment or require their own intervention.

## DSM-5 Diagnosis

### ■ F42 Obsessive-compulsive disorder

## Treatment Recommendations

At present, exposure-based cognitive-behavioral therapy (CBT) and pharmacologic intervention with SSRIs are the only empirically supported treatments for OCD in children and adolescents (Watson and Rees 2008). Expert consensus recommends exposure-based CBT as the first-line treatment of choice for young children with OCD (Freeman et al. 2014). Given Andy's young age, recent onset, and lack of comorbid disturbance or developmental issues, the likelihood of a positive response to this treatment approach is very good. How-



ever, should CBT provide insufficient benefit, then medication should be considered as an adjunctive intervention. Consensus also suggests that treatment should involve Andy's parents and perhaps other family members as well.

On the basis of Andy's healthy premorbid functioning, psychological or neurological testing or other forms of adjunctive psychotherapy are not presently indicated. School intervention, typically based on the extent to which symptoms interfere with academic or social functioning in this setting, does not appear warranted in Andy's case, although this could change.

CBT for OCD is based on the observation that ritualistic behaviors, including avoidance, are negatively reinforced by their ability to reduce obsession-triggered distress. For example, the more effective compulsive hand washing is at reducing contamination fears, the more likely the child will engage in this behavior over time. In addition, engaging in the compulsion does not provide the child with an opportunity to challenge or disprove the obsession (e.g., "these germs won't really hurt me"), thereby further strengthening the connection between obsession and compulsion (the so-called obsessive-compulsive cycle). Exposure-based CBT seeks to break this cycle by encouraging children to resist the urge to ritualize (response prevention) in the face of obsession-triggered distress (Piacentini et al. 2007a).

The most effective CBT interventions for childhood OCD are multicomponent and supplement exposure plus response prevention (ERP) with psychoeducation about the disorder; a behavioral reward system to enhance treatment compliance; and, for an older child or adolescent, cognitive restructuring aimed at teaching the individual to more critically challenge his or her obsessive thoughts (Piacentini et al. 2007a). Treatment progresses in a gradual fashion, according to a symptom hierarchy, with milder symptoms exposed initially, followed by more difficult exposures as treatment progresses. For example, Andy's therapist might initially ask him to briefly touch his fingertip to a "contaminated" T-shirt, with subsequent exposures increasing in difficulty, perhaps culminating in having Andy wear the shirt for extended periods of time. Although habituation of fear over repeated exposures has traditionally been considered the mechanism underlying ERP efficacy (Foa and Kozac 1986), more recent inhibitory learning-based approaches have shifted focus away from fear habituation and instead focus on enhancing patients' ability to tolerate exposure-triggered distress (Craske et al. 2008). Even though exposures are typically developed and initially practiced during therapeutic sessions, most treatment gains accrue from repeated practice in the natural environment. Parental involvement in treatment focuses on eliminating family accommodation of symptoms (e.g., participating in the child's rituals or fostering avoidance of feared situations or objects) because this accommodation runs directly counter to the goals of ERP. For children who are about age 9 or younger or who have cognitive impairment, treatment may be more effective when presented in a play format. Younger children also commonly require greater parental involvement in therapy, which involves training the parent to serve as an adjunct therapist in the home setting.

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# Psychopharmacologic Perspective

Mark A. Riddle, M.D.

## Diagnostic Formulation

As the second-opinion consultant to Andy's parents and the pediatrician, the psychiatrist needs first to establish a diagnosis and formulation before proceeding to treatment. The information provided about this 8-year-old boy suggests a diagnosis of OCD. Andy presents with rather severe obsessions (thoughts about dirt and filth) and compulsions (refusal to wear clean clothes because "they are dirty," refusal to play in the park because it "is filthy," and refusal to eat because "dirt could have fallen onto my plate"), all of which focus on contamination. These symptoms are distressing and impairing and have already required parental accommodation. Prior to the onset of his OCD symptoms, Andy was described as quite healthy and happy. Although DSM-5 does not provide a duration criterion for OCD, the very recent onset—just 1 week ago—is noteworthy. Nothing in the case presentation suggests the diagnosis of any other psychiatric disorder or medical condition, other than a recent sore throat with lymphadenopathy and a negative strep test. The negative strep test seems to rule out PANDAS (Murphy et al. 2004); however, a recent scientific consensus report has issued guidelines and working criteria for a possible new category of pediatric acute onset neuropsychiatric syndromes (PANS) triggered by other unknown causes and/or infections (Chang et al. 2015). Unfortunately, PANS is largely a diagnosis of exclusion, made only after all potential causes have been ruled out. PANS may be distinguished from other causes of OCD by the acuity of onset and the presence of psychiatric symptoms in multiple domains (e.g., hallucinations, depression, inattention, Tourette's symptoms), rather than just OCD symptoms.

No confirmatory tests are available for OCD. Symptoms of OCD commonly wax and wane in severity; rating scales can be useful for following the severity of symptoms over time. The most commonly used rating scales are the child-completed Leyton Obsessional Inventory—Child Version (Berg et al. 1986) and the clinician-completed CY-BOCS (Scahill et al. 1997).

Andy appears to be a high-functioning boy from a high-functioning family. The parents' response to the rapid onset of rather severe OCD symptoms appears to be thoughtful and helpful. In terms of possible genetic vulnerabilities, the older brother has a history of a transient eye blink tic, and the father had a brief period as a boy of excessive worries that included "a need for symmetry," which could be considered an obsessive-compulsive symptom. The extended maternal family has a history of depression, and the paternal family has a history of Tourette's disorder. Given that early-onset OCD (before age 18) runs in families and is associated with tic and anxiety disorders (Nestadt et al. 2001), the formulation in this case would favor age-appropriate expression of a genetic vulnerability. Also, given the transient nature of the father's and brother's symptoms, combined with Andy's quite recent symptom onset, caution is indicated regarding prediction of course and prognosis.

## DSM-5 Diagnosis

### ■ F42 Obsessive-compulsive disorder

## Treatment Recommendations

The first step in treatment is illness education. OCD is a relatively common disorder, with a lifetime prevalence of 0.5%–2.0% (Towbin and Riddle 2007). When young children receive an OCD diagnosis, parents are usually quite concerned about etiology, confirmatory tests, course of illness, and prognosis. Reassurance that the child or parent did not do something to cause the OCD is obviously important. If the formulation includes genetic vulnerability, concerns about future generations are obvious. Prognosis is difficult to address when the symptoms have been present for only 1 week. However, the prognosis for OCD is quite favorable—many children have a complete remission, and severity is likely to wane even if symptoms continue. Finally, genetic vulnerability is probably complex and should not affect decisions about having additional children.

The next step in treatment is acute stabilization and crisis management, if necessary. The biggest concern with Andy was his refusal to eat for several days because of contamination concerns. Fortunately, he was responsive to the pediatrician's simple and skillful intervention.

For treatment some clinicians might recommend a "watchful waiting" approach, given that the symptoms have been present for only about 1 week and might be transient (i.e., self-limited). Although situations occur in which watchful waiting is appropriate, the severity of Andy's symptoms warrants a more assertive treatment plan.

Two evidence-based short-term treatments can be used for OCD: CBT and medication, specifically SSRIs. Both are moderately effective in relieving the symptoms of OCD. In a meta-analysis of six placebo-controlled studies of SSRIs for OCD involving more than 700 participants, the rate of response was 52% in the SSRI-treated group and 32% in the placebo group (Bridge et al. 2007).

In addition to the two evidence-based treatments, CBT and SSRIs, another important component of treatment is parent counseling regarding optimal approaches to managing a child's OCD symptoms. Helping parents find a comfortable and effective balance between accommodating to their child's symptoms and setting firm limits on impairing symptoms can be a daunting clinical challenge. Even the best of parents who have a child with impairing OCD find it difficult to manage their child's behaviors without expert support and advice.

No treatment is effective unless the child and parents accept the treatment. Even medication, which is a passive treatment, can be undermined by lack of compliance. Thus, for Andy, given his parents' stated concerns about the potential risks of medication, CBT might be the most effective first-line treatment. Most CBT therapists accept patients as young as age 7 or 8 years. Careful therapist selection, based on the therapist's experience and skills, is very important. In the best study to date of CBT for OCD in children (Pediatric OCD Treatment Study [POTS] Team 2004), the CBT therapists at one site had a treatment effect that was more than three times greater than the effect at the other site.

If high-quality CBT is not available or has been tried and found ineffective, treatment with an SSRI is indicated. Six SSRIs are available in the United States: citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine, and sertraline. No evidence supports any differences among them in terms of efficacy; however, various characteristics of these medications may influence choice. Three SSRIs—fluoxetine, fluvoxamine, and sertraline—are approved by the U.S. Food and Drug Administration for OCD in children. Fluoxetine has a very long half-life, which is an advantage when a dose is missed but a disadvantage when changing medicines. Paroxetine has nonlinear kinetics, which makes for nonlinear relationships between dose and blood levels.

For maximizing potential therapeutic benefits, several general principles regarding use of SSRIs in children are noteworthy. Children and families can be assured that side effects, when present, are generally mild. Rare potential major side effects—suicidal ideation or attempts, onset of mania in vulnerable children, and impairing sexual dysfunction—need to be described during the consent process. Standard practice includes low initial dosing followed by gradual increases in the context of regular monitoring of therapeutic response and side effects. Treatment at the highest tolerated dosage for 6–8 weeks is needed before declaring a medication ineffective (Towbin and Riddle 2007). Although some early data suggested that higher dosages of SSRIs were needed to successfully treat adults with OCD, placebo-controlled studies of SSRIs for OCD in children and adolescents have not indicated that higher dosages are needed for youth. Dosages needed to treat OCD, depression, and various anxiety disorders are generally the same.

Limited research data are available to guide medication treatment for children with OCD if the initial SSRI is not effective. The two most commonly used strategies are to switch to another SSRI or to augment with another medication. The most common augment, especially for children who have tics and/or a family history of tics, is a low-dose neuroleptic (McDougle et al. 2000).

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# PART II

## Comorbid Complexity

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# Introduction to Comorbid Complexity

Peter S. Jensen, M.D.  
Cathryn A. Galanter, M.D.

**IN PART II**, we present cases that are complicated because of multiple comorbidities. In such cases, careful attention to all of the precipitating and participating factors becomes essential. More often than not, effective treatment of a child with multiple comorbidities also means stabilizing key aspects of the child's environment. In addition, identifying how environmental factors precipitate and participate in maintaining the child's symptoms becomes especially critical.

In the first case, "Stealing the Car: Disruptive Behavior in an Adolescent" (Chapter 13), the two commentators note the importance of the environmental factors but recommend somewhat different approaches to assessment and diagnosis, including eschewing diagnosis altogether in multisystemic therapy. Both commentators, however, come to very similar treatment conclusions.

In the second case, "Zero Tolerance: Threats to Harm a Teacher in Elementary School" (Chapter 14), few differences are seen among the experts' diagnoses. The presentation of an actual patient with comorbid complexities may yield fewer or more differences across experts, depending on therapeutic approach, disciplinary background, and etiological inferences. In our view, for complicated cases, the need for multidisciplinary input and multiple interventions increases; thus, the integration of medication, psychotherapeutic, and environmental supports becomes increasingly essential. Often, because a single individual may lack expertise in all areas, optimal treatment approaches require multidisciplinary teams or close collaborations across disciplines.

In the case of "Anxious Adolescent in the Emergency Room: Misuse of Prescription Medications" (Chapter 15), the psychotherapeutic and psychopharmacologic commentators both note the importance of assessing the patient's anxiety, mood, attention, and eating behaviors to rule in or out coexisting psychiatric disorders that are occurring with her substance use disorders. Similarly, people presenting with anxiety disorders may also have histories of substance use. Commonly, one or the other of the diagnoses is missed, depending



on the clinical door the patient enters (i.e., based on the diagnostic beliefs and habits of a particular clinician).

In “The Worried Child: A Child With Multiple Anxiety Disorders” (Chapter 16), the commentators differ slightly in their approach to the possibility of single versus multiple anxiety disorders. Although children with anxiety disorders often meet criteria for multiple anxiety disorders, our understanding of these distinctions and their possible importance remains rudimentary at this point. In this case, however, the extent to which the child has a specific phobia and/or a generalized anxiety disorder may be important. Although both of these anxiety disorders generally are thought to respond to cognitive-behavioral therapy, specific phobia per se has not been systematically investigated in terms of the benefits of medication. This case also illustrates—potentially dramatically—the differences in kinds of treatments that might be offered, depending on a clinician’s disciplinary background and type of training. Those trained principally in medication may too quickly offer medication treatment for the presumed generalized anxiety disorder, whereas those trained in cognitive-behavioral therapy or exposure methods may tend to focus on the specific phobia and miss other aspects of the child’s anxiety presentation that may in fact benefit from and require medication.

“Affective Storms: A Careful Assessment of Rage Attacks” (Chapter 17) exemplifies one of the problems that currently challenges the field of child and adolescent psychiatry—that is, determining to what extent these young people’s complex rages or “storms” are part and parcel of more commonplace disorders such as comorbid attention-deficit/hyperactivity disorder (ADHD) and oppositional defiant disorder; to what extent they reflect a mood dysregulation disorder, such as bipolar I disorder; and to what extent they make up discrete new syndromes altogether that need to be studied in their own right. Both the psychotherapeutic and the psychopharmacologic commentators invoked the new DSM-5 diagnosis disruptive mood dysregulation disorder. As best we know, children are severely impaired and in need of effective treatments as determined through high-quality research—research that remains to be done, given the newness of this diagnostic entity.

The case of “Struggling in School: Language and Reading Difficulties” (Chapter 18) illustrates a much needed area of research: the overlap between ADHD and learning disabilities. In terms of federal research, ADHD historically has been studied almost exclusively by the National Institute of Mental Health. In contrast, learning disabilities have been studied most commonly by the National Institute of Child Health and Human Development and the U.S. Department of Education. Rarely have these two conditions—ADHD and learning disabilities—been studied explicitly together in treatment studies. The diagnosis of learning disabilities or ADHD will likely depend on the clinical door the family enters. Also, the case presentation includes a long list of sophisticated psychoeducational tests. Most child and adolescent psychiatrists are not fully trained in the use or interpretation of these tests, which is an important weakness in many training programs.

The last case in this section, “Abdominal Pain in a Child With Inflammatory Bowel Disease” (Chapter 19), aptly illustrates the complexity of working with children with medical illnesses and the difficulties in differentiating psychiatric illnesses from co-occurring or un-

derlying medical morbidity. Despite these challenges, the commentators agree on the current functional nature of the child's pain syndrome; the stable nature of the Crohn's disease; and the importance of assisting the child in the context of the parent-child relationship, including addressing the potential role of family members in maintaining the child's difficulties. This case also illustrates that complex cases often require a multidisciplinary team, skilled not only in treating medical illnesses and understanding the biological factors related to those diseases, but also in using the necessary range of psychiatric medications and evidence-based psychotherapies in addressing such complex problems.



# CHAPTER 13

## Stealing the Car

### Disruptive Behavior in an Adolescent

Peter S. Jensen, M.D.

#### Case Presentation

##### Identifying Information

Trey is a 17-year-old tenth grader who lives with his mother, a 12-year-old brother, and the mother's boyfriend.

##### Chief Complaint

Trey was referred by a probation officer for an “urgent” mental health evaluation after he was arrested for “stealing” his family's car. He was accompanied to the evaluation by his mother and her boyfriend.

##### History of Present Illness

Over the past 6 months, Trey has had increasing conflict with his mother and, more recently, arguments with his mother's boyfriend. Although Trey has always been “hard to handle” (his mother's words), the situation worsened after Trey turned age 16 and earned his driver's license. At about the same time, the mother became involved with a new boyfriend, who spends a lot of time in the home and recently started interceding when Trey and his mother argue. Arguments have principally turned on whether Trey is allowed to take the car out in the afternoons after school to “go places.” Although he claims that he just goes to visit friends, in fact Trey had a recent accident 8 miles from where he said he would be, and the mother's coworkers have sighted Trey driving toward a seedy, drug-infested area of town where he is not supposed to go. For the accident, he received a ticket for being at fault (failing to yield, turning into an oncoming vehicle). His mother is reluctant to let him take the car, in part because she feels he is not telling her where he is really going and also because his driving “scares me,” as he is often distracted. Although he has had only one accident, he reportedly has had several “near misses” with his mother in the car.

One day, Trey and the mother's boyfriend got into a heated verbal argument when Trey wanted to take the car while his mother was away at work; the boyfriend said "no," and the two got into a shoving match. The boyfriend then grounded Trey and sent him to his room. Trey snuck out the window and drove the car over to a friend's house. The mother's boyfriend alerted the police, who found the car and arrested Trey.

## Past Psychiatric History

Trey has a history of behavior problems and learning difficulties dating back to first grade, just about a year after his father was killed in a trucking accident. Trey idolized his father, who often worked away from home as a long-distance trucker. Trey's difficulties in preschool and kindergarten had not aroused particular concerns, although his kindergarten teacher described him as "the Energizer Rabbit—he keeps on going." Toward the end of first grade, after the teacher expressed increasing concerns about Trey's difficulties staying seated, unwillingness to follow directions on the playground, aggression toward peers, and problems completing seat assignments, his mother took him for a medical evaluation with a pediatrician, who diagnosed attention-deficit/hyperactivity disorder (ADHD) and prescribed methylphenidate 5 mg three times a day, with some benefit. Trey's mother discontinued his medication over the summer but restarted it in second grade. He continued taking the medication on and off for most of elementary school but began to complain about taking it. In fifth grade, because of Trey's complaints, the pediatrician changed the prescription to osmotic-release oral system methylphenidate (OROS-MPH) 18 mg/day, which Trey took for much of fifth and sixth grades but then stopped taking at the end of sixth grade.

Trey has had a long history of getting into heated arguments and conflicts, both at home and at his middle and high schools. He was suspended for fighting several times and was then expelled after hitting with his fist a teacher who was trying to break up a hallway fight in which Trey was involved. Trey claims it was "an accident." Because of these problems, as well as academic difficulties in most subjects, he was held back in ninth grade. After this incident, Trey seemed remorseful and sorry but was also overheard bragging about it to a friend on the phone.

Trey has also had heated arguments with his mother and, on at least one occasion, has physically shoved her after she grounded him. In one incident, she fell and hit her head, needing stitches. Similarly, he is often physically aggressive toward his younger brother, including punching him and leaving bruises on his arm.

His mother notes that Trey has had long-standing problems with not minding her and staying out later than curfew. In ninth grade, he got caught skipping classes with another ninth grader, who has a history of drug abuse problems.

## Substance Abuse History

Trey's mother says that she knows Trey is drinking because "he sometimes smells like a brewery" after being out with friends on weekends. This has happened four or five times,

and once when she confronted him about his drinking, he told her, “It’s no big deal; everyone does it.” His mother wonders if Trey has tried marijuana, noting that he keeps on display above his bed some paraphernalia, which he says are “for show,” and that on two instances she wondered if he was “on drugs” when he came home with watery red eyes and a musky smell.

## **Medical History**

Trey had a tonsillectomy at age 9 after repeated bouts of strep throat. He has mild seasonal allergies and gets hives from eating shellfish.

## **Developmental History**

Trey was born at 38 weeks gestational age, with Apgar scores of 7 and 8 at 1 and 5 minutes, respectively. He had mildly elevated bilirubin and jaundice, for which he stayed an extra week in the hospital. Developmental milestones were normal or a bit precocious. His mother noted that he was “very active” beginning at about age 2 years, but this never worried her until teachers raised concerns in kindergarten and first grade.

## **Social History**

Trey was raised by his mother and father until his father’s death when Trey was in kindergarten. His mother was pregnant with the younger brother at the time of the father’s death. She went back to work as a waitress to support the family. Trey has done fairly well in school, but his grades began a gradual decline in middle school, and he was held back in ninth grade for problems described earlier in this case presentation. His mother is concerned about his choice of friends, who tend to be “rockers” and bad students, and one of whom has known drug problems. Trey has several hobbies; he particularly likes playing guitar. He has been “jamming” with two friends after school for the past 2 years and wants to be in a band.

## **Family History**

Trey’s father had a history of childhood and teenage problems in school—not doing homework, not getting along with others, and eventually dropping out. The father also had alcohol and drug abuse problems until he joined Alcoholics Anonymous at age 25. Trey’s mother and maternal grandmother have a history of depressive episodes, for which the mother has been treated with psychotherapy and a selective serotonin reuptake inhibitor.

## **Mental Status Examination**

Trey presented dressed in jeans, sandals, a ball cap, and a KISS T-shirt. In the presence of the mother and boyfriend, he was sullen and angry about the interview and particularly resentful about the mother’s boyfriend and the subsequent arrest. His eye contact was poor, and his attitude was uncooperative. On interview without his mother and her boyfriend

present, he appeared to warm up and to show more affect when talking about his future plans and interests in rock music. Trey denied suicidal or homicidal ideation. He said that his mother's boyfriend has "no right" to tell him what to do because "he's not my dad." He stated that school does not interest him. Although he admitted that he has trouble concentrating, he claimed to not like medication because it "takes away my personality...I get nerdy." He admitted to some alcohol use with friends but stated, "It's not really a big problem. I know when to stop." Although he noted that one of his music friends has "drug problems," he stated, "I don't because it's not my style."

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## Psychotherapeutic Perspective

Scott W. Henggeler, Ph.D.

### Diagnostic Formulation

This commentary is written from the perspective of multisystemic therapy (MST; Henggeler et al. 2009), an evidence-based treatment typically used with adolescents referred from the juvenile justice system for serious antisocial behavior that places these youth at high risk for out-of-home placement. MST does not emphasize formal diagnostics but rather focuses on identifying characteristics of the individual youth and the social systems in which he or she is embedded (i.e., family, peers, school, and neighborhood) that might be linked with the identified problems. Importantly, youth and social system strengths are also identified, because these are used as levers for change in the subsequent design of interventions. A multifaceted approach is taken to the assessment of problems, risk factors, and strengths. This approach includes interviews with family members (i.e., youth, caregivers, siblings, extended family as appropriate), teachers, peers, juvenile justice authorities, and others, as well as therapist observations of transactions within and between these systems. The MST therapist, in collaboration with other members of the MST treatment team, then synthesizes the assessment information into a coherent framework that will be used to guide and prioritize the design and implementation of interventions.

In the case of Trey, the likely consensus-identified problems include 1) physical aggression, 2) noncompliance, 3) substance abuse, and 4) lack of effort at school. These are serious and interrelated problems that place Trey at risk for incarceration (e.g., his physical

confrontations with adults could readily lead to arrest and incarceration as an adult offender) as well as deleterious long-term psychosocial outcomes (e.g., substance abuse and poor school/vocational performance are predictors of difficulties during adulthood). In delineating the risk factors linked with these problems, MST gives priority to proximal factors (e.g., parenting, interactions with friends) rather than distal factors (e.g., early childhood experiences). For purposes of illustration, hypothesized risk factors for Trey's interpersonal aggression likely include genetic (i.e., from father) and biological (i.e., ADHD, substance abuse) predispositions for interpersonal aggression; weak parental monitoring, supervision, and discipline at the family level; extensive association with deviant friends at the peer level; and poor academic and social performance at the school level. These risk factors likely combine and interplay to support the development and maintenance of Trey's antisocial behavior. On the other hand, as noted previously, the identification of systemic strengths is also a critical emphasis of MST. For determining strengths, information provided in the case summary is less helpful, but several strengths can be inferred. Trey's mother cares about him, the mother's boyfriend cares about Trey's behavior, Trey is still in school (i.e., many 17-year-olds with his problems would have dropped out by now), and Trey enjoys playing music.

## DSM-5 Diagnosis

- **MST does not emphasize formal diagnostics but rather focuses on identifying problematic behaviors and the individual (e.g., cognitions) and social (e.g., family relations, peer relations) characteristics that are associated with these problem behaviors, as described above in the Diagnostic Formulation. Thus, this MST commentary about Trey's case does not include a DSM-5 diagnosis (American Psychiatric Association 2013).**

## Treatment Recommendations

The design of MST interventions is based on nine treatment principles (Henggeler et al. 2009), and these interventions are developed and implemented in an iterative process: 1) the key risk factors for the identified problem are specified, as done for Trey in the previous section on diagnostic formulation; 2) these factors are prioritized on the basis of their likelihood to effect change in the identified problem if the factors are modified; 3) interventions, derived primarily from evidence-based treatment protocols (e.g., the behavior therapies, cognitive-behavioral therapies), are developed for specific risk factors; 4) the interventions are implemented through leveraging identified systemic strengths; 5) the outcomes of the interventions are evaluated; and, assuming that success has not been complete, 6) the process is repeated, capitalizing on the knowledge gained from the relative success or failure of the preceding interventions.



The development of MST interventions for Trey's physical aggression would likely be multifaceted and sequential. Before these interventions can be developed, however, a better understanding of the mother's parenting competence is needed because improved parenting is often the key driver of youth clinical change within MST. Indeed, improved parenting has been identified as the key mediator for several effective treatments of serious antisocial behavior in adolescents (Henggeler and Sheidow 2012). Even though Trey is age 17, he is only in the 10th grade and will likely be living in his mother's home for at least another 3 years. Common causes of ineffective parenting include parental substance abuse or mental health problems, lack of social support, high stress, low knowledge, skill deficits, and having "given up." The pertinent drivers of his mother's parenting difficulties would need to be identified and resolved before interventions could be delivered optimally to Trey. Otherwise, positive therapeutic gains will likely dissipate with the conclusion of treatment. Assuming that the barriers to effective parenting were addressed effectively, the therapist would rely on the mother's love of her son and the boyfriend's caring for Trey's mother to develop a set of interventions that would be implemented by the mother. Foremost, the therapist would coach the mother in well-specified strategies for better monitoring, supervising, and disciplining her son. The mother's boyfriend would not implement the interventions directly but would act as the mother's support system during their implementation.

In essence, interventions would be designed to change Trey's attitudes and social environment that are currently supporting his physical aggression and other antisocial behaviors to counterparts that favor prosocial and responsible behavior. For example, Trey's substance use would be targeted with contingency management, which is an evidence-based treatment of substance abuse that has been successfully integrated into MST protocols for juvenile offenders (Henggeler et al. 2012); the parent would monitor the youth's substance use through frequent drug screens and implement rewards (e.g., privileges, desired items) and sanctions (e.g., restrictions, loss of car privileges) on the basis of the results of the screens. Similarly, cognitive-behavioral interventions, including both the youth and his mother, would be used to develop self-management strategies for dealing with high-risk substance use situations. Because impulsivity related to Trey's ADHD is also a likely contributor to his interpersonal aggression, psychiatric consultation would be obtained regarding the possibility of resuming evidence-based psychopharmacology. More challenging but critical interventions would also be designed (see Henggeler et al. 2009) to help the mother disengage Trey from his deviant peer group, connect him with more prosocial peer activities (e.g., leveraging his interest in guitar), and enhance his school and/or vocational functioning. These latter interventions are essential in promoting long-term behavioral change, and the therapist would serve as the mother's coach throughout the implementation process. Finally, throughout the course of treatment, the therapist would help the mother build an indigenious support system that extends beyond her boyfriend and could be accessed when problems inevitably reemerge. The ultimate goal of treatment, therefore, is to substitute a social network that is conducive to prosocial and responsible behavior for one that is currently supporting antisocial behavior.

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# Psychopharmacologic Perspective

Daniel F. Connor, M.D.

## Diagnostic Formulation

Trey is a 17-year-old male with a psychiatric history notable for an early-onset, chronic, cross-situational, and impairing behavioral disorder. Early-onset externalizing symptoms include attentional difficulties with tasks that require sustained vigilance (i.e., schoolwork), impulsivity and poor frustration tolerance, defiance toward rules and parents, physical aggression, and hyperactivity that emerged early in development (i.e., by kindergarten), all of which are ongoing into adolescence. In adolescence, symptoms include substance use (alcohol and possibly cannabis), continued physical aggression at home and at school, defiance of parental rules, arguing with authority figures, academic difficulties, and a history of unsafe motor vehicle operation. There is a family history of vulnerability to psychiatric disorder including reported paternal ADHD, academic underachievement, and substance use disorder, and first- and second-degree maternal affective disorder. Psychologically, a number of stressors are present and increase risk for poor outcomes. Included here are developmental stressors as Trey appears to struggle with integrating his neuropsychiatric and academic vulnerabilities into a coherent adolescent identity that would allow him to accept psychiatric treatment, blended family issues including multiple maternal boyfriends, conflicts over just who has the authority to discipline him in the home, and early loss of his father. Socially, he has underperformed academically, leading to retention in the ninth grade. As he negotiates adolescence, the mother worries that he is choosing a peer group that is not entirely oriented toward prosocial activities. On the other hand, Trey has a number of strengths that might form a partial basis for beginning a therapeutic alliance. These include the capacity for interpersonal attachment (e.g., relationship with mother and friends), remaining in school despite many challenges (a prosocial activity), and an interest in music (another prosocial activity). He appears to be a stimulant responder when adhering to ADHD treatment.

Trey has a history of persistent and significant overt (e.g., physical fights) and covert (e.g., lying, rule breaking) aggression. Although it is difficult to discern from the case material presented, his aggression appears to be impulsive, explosive, and driven by fear of

threat and/or frustration. He does not appear to possess limited prosocial characteristics such as callous-unemotional personality traits or to engage in coercive and instrumental forms of aggression driven by reward contingencies. In the evaluation of his aggressive behavior, it is important to assess whether his aggression is ego-dystonic and causes negative internal affect or ego-syntonic and not restrained by negative feeling after an aggressive episode. More callous forms of aggression have a worse prognosis into adulthood.

Aggression does not denote illness specificity but rather illness severity and is a symptom accompanying a number of different psychiatric disorders (Connor and McLaughlin 2006). Although independent of any specific psychiatric disorder, aggression is often a focus of treatment. Impulsive aggression generally appears more psychopharmacologically responsive than instrumental forms of aggression (Pappadopulos et al. 2006).

Trey is not described as overtly irritable; if he were, the behavior might suggest a diagnosis of disruptive mood dysregulation disorder. A diagnosis of intermittent explosive disorder does not appear appropriate because Trey's aggressive outbursts seem to be better explained by a diagnosis of ADHD, conduct disorder, and/or oppositional defiant disorder (ODD). When criteria are met for both ODD and conduct disorder, both DSM-5 diagnoses may be assigned. However, from the case presented, it does not seem that conduct disorder is an appropriate diagnosis for Trey, who does not obviously engage in a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated (i.e., it is not unexpected that adolescent males sometimes engage in physical altercations with peers or have dysregulated behaviors toward parental figures). Diagnoses of ADHD and ODD complicated by substance use disorder appear most closely aligned with the presented case material.

## DSM-5 Diagnosis

- F90.2 Attention-deficit/hyperactivity disorder, combined presentation, severe
- F91.3 Oppositional defiant disorder, severe
- F10.99 Unspecified alcohol-related disorder
- Rule out conduct disorder
- Rule out cannabis use disorder
- Rule out specific learning disorder
- Z62.820 Parent-child relational problem
- Z55.9 Academic or educational problem
- Allergy to shellfish, no known drug allergies

## Treatment Recommendations

Evidence-based treatment emerges from a careful multimodal, multi-informant clinical evaluation that assesses psychiatric, psychological, developmental, behavioral, family, educational, and outside agency factors (e.g., probation and juvenile justice). Evidence-based treatment is a result of incorporating clinician experience, the pertinent scientific literature, and patient values into an individualized treatment plan. Treatment for Trey needs to address behavioral, psychological, family, educational, and pharmacological approaches. Treatment that can address multiple targets simultaneously appears to be more effective than piecemeal interventions (Connor et al. 2006). The following commentary focuses on psychopharmacological approaches to this case.

When considering psychopharmacological treatment, the clinician needs to identify target symptoms to guide intervention. A primary illness approach seeks to understand the patient's target symptoms within the context of one or more identifiable and treatable primary psychiatric illnesses. If the target symptoms are associated with a primary psychiatric disorder, then effective treatment of the underlying and primary disorder should allow improvement in target symptoms. This is similar to how clinical medicine approaches the patient with fever or pain. The underlying pathophysiological etiologies associated with fever or pain (e.g., infection, inflammation, cancer) are sought, identified, and treated. The fever or pain then improves as the underlying illness is successfully treated.

In the case of Trey, target symptoms of impulsivity, impulsive aggression, low frustration tolerance, concentration difficulties, rule-breaking behavior, and academic underperformance may all be due to untreated ADHD comorbid with ODD. Evidence-based psychopharmacological treatment of ADHD may cause improvement in targeted symptoms. There is evidence that ODD symptoms may also improve with medication interventions when ODD occurs in the context of ADHD (Connor et al. 2010). A reasonable treatment goal with medication therapy is greater than 50% improvement in symptom severity and improvement in daily functioning. Thus, the first step would be to introduce an agent with evidence-based support for the treatment of ADHD, such as a stimulant or atomoxetine, and seek to optimize the dose (Blader et al. 2010). If only partial response occurs (i.e., <50% improvement in symptom severity), combined pharmacotherapy with a stimulant and an  $\alpha_2A$ -adrenergic receptor agonist (e.g., extended-release guanfacine or extended-release clonidine) may capture additional benefit (Findling et al. 2014). Another evidence-based approach to the ADHD partial responder with significant impulsive aggression is the addition of an atypical antipsychotic such as risperidone to ongoing stimulant treatment (Aman et al. 2014).

In summary, treatment of the adolescent with ADHD and ODD with significant aggression requires a comprehensive approach that addresses not only the disorder and target symptoms but also comorbid psychiatric disorders, academic needs, and psychosocial stressors. Psychopharmacological treatment of symptoms utilizing the primary illness approach is recommended.

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# CHAPTER 14

## Zero Tolerance

### Threats to Harm a Teacher in Elementary School

Karen C. Wells, Ph.D.

#### Case Presentation

##### Identifying Information

James is a 10-year-old who lives with his parents and two siblings, an 8-year-old sister and a newborn. He attends fifth grade.

##### Chief Complaint

James was referred to the outpatient child psychiatry clinic by the emergency department of the local hospital, where he was taken for an emergency evaluation because of threatening to kill his teacher.

##### History of Present Illness

On the day of evaluation, James had pulled a knife from his pocket at school and threatened to kill his teacher after she gave him after-school detention and threatened to call his parents about his fighting on the playground. When James's parents could not be reached immediately, school security personnel transported James to the emergency department because he continued to be combative and verbally defiant to the principal in the school office. Once at the emergency department, James became sullen and withdrawn and refused to speak to the medical personnel. When his parents arrived at the emergency department, they gave a history of James's disruptive behavior in school and his oppositional and aggressive behavior from an early age, escalating to hitting his siblings and, more recently, fighting at school and hitting and kicking his parents when they attempted to discipline him. Although James had displayed disruptive behavior since an early age, his parents reported

an increase in his anger and aggression since the recent birth of a sibling, as well as a corresponding increase in their own anger and short-tempered reactions to James. In the emergency department, James denied suicidal or homicidal ideation or plans, and after several hours, he was released to the custody of his parents with an appointment scheduled the next day at the psychiatry clinic.

## Past Psychiatric History

Interview and history taken from James's parents at the psychiatry clinic indicated a child who from early infancy had had a difficult temperament, fussy irritability, and difficulty developing regular sleeping habits. His mother reported that James "never crawled or toddled but just seemed to get up and start running one day and has been running ever since." He was "into everything," was seemingly fearless, and had to be constantly watched and monitored for dangerous behaviors, such as climbing bookcases. He did not respond when adults said "no," and when physically stopped or prevented from preferred or risky activities, he became very upset, screamed, cried, and threw tantrums. In kindergarten at age 5, James was aggressive toward other children, pinching and hitting them, and impulsively grabbed toys from other children. He threw tantrums when the teacher intervened to return the toy. He had difficulty making transitions from one activity to another and was unable to settle or rest at quiet time. The school administration suggested that he repeat kindergarten before going on to first grade, although the parents disagreed.

In the early grades of elementary school, James continued to display disruptive behavior. He had difficulty sitting and paying attention in circle time and, later, at his desk, and he was frequently out of his seat walking around the room. He also continued to show aggression toward other children when frustrated, impulsively hitting them when he did not get his way. In third and fourth grades, he continued to be aggressive toward classmates, had difficulty completing his assignments in class, and made disruptive noises in his seat that bothered other children. He seemed to be of average or higher intelligence but made poor grades, mainly due to not completing assignments or turning in homework. His teacher moved his desk to the front of the class by her desk. Over the years, as behavioral expectations in school increased and teacher tolerance decreased, his behavior elicited ever-increasing levels of corrective, negative feedback and criticism from teachers.

At home, his parents responded to James's behavior with increasing frustration, criticism, and hostility. The father spanked James frequently and, according to his mother, cursed at James when he was very angry, but this did not appear to reach the level of physical abuse. His mother admitted to yelling and scolding and calling James names, about which she later felt guilty. James first hit his mother in one of these disciplinary interactions. After this, his tantrums increased and would include hitting and kicking at both parents when he did not get his way. His parents admitted that their approaches did not seem to be working, but they did not know what would work. James appeared increasingly angry and out of control, and his parents were at a loss as to how to manage him.

## **Substance Abuse History**

James and his parents deny that James has used alcohol, cigarettes, or recreational drugs.

## **Medical History**

James had a tonsillectomy at age 5 but no other significant medical history or procedures.

## **Developmental History**

James was the product of a normal, full-term pregnancy and delivery. His mother, a pack-a-day smoker prior to the pregnancy, reported that she tried to quit smoking while pregnant but succeeded only in cutting down from a pack a day to “several cigarettes a day.” The remaining early developmental history has been described previously in this case presentation.

## **Social History**

James’s mother works full time outside the home. His father is currently unemployed and has a work history of multiple job changes. Stressors include the father’s unemployment, credit problems related to three automobile accidents that the father has had within the last 3 years, the new baby, an overburdened mother, and marital conflict related to all of these factors.

## **Family History**

The father’s brother had a history of attention-deficit/hyperactivity disorder (ADHD) and substance abuse, and several paternal cousins had ADHD. The father had never seen a psychiatrist or psychologist and had no formal diagnoses but reported having had significant difficulty in school despite a normal IQ. He reported being “bored” with his jobs and not finding an occupation that interested him, but his wife reported that he had been fired from several jobs because of “forgetfulness” and disorganization. According to his wife, he drinks 6–12 beers per night. James’s mother has a diagnosis of depression and is currently being treated with antidepressant medication.

## **Mental Status Examination**

The interview revealed that James was a sullen boy who answered questions with one- or two-word responses. He stayed in his seat, shredding a tissue into tiny pieces, throughout the course of the interview. He stated that his mood was “fine” but that he got angry when people treated him unfairly. He denied that he had threatened his teacher with a knife and said that the boys with whom he had been fighting deserved to be punished but that he did not. His reality testing was unimpaired, and he denied suicidal or homicidal ideation. He stated that he did not know why he was at the clinic and showed little insight about any contributions to his current difficulties.



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# Psychotherapeutic Perspective

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## Diagnostic Formulation

James's presentation suggests a history of disruptive behavior problems and family stressors. A multimethod, multi-informant approach is recommended to assess the nature, onset, and severity of his symptoms. Specifically, information regarding his current symptoms and functioning, as well as his developmental, social, academic, and treatment history, should be obtained through 1) clinical interviews with James and his parents, 2) completion of behavioral checklists (e.g., Behavioral Assessment Scale for Children—Second Edition; Reynolds and Kamphaus 2004) by James and his parents and teacher, 3) school consultation, and 4) direct behavioral observation.

On the basis of the information provided, James is exhibiting a number of symptoms of DSM-5 (American Psychiatric Association 2013) oppositional defiant disorder (ODD) (i.e., often loses his temper, exhibits active defiance, often blames others, and often appears angry and resentful). These symptoms occur in multiple settings (i.e., at home, in the classroom, and with peers) and have lasted longer than 6 months. James is also exhibiting symptoms of conduct disorder (CD). The presenting incident in which he threatened to kill his teacher with a knife meets the diagnostic criterion for CD of using a weapon that can cause serious physical harm to others in the past 6 months. Reports of a number of other aggressive acts toward children and adults, beginning at age 5, also indicate that James has been exhibiting a repetitive and persistent pattern of behavior in which the basic rights of others are violated. DSM-5 allows for diagnosis of both ODD and CD when the criteria for both disorders are met. Given that the aggressive incidents described tended to be reactive in nature, it would be important to determine whether James has also demonstrated more proactive forms of aggressive, destructive, or deceitful behaviors to further confirm that a CD diagnosis is appropriate. At this point, a CD diagnosis is given provisionally. James's aggressive behavior is clearly causing social and academic impairment, as evidenced by strained parent, teacher, and peer relationships and serious school disciplinary events. Because his history includes little indication of prosocial emotions, empathy, or remorse, James may exhibit callous-unemotional traits.

James's history is also indicative of a number of symptoms of ADHD (i.e., impulsivity, hyperactivity, difficulty paying attention and completing assignments). Given the high rate of co-occurrence of ADHD and ODD/CD (Jensen and MTA Cooperative Group 2002), the discrepancy between James's intellectual functioning and academic performance, and the paternal family history of ADHD, it will be important to further assess James for ADHD and to consider how these symptoms may be affecting his behavior and academic functioning. Research suggests that children with both CD and ADHD have a poorer prognosis than children with only one of these disorders (e.g., Waschbusch 2002) and that children with higher total numbers of conduct problems and ADHD symptoms are at risk for developing more severe CD in adolescence (Whittinger et al. 2007), underscoring the need to address both disorders if indicated.

Given James's difficult temperament in infancy, he was likely born with a biological predisposition to social-emotional and/or behavior problems. However, a number of family environmental stressors are present that appear to be exacerbating James's behavior problems. His parents report an escalating cycle of harsh and conflictual disciplinary interactions, which are reflective of the coercive family process often seen in children with disruptive behavior disorders (Patterson 2002). Other key risk factors for CD are also reported, including maternal depression and paternal substance use, as well as situational stressors such as the father's unemployment, marital strain, the birth of a new sibling, and financial concerns.

## DSM-5 Diagnosis

- **F91.3 Oppositional defiant disorder, severe**
- **F91.1 Conduct disorder, childhood-onset type, moderate, with limited prosocial emotions (provisional)**
- **F90.2 Attention-deficit/hyperactivity disorder, combined presentation, moderate**
- **Z62.820 Parent-child relational problem**
- **Z60.9 Unspecified problem related to social environment (paternal unemployment and alcohol use disorder, strained family finances, parental marital difficulties)**

## Treatment Recommendations

The information provided about James's current symptom presentation, as well as his psychosocial history and family functioning, indicates that a comprehensive treatment plan will be needed to address his conduct and attention problems. On the basis of the current treatment outcome research, multimodal treatment of ADHD with both stimulant medication and comprehensive behavioral therapy is recommended, particularly for children with co-occurring ADHD and ODD/CD (Jensen and MTA Cooperative Group 2002). Com-

prehensive behavioral intervention should include individual and/or group therapy for James, behavioral parent training for his parents (or conjoint parent-child interaction therapy), and a school-based behavior intervention plan.

As a first line of treatment, James and his parents would benefit from participating in an evidence-based program that addresses the characteristic skill deficits seen in children with conduct problems and their families; these programs include Coping Power (Lochman et al. 2008; Wells et al. 2008) and Parent-Child Interaction Therapy (e.g., Eyberg and Bussing 2010). James appears to have problems with anger management and can benefit from improving his awareness of the early physiological cues of anger (e.g., face feeling hot, muscles getting tense) and learning cognitive strategies (e.g., coping statements such as “don’t be a fool, keep your cool,” “things go better for me when I take time to calm down before responding”) and physical relaxation strategies (e.g., deep breathing, progressive muscle relaxation) to help manage his anger. His reliance on aggression to resolve conflicts also is suggestive of a need for assistance in social problem solving. Therapeutic intervention in this area might include improving his ability to see situations from others’ perspectives and expanding his repertoire of problem-solving strategies (e.g., to include assertive communication and negotiation strategies, rather than primarily aggression) and to improve his ability to think ahead about the consequences of his actions. Aggressive children are likely to be rejected by their normative peer group, placing them at increased risk for association with deviant peers and escalating behavior problems (e.g., Coie et al. 1992). Improvement of James’s social skills, addressed through in vivo practice of prosocial behavior, increased parental monitoring, and involvement in supervised extracurricular activities, may decrease the risk of negative peer involvement.

The main treatment goals with James’s parents will include improving the parent-child relationship and establishing effective behavior management strategies. James’s parents can work to improve their relationship with James by spending regular quality one-on-one time with him and by increasing praise and attention to his positive behavior. Children with disruptive behaviors often respond well to structured behavioral programs encompassing clear expectations, rewards for appropriate behavior, and consequences for noncompliance. A therapist can work with the family to develop a behavioral system, including strategies to address minor disruptive behaviors (e.g., through selective ignoring) as well as more serious misbehavior (e.g., through privilege removal or additional work chores) and to implement this system in a calm, consistent manner. To be maximally effective, the system should also encompass school behavior. This can be accomplished through establishing a written school-to-home report system, in which teachers indicate daily progress toward behavioral goals and parents provide rewards or consequences as indicated, as well as by establishing a Section 504 Plan or Individualized Education Program.

A central part of James’s treatment plan should be to address the current family stressors by providing needed support and services. James’s father would particularly benefit from assessment and treatment for suspected substance use and attention-deficit disorders. Both parents would benefit from marital therapy, financial counseling, and additional social support and caregiving respite. Importantly, James’s behavior should be reassessed after

the family stressors have been adequately addressed, to determine the extent to which James's disruptive behavior is reflective of distress in the family system versus potentially chronic antisocial behavior.

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## **Psychopharmacologic Perspective**

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### **Diagnostic Formulation**

A thorough and thoughtful diagnostic assessment is the first step in a psychopharmacologic approach to a youngster with aggressive behavior (Knapp et al. 2012). Because James has a history of chronic restlessness and impulsivity, and his father has a history of academic and vocational underachievement, a diagnosis of ADHD seems to be a reasonable consideration for James.

The young man also has a chronic history of difficulties with oppositionality, defiance, and impulsive aggressive behavior. Therefore, this youngster may also have a disruptive behavior disorder such as ODD and/or CD.

However, the case presentation suggests that other diagnoses might be considered as well. On the basis of the history of potentially excessive corporal punishment and possibly overly harsh verbal reprimands, the clinician should consider in the differential diagnosis whether James might also be suffering from posttraumatic stress disorder or a related anxiety disorder.

The patient's history also indicates multiple stressors within the home, all of which might be substantively impacting this youngster's behavior and emotional state. For this reason, these issues should also be thoughtfully evaluated and considered as part of a biopsychosocial evaluation. Once the evaluation is completed, a treatment plan can be formulated.

In James's age group, ADHD is frequently associated with comorbid disruptive behavior disorders (Pliszka and AACAP Work Group on Quality Issues 2007). Thus, although James may in fact be suffering from other psychiatric syndromes and likely has substantive

psychosocial determinants for his behaviors, we presume for heuristic purposes that he has ADHD and comorbid ODD and CD.

## DSM-5 Diagnosis

- F90.2 Attention-deficit/hyperactivity disorder, combined presentation
- F91.3 Oppositional defiant disorder
- F91.1 Conduct disorder, childhood-onset type

## Treatment Recommendations

Pharmacotherapy alone might not be optimal for this patient, considering that psychosocial interventions are often effective in reducing the behaviors this child is manifesting coupled with the multiple psychosocial stressors in his life and the psychological distress he is experiencing. Thus, medication therapy might be most effective for this child as part of a multimodal treatment plan (Scotto Rosato et al. 2012).

A rational pharmacologic treatment approach, based on published recommendations, to treating such a youngster generally begins with pharmacotherapy of ADHD (Kutcher et al. 2004). Psychostimulants, atomoxetine, and the  $\alpha_2$ -adrenergic receptor agonists clonidine and guanfacine have U.S. Food and Drug Administration (FDA) approval for use in children with ADHD. A psychostimulant might be the most reasonable choice for James because more extensive data are available for this class than for other classes of ADHD pharmacotherapy to suggest that treatment is associated with both ADHD symptom amelioration and reductions in impulsive aggressive behavior in children with ADHD and aggression (Connor et al. 2002).

For youngsters like James, a long-acting stimulant (rather than a short-acting formulation) may be a rational starting point for ADHD pharmacotherapy because a long-acting preparation may more readily afford a child the opportunity to have sustained symptom amelioration over the course of a day. However, for families that are particularly concerned about potential stimulant-related side effects, initial treatment with a short-acting stimulant may be a reasonable initial choice. Beginning therapy with a short-acting stimulant formulation may allow the family to become more comfortable with a more modest degree of medication exposure. This latter approach, therefore, can provide an opportunity to assuage the parents' concerns about psychostimulant treatment early in the course of drug therapy.

Notably, the extant evidence suggests that when ADHD is comorbid with CD, the effectiveness of psychostimulants in the treatment of aggression is reduced (Connor et al. 2002). Therefore, at the start of psychostimulant therapy, the clinician should review with James's family the possibility that although James might have substantive reductions in ADHD symptomatology with optimized psychostimulant pharmacotherapy alone, he may

not receive adequate reductions in his pathological aggression (Jensen et al. 2007). The clinician should also mention to James's family, however, that it is also possible that with well-monitored titration of stimulant monotherapy, adequate reductions in impulsive aggressive behavior might also occur (Blader et al. 2010).

Following FDA-approved dosing strategies for treating ADHD is recommended because these dosing approaches are derived from scientific data. As mentioned, although James might have good ADHD symptom amelioration with the first psychostimulant prescribed, satisfactory reductions in aggressive behavior may not occur. For a patient with residual and problematic aggression, we generally review two treatment options with the patient and family: 1) try another first-line treatment for ADHD (e.g., another psychostimulant, atomoxetine, or an  $\alpha_2$ -adrenergic agonist) to see if better overall response is seen or 2) consider an adjunctive agent specifically selected to address the aggression. Unfortunately, no methodologically stringent data are available to indicate which option is best. However, we have the impression that replacing the psychostimulant with either another stimulant or atomoxetine or an  $\alpha_2$ -adrenergic agonist is often not as successful as opting for a treatment course in which an adjunctive medication is initiated.

We wish to emphasize that in James's heuristic case, we are discussing interventions for treatment-resistant aggression and not residual ADHD symptomatology per se. This is an important consideration because both clonidine and guanfacine have FDA approval as adjuncts to psychostimulants for the treatment of ADHD. If James had residual ADHD symptomatology while receiving treatment with a psychostimulant, one rational strategy would be to consider adding an  $\alpha_2$ -adrenergic agonist to James's pharmacological regimen.

For some youth whose families are particularly concerned about the safety profile of possible adjunctive drugs, trying treatment with another psychostimulant (e.g., replacing a methylphenidate-based stimulant with an amphetamine, or vice versa), atomoxetine, or an  $\alpha_2$ -adrenergic agonist may be reasonable. Should the family choose an adjunctive medication to address James's residual aggression despite effective treatment of his ADHD, risperidone (Aman et al. 2014; Gadow et al. 2014), clonidine (Hazell and Stuart 2003), and divalproex sodium (Blader et al. 2009) have placebo-controlled evidence to support their being used in combination with psychostimulants in such children. Of these three medications, risperidone has been studied most extensively in this patient population.

Presuming that the family would select risperidone because it has more data to support its use, the clinician should then review with the patient and his family the risk-benefit ratio associated with this drug. In addition, baseline assessments should be obtained so James can be monitored for weight gain and potential metabolic effects (Krill and Kumra 2014). Unfortunately, the presence of a psychostimulant does not appear to reduce the weight gain that is common during risperidone treatment (Aman et al. 2004). Dosing of risperidone should be gradually titrated upward and should generally adhere to the maximum doses used in published studies of risperidone in this patient population. During the course of pharmacotherapy, the goal is to address both the youngster's ADHD with a stimulant and residual aggressive behavior with risperidone, while carefully monitoring for treatment-related side effects. To facilitate the monitoring of symptom severity, the use of rating scales

that track these symptom domains may be quite useful (Kutcher et al. 2004; Pappadopoulos et al. 2003).

Youth with ADHD and a comorbid disruptive behavior disorder diagnosis are at risk for poor outcomes (Connor et al. 2006). As a result, an appreciation of the poor outcomes that often befall these aggressive children needs to be incorporated into any risk-benefit consideration of combined pharmacotherapy, both at the outset of and during ongoing pharmacotherapy.

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# CHAPTER 15

## Anxious Adolescent in the Emergency Room

### Misuse of Prescription Medications

Jeffrey J. Wilson, M.D., FAACAP

#### Case Presentation

##### Identifying Information

Madison is a 16-year-old junior in high school who lives with her parents, her 12-year-old twin brothers, and her maternal grandmother.

##### Chief Complaint

Madison was referred to psychiatric treatment after a 1-week history of panic attacks, resulting in three emergency room visits in the past 2 days.

##### History of Present Illness

Madison's mother brought Madison to her first outpatient psychiatry visit. Madison complained of escalating anxiety, with periods of uncontrollable attacks of shortness of breath, nausea, racing thoughts, fears of hurting somebody, intrusive violent thoughts, and fears of going crazy, relieved only with escalating doses of benzodiazepines. She currently feels that even the 1 mg of clonazepam given to her in the emergency room only partially relieved her attacks. Madison reported that during her last attack, she took all of her remaining clonazepam and only then was able to settle down to sleep. She also said, however, that she had none left and maybe had lost some of her pills when she was anxious and trying to calm down. She did not think she took more than two. Her mother was surprised, saying, "I thought the doctor gave you 10 pills!" to hold Madison over until she could obtain a psychiatric appointment.

“No! She only gave me five!” Madison shouted and glared angrily at her mother. Her mother, somewhat taken aback, murmured more softly, “Perhaps I’m mistaken. I didn’t really count.” Her mother went on to say, “It’s all been so crazy the past few days. Madison is simply amazing, but something has gotten into her that has made her simply abominable when she is having these attacks of anxiety.” Madison had been to the emergency room three times in the past week, receiving a prescription first for hydroxyzine, then lorazepam, and most recently clonazepam. Despite these interventions, she slept barely 2 or 3 hours each night.

## Past Psychiatric History

Madison was a straight-A student, basketball star, and cheerleader prior to entering high school. In the middle of her sophomore year, her grades became more erratic and her participation in sports and other extracurricular activities more or less ceased. About 1 year after her younger twin brothers were diagnosed as having attention-deficit/hyperactivity disorder (ADHD) and began medication treatment, she became convinced that she too had ADHD. Her grades were beginning to slip into Bs and occasional Cs. Madison saw her pediatrician and completed a self-report, he diagnosed ADHD, and she began taking lisdexamfetamine (Vyvanse) 70 mg/day. Her prescription was eventually changed to amphetamine-dextroamphetamine mixed salts (Adderall XR) 30 mg/day because Madison said that Vyvanse 70 mg/day “didn’t work anymore.”

Over the past year, Madison began having emotional outbursts and seemed more irritable. She seemed to sleep relatively little for days at a time, and then she would “crash” and sleep for as long as 18 hours. Over the past 3–4 months, she began having intense outbursts.

## Substance Abuse History

Madison first used alcohol in eighth grade and first used cannabis in the summer following eighth grade. At the time of the visit, she admitted to using alcohol and cannabis approximately two to three times per month, “only at parties.” She said that no alcohol or illicit drugs were in the home. Madison reported that she had tried methamphetamine once intranasally. She felt that she was “on top of the world” and that she could “really focus” but that “coming down” was awful. She felt paranoid and worried that her parents would find out and she would be expelled from school. She was not sure but she thought she saw shadows and heard inaudible voices. The experience scared her so much that “I will never use illegal drugs again.” Madison denied use of prescription opiates, heroin, or cocaine.

Madison reported that when she drank, she would “never drink more than five” shots of alcohol, but she seemed to have a high tolerance for alcohol despite her weight. She said she “could drink 10 shots” if she wanted. She denied any impairment due to her alcohol or cannabis use, including any impact on her responsibilities or functioning at home or school or on her social life. Madison’s cannabis use was limited to shared “blunts” with friends, sometimes three or four blunts between four or five peers during a party. She admitted sometimes feeling “shaky and nervous” after smoking cannabis. She said she sometimes felt her heart racing, but it was “fun” and “social” so she “just went along with the party.”

## **Medical History**

Madison's panic attacks and feelings of a racing heart rate led to an electrocardiogram and an echocardiogram, both of which were normal other than occasional tachycardia.

## **Developmental History**

At birth Madison weighed 6 lbs 4 oz. Her mother had no reported difficulties during pregnancy or delivery. Her mother reported that she took fluoxetine during the third trimester due to panic attacks but denied taking any other drugs or alcohol. She admitted to smoking "a few cigarettes" when really stressed but said it "could not have been more than 10" during her entire pregnancy. Madison was a precocious child but met normal if not early developmental milestones.

## **Social History**

According to her mother, Madison was exceptionally social, outgoing, and well behaved but a "little strong willed." Recently, however, Madison seemed to socialize more on the computer than outside her home.

## **Family History**

Madison's mother has panic attacks with agoraphobia, which are effectively treated with fluoxetine and occasional alprazolam. She takes the latter once a month. Madison's maternal grandmother, who lived with the family, also had anxiety and took alprazolam occasionally. She likely also had agoraphobia because she rarely went out. Madison's father does not have psychiatric problems but does take medication for back pain at times. Madison's mother is not sure what kind of medication, but she knows he takes it regularly. Madison's twin younger brothers (age 12) take medication for ADHD, including dexamethylphenidate and a clonidine patch. Madison's brothers are basketball players who prefer not to take their medications on weekends. Madison's mother casually remarked that "somehow it always seems like the kids are running out of their medications." This did not make sense to her because if they are not taking medication every day, there "should be some surplus, shouldn't there?"

There is no known family history of bipolar disorder or schizophrenia. Madison's paternal aunt and a paternal uncle both had histories of alcoholism.

## **Mental Status Examination**

Madison was dressed casually, and her hair was unkempt as if she had just gotten out of bed. She arrived 10 minutes late to her appointment in her mother's tow with barely muted aggression and an occasional vicious look at her mother. She appeared tense and was moderately agitated. When alone with the clinician, Madison was initially self-contained and provided only one-word responses until she began discussing her anxiety. As she expressed her anxiety, she became more animated and escalated in her affect. Her speech was some-

what rapid, if not pressured, and she endorsed almost all specific inquiries. She appeared to clench—even grind—her teeth when not talking. She reported feeling anxious “all the time,” with “terrifying” disabling panic attacks several times daily. She endorsed passive suicidal thoughts during acute anxiety episodes. When asked regarding a plan, she reported, “If I don’t get some help, I *am* going to kill myself.” She denied suicide attempts and reported ideation only when distressed. She denied auditory, visual, or olfactory hallucinations or other perceptual abnormalities. Her thought process was linear but perseverative, centered on her desperate need to obtain relief with medication. Cognitive functions were otherwise age appropriate, including short-term memory, abstraction, and calculation. She could not recall what she had for dinner the night before this evaluation.

### Physical Examination and Toxicology During Emergency Room Visits

The electronic medical record indicated that Madison most recently presented with a heart rate of 95, blood pressure of 130/80, respiratory rate of 20, and temperature of 98.9°F. Her height was 5’4” and her weight was 99 lbs, resulting in a body mass index of 17.0. She was tremulous, but this varied and seemed exaggerated when she was watched. There was a mild resting tremor. Her pupils were moderately dilated.

She received 10 doses each of lorazepam 1 mg and clonazepam 1 mg in the past week. When asked, she reported that she had taken, lost, or thrown out some of this medication in frustration that “Nothing works!”

Madison had no record of prescriptions in her medical record, and it was unclear where the medications that she reported taking at home came from. Urine drug screen in the emergency room was positive for cannabis, amphetamine, benzodiazepines, and opiates.

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## Psychotherapeutic Perspective

Christianne Esposito-Smythers, Ph.D.

Sarah Fischer, Ph.D.

### Diagnostic Formulation

Madison’s assessment data are notable for a recent 1-year history of stimulant use, reportedly to manage ADHD diagnosed by her pediatrician. She also appears to be taking stim-

ulants prescribed to her brothers. Although Madison's presentation includes features of panic attacks, stimulant use disorder may better account for these symptoms. Specifically, Madison reported evidence of tolerance (i.e., the maximal prescribed dose of Vyvanse no longer worked), a strong urge to use stimulants as evidenced in drug-seeking behavior (i.e., self-report to pediatrician, taking brothers' medications), withdrawal symptoms (i.e., insomnia, psychomotor agitation, use of stimulants to avoid withdrawal, use of benzodiazepines to relieve withdrawal), use of stimulants in larger amounts than prescribed, reduction in social activities (i.e., spending more time on the computer than with friends), continued failure to fulfill school obligations, and use of stimulants despite persistent and recurrent psychological and/or physical problems caused by use (e.g., anxiety, passive suicidal and homicidal thoughts, insomnia). She reported getting little sleep for a few days, after which time she will sleep for up to 18 hours. This may reflect a prolonged period of stimulant use (i.e., a "speed run") followed by a "crash," characterized by an extended need for rest and recuperation.

Madison reported or demonstrated multiple symptoms of stimulant intoxication. These included maladaptive behavioral and psychological changes likely associated with stimulant use, increased heart rate, dilated pupils, elevated blood pressure, nausea, potential weight loss (see last paragraph of this section), psychomotor agitation, and confusion (i.e., could not remember what she ate the previous night). She likely uses the benzodiazepines to dampen or "come down" from symptoms of intoxication.

Given Madison's more recent repeated use of benzodiazepines, she should also be further assessed for a sedative-, hypnotic-, or anxiolytic-related disorder. She reported some potential evidence of tolerance and use in larger amounts (i.e., she stated that 1 mg of clonazepam only partially relieves "panic attacks" and she had to take all remaining clonazepam to sleep) and spent a great deal of time in activities necessary to obtain benzodiazepines (i.e., she made multiple trips to the emergency room).

Notably, Madison's urine drug screen was positive for stimulants and benzodiazepines, consistent with the formulation above. She also has ample access to these substances at home. Madison's urine drug screen was also positive for opiates and cannabis. It is possible that her father is taking an opiate for his back pain, which would provide Madison with access. Thus, her use of opiates should be more thoroughly assessed, in addition to her symptoms of cannabis and alcohol use disorders. She reported using cannabis and alcohol with friends as well as having a high tolerance for alcohol. She also has a family history positive for alcohol use disorder and possibly opioid use disorder, which may increase her risk for these disorders.

For diagnostic accuracy, a thorough substance abuse evaluation should be conducted using a structured diagnostic interview developed to assess substance use disorders (SUDs) in adolescents. One example is the Schedule for Affective Disorders and Schizophrenia for School-Age Children—Present and Lifetime Version (K-SADS-PL; Kaufman et al. 1997), not yet adapted for DSM-5 (American Psychiatric Association 2013). It will also be important to collect information regarding the patterns and function of her substance use. Madison and her parent(s) should be interviewed separately to improve the accuracy of reporting.

Obtaining information from school-based professionals and other knowledgeable parties may be useful.

Madison should also be evaluated for co-occurring mental health disorders using empirically validated assessment instruments. A reassessment for ADHD with a mental health professional is indicated; this assessment should include 1) a diagnostic interview, 2) teacher- and parent-rated ADHD symptom checklists, and 3) a detailed history of academic functioning. A diagnosis of ADHD is unlikely given that Madison made straight As until her second year in high school. Furthermore, her performance declined after initiating alcohol and marijuana use. Finally, Madison stated that Vyvanse “didn’t work anymore,” suggesting that she may not have ADHD and has built a tolerance for this medication.

Madison should also be assessed for panic and eating disorders. Her positive family history for panic disorder with agoraphobia increases her risk; however, her panic and anxiety symptoms appear to be secondary to a stimulant use disorder. With regard to potential eating pathology, Madison is significantly underweight for her height. Multiple potential explanations need to be examined using a diagnostic interview as well as information about her growth history. If she has always been underweight and small, this may not be a significant issue. If her weight started dropping after puberty, then further assessment for possible restrictive eating behavior and distorted cognitions regarding weight and shape should be conducted. If she lost a significant amount of weight over the last year with the onset of stimulant use, then this may explain her low weight.

## DSM-5 Diagnosis

- F15.20 Stimulant use disorder, amphetamine-type substance, severe
- Rule out sedative, hypnotic, or anxiolytic use disorder
- Rule out cannabis use disorder
- Rule out alcohol use disorder
- Rule out opioid use disorder
- Rule out attention-deficit/hyperactivity disorder
- Rule out panic disorder
- Rule out eating disorder

## Treatment Recommendations

Although the present diagnostic formulation includes stimulant use disorder, Madison has more extensive substance involvement. A thorough diagnostic evaluation may yield additional SUD diagnoses. We offer the following recommendations for psychosocial treat-

ment: Depending on the severity of her withdrawal symptoms, inpatient hospitalization for purposes of detoxification may be required. After detoxification, a combination of individual skills-based treatment, such as cognitive-behavioral therapy (CBT), and family therapy may best address Madison's treatment needs.

Multiple randomized controlled clinical trials have examined the efficacy of treatments for adolescent substance abuse (for reviews, see Hogue et al. 2014; Waldron and Turner 2008). Results of these trials suggest that individual CBT and family therapy, particularly when used in combination, yield significant reductions in substance use. Because Madison does not acknowledge problems associated with her substance use, her individual CBT may be best received if preceded by motivational interviewing (Dennis et al. 2004). Motivational interviewing is designed to heighten motivation for treatment and enhance self-efficacy for change through the use of personalized feedback and education in combination with nondirective therapeutic techniques.

Madison's chances of improvement would be enhanced with significant family involvement. Madison's mother appears to believe that her daughter has ADHD and an anxiety disorder and therefore facilitates obtaining both stimulants and benzodiazepines from physicians. Additionally, the mother did not know how much medication her children had taken. Lack of parental monitoring of medication also makes it easier for Madison to abuse substances. Madison's mother and grandmother have both been treated for anxiety disorders with selective serotonin reuptake inhibitors (SSRIs) and benzodiazepines. Thus, her parents likely believe that Madison has panic attacks and that benzodiazepines are needed to alleviate them. Madison's parents would benefit from psychoeducation regarding SUDs and ADHD prior to treatment initiation. After they understand Madison's substance abuse problem, family therapy would be beneficial. Examples of well-established and probably efficacious family therapies for adolescent substance abuse include brief strategic, multidimensional, functional, and ecologically based family therapies (see Hogue et al. 2014). Additionally, integrated CBT that includes individual, parent, and family sessions to address adolescent substance use and co-occurring mental health conditions also shows promise (e.g., Esposito-Smythers et al. 2011; Hogue et al. 2014).

If additional assessment reveals that Madison also has an anxiety and/or eating disorder, an integrated treatment model that addresses all of these concerns, and includes the family, is warranted. Following psychoeducation and motivational interviewing, substance use could be addressed via parental monitoring and contingency management, as well as individual CBT. If anxiety symptoms continue following a period of abstinence from substance use, individual CBT is recommended to address those symptoms. Madison's parents would also benefit from learning techniques to cope with anxiety to fully support her use of these skills. If an eating disorder is present, Madison's parents should be heavily involved in treating those symptoms as well. The recommendations described in this section overlap with empirically supported treatments for eating disorders in adolescence, which are family based and involve parental monitoring of food intake (Lock et al. 2010).



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# Psychopharmacologic Perspective

Joseph Lee, M.D., ABAM

## Diagnostic Formulation

Madison's presentation is full of red flags. The most immediate concerns are 1) the consequences of potentially serious withdrawal or intoxication and 2) reported suicidal and homicidal gestures. Although these remain the priorities for action, the clinician would be wise to evaluate the relevant variables in this case and organize the assessment accordingly.

There is also the pressing matter of Madison's intense anxiety. Recent treatment of symptoms has exacerbated the situation. Although treatment of anxiety is a goal, the fact that her symptoms may be caused by withdrawal and accentuated by her substance use should guide the clinician to prioritize the substance use.

## Substance Use Profile and Risks

Before heuristically going down a diagnostic algorithm, it is important to analyze available data about Madison that can enhance sound individualized clinical decisions.

Sometimes, the need to establish the seriousness of a youth's current substance use (mild, moderate, severe) undermines the notion of risk and individual trajectory in developing serious SUDs in the future. A young person may meet criteria for only a mild SUD at age 13 or 14, but this classification does not negate the urgency required in intervening therapeutically. A young person using substances with a number of other risk factors necessitates the same concern as a morbidly obese young person with a family history of coronary artery disease.

Looking at this case through the lens of risks and trajectories, one can learn plenty on the basis of demographics alone. Females ages 12–17 are more likely to misuse prescription drugs than their male counterparts (Cotto et al. 2010). Madison fits this profile. Second, her relatively early initiation into drug use with cannabis and alcohol increases her risk of developing an SUD manyfold over the norm (Meyers and Dick 2010). Her family history of substance use and a family culture permissive of use are other risk factors (Whitesell et al. 2013). Literature demonstrates that her recent faltering academic focus and inclusion into a substance-using peer group are risks as well (Whitesell et al. 2013). Other studies

show that even variables such as social popularity correlate with and may be potential risk factors for the development of SUDs (Whitesell et al. 2013).

Research tracking young cohorts prospectively confirms that common liabilities precede and predict SUDs and other risk-taking phenomena, such as conduct disorder or early adoption of tobacco use (McGue et al. 2008; Vanyukov and Ridenour 2012). It is not surprising, then, that conduct disorder is the most frequent co-occurring mental health diagnosis for adolescents with SUDs. Although Madison's profile is not suggestive of conduct disorder, there is a strong possibility that she has lied and/or stolen recently. Her anxious traits may mask more overt risk-taking tendencies because "risk takers" are often stereotypically thought of as bungee-jumping thrill seekers. Subsequently, some predominantly anxious youth are overlooked in the context of risks for SUDs. The bottom line is that Madison has many risk factors for continued serious problems with substances, regardless of the severity of her current SUDs.

## **DSM-5 Assessment**

From a strict diagnostic perspective, Madison meets at least six to eight DSM-5 criteria for an SUD. If this assessment is valid, it would solidify a diagnosis of a severe benzodiazepine use disorder. On the basis of her history, at least mild SUDs for amphetamines, alcohol, and cannabis may be justified as well.

Generalized anxiety disorder is a possibility for Madison given both her family history and presentation, but her concomitant substance use and the lack of anxiety symptoms preceding her substance use (per her mother) could suggest substance-induced anxiety disorder instead. The two diagnoses do not have to be mutually exclusive over time. ADHD is questionable given the late diagnosis and substance use, but there is a family history with her brothers.

## **A Note on Laboratory Testing**

Urine drug testing is composed of two parts: the first rapid screen is a basic immunoassay with high sensitivity, and the second confirmation test is done by gas chromatography–mass spectrometry (GC-MS) or high-performance liquid chromatography (HPLC). These tests provide specific drug levels as well as giving some clue as to frequency and severity of use. In the emergency room, typically only the immunoassay test results are available. The GC-MS or HPLC results take between 24 and 72 hours. There is a danger in overinterpreting the first-level immunoassay drug test. First, false positives are common. Certain medications (e.g., antibiotics) may cross-react and produce positive readings for opiates or other drugs. Second, immunoassays test for a finite number of commonly used substances such as amphetamines, cannabis, or cocaine. Synthetic cannabinoids, hallucinogens, and many other "designer drugs" are not detected unless the appropriate immunoassay is preselected, a fact that has contributed to the popularity of certain synthetic drugs in cohorts that value discretion. Finally, substances have variable clearance rates from the body, so the possibility exists that Madison used other substances recently despite the negative lab results.

Madison's immunoassay drug test came back positive for cannabis, amphetamine, and opiates. Given the limitations of drug testing, the clinician should not assume to have verification of the extent of Madison's substance use.

## DSM-5 Diagnosis

- F13.20 Sedative, hypnotic, or anxiolytic (benzodiazepine) use disorder, severe
- F10.10 Alcohol use disorder, mild
- F12.10 Cannabis use disorder, mild
- Rule out sedative, hypnotic, or anxiolytic (benzodiazepine) withdrawal
- Rule out sedative, hypnotic, or anxiolytic-induced anxiety disorder with panic attacks

## Treatment Recommendations

The primary treatment recommendations for Madison revolve around her safety and any potential complications of withdrawal. Her vital signs in the emergency room were not particularly abnormal, but withdrawal presents in a dynamic manner. Dilated pupils are non-specific in this case and could relate to withdrawal from a benzodiazepine or an opiate (from her father's pain medication) or both. Of the two, benzodiazepine withdrawal is of greater medical concern because of risks for seizures, delirium, and even death. The discovery of chronic opiate use would introduce a number of other issues in detoxification and ongoing treatment, which are not covered in this chapter.

As discussed in the previous subsection ("A Note on Laboratory Testing"), limited faith should be placed on the emergency room's screening drug immunoassay, and the clinician should track down the results of the confirmation test. Because Madison may also be using other substances not tested for on the screen and given her poor history of compliance, outpatient detoxification should not be attempted. Her threats for self-harm and suicide, although possibly stated impulsively, should be taken seriously. Furthermore, her parents have proven to be unreliable in providing adequate supervision in this state of crisis, and Madison has been able to obtain prescription drugs in the home. The recommendation would be to hospitalize Madison for withdrawal and psychiatric stabilization.

While admitted to a hospital or psychiatric unit, Madison should be medically evaluated and monitored for withdrawal from suspected substances. Younger patients do not always show the telltale signs of withdrawal, and some have a tendency to minimize the amount of use; in combination, these factors can lead to seizures, delirium, or even psychotic phenomena. As such, an emphasis on developing rapport with the patient, verification of use history, and proactive management of withdrawal are all critical early on. Madison's poten-

tial misuse of stimulants also necessitates screening for eating disorders, which, if present, can create higher risk for seizures.

Benzodiazepines, antiepileptics, and barbiturates have all been used to treat benzodiazepine withdrawal, and there is evidence for their effectiveness (Simkin and Grenoble 2010). Agonist substitution is common in treating opiate use disorders, but no large reliable studies have been done of agonist substitution for treating benzodiazepine use disorders, and Madison's age and polydrug use complicate her treatment.

Madison is currently in a precontemplative stage with regard to sobriety. Motivational interviewing may be useful to avoid an already tense situation (Tanner-Smith and Lipsey 2015). Family education and involvement are essential as well.

Madison's stated preoccupation is with anxiety. Although a detoxification protocol may alleviate some symptoms, medications should be deployed carefully and with exact expectations. Given her prior experience with benzodiazepines, she may find other alternatives for treating her "anxiety" unsatisfactory. SSRIs take some time to gain effectiveness, and other medications for anxiety with low risk of misuse (e.g., gabapentin) have limited evidence of efficacy in adolescents. Rapport building and effective psychotherapy may help the clinician partner with Madison and reframe her needs to avoid drug-seeking behaviors.

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# CHAPTER 16

## The Worried Child

### A Child With Multiple Anxiety Disorders

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Wendy K. Silverman, Ph.D., ABPP

#### Case Presentation

##### Identifying Information

Miguel, a 12-year-old Latino boy, was referred to an anxiety disorders clinic by his pediatrician. Miguel lives with his biological parents, 14-year-old brother, and maternal grandmother.

##### Chief Complaint

Miguel's mother sought help because she was concerned about her son's weight loss of 10 lbs over the past 2 months, stemming from Miguel's refusal to eat solid foods.

##### History of Present Illness

Miguel's mother attributed her son's refusal to eat solid foods to an extreme fear of choking. At the time of the initial evaluation, Miguel was eating only soft foods (e.g., yogurt, ice cream, smoothies), accompanied by two large glasses of water with each meal. Miguel also voiced concerns regarding his safety and security and demanded constant reassurance from his mother to alleviate these concerns.

Miguel and his mother both indicated that Miguel's difficulties with eating began about 6 months prior to their clinic presentation, when he nearly choked on a banana while riding in the car. Miguel became frightened about eating *anything* shortly thereafter. He also explained that he prefers to eat slowly because he needs to chew several times.

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Miguel added that he avoids going to restaurants with his family because these outings have turned into unpleasant experiences.

When asked, Miguel related that he did not fear gaining weight but rather feared choking. His mother also noted that he often worried about intruders breaking into the house, but this fear did not interfere with his daily functioning to the same extent as his fears of eating solid foods.

## Past Psychiatric History

Miguel has no history of mental illness or substance abuse.

## Medical History

Miguel has no current medical illnesses and takes no medications. As an infant and toddler, he suffered from recurrent ear infections. The pediatrician was concerned about Miguel's limited food intake and recommended that Miguel's mother take him to the anxiety disorders clinic.

## Developmental History

Miguel learned to walk at age 11 months and was potty trained by age 3 years. His speech development was unremarkable, with no significant delays. Miguel was reported by his mother to be timid and shy. She further reported that Miguel was fearful and usually withdrawn in unknown situations.

## Social History

According to Miguel and his mother, he has no history of abuse or neglect. As an infant, he was described as "slow to warm up" in that he was unusually fearful, shy, and quiet, as previously noted. Miguel is currently in seventh grade at a large middle school. Although he has only a few close friends, he has no difficulties making or keeping friends. Miguel is not involved in any extracurricular activities.

## Family History

Miguel's immediate and extended family has no history of mental illness. Notably, his father has returned to work as a mechanic after 3 months of being unemployed.

## Mental Status Examination

The clinician obtained information about Miguel's mental status. The boy showed appropriate insight and good judgment, as ascertained by the introductory sections of the Anxiety Disorders Interview Schedule for DSM-IV—Child Version (ADIS-IV-C; Silverman and Albano 1996) (a new version is not yet available for DSM-5 disorders [American Psychiatric Association 2013]), which asks the client to report his name, age, and school name, as well his reasons for presenting to the clinic. Miguel showed socially appropriate appearance and behavior. Miguel was nervous and shy during the interview, but his mood was otherwise suitable.

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# **Psychotherapeutic Perspective**

Leslie R. Rith-Najarian, M.A.

Bruce F. Chorpita, Ph.D.

## **Diagnostic Formulation**

Miguel appears to have a primary DSM-5 diagnosis of specific phobia, other type. The onset of this disorder appears to have been triggered by a combination of his temperamentally heightened inhibition and an aversive conditioning experience related to his choking on a banana 6 months prior to the interview. Some children may choke on food and not develop the extreme fear and avoidance demonstrated by Miguel; such differences in conditioning thresholds may involve overall differences in temperament (Vasey and Dadds 2001).

Miguel also may have additional anxiety problems, which could indicate a diagnosis of generalized anxiety disorder (GAD) or social anxiety disorder, associated with his fears and concerns around his personal safety, being in public places, and unknown situations. It is common for children diagnosed with a specific phobia to have comorbid GAD or comorbid social anxiety disorder (Hammerness et al. 2008). For help ruling out or confirming possible additional diagnoses, the clinician might administer additional sections of the ADIS-IV-C and a self-report measure with scales corresponding to relevant DSM syndromes such as worry and separation anxiety (e.g., the Revised Child Anxiety and Depression Scales; Chorpita et al. 2000). Furthermore, the clinician should determine whether Miguel's safety and security fears are in fact out of proportion before considering assigning any additional diagnosis. For example, Miguel might live in a neighborhood in which break-ins are common.

Given the high level of interference caused by Miguel's specific phobia, most notably the extreme weight loss, the primary diagnosis would be specific phobia, other type.

## **DSM-5 Diagnosis**

■ **F40.298 Specific phobia, other**

## **Treatment Recommendations**

As suggested by the substantial literature on the treatment of specific phobia (Chorpita and Southam-Gerow 2006) and the demonstrations of successful behavioral treatments of choking phobia (Zelikovsky et al. 2001), the primary treatment plan for Miguel would involve a cognitive-behavioral intervention with a focus on those treatment strategies most commonly associated with successful treatments of phobias (see Chorpita and Daleiden 2009). The centerpiece of these strategies would be exposure, which would involve having



Miguel practice eating foods that are safe but anxiety provoking. Miguel would be asked to provide ratings of fear before, during, and after each eating task that he performs with the clinician. These ratings would be used to guide the pace and intensity of exposure (see Chorpita 2007).

Practice exercises would be supported by several other techniques, each with a separate rationale. First, a period of relationship building or getting acquainted would be important before the clinician begins exposure exercises. Because the clinician will later ask Miguel to participate in relatively distressing exercises, a positive relationship would likely reduce the probability of refusal or dropout. Given that the child is at risk because of weight loss and nutritional problems, this period of relationship building would need to happen quickly—perhaps in a single session involving some conversation and games. Next, a list of feared items would be developed to facilitate both measurement of progress, using weekly distress ratings for each item targeted, and selection of new items to practice in each meeting. If motivation were to become an issue, a reward program could be added whereby Miguel earns points for each practice session and redeems them for rewards. Finally, to increase the probability of Miguel's engaging in exposure exercises, the clinician could model eating feared foods to the extent possible, such that the clinician would eat some of a banana just prior to asking Miguel to eat some banana.

Successful treatment would conclude with a review of skills and some planning and preparation for how to handle future difficulties should they arise. If the treatment is not making sufficient progress despite intensive troubleshooting and adjusting of the outpatient treatment program, one might consider very brief inpatient treatment (Burklow and Linscheid 2004) or medication (Banerjee et al. 2005), given some evidence of their success in the literature.

Following successful treatment, one would need to evaluate whether Miguel's remaining anxiety concerns continue to warrant attention and to consider developing a new plan accordingly.

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## Psychopharmacologic Perspective

Erica M. Chin, Ph.D.

Maira A. Rynn, M.D.

## Assessment

Anxiety disorders are the most common psychiatric problems in children, with prevalence estimates ranging from 10% to 20%. Comorbidity of anxiety disorders is more often the rule than

the exception, with 50%–75% of anxious youth presenting multiple anxiety diagnoses (Beidel and Turner 1988; Brady and Kendall 1992). Despite their high prevalence rates, these disorders in children and adolescents often go undetected and untreated (Costello et al. 2004). A comprehensive assessment of anxiety in children and adolescents provides the foundation for case formulation and informs effective treatment planning. It is important for clinicians to detect departures from normal developmentally appropriate worries; examine patterns of accommodation from caretakers, school, and peers; and understand the degree of distress, functional impairment, and avoidance behaviors for the child. A broad range of assessments should include a clinical interview; behavioral assessment; and self, parent, and teacher report measures.

Obtaining information about anxiety symptoms from multiple sources, including youth, parents, and teachers, is key because of the variable agreement among informants (Choudhury et al. 2003). Differences may be largely attributed to the observability of the symptoms being reported (Comer and Kendall 2004). Children are generally more attuned to their inner distress, whereas parents and teachers may better appreciate the impact of a child's anxiety on family and school functioning. Additionally, when directly questioned, some youth may be reluctant reporters about embarrassing, distressing, or socially undesirable behaviors. Therefore, self-report screening measures can assist in both the evaluation and monitoring of treatment progress. Well-studied self-report measures for anxiety include the Multidimensional Anxiety Scale for Children—Second Edition (March 2012), the Screen for Child Anxiety Related Emotional Disorders (Birmaher et al. 1999), and the Spence Children's Anxiety Scale (Spence 1998).

Structured interviews include the ADIS-IV-C. Visual analogues, such as the Feelings Thermometer in the ADIS-IV-C, are helpful in quantifying the severity of anxiety symptoms and interference with a youth's functioning. Clinical interviews should include assessment of family accommodations to the child's behaviors; accommodations may include, for example, providing reassurance, allowing children to avoid feared stimuli, and modifying family routines. Although a parent's intention with these modifications is to reduce the child's anxiety, in the long run anxiety is reinforced. Long-standing family accommodation can affect both a youth's and the parent's report of experienced emotional, cognitive, and physiological distress. When chronic anxiety takes control of family routines, a child may react to exposure to anxiety-provoking situations with increasingly oppositional behaviors and irritability.

Clinicians can also learn from behavioral assessments. For specific phobias, behavioral assessment may involve direct assessment of the phobic situation. When patients have a long-standing history of avoiding a feared situation or object, they may have difficulty describing the specific factors that contribute to their fear. Behavioral assessments can involve having the youth self-monitor and record encounters with a feared stimulus and note variables such as the feared trigger, degree of distress, thoughts, and physical sensations.

## **Diagnostic Formulation**

Miguel's behavior of refusing to eat solid foods and his limited food intake due to fear of choking meet DSM-5 criteria for a primary diagnosis of specific phobia, with a specifier of

“other” to indicate a type of fear that is not specifically designated by DSM-5. Miguel’s marked and consistent fear about choking, coupled with significant avoidance behaviors, has lasted 6 months and has led to a 10-lb weight loss. The combination of Miguel’s inhibited temperament, the triggering experience of nearly choking on a banana while riding in a car, and his reinforced avoidance has contributed to his current clinical presentation. Overall, specific phobias are reported to have an early onset, usually before age 10 years (Kessler et al. 2005). Interestingly, in contrast to other types of specific phobia, which are more prevalent in females, choking phobia in youth is more frequently diagnosed in males (Bailly and de Lenclave 2005).

Because Miguel does not appear to endorse intentional weight loss, fear of weight gain, or concerns about his body weight or shape, a diagnosis of anorexia nervosa or bulimia nervosa is not warranted. His significant weight loss and eating disturbance meet many of the broad descriptions of the new DSM-5 diagnostic criteria of avoidant/restrictive food intake disorder (ARFID); however, as stated in Criterion D of the DSM-5 diagnostic criteria, ARFID is diagnosed when the disturbance is not better accounted for by another mental disorder. In Miguel’s case, his food refusal and restrictive behaviors are better accounted for by a specific phobia. As a point of reference, the new ARFID diagnosis replaces and extends the DSM-IV diagnosis of feeding disorder of infancy or early childhood (American Psychiatric Association 1994). In a retrospective case control study of 712 children and adolescents, of whom 78 (13.8%) met criteria for ARFID, Fisher et al. (2014) noted that 21.4% of the patients with ARFID also presented with GAD and 13.2% had fears of eating secondary to fears of choking or vomiting. In this study, a diagnosis of ARFID was added only when the feeding disturbance resulted in impairment that required intervention beyond what was required for the other diagnosed condition (Fisher et al. 2014).

Miguel’s worries about his safety and about intruders breaking into the house may be indicative of additional anxiety problems. When youth present with repetitive thinking about anticipated negative or feared events, significant distress, and/or impairment, a clinician may have difficulty distinguishing whether the symptoms are more indicative of GAD or obsessive-compulsive disorder (OCD; Comer et al. 2004). Miguel’s concerns about intruders breaking into his residence may be conceptualized as a concern of a more “everyday matter” about the safety of his family (suggesting GAD) or a more exaggerated or fantastic concern (suggesting OCD). The quality of his demanding “constant reassurance” may be conceptualized as a compulsion. Careful developmental and social/environmental considerations will be helpful in determining a more accurate diagnosis. In the case of OCD, a person’s worries are experienced as intrusive and unwanted as well as time-consuming. Interestingly, in DSM-5, OCD was removed from the anxiety disorders chapter and included in a separate category called obsessive-compulsive and related disorders. Miguel’s worries, as described in the case presentation, appear to be more consistent with a diagnosis of GAD, but additional assessment of psychological symptoms (poor concentration, irritability, sleep disturbance) and somatic symptoms (restlessness, fatigue, muscle tension) are needed to establish a diagnosis.

## DSM-5 Diagnosis

- F40.298 Specific phobia, other
- Rule out generalized anxiety disorder
- Rule out avoidant/restrictive food intake disorder

## Treatment Recommendations

Graduated exposure-based treatments are considered the empirically supported treatments of choice for specific phobias. Exposure-based therapies involve having the patient confront the feared situation and/or object in a systematic and controlled manner while preventing behavioral and cognitive avoidance. Notably, however, not all children with significant anxiety symptoms manage to engage in and tolerate these treatments. For these children, pharmacotherapy can be used in combination with the exposure-based psychotherapy or as a monotherapy option. Given the high comorbidity of specific phobia with other anxiety disorders, including GAD, social anxiety disorder, and separation anxiety disorder, researchers have investigated interventions. An established evidence base supports the use of antidepressants—specifically selective serotonin reuptake inhibitors—for the treatment of pediatric anxiety disorders (Walkup et al. 2013). Importantly, when a clinical decision is made to treat a child with an antidepressant medication, careful monitoring is required to assess for the development of worsening of symptoms, new adverse symptoms, and especially the appearance of suicidal thinking or behaviors.

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# CHAPTER 17

## Affective Storms

### A Careful Assessment of Rage Attacks

Gabrielle A. Carlson, M.D.

#### Case Presentation

##### Identifying Information

Sam is a 10-year-old boy who has just finished fifth grade in a special education class. He has been classified as having multiple disabilities since kindergarten. He lives with both parents.

##### Chief Complaint

For many years Sam has had occasional explosive outbursts when frustrated. They intensified during fifth grade. His mother wanted a second opinion regarding the diagnosis of bipolar disorder that her son had received. She is concerned because 1) bipolar disorder runs in her husband's family and 2) she is aware of the popular media descriptions equating rages with bipolar disorder.

##### History of Present Illness

Sam has difficulties in several domains. His mother describes "rages" or outbursts during which he throws objects at her or says he wants to kill himself, and he has threatened both himself and his mother with a kitchen knife. He bangs his head when frustrated with homework. Sam's rages, which can last up to 2 hours, occur when he does not get something he wants, when something that he expected does not happen, when he feels criticized, when his demands are not instantly met, when he misunderstands what others are saying, or when he is asked to comply with requests. He feels bad about these rages, however, after they occur.

At the time of referral, Sam is taking divalproex 500 mg/day (blood level is 97 µg/mL) and atomoxetine 60 mg/day. Nevertheless, his mother reports that he is extremely distract-

ible, disorganized, and forgetful and somewhat hyperactive. Sam has difficulty with transitions and change. He argues relentlessly and asks questions seemingly for the sake of asking questions.

Sam's mother describes him as grouchy and negative most of the time but without any sustained depressed mood. If something does not go his way, he decompensates. For instance, if he wants to play with someone and that person is not available (which usually happens), he gets very agitated and angry. He whines about many things. A possible manic symptom is that Sam tries to get other children to like him by acting silly, although his mother is not sure whether this behavior is euphoria or a misguided attempt at socialization. He asks lots of questions about sex; however, despite his curiosity about the subject, he has not acted out inappropriately. Sam does not have sleep problems when he is not taking medication.

Sam really has no friends, although he does not acknowledge this and has described himself as popular (this statement was considered grandiose by one of his doctors). He prefers playing with much younger children and loves babies. He has had serious learning issues (see "Cognitive Testing" section below).

Sam's mother completed the Child Behavior Checklist (Achenbach 1991a), on which the subscale scores for attention/hyperactivity, anxiety/depression, and aggression were above the 99th percentile. The score on the Parent Version of the Child Mania Rating Scale (Pavuluri et al. 2006) was 31, but his mother later told the clinician that she had completed the form on the basis of Sam's behavior while he was taking venlafaxine.

Sam's special education teacher described symptoms of inattentiveness and disorganization, oppositionality, anxiety (Sam often goes to the school nurse with physical complaints), low self-esteem, occasional trouble relating to other children, and getting upset with transitions. Social problems and somatic symptoms got the highest endorsements (>99th percentile) on the Teacher Report Form (Achenbach 1991b). Of potential manic symptoms, only irritability was observed in school.

## Past Psychiatric History

As a preschool child, Sam was very hyperactive. He climbed out of windows and the supermarket cart and would not stick with play activities in preschool or at home. Tantrums began when he was around age 4. Major meltdowns occurred monthly. At age 5, he was evaluated for attention-deficit/hyperactivity disorder (ADHD) and began taking a stimulant medication, which helped his behavior. When eye-blinking tics developed 3 years later, however, he was switched to atomoxetine. His subsequent worsened attention span, disorganization, and activity level necessitated placement in a special education classroom in fifth grade.

At age 9, Sam developed unusual fears (e.g., becoming agitated when cars passed the car he was riding in). His psychiatrist treated him with venlafaxine. Sam began talking in his sleep and, when he woke up, thought he saw a face when nothing was there. He perseverated on the subject of God and began wanting to go to confession all the time. His rages began occurring at least daily. When his mother complained that Sam was getting

more irritable, his doctor raised the dosage to a maximum of 225 mg/day. Finally, after several trips to the emergency room because Sam was so out of control, the emergency room doctor suggested that his mother stop Sam's venlafaxine. When she did as advised, Sam was still irritable and his rages returned to their previous frequency. His psychiatrist prescribed divalproex on the assumption that Sam had experienced a drug-induced manic episode.

## **Medical History**

Sam has had no significant medical problems.

## **Developmental History**

Sam's mother experienced normal labor and delivery. Sam was a demanding baby, never sleeping through the night and requiring predigested formula. He did not speak sentences until age 3 years, and he was evaluated at a special education preschool. His mother also noted that Sam sometimes repeated other people's words when he was learning to speak, and he fought with peers because things had to be "his way." Sam was always clumsy and accident-prone and had a high pain threshold, so he would end up with lumps and bruises that did not seem to bother him. He had no other symptoms of sensory defensiveness.

In addition to speech services, Sam received occupational therapy for visual-motor difficulties.

## **Family History**

Sam's mother is a high school graduate who works as a lab technician. She had separation anxiety as a child but was a reasonable student. Other relatives have obsessive-compulsive disorder, panic disorder, and a gambling problem. Sam's father is a construction worker who dropped out of school at age 16. He had learning disabilities and temper problems, and as an adult is recovering from alcoholism. The father's sister was identified as "bipolar"; however, answers to further questioning suggested that she had prominent depressions with questionable hypomania. The father has other siblings who have alcohol use disorder.

## **Cognitive Testing**

On the Wechsler Intelligence Scale for Children, Third Edition (Wechsler 1991), Sam achieved the following standard scores: Verbal IQ of 88 (Arithmetic 5, Comprehension 8, Information 10), Performance IQ of 81 (Picture Completion 3, Block Design 9, Picture Arrangement 9), and Full Scale IQ of 83. Language testing showed that he no longer qualified for language services. He was at the first percentile for math achievement and written expression and at the ninth percentile for reading comprehension and word attack.

## **Mental Status Examination**

Sam is a cute youngster who both looks and relates like a much younger child. He is disinhibited and overly friendly, and he frequently interrupted when the psychiatrist was



interviewing Sam's mother. During the one-to-one interview with Sam, while he had the examiner's complete attention, his behavior was more appropriate. Eye contact and nonverbal expression were normal.

Sam gave simple responses to questions but provided more information when prompted. For instance, Sam was asked to summarize the movie *Mighty Joe Young*, which he had been watching in the waiting room. Sam could not summarize it, but when asked specific questions (e.g., "Who was in it?" "What did he do?" "What happened next?"), his responses were on topic and adequate. When asked to read *Leo the Late Bloomer*, he asked what *blooming* meant. When told, he said "I hope that's me."

Sam's reading was at a first-grade level. His math was weak. He said  $5 + 3$  was 7, and he could not subtract without making marks on a sheet of paper and then crossing them out.

Sam admitted to getting angry when kids in school made fun of him because he has trouble reading and writing and when people tell him "no." When asked what he does when he gets angry, he showed the examiner by banging his head repeatedly into his hands. When asked about his apparent grouchiness, Sam said he always feels that he is "just about to boil over." He denied depression and said he is sad only if an animal dies, but when asked how he feels about his trouble in school, he said "bad." What makes him happy is "parties," but he does not think he gets "too happy," and what makes him scared is "when my parents fight." He also worries about God because he knows that he himself is often bad and in trouble. He does not endorse any psychotic symptoms in a convincing way. Recalling how he felt while taking venlafaxine, Sam said "I couldn't sit still."

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## Psychotherapeutic Perspective

Penelope Knapp, M.D.

### Diagnostic Formulation

The differential diagnosis of stormy affective behavior includes 1) disruptive mood dysregulation disorder (DMDD), 2) bipolar disorder, 3) ADHD, 4) developmental regulatory disorders, and 5) intellectual disabilities impairing adaptive response to ordinary stresses. Sam has a history of tantrums, and his current symptoms include irritability, attention-deficit constellation (without hyperactivity), anxiety, rages when he is thwarted, and difficulty communicating his needs.

Sam does not have a strong family history of bipolar disorder or a clear pattern of alternating elevated and depressed mood, which is a feature of bipolar disorder. His baseline mood is “grouchy and negative,” and he is labile and becomes agitated easily. He does not have distinct episodes of mania or hypomania. His chronic and severe persistent irritability resembles core features of the new DSM-5 diagnosis of DMDD (American Psychiatric Association 2013), in that his temper outbursts have occurred three or more times a week for more than 1 year, have occurred in two or more settings, and are inconsistent with developmental level. Further history is needed to determine whether Sam has tantrums in school.

Sam’s diagnosis of ADHD is based on his hyperactivity, impulsivity, and tantrums, and he had been taking stimulant medications since age 5 years, with the medication recently changed to atomoxetine. It will be important to clarify what effect if any the medications have had, especially considering that his teacher notes continuing disorganization and inattention. Sam continues to have difficulty managing his attention at an age-appropriate level. Attention, however, is not a unitary function, and neuropsychological testing would clarify whether Sam’s difficulties are with deploying, sustaining, or shifting his attention in relation to other executive functions.

Sam has delayed language development and struggles in school. His academic achievement progresses at a level below what his IQ would predict in all areas, particularly reading and mathematics. His language development was delayed; he possibly had echolalia and currently has significant difficulty with pragmatic aspects of language. The history indicates that language testing was done in preschool and that subsequent testing no longer qualified him for services. Further diagnostic clarity should be pursued, beginning with obtaining the report of the earlier testing results to see if testing focused on achievement of language milestones only with respect to expressive and receptive language or if it also included language pragmatics.

Sam’s developmental history suggests that he has had regulatory problems since infancy. DSM-5 does not specifically characterize developmental regulatory disorders, although the revised Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0–3-R) does (Zero to Three 2005); many children older than age 36 months who meet diagnostic criteria for various DSM diagnoses can be found by history to have also met DC:0–3-R diagnostic criteria for a regulatory disorder. This diagnosis requires both a distinct behavioral pattern and a sensory, sensory-motor, or organizational processing difficulty. Several types of regulatory disorder have been identified; Sam might most closely fit Type III: motorically disorganized, impulsive. However, self-regulation also describes whether the infant or toddler has been able to establish a rhythm of hunger, arousal, and sleep and whether the child can self-soothe or modulate his or her feelings to an age-appropriate degree, and Sam’s history of feeding problems and “demandingness” may be indicative of earlier roots to his present problems. Anxiety is a nonspecific symptom. Sam’s unusual fears and somatic complaints, with frequent visits to the school nurse, indicate that he struggles with anxiety. An attempt was made to treat this with the serotonin-norepinephrine reuptake inhibitor (SNRI) venlafaxine, which led to reduced sleep,

increased rages, and perseverative religious thoughts. This reaction suggests that Sam does not suffer from a simple anxiety disorder per se, but rather that anxiety may be a feature of his difficulty with self-regulation as well as a reaction to continuing stresses related to his disabilities in school and with respect to interpersonal communication.

Finally, the family history is rudimentary, and the current family relationships are not described. Sam's troubling preoccupations with religiosity need to be understood in the context of the family's religious beliefs to determine whether his views are congruent with those of his family's culture (i.e., learned) or if they represent his own constructions. Also, although a history of previous alcoholism in the father was reported, the clinician should learn about the mother's alcohol use during pregnancy because children who have fetal alcohol syndrome may present with impulsivity and impairments in attention and cognition.

Sam's affective storms do not meet criteria for bipolar disorder. The first diagnosis to consider is ADHD, combined presentation, in partial remission, with moderate current severity. In his preschool years, Sam was very hyperactive, and his mother and teacher endorse symptoms of inattentiveness and disorganization. Stimulant medication has been helpful. DSM-5 requires specifying the type of presentation as well as the level of severity to indicate whether impairment interferes with or reduces the quality of social and academic function. Despite treatment, Sam continues to have interfering impairment.

Sam also meets DSM-5 criteria for intellectual disability, mild, which is specified by severity on the basis not of IQ but rather of adaptive functioning in conceptual, social, and practical domains. More specifically, he meets criteria for specific learning disorder with impairment in reading and specific learning disorder with impairment in mathematics.

DMDD is also a likely diagnosis. DMDD is diagnosed in individuals with a developmental age of at least 6 years who have general irritable mood and who are manifesting verbal or behavioral angry outbursts, out of proportion to context, three or more times weekly.

Sam's constellation of developmental, self-regulatory, language, and social problems might previously have met criteria for DSM-IV-TR pervasive developmental disorder not otherwise specified (American Psychiatric Association 2000); however, his symptoms would not fully meet requirements for DSM-5 autism spectrum disorder. His social communication and interaction deficits might be better explained by his ADHD, and his rage in response to unpredicted events or not getting his way do not fully meet ASD Criteria B2 (e.g., insistence on sameness, inflexible adherence to routines) and B3 (e.g., highly restricted, fixated interests that are abnormal in intensity or focus). Moreover, his disinhibited, overly friendly demeanor with a benign therapist, as well as his implied capacity for joint attention in a structured one-to-one setting, rules out this diagnostic option.

## DSM-5 Diagnosis

- **F90.2 Attention-deficit/hyperactivity disorder, combined presentation, in partial remission, with moderate current severity**
- **F70 Intellectual disability, mild**
- **F81.0 Specific learning disorder with impairment in reading**

- **F81.2 Specific learning disorder with impairment in mathematics**
- **F34.8 Disruptive mood dysregulation disorder**

## **Treatment Recommendations**

The initial treatment plan would be to work with Sam, together with his family, through the course of a more extended evaluation, to understand how the family perceives his level of functioning, how they recognize individual triggers for his outbursts, and how they assist him and to guide them through the fuller diagnostic assessment necessary for treatment planning and for executing a new educational approach.

A foundation for building a treatment plan with the parents is laid by having them understand the information gained by the evaluation, including not only Sam's areas of delay or deficiency but also his strengths. Because the family is a tactical resource for his learning and growing, the family members' capacities and areas of difficulty will also have to be understood. In family sessions, the therapist can identify how Sam can and could learn, not just what he has not learned.

Sam has responded to ADHD treatment with the SNRI atomoxetine. Behavior modification at home (Pelham and Fabiano 2000) and classroom support, with modified time allotted for test and homework, are complementary interventions.

DSM-5, in defining DMDD as a distinct condition, provides a diagnostic home for youngsters with severe outbursts who do not meet criteria for bipolar disorder and are not at greater risk for developing it. In clinical practice, treatment of DMDD differs from treatment of depressive and anxiety disorders. Approaches for DMDD include parent education, behavior modification, and classroom accommodation (Brock 2002).

Because Sam has an intellectual disability and specific learning disorders, and because his teacher reports low self-esteem and anxiety, propelling him to the nurse's office with somatic complaints, the clinician needs to obtain testing that informs an individualized education program that will allow Sam to enjoy success in learning.

The purpose of this commentary is not to address pharmacologic intervention. However, I would like to note that currently Sam's symptoms of affective dysregulation are being targeted by a mood-stabilizing anticonvulsant (divalproex), his symptoms of ADHD by an SNRI (atomoxetine), and his general difficulty with emotional regulation. Fuller characterization of all of Sam's symptom patterns is necessary, as is specification of target symptoms for any medication prescribed to allow tracking of the treatment effect. Moreover, coordination between nonpharmacologic and pharmacologic treatment is necessary to understand treatment response and adjust dosages. A detailed medication evaluation would organize such information. If medication is part of Sam's treatment, his parents should receive psychoeducation about each medication and should actively participate in observing its effects on their child. Finally, because youngsters with DMDD may be at later risk for major depressive disorder or generalized anxiety disorder, parent education should include guiding the family to awareness of these problems if they emerge.

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# Psychopharmacologic Perspective

Amna Aziz, M.D.

Jon McClellan, M.D.

## Diagnostic Formulation

Sam's struggles, including aggression, explosive rages, impulsivity, volatile moods, anxiety, social immaturity, learning difficulties, and demoralization, cross several diagnostic categories. Many of his symptoms are reactive, are context specific, and represent ineffective coping strategies in response to conflict or stress. Such clinical presentations often arise in youth with difficult temperaments coupled with poor impulse control, developmental lags, and difficulties with self-soothing and interpersonal effectiveness.

Sam's mother initiated the referral on the basis of concerns of bipolar disorder. Symptoms of irritability, excessive silliness, anger outbursts, reckless behaviors, and mood swings have been widely characterized as pediatric bipolar disorder over the past two decades. This practice has been controversial and represents a substantial departure from how manic-depressive illness was originally described in adults (McClellan et al. 2007). Like many youth diagnosed as "bipolar," Sam does not present with well-demarcated cyclical mood states that meet full criteria for major depression or mania; nor does he have marked prolonged episodes of sleep disturbance, which is the sine qua non of classic manic-depressive illness.

In light of the pediatric bipolar controversy, DSM-5 adopted DMDD, which more accurately describes Sam's clinical presentation. Sam has a 6-year history of severe recurrent episodes of rage that are disproportionate to the situation, as well as a persistent negative mood without distinct episodes of depression. The diagnosis of DMDD stems from the work of Leibenluft and colleagues, who sought to distinguish youth with severe mood dysregulation from those with bipolar disorder (Towbin et al. 2013). Per DSM-5, DMDD is defined by a persistently abnormal baseline mood (i.e., irritability, anger, and/or sadness) and increased reactivity to negative emotional stimuli (e.g., temper outbursts). These features must have been present for at least 12 months prior to age 10 years. Significant overlap exists between DMDD and severe mood dysregulation, oppositional defiant disorder, ADHD, and anxiety disorders.

It is also important to recognize Sam's challenges with academics and learning. Although his IQ is in the normal range (full scale IQ of 83), his cognitive abilities lag behind

those of most of his peers. Academic testing indicates that his performance in math and written expression falls more than two standard deviations behind that of his peers and that he also struggles with reading. Socially he is immature and struggles to initiate and maintain quality friendships. His learning and social difficulties undoubtedly contribute to demoralization, poor self-worth, and decreased frustration tolerance.

## DSM-5 Diagnosis

- F34.8 Disruptive mood dysregulation disorder
- F90.2 Attention-deficit/hyperactivity disorder, combined presentation
- F41.9 Unspecified anxiety disorder
- F81.2 Specific learning disorder with impairment in mathematics
- F81.81 Specific learning disorder with impairment in written expression

## Treatment Recommendations

The diagnosis of DMDD represents a unique clinical challenge. Because DMDD is newly defined, there are not yet studies examining interventions specific for the disorder. Treatment strategies must be extrapolated from the literature addressing related or overlapping conditions, including ADHD, oppositional defiant disorder, and pediatric bipolar disorder. Evidence-based treatments targeting ADHD and aggression are likely to provide the greatest benefit. Medication therapies have well-documented efficacy for ADHD, with the best support for psychostimulants (Pliszka and AACAP Work Group on Quality Issues 2007). Pharmacotherapy for pediatric aggression is less well studied because aggression is not a specific diagnosis and because aggressive behaviors arise across multiple different childhood psychiatric conditions. A meta-analytic review found that atypical antipsychotics have the most empirical support for treating maladaptive aggression in children, followed by stimulants, mood stabilizers, and traditional neuroleptics (Scotto Rosato et al. 2012).

Before initiating or changing pharmacotherapy, the clinician needs to review the prior effectiveness and tolerability of medication treatments. Sam is currently taking divalproex 500 mg/day (blood level=97 µg/mL) and atomoxetine 60 mg/day. The history does not indicate whether Sam has had a significant therapeutic response or developed toxicities to either of these agents, or whether ongoing treatment with either or both is indicated. However, his ongoing behavioral and emotional struggles suggest that changes or modifications of his current regimen are needed.

Sam was previously treated with a stimulant and venlafaxine. He developed tics while taking the stimulant and was therefore switched to atomoxetine, which has been approved by the U.S. Food and Drug Administration (FDA) for treating ADHD in youth as monotherapy and is recommended for children with ADHD who cannot tolerate stimulants or for those who have comorbid anxiety (Pliszka and AACAP Work Group on Quality Issues

2007). However, atomoxetine may increase activation, which could be contributing to Sam's current problems. Venlafaxine apparently caused significant activation in Sam, exacerbating his irritability and rage outbursts. He may be at risk for activation with other antidepressants as well. Divalproex was selected to treat possible venlafaxine-induced mania; however, the history does not support that Sam experienced a well-defined manic episode. Furthermore, although divalproex has FDA approval to treat mania in adults, a large randomized placebo-controlled trial for pediatric bipolar disorder did not support use of the medication in treating youth with bipolar disorder (Wagner et al. 2009), and the evidence supporting the use of divalproex for aggression and rage outbursts in children is at best mixed (Scotto Rosato et al. 2012).

Sam's treatment should be refocused to adequately address his ADHD symptoms. He had been successfully treated with a stimulant medication for 3 years prior to the onset of tics. The emergence of tics is not an absolute contraindication for stimulant therapy, and the development of tics while taking one stimulant does not preclude an alternative stimulant trial. Given the lack of adequate response from Sam's current regimen, a stimulant trial (either a methylphenidate or amphetamine formulation depending on his prior exposure) appears warranted. The  $\alpha_2$ -adrenergic agonists clonidine and guanfacine have each been found to be helpful for symptoms of ADHD and oppositional defiant disorder (Hirota et al. 2014). Longer-acting preparations of these agents have FDA approval for treating ADHD.

If Sam's symptoms do not respond sufficiently to ADHD treatments, a trial of risperidone may be indicated to better control his aggression, poor impulse control, and reactivity. Risperidone, the atypical antipsychotic best studied for use in pediatric populations, has demonstrated benefit for youth with explosive behaviors and aggression across different diagnostic conditions, including bipolar disorder, autism, and intellectual delays (Scotto Rosato et al. 2012). An open-label trial using risperidone in low doses found significant reductions of irritability scores in children with severe mood dysregulation (Krieger et al. 2011). When prescribed in children, risperidone should be initiated slowly, with dosages up to 3 mg/day as tolerated. Potential adverse effects need to be systematically monitored, including the risk for extrapyramidal side effects, weight gain, and other metabolic complications.

As new medications are considered for Sam, the ongoing need for any current treatments (e.g., divalproex and atomoxetine most recently) must also be reassessed. The goal is to use the fewest medications necessary to provide a therapeutic response. Changes in medications should be systematic, with sufficient time to adequately gauge the response to changes while also closely monitoring for an exacerbation of symptoms or side effects.

Finally, medications alone are not likely to resolve Sam's emotional and behavioral challenges. Medication therapy should be considered adjunctive to psychoeducational and cognitive-behavioral interventions designed to improve problem-solving strategies, coping skills, and parenting effectiveness. The goal with use of medications for Sam is to stabilize his aggression and volatility, thus increasing the likelihood that psychotherapeutic strategies can be implemented. In the long term, the desire is to reduce Sam's need for medications through the successful implementation of the other strategies.

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# CHAPTER 18

## Struggling in School

### Language and Reading Difficulties

Lynn M. Wegner, M.D., FAAP

#### Case Presentation

##### Identifying Information

Michael, a 12-year-old sixth grader, attends an inner-city public middle school. He lives with his widowed father, who is employed as a security guard at a local chemical research facility.

##### Chief Complaint

Michael is failing language arts, science, and social studies classes. Retention for sixth grade is being discussed.

##### History of Present Illness

Michael is enrolled in regular sixth-grade classes and receives no supplemental services from school personnel. When asked to read aloud, he reads slowly and with mistakes and many pauses. His social studies and earth science teachers report that he seems very interested in the content in their classes when demonstrations or slide lectures are given. When he has to read independently, however, he quickly seems to lose interest and stares vacantly away from the text. He does not interfere with other students; however, he is not engaged at all in the classroom activities unless “visual presentation” accompanies the discussions or readings. Michael also was a strong math student in previous grades. He was on the accelerated math track, but his pre-algebra instructor is puzzled; although Michael did very well in previous classes in which he studied geometry, elaborate fractionation, and multiplication/division, he struggles with word problems.

Michael's father reports that no recent changes have occurred in the home. Michael's teachers have not seen any altered interactions with peers. He is perceived as a "quiet boy" by all teachers and administrative staff at his middle school.

## Past Psychiatric History

Michael had difficulty separating from his parents when he first began attending day care at age 3 years. He never had significant temper tantrums, but when his mother died during a car accident when he was age 4, he seemed to be more "clingy" to his father.

During the middle of Michael's fifth-grade year, the student support team met to discuss referring Michael for evaluation for attention-deficit disorder, although there were no behavior problems at school. "At times I forget he is in the classroom," one teacher commented. "He never raises his hand to ask questions, and when I call on him, he stares at me as though he hasn't heard what I said."

This year he has shown no improvement, although the school guidance counselor assigned a mentor to help him after school with his homework. The mentor thinks Michael enjoys working with him, but he admitted, "It's hard to know what he thinks or feels. He doesn't talk much."

## Medical History

Michael never had a seizure, head trauma resulting in loss of consciousness, or central nervous system infection. He has had no sensory impairments, chronic illnesses, past hospitalizations, or surgeries. He has no history of iron deficiency or lead exposure. He takes no daily medications.

## Developmental History

Michael was the only pregnancy for his 28-year-old mother. The pregnancy was uncomplicated by hypertension, vaginal bleeding, maternal cigarette smoking, or iron deficiency. He was born at term, weighed over 5½ lbs, and had no perinatal problems.

His social, motor, and language skills were attained at "usual" times; however, his father noted that his son "did not talk a lot."

Throughout preschool, Michael's caregivers commented that he spoke little but seemed to know what was going on. He often seemed "a million miles away" during preschool circle time. However, his ability to assemble puzzles was consistently perceived to be strong, and his ability to assemble LEGO bricks into sophisticated structures seemed advanced for his age.

Although no "real" problems were reported in day care or preschool, Michael did not pass the kindergarten entry screening for language skills. Subsequent formal language testing showed a mixed pattern of expressive and receptive skills "more than two standard deviations below the mean value for his age (i.e., standard score [SS] < 70.)" Michael was referred for language therapy, provided in twice-weekly small group sessions at his school. He received Title I reading support in first and second grades, but all supplemental services,

including the speech and language therapy, were terminated at the end of second grade when he “exited” on the basis of having met the criteria of “average” receptive and expressive skills on standardized testing. Michael had no additional developmental evaluations or therapeutic interventions.

Michael passed the third-grade end-of-grade standardized examinations; however, his fourth-grade teacher made numerous notations on interim grading reports that he seemed inattentive and poorly focused on classroom discussions. His reading comprehension progressively deteriorated through fourth and fifth grades, although he was able to earn “low passing” grades. His written assignments, brief as they were, showed many spelling errors.

## Family History

Michael’s mother was a registered nurse, with no history of academic challenges or mental health consultations. His father admitted he does not like to read and “barely” passed the 12th grade. He noted he has always been a “quiet” person and wonders if he talked with Michael enough after his wife died. Michael’s father has two brothers, neither of whom completed the ninth grade, and he acknowledged that his father “couldn’t even read the Bible.”

## Mental Status Examination

Michael entered the interview room slowly and did not make immediate eye contact with the interviewer. He made no spontaneous comments, and he frequently nodded assent or shook his head in disagreement rather than reply to the examiner’s questions. He denied any problems with his mood, rejecting any thoughts of hurting himself or others. At one point he answered the question “Are you sad?” by replying, “Doesn’t everyone get mad sometimes?” His reality testing was unimpaired.

The following lists include the record reviews, interviews, and Michael’s testing.

## Clinical Assessment, Observations, and Nonstandardized Scales

- Review of medical and school records
- Clinical interview with father and Michael
- Review of nonstandardized summary questionnaire from all five sixth-grade teachers
- School ANSER Form (Levine 1996)

## Standardized Questionnaires

- Behavior Assessment for Children—Third Edition (BASC-3): Parent Version, Teacher Version, and Self-Report Profile (Reynolds and Kamphaus 2015)
- Behavior Rating Inventory of Executive Function (BRIEF): Parent Version, Teacher Version, and Self-Report Version (Guy et al. 2005)

## Standardized Testing

- Clinical Evaluation of Language Fundamentals—Fifth Edition (CELF-5; Wiig et al. 2013)
- CELF-5 Pragmatics Profile (Wiig et al. 2013)
- Comprehensive Test of Phonological Processing—Second Edition (CTOPP-2; Wagner et al. 2013)
- Leiter 3 International Performance Scale—Third Edition (Leiter-3; Roid et al. 2013)
- Peabody Picture Vocabulary Test—Fourth Edition (PPVT-4; Dunn and Dunn 2007)
- Wechsler Intelligence Scale for Children—Fourth Edition (WISC-IV; Wechsler 2004)
- Woodcock-Johnson Tests of Achievement—Fourth Edition (WJ IV; Schrank et al. 2015)

## Evaluation Results

The BASC-2 and BRIEF rating scales administered to Michael's father and teacher yielded a few consistencies and several discrepant endorsements. His teacher noted "clinically significant" concerns for attention, atypicality, and withdrawal, whereas his father endorsed responses reflecting significant concerns only for withdrawal. Both Michael's father and teacher endorsed several areas of weakness in executive function: planning, initiation of actions and comments, mental energy, and working memory. Michael's self-report on the BASC-2 was significant for anxiety, depression, attitude to school, self-esteem, and sense of inadequacy. He endorsed significant areas of concern for working memory and task completion.

All Michael's current teachers completed the School ANSER questionnaire. All noted "significantly delayed more than 1 year" for all reading, language, and writing skills. His math teacher noted delays of more than 1 year in "understanding word problems." In all classes, Michael's teachers observed that his "mental energy" was weak and he did not interact with peers at age level.

Formal standardized testing was administered in three morning sessions. During each session, the examiner noted that Michael seemed willing to participate but progressively became cognitively fatigued, often rubbing his face and hair. He stretched his arms several times and yawned. Notably, the examiner observed that Michael answered questions with one word or two- to three-word phrases. Michael's testing yielded the results listed in Table 18-1.

**TABLE 18–1.** Michael’s standardized test results

Test	Standard score	Percentile
Clinical Evaluation of Language Fundamentals, Fifth Edition (CELF-5)		
Core Language Composite	70	2
Receptive Language	61	0.5
Expressive Language Composite	80	9
Language Memory Composite	66	1
Language Structure Composite	75	2
Pragmatics Profile	2	0.4
Comprehensive Test of Phonological Processing (CTOPP-2)		
Phonological Awareness Composite	76	5
Phonological Memory Composite	67	1
Rapid Naming Composite	79	8
Alternate Phonological Composite	70	2
Alternate Rapid Naming Composite	76	5
Leiter 3 International Performance Scale—Revised (Leiter-3)		
Fluid Reasoning	102	55
Full Scale IQ	110	75
Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4)	80	9
Wechsler Intelligence Scale for Children, Fourth Edition (WISC-IV)		
Verbal Comprehension Index	73	4
Perceptual Reasoning Index	94	34
Working Memory Index	86	18
Processing Speed Index	88	21
Full Scale IQ	81	10
Woodcock-Johnson Tests of Achievement, Fourth Edition (WJ IV)		
Broad Reading Composite	77	6
Broad Math Composite	95	37
Broad Written Language	72	3

*Note.* All standardized results were based on a mean value of 100 with a standard deviation of 15.

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# Psychotherapeutic Perspective

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## Diagnostic Formulation

The DSM-IV diagnoses of expressive language disorder and mixed receptive-expressive language disorder (American Psychiatric Association 1994) are now encompassed within the diagnosis of language disorder in DSM-5 (American Psychiatric Association 2013). Language disorder is characterized by persistent difficulties in the acquisition and use of language across modalities (e.g., spoken, written) that occur early in development. These difficulties are due to deficits in vocabulary, limited sentence structure, and impairments in the ability to understand language and/or to use language to express oneself. Furthermore, DSM-5 criteria require evidence that the deficits are below what would be expected on the basis of chronological age and intellectual functioning and that the language problems are interfering with functioning. Michael's receptive and expressive language scores across a range of measures (e.g., CELF-5, PPVT-4) are below the 10th percentile for children his age and are more than one standard deviation below his full-scale IQ as measured by the Leiter-3. It is interesting to note that Michael's full-scale IQ of 110 on the Leiter-3, a nonverbal test of IQ, is considerably higher than his full-scale IQ of 81 on WISC-IV, which relies heavily on language comprehension. This presentation is typical of children with language disorder. The DSM-5 impairment criterion is clearly met in this case because Michael is failing the majority of his classes and is in danger of being retained.

Michael's achievement scores and impairment in the school setting also suggest that he meets DSM-5 criteria for specific learning disorder with impairment in reading. His reading scores are well below average and are highly discrepant from his full-scale IQ on the Leiter-3. Furthermore, his WJ IV Broad Reading Composite score (SS=77, 6th percentile) is considerably lower than his Broad Math Composite score (SS=95, 37th percentile), which is consistent with Michael's nonverbal intellectual abilities as measured by the Leiter-3. This pattern of findings suggests that Michael's learning difficulties are limited to one academic domain (reading). This finding is replicated in the school setting, where Michael achieved at grade level in math and began struggling when the curriculum pro-

gressed to include word problems, which require reading comprehension. All of Michael's scores on the CTOPP-2 lend support to the specifier "with impairment in reading" (i.e., all subscale scores are below the 10th percentile) and suggest that delays in phonological processing may be contributing to his reading difficulties. Finally, DSM-5 requires that all academic domains and subskills that are impaired be listed along with this specifier. However, given the information provided, it is difficult to determine which subskills are impaired because the WJ IV Broad Reading Composite score draws from several WJ IV subtests. Review of Michael's scores on the specific subtests would provide the information necessary to determine the most appropriate subskills implicated in Michael's specific learning disorder, such as word reading accuracy (Letter Word Identification), reading rate or fluency (Reading Fluency), and reading comprehension (Passage Comprehension).

Michael's case presentation does not contain sufficient information to determine whether he meets DSM-5 criteria for attention-deficit/hyperactivity disorder (ADHD). The determination of whether he may have comorbid ADHD is complicated by the fact that children with language disorders often present with deficits in attention and executive functioning (Noterdaeme et al. 2001). Parent and teacher rating scales that focus on screening for specific DSM ADHD symptoms should be administered to determine the number and severity of ADHD symptoms that Michael is displaying across home and school environments (for a comprehensive review of ADHD rating scales, see Collett et al. 2003). Also, a caregiver interview should be added that includes assessment of the specific ADHD symptoms listed in DSM-5, including symptom frequency, age at onset (note that age at onset has changed from onset before age of 7 in DSM-IV-TR [American Psychiatric Association 2000] to onset before age of 12 in DSM-5), duration, and associated impairment. Determining whether symptoms of inattention are present in all settings or only in settings that involve language and/or reading requirements is imperative.

Additional evaluation of Michael's attention, anxiety, and mood also appears warranted. Michael's father and teacher both endorsed responses on the BASC-2 reflecting concern with withdrawal, and Michael endorsed problems with anxiety, depression, self-esteem, and a sense of inadequacy. Some of these internalizing symptoms may be sequelae related to the early loss of his mother. Again, the presence of a language disorder complicates establishing whether a comorbid mood or anxiety disorder is present. Children with language disorders often present as exceptionally quiet and withdrawn. To more carefully evaluate Michael's mood symptoms, the clinician could administer the Children's Depression Inventory (Kovacs 1992), a self-report measure that assesses depressive behaviors.

## DSM-5 Diagnosis

- **F80.9 Language disorder**
- **F81.0 Specific learning disorder with impairment in reading**
- **Rule out specific learning disorder with impairment in written expression**



- Rule out attention-deficit/hyperactivity disorder
- Rule out depressive disorder

## Treatment Recommendations

The evaluation results should be shared with Michael's school, with the goal of reinstituting the speech, language, and reading support services that Michael received in early elementary school. The fact that his language and reading deficits have persisted despite this early intervention is not surprising. Research clearly demonstrates the chronic nature of both language and reading impairments and supports the need for ongoing intervention (Glogowska et al. 2006). Currently, no published, evidence-based guidelines for the treatment of language disorders are available. Nevertheless, compelling evidence indicates that speech and language therapy is effective in improving expressive language delays, although receptive language delays are more resistant to treatment (Boyle et al. 2007).

In addition to speech and language therapy, Michael should receive some form of reading intervention that directly teaches reading skills. Explicit and systematic reading interventions improve reading comprehension and fluency in older children (Sexton et al. 2012). However, because reading problems tend to be more difficult to treat in older children and adolescents, it is recommended that interventions should be longer in duration and delivered in both one-on-one and small group sessions (Sexton et al. 2012). Evidence supports the efficacy of multiple types of reading intervention. The selected reading intervention should target Michael's specific areas of reading deficit. For example, addressing Michael's phonological awareness deficits by teaching phonological awareness with parallel instruction in other reading skills (e.g., reading fluency or reading comprehension) would likely be productive. Regardless of intervention type, intervention efforts should include explicit and systematic direct instruction in deficient skills and also provide continued cumulative review of mastered content (Sexton et al. 2012). This instruction could be provided on an individual basis (e.g., tutoring) or within the context of school-based special education instruction.

If further evaluation suggests that Michael has comorbid ADHD or if Michael continues to demonstrate attentional difficulties after his language and reading problems have been addressed, the ADHD symptoms and related impairments will need intervention. If Michael meets criteria for ADHD, he will likely meet criteria for predominantly inattentive presentation. The best treatment approach for children with ADHD is a multimodal intervention including pharmacologic and psychosocial treatments (MTA Cooperative Group 1999). A trial with psychostimulants might be considered. Concordantly, psychosocial interventions should be initiated. The psychosocial intervention chosen should be one that targets the academic and school-related difficulties often associated with ADHD, predominantly inattentive presentation. For example, multiple interventions have been developed and evaluated that target materials organization and planning skills, focus during class and homework completion, and the parent-child interactions surrounding these tasks (e.g., Langberg et al. 2012; Pfiffner et al. 2014).

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# **Psychopharmacologic Perspective**

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## **Diagnostic Formulation**

Michael is a 12-year-old boy with a history of reading and writing expression difficulties, inattention, daydreaming, and lack of participation in class. He is failing academically despite efforts to learn. He is quiet and withdrawn, struggling socially, and becoming progressively more insecure, anxious, and depressed.

Michael's developmental and medical history is unremarkable except his speech and language problems: He has always struggled with limited speech volume and limited verbal communication. He failed the kindergarten entry screening for language skills. He had deficiencies in expressive and receptive language. He struggled academically despite language therapy and reading support throughout second grade. His performance on written assignments was well below average in sixth grade. His math performance got progressively worse after starting math word problems.

Michael's history of limited speech volume and limited verbal and written communication in general since early childhood supports a DSM-5 diagnosis of a language disorder. Michael's social difficulties are closely related to his verbal difficulties. A diagnosis of social (pragmatic) communication disorder could be justified; however, on the basis of the mental status examination, Michael seems to use nonverbal communication well. He also seems to be able to change communication to match context and seems to be able to follow the rules for conversation and storytelling.

His reading and writing difficulties meet DSM-5 diagnostic criteria for a specific learning disorder with impairments in reading and in written expression. It has become clear that specific learning disorders have a chronic course and require ongoing interventions. Michael will benefit from interventions aimed at strengthening his areas of academic weakness.

Michael's avoidance of verbal interactions may suggest a diagnosis of selective mutism. However, the impairment is better explained by the communication disorder and specific learning disorder.

The long-standing history of forgetfulness, distractibility, difficulties sustaining attention, seeming not to listen when spoken to directly, losing focus quickly, and avoiding par-

ticipation in challenging activities such as class discussions suggest a diagnosis of ADHD, predominantly inattentive presentation. Although children with specific learning disorders may appear inattentive because of frustration and mental fatigue, they do not present with impairment outside of academic work. Michael will benefit from a thorough evaluation of his attention and concentration outside of academic work.

Sluggish cognitive tempo (or concentration deficit disorder) is a newer diagnostic construct that overlaps with ADHD, inattentive presentation (Lee et al. 2014). It grew out of efforts to identify differences between subtypes of children with ADHD. The symptoms include daydreaming; having trouble staying awake/alert; being mentally foggy or easily confused; staring a lot; having one's mind elsewhere (spaciness); being lethargic, underactive, slow moving, and sluggish; having difficulty processing questions or explanations accurately; presenting with a drowsy/sleepy appearance; being apathetic and withdrawn; appearing lost in thoughts; being slow to complete tasks; and experiencing initiative/effort fades that cause impairment in one's life.

Michael endorsed symptoms of depression and anxiety. Because of Michael's history of early trauma (losing his mother at age 4 years), there is a possibility that his ability to perform academically has been eroded by unresolved grief, leading to persistent depression and anxiety and causing low to moderate decrease in energy, concentration, and social withdrawal. His father also reports a personal history of difficulties expressing himself that may have impaired his ability to support Michael's grieving process. Therefore, additional diagnoses to be considered for Michael include persistent complex bereavement disorder, dysthymic disorder, and major depressive disorder, chronic, mild to moderate, without psychotic features.

Clinical instruments that may be helpful in Michael's case include the Child Depression Inventory (Kovacs 1985) to help clarify depressive symptoms and either the SNAP-IV Teacher and Parent Rating Scale (Swanson 1992) or Conners Rating Scales—Revised (Conners 2008) to further clarify the symptomatology of ADHD.

## DSM-5 Diagnosis

- F80.9 Language disorder
- F81.0 Specific learning disorder with impairment in reading
- F81.81 Specific learning disorder with impairment in written expression
- Rule out social (pragmatic) communication disorder
- Rule out attention-deficit/hyperactivity disorder, predominantly inattentive presentation
- Rule out persistent complex bereavement disorder versus persistent depressive disorder (dysthymia) versus major depressive disorder, chronic, mild to moderate, without psychotic features
- R41.83 Borderline intellectual functioning

- Z55.9 Academic or educational problem
- Z59.9 Unspecified housing or economic problem (one-parent house hold)

## Treatment Recommendations

Various speech and language therapies are effective interventions for language disorder (Law et al. 2003, 2015). Speech and language pathologists have to treat a wide variety of difficulties, and “one size does not fit all” (Scott 2014). Developing individualized treatment plans is a difficult task, and experts have been trying to make use of recent technological advances in order to better respond to the challenge (Robles-Bykbaev et al. 2015).

Specific learning disorders have a chronic course and require ongoing interventions aimed at strengthening the areas of academic weaknesses. Specific learning disorders with impairment in reading and written expression have various degrees of severity. Phonological processing plays a critical role in specific learning disorder with impairment in reading. Neuroimaging studies have shown that early reading intervention facilitates the development of those neural systems that underlie normal reading (left anterolateral occipito-temporal region). Such interventions are most effective when implemented at the earliest possible age, when the brain responds best. Close monitoring in kindergarten and first grade will help teachers identify the children who struggle and need early reading interventions. The interventions in early grades focus on phonemic awareness, phonics, fluency, vocabulary, and comprehension and aim to help children improve their phonological awareness and word identification skills (Lonigan 2003). Children in third grade or higher receive various other remedial interventions (Lovett and Barron 2003).

If Michael is found to have ADHD, stimulants (methylphenidate- and amphetamine-based drugs) are considered the first line of treatment for ADHD (MTA Cooperative Group 1999). Although not currently the standard of practice, a baseline electrocardiogram may be advisable, especially if Michael has any history of cardiac problems or exertional symptoms. Serial electrocardiograms may be indicated if cardiovascular indicators change. Vital signs (heart rate, blood pressure), weight, and height should be closely monitored while a patient is taking a stimulant. Extended-release products are generally preferred to avoid the need for midday dosing at school. Titration should start with the lowest dose of the chosen extended-release product, with weekly increases based on clinical benefit and side effects. Some patients may benefit from a booster dose of an immediate-release product in the afternoon for homework or organized high-performance activities.

Another first-line drug for ADHD is atomoxetine (Cheng et al. 2007), which may also mildly benefit comorbid internalizing symptoms, possibly relevant in Michael's case. This drug should be titrated weekly, starting with 0.5 mg/kg. Most patients respond to about 1.0–1.2 mg/kg, but the safety of dosages up to 1.8 mg/kg was demonstrated in premarketing studies. Many of its side effects are similar to those of stimulants, but atomoxetine differs by not interfering with sleep and even sometimes inducing drowsiness or fatigue. For this rea-

son and because of its long pharmacodynamics half-life, it can be given at bedtime to make a virtue of the sedative side effect. In contrast to the more immediate effect of stimulants, a month or more is required for a fair trial of atomoxetine. Extended-release  $\alpha_2$ -adrenergic agonists have also been approved by the U.S. Food and Drug Administration for ADHD and may have benefits for anxiety.

Given Michael's reports of depression and anxiety, atomoxetine may be the best first choice. Another option may be a tricyclic antidepressant or bupropion, which might help depression and have documented efficacy for ADHD symptoms. However, they are not considered first-line drugs, and the tricyclics present their own cardiovascular risks. If Michael's symptoms of depression and anxiety persist after attempts to treat both ADHD and internalizing symptoms with one drug, cognitive-behavioral therapy may be added if not already implemented. If treatment is still not sufficient, the clinician might consider fluoxetine, which has been more effective than placebo in treating depression in children and adolescents. Michael and his father should be educated about the potential of an increased suicide risk during treatment with antidepressants and instructed about how to monitor for such risk and what to do in case of an emergency.

Another agent worth considering in view of Michael's apparent sluggish cognitive tempo and relative lack of hyperactive-impulsive symptoms is L-carnitine or acetyl-L-carnitine, which is necessary for energy metabolism and in a pilot study (Arnold et al. 2007) showed significant benefit for inattentive-type (but not combined-type) ADHD.

In addition, psychoeducational, individual, group, and/or family therapy may help Michael address unresolved grief, understand his learning disorders, and address self-esteem issues.

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# CHAPTER 19

## Abdominal Pain in a Child With Inflammatory Bowel Disease

Eva M. Szigethy, M.D., Ph.D.

### Case Presentation

#### Identifying Information

Ryan is a 13-year-old who was diagnosed with Crohn's disease, a common inflammatory bowel disease (IBD), 4 years ago. He lives at home with his parents and attends eighth grade in a regular education classroom. He was referred for a behavioral health evaluation by his gastroenterologist.

#### Chief Complaint

Ryan reports that he would be fine “if this stupid pain was not ruining my life.”

#### History of Present Illness

Over the past month, Ryan developed persistent abdominal pain that was interfering with his school performance. The pain was worse in the morning and was not accompanied by the symptoms (e.g., bloody diarrhea and weight loss) that usually accompany a flare-up of his IBD. The pain did not seem to be triggered by food or eating. Ryan went to his pediatric gastroenterologist 1 month after the pain began, but neither his physical examination nor laboratory tests were consistent with IBD activity or any other physical illness–related cause for his pain.

According to Ryan's mother, he was doing well until approximately 8 months prior when he started complaining about stomachaches. For the next month, the pain persisted and he began to seem sad, become easily frustrated, complain of fatigue in spite of sleeping



more than 10 hours per night, have difficulty concentrating, and have decreased appetite but with little weight loss. She also noted that he was making more negative self-comments (“I am stupid”) and sometimes said “I wish I were dead” but had no active suicidal intent. He missed more than 40 days of eighth grade at a public school during this period, resulting in a downward drift in his usually above average grades. His mother was also concerned about his increased isolation from his friends; he often spent hours alone in his room listening to music and watching TV.

When questioned about specific symptoms, Ryan denied feeling depressed but endorsed that the pain was making him very tired and making it too hard to concentrate in school, so he had stopped trying. Ryan also felt stressed by the constant tension between his parents, who were arguing a lot and talking about getting a divorce. Ryan felt that the pain also helped him get more attention from his father. He denied any other symptoms of depression. In terms of anxiety, he endorsed worrying that he would have a flare-up of his IBD but denied any other anxiety symptoms. He denied that the anxiety interfered with sleep or caused muscle tension or restlessness.

## Past Psychiatric History

Ryan and his mother denied that Ryan had any previous problems with depression. He reported that he remembers feeling more irritable, not sleeping, and being more distractible when he was getting intermittent high-dose steroid treatments for his IBD flare-ups, particularly on the 4–5 days he was taking the highest dose. He has had no previous psychiatric treatment. He has no history of attention-deficit/hyperactivity disorder or a learning disability to account for his declining grades. Ryan’s pain was not associated with excessive visits to the gastroenterologist or emergency room or with avoidance of medical care.

## Medical History

Ryan and his mother denied that Ryan had previously had problems with persistent abdominal pain. He did endorse having stomach pains during his two previous flare-ups of his Crohn’s disease. He was medically hospitalized at age 9 at the time of his IBD diagnosis but did not find this experience to be particularly traumatic. He has not had a worsening of his IBD course. His current medications for IBD include mercaptopurine, an immunosuppressant, and omeprazole (Prilosec) for possible gastric reflux. There have been no recent changes in medications or dosages.

## Developmental History

Ryan is on target for meeting developmental milestones.

## Social History

Ryan’s father is a war veteran who is unemployed. His mother works as a high school teacher and often buries herself in her work to escape conflict at home. Ryan is an only child.

## **Family History**

The family history is significant for possible colitis, depression, and alcoholism in Ryan's father.

## **Mental Status Examination**

Ryan appeared small for his age (25th percentile for age-appropriate height). He was slightly unkempt, with hair in his eyes and loose-fitting T-shirt and jeans. He was not happy to be at the evaluation and stated, "It was my mother's idea." He was shy and reserved for the majority of the interview. He endorsed an abdominal pain level of 7 out of 10 but did not appear in any acute distress. He had poor eye contact through much of the interview, often looking at the floor. Ryan tended to give short, monotonic answers in a soft voice. He was occasionally fidgety in a nervous manner, cracking his knuckles and shaking his leg, but otherwise no motor abnormalities were noted.

Ryan's affect was constricted in the depressed range. He also appeared anxious, particularly on topics such as returning to school or getting along with friends. His thought process was organized. Ryan denied current suicidality or psychosis. Ryan was alert and oriented. His insight and judgment were developmentally appropriate in most realms but impaired regarding how he is coping with abdominal pain.

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# **Psychotherapeutic Perspective**

David R. DeMaso, M.D.

## **Diagnostic Formulation**

Ryan, an early adolescent with Crohn's disease, has had persistent abdominal pain over the last month. His subjective pain complaints, physical examination, and laboratory testing are inconsistent with an acute gastrointestinal illness flare-up, suggesting that his IBD is currently under good medical control with mercaptopurine and omeprazole. Although there is not enough evidence that he has an active medical condition (e.g., Crohn's disease, gastroesophageal reflux, side effects from treatment) contributing to his current pain, the possibility that one or more physical conditions may be contributing at some physiological level to his gastrointestinal symptom production cannot be completely ruled out. Even if a

medical condition is contributing to his symptoms, the condition is unlikely to fully account for the severity of his pain complaints or the degree of his functional disability.

Emotionally, Ryan appears to be experiencing a major depressive disorder (MDD), single episode, as evidenced by approximately 8 months of disabling depressed mood, diminished interests, hypersomnia, fatigue, feelings of worthlessness, diminished ability to concentrate, and recurrent thoughts of dying, in the context of a biological vulnerability to depression (e.g., paternal illness) (American Psychiatric Association 2013). These symptoms cannot be attributed to steroid-induced or steroid-exacerbated depressive symptoms because he is not currently being treated with steroids. His distressing and disruptive pain symptoms together with his excessive thoughts and behaviors related to these symptoms suggest that Ryan has a co-occurring persistent somatic symptom disorder. Both disorders have resulted in clinically significant distress and impairment in his social and academic functioning.

Ryan has no apparent disabling anxiety, temperament issues, or substance abuse, all of which are commonly involved in clinical presentations of this nature. Although his parents are likely caring and supportive, they clearly have significant relational problems, as evidenced by his father's unemployment and alleged alcohol problems, as well as his mother's avoidance of conflict. The degree of marital discord that Ryan has witnessed in the home is unknown, but this discord does represent a major stress for a young adolescent.

## DSM-5 Diagnosis

- F32.1 Major depressive disorder, single episode, moderate
- F45.1 Somatic symptom disorder, with predominant pain, persistent, moderate
- Z62.898 Child affected by parental relationship distress
- Crohn's disease, not otherwise specified
- Gastroesophageal reflux, possible

## Treatment Recommendations

Communication of the diagnostic formulation is the critical first step in responding to Ryan (Shaw and DeMaso 2006; Shaw et al. 2010). He and his family likely believe that Ryan's persistent pain is due to his medical condition. This view of the problem needs to be reframed to a biopsychosocial understanding, which should be communicated by the psychiatrist first to the gastroenterologist. Then an "informing conference" should be scheduled, which includes the gastroenterologist and the family (Shaw and DeMaso 2006); it can be helpful for the psychiatrist to join this meeting depending on the gastroenterologist's expertise and comfort in communicating the biopsychosocial findings.

In this meeting, Ryan and his family would be presented with the diagnostic formulation, generally by the gastroenterologist, in a supportive and nonjudgmental manner. The

family should be told that many important things have been discovered. The following is an example of a useful introduction: “We have good news. We have ruled out a number of serious physical illnesses, and this is not a flare-up of your Crohn’s disease.” Statements that should be avoided include “We couldn’t find anything,” “It’s in your mind,” and “The symptoms are not real.” Statements can focus on describing the common co-occurrence of mood and pain symptoms. Close attention and careful response to the family’s words allows the family to be integrated into a more biopsychosocial formulation, thereby facilitating family acceptance (Shaw and DeMaso 2006).

Following the family’s acceptance of a new formulation, the psychiatrist can facilitate the formation of a medical-psychiatric team, with the goal being an integrated medical and psychiatric approach (Shaw and DeMaso 2006; Shaw et al. 2010). This team supports simultaneously the gastroenterologist’s ongoing monitoring and treatment and the psychiatrist’s interventions. The gastroenterologist should provide ongoing follow-up while avoiding unnecessary medical investigations and procedures.

Nonpharmacologic intervention recommendations would include individual psychotherapy and family therapy, with treatment of Ryan’s depression being a primary focus. Supportive, interpersonal, cognitive-behavioral, and/or behavioral modification therapies can be used to help change Ryan’s erroneous cognitions about his ability to resume functioning and to encourage more adaptive coping mechanisms (Benton and DeMaso 2010). In a randomized controlled trial, Szigethy et al. (2014) compared the efficacy of cognitive-behavioral therapy and supportive nondirective therapy in treating youth with comorbid IBD and depression. Both interventions were found to be associated with reduced depression severity, improved health-related adjustment, and lessened IBD activity over time. Family therapy, including an illness narrative probe, was included in each of the two types of therapy to explore ways in which Ryan’s symptoms may serve to stabilize the family (i.e., the family’s focus on the symptoms allows for avoidance of conflict). Parent education and guidance can discourage reinforcement of the symptoms and promote positive reinforcement for improvement of functioning. The use of physical therapy, biofeedback, and/or relaxation techniques, along with a graduated return to Ryan’s usual activities, may be additional interventions (Benton and DeMaso 2010; Szigethy et al. 2014).

Although the literature contains little information pertaining to pharmacologic treatment of comorbid psychiatric and physical disorders in the pediatric population, Ryan would benefit from a trial of an antidepressant medication targeting his depression. The impact of antidepressant medications on his pain symptoms is unclear because data are limited regarding the use of these medications in children and adolescents with pain disorders. Clinical experience would also suggest that the psychiatrist and gastroenterologist must be careful not to undertreat Ryan’s pain, given that he may have both psychological and physical contributing factors at different points in his treatment. It is important to consider the use of analgesics to treat pain due to any subsequent flare-up of his IBD. Undertreated physical pain will only exacerbate any associated depressive symptoms and maintain his functional disability (Ibeziako and DeMaso 2012).

Should Ryan’s pain symptoms persist and/or become more disabling, a rehabilitation model may need to be adopted in which his pain is accepted as a symptom that may not go

away (Ibeziako and DeMaso 2012; Shaw and DeMaso 2006). The focus becomes one of improving independent functioning and skill building to improve coping. Ryan's progress is measured by changes in adaptive functioning, including school attendance and resuming normal social and recreational activities. This approach can be a hard shift for patients and their families because acknowledging the pain without continuing to make medical inquiry into the etiological causes requires a large paradigm shift on their part (Shaw and DeMaso 2006).

Although the described treatment approaches are successful in many cases, some families remain resistant to psychiatric intervention (Ibeziako and DeMaso 2012). If Ryan's family becomes resistant, the psychiatrist should remain a consultant to the gastroenterologist to advise alternative ways in which the gastroenterologist can decrease reinforcement for the sick role while encouraging Ryan's mobilization and responding to his depressive illness.

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## Psychopharmacologic Perspective

John V. Campo, M.D.

### Diagnostic Formulation

Ryan, a 13-year-old with a history of Crohn's disease, presents with 1 month of persistent abdominal pain and 6 months of dysphoric mood, fatigue, poor concentration, hypersomnia, decreased appetite, negative self-image, passive death wish, social isolation, and declining school performance and attendance. In addition to having chronic physical illness, Ryan has significant psychosocial stressors, including parental marital conflict and threatened separation, and paternal alcoholism and unemployment. Although no clear evidence for an anxiety disorder has been given, the details of the history provide reason to suspect anxiety. Therefore, the patient and parent(s) should be questioned further, and consideration should be given to offering a questionnaire focused on anxiety symptoms.

Any credible differential diagnosis must include unrecognized physical disease as a potential cause of Ryan's abdominal pain. Ryan's history, physical evaluation, and lack of

discernible pathology suggest that his Crohn's disease remains in remission, and little information is provided to suggest the presence of other explanatory physical disease. Additional medical tests and procedures are probably unnecessary in the absence of new information because relentless testing to rule out physical disease can inadvertently cause physical harm to the patient and/or create the false conviction in families that a serious physical disease has been "missed." Abdominal pain and depressive symptoms are common in patients with Crohn's disease who appear to be in remission and thus show no evidence of active gut pathology (Farrokhyar et al. 2006). Evidence also suggests that prior gut inflammation increases the risk of subsequent "medically unexplained" abdominal pain, perhaps by generating heightened gut sensitivity (i.e., visceral hypersensitivity) and lowering the threshold for particular sensations to be experienced as painful or distressing (Spiller 2007).

In DSM-5 psychiatric nosology (American Psychiatric Association 2013), the diagnostic category of somatic symptom disorder (SSD) is defined by the presence of somatic symptoms that suggest a physical disorder but are not fully explained by an associated general medical condition, the effects of a substance, or another mental disorder. The symptoms must cause distress or functional impairment and must have persisted more than 6 months. Because Ryan's pain symptoms are only of 1 month's duration, further observation and time would be required before making this diagnosis.

Youth with Crohn's disease appear to be at increased risk of experiencing depressive symptoms and disorders compared with healthy children (Mackner and Crandall 2007), and growing evidence suggests that depression can negatively influence the course of disease, making the identification and treatment of depression in youth with Crohn's disease particularly important. Other than some hints of anxiety in Ryan that would suggest a more focused evaluation, no clear evidence indicates that a significant anxiety disorder is present, possibly apart from some anxiety about his chronic illness. Because Ryan meets criteria for MDD, the clinician must decide whether to classify the boy's abdominal pain as representative of SSD or to consider the pain as being better attributable to MDD. In Ryan's case, the relatively brief duration (1 month) of his pain symptoms suggests that an SSD diagnosis is premature and that his pain might best be considered subordinate to MDD. Thus, given the predominance of Ryan's depressive symptoms, his subjective focus on pain as the primary complaint, his stable Crohn's disease, and his relatively mild attendant anxiety symptoms, the following diagnostic formulation is offered.

## DSM-5 Diagnosis

- F32.1 Major depressive disorder, single episode, moderate
- Rule out anxiety due to another medical condition
- Rule out emerging somatic symptom disorder
- Crohn's disease, in remission

## Treatment Recommendations

A treatment approach that restores Ryan to normal functioning and provides relief for his abdominal pain and depressive symptoms would be ideal. Treatment begins after the clinician, patient, and family reach diagnostic consensus and appropriate education is provided to allow for true informed consent. The clinician should provide reassurance that Ryan's Crohn's disease appears to remain in remission and that his abdominal pain is not a signal of ongoing tissue damage or a life-threatening and progressive physical disease. While emphasizing that the Crohn's disease is in remission, the clinician should also help the patient and family to understand that a history of Crohn's disease is likely a risk factor for both MDD and future SSD, that both disorders can be chronic and impairing in their own right, and that untreated depression may negatively impact the course of the Crohn's disease and increase the likelihood of relapse. Roles and responsibilities of the patient, family, and professionals should be clarified, and the importance of communication and collaboration must be emphasized. The psychiatric consultant and referring physician should communicate regularly and coordinate planning to maintain the physician-patient alliance and prevent unnecessary "doctor shopping."

Existing treatment options for MDD and emerging SSD should be reviewed comprehensively, with a focus on what is known and not known and on facilitating informed treatment choices for the patient and family. The evidence base available to guide the management of youth with SSD is limited, and although research has shown that treatment with psychotherapy and/or antidepressant medications is effective for depressed adolescents, youth with chronic physical illness have typically been excluded from clinical trials, leaving clinicians to rely on studies of youth without documented physical disease or to extrapolate from experience with adults. The clinician should review with the patient and family the available clinical research specific to youth with MDD and Crohn's disease, most notably the encouraging work of Szigethy et al. (2007) in the application of cognitive-behavioral psychotherapy to depressed youth with Crohn's disease. Other interventions such as relaxation training, guided imagery, and hypnosis also have shown some promise in the treatment of SSD-related symptomatology in youth (Tan et al. 2005).

Psychopharmacologic treatment should be offered if the patient and family are willing, either in combination with psychotherapy treatment or if psychotherapeutic interventions fail. Unfortunately, no large randomized controlled trials of psychoactive medications have been done for the treatment of depression and SSD in youth with Crohn's disease. Nevertheless, the demonstrated efficacy of selective serotonin reuptake inhibitor (SSRI) antidepressant medications for MDD in adolescents (Bridge et al. 2007) makes the use of an SSRI the most reasonable initial consideration, given little reason to suspect that the presence of Crohn's disease would obviate its use. Alternatively, a case report described the successful treatment of chronic pain and MDD in two adolescent girls with Crohn's disease with the selective serotonin-norepinephrine reuptake inhibitor duloxetine (Meighen 2007). More recently, Campo et al. (2013) presented initial data from a randomized placebo-controlled trial of citalopram for functional abdominal pain, finding that 52.5% ( $n=21$ ) of

subjects given citalopram and 31.7% ( $n=13$ ) of those given placebo were rated “much” or “very much” improved ( $P=0.058$ ) on the Clinical Global Impression–Improvement Scale using intent-to-treat (ITT) analysis. In a completer analysis, 60.0% ( $n=21$ ) of subjects given citalopram and 29.7% of those given placebo ( $n=11$ ) were judged to be responders ( $P=0.01$ ).

Although Ryan’s Crohn’s disease appears to be quiescent, it is worth noting that a handful of case reports have associated Crohn’s disease remission with the initiation of the antidepressant bupropion (Kane et al. 2003). Of note, bupropion has been reported to lower levels of tumor necrosis factor–alpha (TNF- $\alpha$ ), a circulating proinflammatory cytokine that has been associated with gut mucosal erosions in Crohn’s disease (Brustolin et al. 2006). Although clinical studies are lacking, a report that mirtazapine may increase levels of TNF- $\alpha$  led one author to presumptively recommend that mirtazapine be avoided in patients with Crohn’s disease (Kast 2003).

Although research on the pharmacologic treatment of children with functional pain syndromes has been inconclusive (Campo 2005), adults have reportedly benefited from treatment with antidepressant medications (Drossman et al. 2003; Tack et al. 2006). An open trial of citalopram for children with functional abdominal pain found that 21 of 25 treated youth (84%) responded positively (Campo et al. 2004).

On the basis of the intersection of evidence supporting the use of SSRIs for depression in adolescents and at least one open trial suggesting that SSRIs may be of benefit in treating children with functional abdominal pain, the most prudent medication choice for Ryan would likely be an SSRI. Because both of Ryan’s current medications (i.e., mercaptopurine and omeprazole) are metabolized by cytochrome P450 2D6, the clinician may wish to minimize pharmacokinetic concerns by using citalopram or escitalopram, as fluoxetine is an inhibitor of 2D6. My clinical approach would be to initiate SSRI treatment at a low dosage (e.g., citalopram 10 mg/day), increase to a potentially therapeutic dosage (e.g., 20 mg/day) over the next week, and then advance to a higher dosage (e.g., 40 mg/day) at approximately week 4, in the absence of full improvement.

Regardless of whether the specific treatment chosen is psychotherapeutic, pharmacologic, or a combination, the clinician needs to instill realistic hope and positive expectations for the patient and family. Care is likely best framed by a rehabilitative approach, which directs the patient and family toward coping with and overcoming Ryan’s pain symptoms and returning to usual activities and responsibilities. Any familial or social reinforcement of pain symptoms (i.e., secondary gain) should be minimized or extinguished (see Campo and Fritz 2007). A rehabilitative approach should communicate that healthy activity is safe and desirable and that school attendance and performance should be emphasized. Homebound instruction should be avoided. Respect for the importance of school should be communicated by attempting to schedule follow-up visits outside of regular school hours whenever possible.

Ideally, coordination of the child’s medical care should be consolidated with a single clinician, and regularly scheduled visits can reassure the patient and family that their concerns have not been dismissed (Campo and Fritz 2007). Other potential treatment targets



in Ryan's case include parental marital conflict, the father's alcoholism, and associated psychiatric disorders in either parent, particularly depression and/or posttraumatic stress disorder in the father. Also, additional assessment should explore whether there is need to be concerned about domestic violence or maltreatment in the home.

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# PART III

## Toughest Cases

### Diagnostic and Treatment Dilemmas

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# Introduction to Toughest Cases

Peter S. Jensen, M.D.  
Cathryn A. Galanter, M.D.

**IN PART III**, we present cases that pose diagnostic and therapeutic challenges to clinicians. In some instances, these difficulties are simply due to the absence of critical research to discriminate various syndromes. In other cases, clinicians may encounter difficulties in deciding which subtle diagnostic distinctions are possible and important. In still other instances, clinicians may face a dilemma as to which component of the patient's overall presentation to treat first.

In "Frequent Tantrums: Oppositional Behavior in a Young Child" (Chapter 20), our expert commentators vary in the differential diagnosis of tantrum behavior in a 6-year-old child. In essence, the case presents difficulties in distinguishing between oppositional defiant disorder, disruptive mood dysregulation disorder, attention-deficit/hyperactivity disorder, and unspecified bipolar disorder. Both commentators recommend that psychotherapy be considered in this case, although they vary in their approach and in whether they include medication in the treatment plan.

The challenge for our field—and one that still lies ahead of us—is ferreting out how to distinguish among these cases and being able to do it reliably in research settings and clinical practice. The goal is to better understand those family, constitutional, and environmental factors that predispose children in different directions and then to use that information to provide optimal prevention and treatment interventions. Thus, perhaps the child in this case has four or five different disorders, using the Robins and Guze (1970) and Cantwell-modified (Cantwell 1995) disorder validation criteria—disorders that could be ferreted out once we know where to look in the brain, the genes, the family, and the developmental and environmental factors. More research is needed before this child's story can be completed.

In "Toddler With Temper Tantrums: A Careful Assessment of a Dysregulated Preschool Child" (Chapter 21), the case of a 4½-year-old boy illustrates some of the difficulties in making diagnoses with very young children, as well as the differences among experts as to etiological factors and preferred approaches to treatment. For one of the commentators,

oppositional defiant disorder symptoms seem central, whereas for the other commentator, issues of anxiety and separation and attachment difficulties take center stage.

Although the commentators differ in the extent to which anxiety and attachment issues are approached in the patient's case, they both recommend empirically supported psychotherapies that involve the parents, such as parent management training or dyadic therapies such as Parent Child Interaction Therapy (Schuhmann et al. 1998). For various reasons, parent-directed treatment requires the clinician to carefully assess the environment, including the nature of the parent-child relationship. The following are all necessary for success: reliance on multiple informants (including other caretakers); a separate determination of the child's affective state apart from his or her behavior; generous use of rigorous rating scales; speech and language testing; and psychoeducational, intelligence, and environmental assessments.

In "Won't Leave His Room: Clinical High Risk for Developing Psychosis" (Chapter 22), a 15-year-old shows progressive deterioration in functioning over time. The commentators agree that the youth's impairment is substantial and have similar diagnostic assessments of unspecified depressive disorder and attenuated psychosis syndrome (which is listed in DSM-5 as a condition for further study); one commentator also includes unspecified anxiety disorder. They also take similar approaches to treatment, recommending cognitive-behavioral therapy (CBT) as part of the first-line treatment recommendation. The psychopharmacology experts also describe the approach they would take to prescribing medication if the patient's response to CBT was not sufficient. Their areas of diagnostic and treatment agreement demonstrate that clinical research has advanced the field. However, this case also illustrates the great need for further research on characterizing a diagnostic category that likely represents a heterogeneous group as well as research on treatment and outcome. For youth like this one with attenuated psychotic symptoms, and similarly for others who suffer from unspecified bipolar disorder, there is a great need for continued research to help predict who is at greatest risk for developing a full disorder and what interventions, pharmacologic and otherwise, are the most helpful in achieving the best outcome.

"Cutting Helps Me Feel Better: Nonsuicidal Self-Injury" (Chapter 23) tells the story of an adolescent who may meet the criteria for nonsuicidal self-injury, listed in DSM-5 as a condition for further study. Although one group of commentators inferred the diagnosis of major depression, the other group did not. Both groups, however, recommended various forms of psychotherapy, for example, dialectical behavior therapy. Also demonstrated in this case is the important role of diaries in helping experts better understand the unique precipitants and consequences of the youth's suicidal behavior. This type of intermittent behavior, like many clinical phenomena, can be difficult to understand through the use of rating scales alone, and clinicians often must work with the patient and family to do careful detective work to tease out possible precipitants, motives, and reinforcing consequences of a specific behavior.

"From Foster Care to the State Hospital: Psychotic Symptoms in a Child Who Is the Victim of Neglect" (Chapter 24) demonstrates some of the most daunting challenges faced in treating children and youth with the most severe impairments. Often, no single treat-

ment is satisfactory, and even multiple treatments leave something to be desired. Multiple medications—often in combinations whose risks and benefits are unknown—end up being used. Sometimes, it is only through the diagnostic course, in hindsight, that a clinician learns about the true nature of a child's disorder. This case also aptly illustrates the aphorism “the secret of patient care is caring for patients”; for many patients, what clinicians are seeking is care and not necessarily a cure, and the goal of treatment (and the ultimate measure of treatment success) is the ongoing maintenance of a relationship, continued problem solving, and finding what “works” for a given patient and family.

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# CHAPTER 20

## Frequent Tantrums

### Oppositional Behavior in a Young Child

Ross W. Greene, Ph.D.

#### Case Presentation

##### Identifying Information

Joey is a 7-year-old boy who lives with his parents and two younger siblings. He is in the second grade at a local public school.

##### Chief Complaint

Joey and his family were referred to an outpatient psychiatrist's office for Joey's frequent oppositional behavior and aggressive outbursts.

##### History of Present Illness

Joey's family physician recommended that Joey be seen for a psychiatric evaluation because prior intervention had not improved his challenging behavior. His parents reported that Joey "never grew out of his difficult temperament as an infant" and had always had strong emotional reactions to frustration, especially when things did not go the way he anticipated or when there was a change in plans. His parents reported that the word "no" often sent Joey into full-blown temper outbursts. Joey's tantrums typically involved crying, screaming, and occasionally throwing things or destroying property; he was typically remorseful afterward but often still clung to the rigid stance that contributed to the tantrum. Joey's parents indicated that they were reluctant to "give in" to Joey, lest he "walk all over them." Nonetheless, the father reported feeling that his wife was too lenient and inconsistent in her discipline, whereas the mother reported that it was not possible to take a strong stand in response to the multitude of situations in which Joey became frustrated each day. The parents were quite concerned about the impact of Joey's behavior on his younger siblings.

Joey's mother relied fairly heavily on the Internet for information that might help her understand her son, although she acknowledged that the information she accessed was often confusing and contradictory. She had concluded that Joey did not meet diagnostic criteria for attention-deficit/hyperactivity (ADHD) because he was not especially hyperactive and impulsive and because his teachers had reported no difficulties with inattention or distractibility. She felt that the oppositional defiant disorder (ODD) diagnosis made sense, but she was worried that his behaviors might be a sign of bipolar disorder, intermittent explosive disorder, or disruptive mood dysregulation disorder (DMDD). The mother also read about Asperger's disorder (she was confused about why it no longer existed) and felt that some features described her son—he was pretty inflexible and was bossy and controlling with his friends—but a lot of the criteria for Asperger's disorder did not seem to fit at all. When asked about Joey's typical mood, the mother's first response was "serious." When asked to clarify, she indicated that Joey never seemed overly happy (unless he was playing a video game or watching a favorite TV show) but also did not seem especially irritable, cranky, or grouchy (unless he was frustrated about something). The parents did not view Joey as being especially anxious but reported that he tended to avoid new or unfamiliar people and activities and responded poorly to changes in routine. They reported that he had a few good friends who had a shared interest in the video games he liked but that Joey often overreacted when he lost a game.

## Past Psychiatric History

Joey was colicky as an infant, had difficulty establishing a regular sleep cycle, and overreacted to noises and changes. His preschool teachers reported that he had more difficulty sharing than his peers, was bossy, and always wanted his own way (and would lash out when things did not go his way). These reports caused Joey's mother to wonder if her postpartum depression after Joey's birth was having lingering effects or if he was still reacting badly to the addition of his younger sister to the family. At the time of his sister's birth, the mother had a brief discussion about her concerns with Joey's pediatrician and was relieved when the pediatrician suggested that Joey was "just a boy," would probably "grow out of" his behavioral difficulties and would eventually adapt to the presence of his sister and the parents' divided affections.

When Joey was age 4 years, his parents sought the guidance of a mental health professional for the first time. This professional recommended that the parents begin implementing a formal home-based contingency management program in which target behaviors were identified and Joey received rewards for exhibiting desired behaviors and time-out or loss of rewards for undesirable behaviors. At the time, the mental health clinician felt that Joey met diagnostic criteria for ODD. Over the first few months of implementation, Joey's parents and teachers noted the heightened severity of his temper outbursts, especially when he was placed in time-out. During the worst episodes, Joey's screaming and crying could last as long as 45 minutes. The mental health clinician reassured the parents that Joey's temper outbursts would diminish once he realized that he could not always

have things his way. The parents discontinued treatment after several months because they felt that things were not improving.

## **Medical History**

Joey had jaundice at birth and required bilirubin lights for 5 days. In addition to being colicky as an infant, Joey had difficulty self-soothing and establishing a regular sleep cycle, and he overreacted to noises, lights, and changes. He was breastfed for 9 months. He presently has no medical illnesses beyond seasonal allergies.

## **Developmental History**

Joey achieved developmental milestones within expectations.

## **Social History**

Joey often plays with the 6-year-old boy who lives next door. Joey's parents report that the boy is rather passive and does not seem to mind Joey's bossiness. Joey's teachers report no significant behavioral concerns at school but have reported that Joey has difficulty sharing and has a preference for playing alone. Although he has been to a few birthday parties, Joey has yet to receive an invitation for a playdate from kids at school.

## **Family History**

Joey's mother had postpartum depression after he was born, lasting approximately 3 months. Joey's father had some academic difficulties as a child and reported that his own parents described Joey as a "chip off the old block." A distant paternal uncle abused alcohol.

## **Mental Status Examination**

Joey was a neatly dressed boy who appeared his stated age. He did not have any atypical facial features. Joey was generally cooperative with the interview and interviewer but struck the interviewer as a very serious child who was not overly responsive to attempts at humor and did not seem especially eager to please. Joey did acknowledge that he sometimes gets very mad, especially when his younger siblings play with his toys or interrupt something he is watching on TV. He indicated that he got along equally well with his mother and father, but that his father was "meaner." His thought process was fairly linear. He denied psychotic symptoms. He also denied thoughts of wanting to harm himself or others. Joey appeared to be of at least average intelligence, with a good fund of knowledge (e.g., he could name the president and the name of his favorite professional hockey team), but he had difficulty responding to more open-ended questions. Joey's speech was of regular tone and volume. When his mother entered the room at the end of the interview, Joey buried his head in her lap and demanded that she respond to the interviewer's questions. When she refused to do so, he buried his head even deeper and refused to answer additional questions, even with prodding.

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## Psychotherapeutic Perspective

Alison R. Zisser, Ph.D.  
Sheila M. Eyberg, Ph.D., ABPP

**JOEY** was referred for diagnosis and treatment of significant oppositional behavior and aggressive outbursts. Beyond the clinical interview and mental status examination, additional assessment procedures will be needed to assure a reliable diagnosis and plan an effective course of treatment given Joey's complex behavioral presentation.

It will be important to obtain a thorough behavioral history from Joey's parents and teachers, as well as rating scale data and behavioral observations over the course of treatment. The Child Behavior Checklist (Achenbach and Rescorla 2001) parent and teacher forms will be used to screen broadly across many areas of potential concern. The Eyberg Child Behavior Inventory (Eyberg and Pincus 1999) and Dyadic Parent-Child Interaction Coding System (Eyberg et al. 2013) will be administered to quantify Joey's disruptive behaviors and to provide baseline information for use in treatment planning.

In light of Joey's reported avoidance of unfamiliar people and resistance to engaging with the assessor, the Anxiety Disorders Interview Schedule Child/Parent report (Silverman and Albano 1996), once it is normed for DSM-5 (American Psychiatric Association 2013), will be administered to rule out a specific anxiety disorder. Because Joey is also reported to show features associated with autism spectrum disorder (i.e., cognitive rigidity, difficulty adjusting to change in routine, preference for playing alone, and sensory sensitivities), referral to a provider certified in administration of the Autism Diagnostic Observation Schedule, Second Edition (Lord et al. 2012), may be considered after observations of Joey's response to treatment.

## Diagnostic Formulation

Joey's symptom history is critical to case conceptualization. Per his parents, Joey has for years presented difficult-to-manage behaviors at home, including frequent, severe temper outbursts involving both verbal and physical aggression. Joey also presents disruptive behavior with his peers and lashes out when he does not get his way. In contrast, Joey's teachers report no significant behavioral concerns, although they note he has difficulty with age-appropriate social interactions (e.g., sharing).

Joey's behavioral presentation is consistent with a DSM-5 diagnosis of ODD, moderate severity. He has demonstrated a pattern of defiant behavior for at least 6 months, resulting in significant impairment in familial and social functioning. Distinguishing features include Joey's frequent and long-standing temper outbursts, argumentativeness, touchiness, and difficulty accepting limits. The moderate severity rating is based on functional impairment evidenced within two settings. At home, his behaviors are reported to have a negative effect on his younger siblings. With peers, his behaviors have a negative effect on his social relations, evidenced by the fact that he does not receive playdate invitations.

DSM-5 diagnostic criteria for ODD stipulate that the disruptive behaviors must occur outside an episode of mood, substance use, or psychotic disorder and require that criteria for DMDD not be met. The differentiating feature distinguishing between ODD and DMDD in Joey's case relates to his mood between tantrums. The DMDD diagnosis requires persistent irritability between temper outbursts. Joey's mother indicates that although Joey is generally a serious child, he is not especially irritable, cranky, or grouchy unless triggered, and Joey's teachers provide no evidence of pervasive irritability. For this reason, the new DSM-5 diagnostic category of DMDD is not appropriate. It will be necessary within the diagnostic evaluation to determine whether the absence of more pervasive irritability at home relates to the parents' reported leniency and potential catering to Joey's wishes as a means of preventing further disruptions. Although the addition of DMDD to DSM-5 has been marked by controversy, and research suggests low prevalence in community samples (Copeland et al. 2013), DMDD would remain an alternative diagnostic possibility until Joey's irritability and the underlying function of Joey's temper outbursts are more fully understood.

The relevant psychosocial concerns presented by this case include strain in the parent-child relationship and potential marital strain resulting from Joey's behavior and differences in parenting practices. The behaviors described by Joey's parents, as well as their description of their own parenting and discipline practices, suggest coercive parent-child interaction patterns in which parent and child behaviors both contribute to increasingly dysfunctional interactions and dysregulated emotional expression. As a result, the coding of parent-child relational problem is also warranted. Diagnostic presentation is uncomplicated by medical concerns.

## DSM-5 Diagnosis

- **F91.3 Oppositional defiant disorder**
- **Z62.820 Parent-child relational problem**

## Treatment Recommendations

The treatment in this case should target the dysfunctional parent-child interaction patterns in Joey's family. The mediating effects of parenting practices on child behavior change sug-

gest that parent training focused on improving parent-child interactions will foster positive behavioral and emotional changes that would be expected to generalize to relationships with Joey's siblings and peers. An analysis of child treatments for disruptive behavior identified six evidence-based treatments for 7-year-olds according to the criteria established by the American Psychological Association Task Force on the Promotion and Dissemination of Psychological Procedures (Eyberg et al. 2008). Four of the six treatments were parent-training programs, leading Eyberg et al. (2008) to propose parent training as a first-line approach for young children.

For Joey we recommend an evidence-based parent-training approach, such as Parent-Child Interaction Therapy (PCIT; Zisser and Eyberg 2010). PCIT is an empirically supported treatment for families with children ages 2–7 years with disruptive behavior disorders. Families attend weekly 1-hour sessions for an average of 14–16 weeks. Treatment is not time limited and is completed when parents have mastered the PCIT skills and rate their child's behavior within normal limits.

The pretreatment assessment is used to gather information to inform treatment planning. The clinical interview addresses past discipline strategies as well as past experiences with behavioral techniques. With Joey's parents, a behavioral analysis of their implementation of the timeout procedure will be important for identifying errors that may be clarified when timeout is introduced in the second phase of PCIT.

In the first phase of PCIT, the child-directed interaction, parents learn play therapy skills designed to strengthen the parent-child relationship. The parent and child develop a cooperative, positive, reciprocal interaction, which increases enjoyment of their relationship and the child's inclination to obey. Parents must meet preset child-directed interaction skill levels before progressing to the second phase of treatment, the parent-directed interaction.

During the parent-directed interaction, parents learn to use clear, positively worded direct commands and to implement consistent consequences following child compliance and noncompliance. Parents are taught a precise, step-by-step timeout procedure. Parents learn to apply the skills first at home in dyadic interactions, then in public settings, and then during sibling interactions. During treatment, therapists actively coach the parents, providing prompts and feedback as the parents practice the skills with their child. Between sessions, parents spend 5–10 minutes each day practicing the skills at home.

Joey's behavior is expected to improve steadily during treatment. If Joey's behavior does not show regular improvement each week, the therapist will address family stressors that may be interfering with the parents' adherence to home practice. If Joey's parents report practicing the PCIT skills consistently without the expected effects, other treatment options such as medication or an alternative psychosocial treatment will be considered.

One alternative treatment that addresses the process between parent and child during disagreements is Collaborative Problem Solving (Greene et al. 2003). This approach, which has a sound theoretical base and growing support in the literature, posits that deficits in children's cognitive flexibility, frustration tolerance, and problem solving underlie their explosive interactions with caregivers. The clinician works with the caregiver to differenti-

ate between situations in which the imposition of caregiver's will is necessary (e.g., safety concerns), situations in which expectations for child behavior may be lessened (e.g., picking out a snack), and situations in which the child may collaborate with the caregiver to achieve a mutually satisfactory solution to a disagreement. When developing collaborative skills, the clinician works closely with the caregiver to provide empathy with the child's concern, define the problem, and invite the child to collaborate on a plan of action.

Although fictional, Joey resembles patients who are typically seen in clinical practice — with complex presenting symptoms, previously unsuccessful treatment, and impaired functioning in multiple domains. It is essential with these children and their families to approach both assessment and treatment with the best tools that the evidence base supports. Assessment remains an ongoing process that guides treatment at every step until the presenting problems reach resolution.

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## **Psychopharmacologic Perspective**

Mani Pavuluri, M.D., Ph.D.

### **Diagnostic Formulation**

Joey is a 7-year-old boy presenting with chronic oppositional behavior and explosive outbursts. Potential biological factors include a difficult temperament, perinatal complications, and family history of affective illness (mother) and a learning disorder (father). He demonstrates multiple difficulties in cognitive (executive function, cognitive rigidity, impulse control), affective (dysregulation, reactivity), and sensorimotor (integration) brain functional domains. These have an impact on Joey's behavior and result in psychological factors (rigidity, reactivity, poor problem solving, and frustration tolerance) that lead to conflicted interpersonal relationships and in turn to negative self-evaluation. Socially, his parents have dissonance in managing his behavior, embedded in a young family with two younger siblings.

In Joey's case, no psychopathological description or diagnosis fits accurately or does him justice. One approach the clinician can take is to explain to the parents about the com-



plexity of brain domain dysfunction (in the relative absence of environmental triggers). The following diagnoses should be considered.

**Unspecified bipolar and related disorder:** An unspecified bipolar and related disorder might be the diagnosis if a carefully gathered history indicates cyclical fluctuation of Joey's mood. The reasons a clinician would consider this diagnosis are 1) to capture biologically driven emotion dysregulation (in the absence of any family dysfunction involving abuse that incites reactivity), 2) because of the lack of a better alternative diagnosis, and 3) to pharmacologically treat as one would in case of mania.

Given that Joey does not have a clear episodic history of illness—the case presentation does not include a clear description of elated mood, grandiosity, hypersexuality, rapid flow of speech, or sleep difficulties—ascertaining whether he has a typical or narrow phenotype of bipolar disorder is difficult. The Child Mania Rating Scale (Pavuluri et al. 2006) and the parent report portion of the General Behavior Inventory (Youngstrom et al. 2001) will facilitate screening. A thorough diagnostic interview would be necessary to get further detail on phenomenology.

**Attention-deficit/hyperactivity disorder:** It is highly likely that Joey is exhibiting impulsivity in his reactivity—both emotional and behavioral—at home. His parents are not recognizing and understanding this domain difficulty. These difficulties may present in school as demands escalate in third grade.

**Disruptive mood dysregulation disorder:** The diagnosis for DMDD can be made only after a child reaches age 6 years, a rationale that may underscore the persistence of affect dysregulation without cyclicity in mood swings. If there are no manic or depressive episodes, DMDD becomes the primary disorder alongside ADHD. DMDD cannot be diagnosed in the presence of a bipolar disorder. Either DSM-5 criteria have to be amended or DMDD is construed as the backdrop of rapidly cyclical emotion dysregulation noted in bipolar diathesis.

**Oppositional defiant disorder:** ODD is associated with defying rules and authority and deliberately annoying others, behaviors that go beyond the frustration intolerance, emotional reactivity, and rigidity demonstrated by Joey.

**Specific learning disorders:** Tracking further prognosis, learning disorders are a possibility to consider if academic difficulties surface.

No psychopathological description or diagnosis fits accurately or does him justice. One approach is to explain to the parents about the complexity of brain domain dysfunction (in the relative absence of environmental triggers). That said, following diagnoses should be considered.

## DSM-5 Diagnosis

- Rule out unspecified bipolar and related disorder
- Rule out attention-deficit/hyperactivity disorder
- Rule out disruptive mood dysregulation disorder

- Rule out oppositional defiant disorder
- Rule out specific learning disorder(s)

Joey may have explosive rages when others respond “no” to his requests. Occipito-limbic circuitry is responsible for reactivity to negative emotions (Pavuluri et al. 2009). Negative emotions shut down the dorsolateral prefrontal cortex involved in problem solving at the interface of thinking and feeling regions of the brain (Pavuluri et al. 2008). For this reason, psychotherapy is developed on the basis of a cognitive-behavioral therapy model coupled with principles of self psychology that involves no use of negative punishment in disciplining (i.e., no negative consequences) (West et al. 2014). Cognitive rigidity and poor executive function, impulse control, and affect regulation could collectively lead to frustration tolerance with multidomain dysfunction.

## Treatment Recommendations

Answers to the following questions about Joey’s potential mood cycles are important: How long does his irritability last? What are the associated symptoms and signs? What situations trigger them? Is a depressive episode couched between manic episodes? Does Joey have a mixed episode (which is common rather than pure manic or depressive episodes in children) or unspecified bipolar and related disorder, in which fewer symptoms exist for short bursts of time? Does he have interepisodic inattention or impulsivity, suggesting a comorbid diagnosis of ADHD? Is there a halo effect of chronic morbidity due to multiple domain problems?

A referral for neuropsychological assessment is warranted from the pediatrician (sometimes this is better for insurance purposes than referral by a psychiatrist). That assessment will help define potential cognitive difficulties in the area of executive function, attention, verbal memory, visual-spatial perception, working memory, and sensory-motor integration (Wu et al. 2013). Then the neuropsychologist and clinician can meet with school personnel and family via teleconference or in person to offer their recommendations.

## Communication With Parents

The clinician needs to educate Joey’s parents in a detailed manner, maintaining an optimistic tone that strong temperament underlies their son’s problems, manifesting as oppositional behavior, explosive rages, and poor problem-solving ability. I would check the family’s comfort level with using diagnostic labels, giving their son medications, and communicating with the school about these matters. Medications, although essential in severe situations, are not necessary in a case such as Joey’s. I would encourage the family to visit the Balanced Mind Foundation Web site ([www.thebalancedmind.org](http://www.thebalancedmind.org)) to learn more about mood dysregulation and associated problems. I would also convey that as Joey grows, he will gain better control of his emotions and response inhibition. A certain degree of social skills deficit (avoiding unfamiliar people) and reacting to change in routine does not necessitate the

diagnosis of autism spectrum disorder, in which perspective taking is the central deficit and which is not demonstrated by Joey. Problems in children are often complex and defy a single narrow diagnosis.

## Pharmacotherapy Versus Psychotherapy

In a case like Joey's, the decision to start medication requires consideration of four facets: whether all rational parenting strategies have failed thus far, whether affective instability is inexplicable from the point of family dynamics, whether the parents are at the end of their tether wanting the situation to be addressed expeditiously, and whether the parents seek medication. Alternatively, if parents are hesitant to try medications, psychotherapy takes precedence. A clinician is guided by the choices made by the parent and the family context. Effective child- and family-focused therapies, described in the next subsection, can be tried for at least 2 months before a decision can be made to treat the child with medications.

**Psychotherapy.** The RAINBOW approach, a child- and family-focused cognitive-behavioral therapy, is extremely successful in helping children like Joey (West et al. 2014). The acronym RAINBOW is easy to remember and introduce: **r**outine; **a**ffective/regulation anger control; **I** can do it"; **n**o negative thoughts; **b**e a good friend"/balanced lifestyle with parents; **O**h, how can I solve this problem?" (using collaborative problem-solving methods); and **w**ays to get support. Essentially, these principles are based on building the child's self-esteem, regulating daily routines, establishing open communication, and dealing with the child in an extremely compassionate way. Consistency is important, but instituting negative consequences can work against negotiating effectively with a child who rapidly swings into a negative cycle. West et al. (2007) provide a systematic medication algorithm and a plan for troubleshooting psychological issues through a maintenance model of psychotherapy.

**Pharmacotherapy.** If no clear-cut depression is associated with Joey's extreme irritability and explosive outbursts, the clinician might consider a second-generation antipsychotic medication in small doses, such as risperidone 0.5–1 mg/day. Parents need to be educated about possible extrapyramidal side effects, weight gain, and prolactin increase with risperidone. An equally reasonable choice would be aripiprazole in very small doses, such as 5 mg/day. Quetiapine is another alternative, starting with 25 mg/day (Kowatch et al. 2005 [treatment guidelines]; Pavuluri et al. 2004 [pharmacotherapy algorithm]). If initial pharmacotherapy with antipsychotics does not work, the clinician can either add a mood stabilizer, such as lithium, divalproex sodium, or lamotrigine, to the existing antipsychotic or prescribe a different antipsychotic (Pavuluri and Janicak 2008). A patient may need one or more additional medications, such as a treatment for comorbid ADHD or an antidepressant to treat severe anxiety or depression. Stabilizing the symptom complex, as well as addressing side effects and associated autonomic hyperarousal, will pose challenges.

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# CHAPTER 21

## Toddler With Temper Tantrums

### A Careful Assessment of a Dysregulated Preschool Child

Helen Link Egger, M.D.

#### Case Presentation

##### Identifying Information

Jacob is a 4½-year-old boy with no prior psychiatric history. He is an only child who lives with his biological parents.

##### Chief Complaint

Jacob is having difficulty with tantrums, defiance, sleep, and separation anxiety. His parents are concerned that he is “unable to control his emotions.” When he is frustrated or things do not “go as he planned,” he has a temper tantrum. They describe him as a “mama’s boy” who does not like to be separated from his mother. His parents are also worried because he complains of fatigue during the day, despite adequate hours of sleep at night. Jacob’s pediatrician referred him to the infant/preschool mental health clinic for a comprehensive mental health evaluation.

##### Informants and Structure of the Evaluation

Evaluation occurred over three sessions. Jacob’s parents attended the first session. Jacob and his parents attended the second and third sessions. Jacob’s parents completed several rating scales, which are listed at the end of this case presentation. Information was also obtained over the phone from Jacob’s preschool teacher. Results of the assessment and recommendations for treatment were discussed with the parents (without Jacob) during a fourth session.

## History of Present Problems

**Tantrums and other behavioral problems.** Jacob's parents report that Jacob was a "hot-tempered," intense baby whose tantrums started when he was 6 months old. Jacob's tantrums are frequent (4–10 each day), violent, and uncontrollable. According to his mother, on some days the tantrums seem to occur "all day." They can be triggered by frustration or a change in routine or can come "out of the blue." Examples of triggers include the fact that his sock does not fit on his foot the right way, or he wants a blue cup rather than a green cup. He can be happy one moment and then erupt in anger or tears the next moment. When he has a tantrum, Jacob yells, curses, hits his mother, kicks, writhes on the floor, throws objects, bangs his head, and bites himself. Tantrums last from a few minutes to half an hour. They occur primarily at home or when he is out with his parents. Recently, Jacob has been having tantrums with his grandparents and at preschool.

On certain days, "nothing seems right," and he is irritable, touchy, and easily annoyed by others. On these days, he is also oppositional and defiant, challenging his parents' requests in an angry and rigid manner. As long as "things go his way" and the daily routine remains the same, Jacob can appear happy. His parents often feel that they are "walking on eggshells" because they do not know what will change his mood. Jacob does seem to feel remorseful about his misbehavior and tantrums, particularly if he has been physically aggressive. At times, he will cry inconsolably for an hour or more, saying he is a "bad boy."

Neither his parents nor his teacher reports that Jacob has high levels of hyperactivity or inattention. He is able to sit in his seat at dinner. He does not have difficulty paying attention for sustained periods of time (e.g., doing craft projects, reading with his parents). Although he interrupts his mother's conversations, intrudes into other children's games, and has trouble waiting his turn, this impulsive and intrusive behavior often seems secondary to anxiety or a lack of social skills.

**Sleep problems.** Although Jacob goes to bed at 8:00 P.M. and wakes at 7:00 A.M., he is always sluggish and tired in the morning. "When he wakes up, he seems as tired as he did when he went to bed," says his mother. He is a restless sleeper. He complains of fatigue during the day and almost always falls asleep in his car seat when in the car for more than 15 minutes, although he no longer takes regular naps. To fall asleep at night, he needs to have his mother lying beside him in his bed. Every night, he goes into his parents' bed and sleeps the rest of the night next to his mother. Jacob does not have difficulty falling asleep, and he has no nightmares, night terrors, or sleepwalking. His teacher notes that he is often sleepy and complains of fatigue at preschool.

**Anxiety.** As noted above, Jacob has difficulty separating from his mother at night. At home, he follows his mother from room to room and becomes upset and begins yelling for her if he finds himself alone in a room. At preschool, he has difficulty separating from his mother, but after daily crying and clinging for the first month, he now separates without as much difficulty. His parents "cannot remember" the last time they went out without Jacob because he becomes distressed when they attempt to leave him with a babysitter. He says that he is afraid that his parents will not come back. He also has significant anticipatory worry,

repeatedly seeking reassurance from his mother about upcoming events. He is slow to warm up with unfamiliar adults and children, although he is outgoing and friendly when he gets to know others. His parents report no obsessive thoughts or compulsions.

**Mood symptoms.** Jacob's mood is often irritable. His parents describe him as "stressed out" but do not feel that he is a "sad kid." His parents do not report appetite or weight changes, anhedonia, fixated talk or play about death or dying, flights of ideas, pressured speech, racing thoughts, hypersexuality, grandiosity, or bizarre or disorganized behavior.

## Past Psychiatric History

Jacob has no previous psychiatric history.

## Medical History

Jacob has seasonal allergies and a history of ear infections but no history of hospitalizations, head injuries, accidents, or significant illnesses. He takes no medications and has no known history of drug allergies.

## Developmental History

Jacob was born at 42 weeks by Cesarean section and weighed 8 lbs 10 oz. He had no difficulties at birth. His mother describes the pregnancy as very stressful because she was on bed rest for the last trimester due to preterm labor. She also had difficulty with breast-feeding.

Jacob met all of his developmental milestones at expected times. His parents describe him as an intense baby who had difficulty with transitions. He has never been a good sleeper. During his first year, he began to bang his head or bite himself when angry or frustrated. No language, gross motor, or fine motor difficulties were noted.

The Peabody Picture Vocabulary Test—Third Edition (Dunn and Dunn 1997) was administered to assess Jacob's receptive vocabulary (i.e., what he understands), which is strongly associated with verbal intelligence. Jacob's standardized score of 121 was in the superior range, the age equivalent of a child age 6 years 7 months.

## Social History

Jacob is an only child, as are both parents. His parents (both in their mid-30s) have been married for 15 years. His father works 55–60 hours per week. His mother does not work outside the home. Both parents describe themselves as shy, socially isolated, and "stressed out." Jacob's maternal grandparents live nearby but have become annoyed with Jacob's behaviors and critical of their daughter's parenting. Jacob's parents deny a history of major traumas, including physical or sexual abuse.

Jacob attends preschool 5 mornings a week. He enjoys school, although he does not like to say good-bye to his mother in the morning. His teacher notes that Jacob has difficulty controlling his temper, often annoys other children, is often fearful in new situations or with new people, and becomes upset over small changes in routine. Jacob has never been suspended or expelled from preschool or day care.



His peer relationships are fair. He has very few playdates, both because he is not invited to other children's houses and because his mother is concerned about how Jacob might behave if a friend were invited home. He tends to be controlling with peers and will hit or yell if he does not get his way.

## Family History

Jacob's mother has a history of major depression and generalized anxiety. She has been treated effectively in the past with the selective serotonin reuptake inhibitors (SSRIs) fluoxetine and paroxetine. She is not currently taking medication or receiving treatment. The maternal family history is significant for the maternal grandmother's agoraphobia (which was never evaluated or treated). Jacob's father does not report a personal or family history of psychiatric symptoms or treatment. Results of the depression and anxiety screenings of both parents during Jacob's evaluation suggest that his mother currently has clinically significant levels of depressive and anxiety symptoms.

## Mental Status Examination

Jacob was observed during two sessions. Jacob is a cute and articulate 4-year-old boy who was cooperative but initially wary when he met the interviewer. After this initial hesitancy, he had good eye contact with the interviewer. By the end of the session, he was smiling and engaged, although he preferred to remain physically close to his mother and repeatedly checked in with her visually. The interviewer observed Jacob's many strengths (i.e., intelligence, curiosity, enthusiasm, cooperativeness, warmth), as well as his mother's strengths as a parent (i.e., warmth, supportiveness). Jacob's and his mother's interactions were mutually warm and close. Although he clearly enjoyed playing with her, he also seemed worried about doing things correctly. When putting together a puzzle with her, he repeatedly asked her if he had put the piece in the right place, despite her supportive reassurance. He was able to separate from his mother, but his affect became anxious and sad while she was gone, and he complained of feeling tired. He was visibly relieved when she returned. He said that he was a "happy kid" except that he is "sad" when he is "bad." He said that he is afraid of being alone in the house. He worries that something bad will happen to his mother. At the end of the session, he became physically exuberant, although not disruptive. He was able to leave the playroom without difficulty.

## Clinical Assessment and Observation

The following lists include the record reviews, interviews, and testing that were done so the clinician could fully consider Jacob's case. (For reviews of measures for assessing preschool psychopathology, see Carter et al. 2004; DelCarmen-Wiggins and Carter 2004; Egger and Angold 2006; Luby 2006; Zeanah 2000.)

### Record Reviews and Interviews

- Review of available records
- Clinical interview with parents
- Developmental and family history questionnaire

- Parent section of Disruptive Behavior Diagnostic Observation Schedule (Wakschlag et al. 2005, 2008a, 2008b)
- Clinician-child play
- Phone interview with teacher

**Parent Questionnaires**

- Child Behavior Checklist 1½–5 (Achenbach and Rescorla 2000)
- Early Childhood Symptom Inventory–4: Parent Checklist (Gadow and Sprafkin 1997; Gadow et al. 2001)
- Temperament and Atypical Behavior Scale (Neisworth et al. 1999)
- Parenting Stress Index—Short Form (Abidin 1995)
- Family Impact Survey (Ford and Barlow 1994)
- Beck Depression Inventory—Second Edition (Beck et al. 1996)
- Beck Anxiety Inventory (Beck and Steer 1993)

**Teacher Questionnaire**

- Early Childhood Symptom Inventory–4: Teacher Checklist (Sprafkin and Gadow 1996)
- Social Skills Rating System (Fantuzzo et al. 1998; Gresham and Elliott 1990)

**Testing**

- Peabody Picture Vocabulary Test—Third Edition (Dunn and Dunn 1997)

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# **Psychotherapeutic Perspective**

M. Jamila Reid, Ph.D.  
Carolyn Webster-Stratton, Ph.D.

## **Diagnostic Formulation**

The description of Jacob's history and his current behavior indicate both defiant-disruptive and anxious-fearful symptoms. Jacob's current oppositional, defiant, and challenging behaviors at home and at school are consistent with a DSM-5 (American Psychiatric Association 2013) primary diagnosis of oppositional defiant disorder (ODD). Although Jacob's anxious symptoms are in excess of those exhibited by many typical 4-year-old children, the symptoms

may not currently be severe enough to warrant a diagnosis of separation anxiety disorder. Moreover, in young children with ODD, anxious behaviors are frequently comorbid and are likely to have been reinforced by his parents' responses and, in particular, his mother's modeling of anxious behavior. Prior to making a diagnosis of separation anxiety disorder, the clinician needs to examine the predictability around separation routines at home (including bedtime) and at school. Jacob's fears and separation tantrums may be exacerbated by his ODD behaviors and temperamental difficulties because his extreme responses to change may have made it more likely that his parents will "give in," thereby reinforcing his desire to be with them at all times. The parents also report being shy and socially isolated, so Jacob has likely had fewer early separation experiences than other children his age. If, after treatment, Jacob continues to experience intense separation difficulties and fears, then an anxiety diagnosis should be revisited.

Parent and teacher report and direct observation of Jacob provide information on how he reacts to different caregivers and settings. Jacob's scores on the Child Behavior Checklist and the Early Childhood Symptom Inventory should be used to provide information on how his behavior compares to same-aged peers as well as a baseline against which therapy progress can be measured.

Jacob is reportedly fatigued during the day despite apparently adequate hours of sleep. Therefore, his pediatrician needs to rule out a medical cause for his fatigue because lack of sleep could contribute significantly to his irritability and behavioral difficulties.

## DSM-5 Diagnosis

- F91.3 Oppositional defiant disorder, moderate
- Rule out separation anxiety

## Treatment Recommendations

Parent management training is the recommended treatment for oppositional behavior in young children and would be appropriate in Jacob's case. Blueprints, a project at the Center for the Study and Prevention of Violence at the University of Colorado Boulder that identifies evidence-based treatments, recommends two programs for children with ODD in Jacob's age group: Parent Management Training, Oregon Model (PMTO) (e.g., Patterson et al. 1982), and Incredible Years parent training (IYPT) (e.g., Menting et al. 2013; Webster-Stratton and Hammond 1997; Webster-Stratton et al. 2004). These two treatments share a foundation in social learning principles, and either would be appropriate for this family. Both programs have demonstrated outcomes including changes in parent and child behavior in comparison to untreated controls. PMTO has primarily been researched and delivered in an individual format, whereas IYPT uses a group model. Because Jacob's family is somewhat isolated and has little external support, the group format of IYPT might provide community support for Jacob's parents.

IYPT focuses on strengthening parent competencies and parent-child attachment, fostering home-school partnerships, decreasing children's problem behaviors, and strengthen-

ing social, emotional, and academic competencies. The treatment is delivered in a 20-week group format in which a trained leader facilitates discussions about parenting issues. Video vignettes of a variety of common parenting situations serve as starting points for these discussions, and role-plays and homework assignments provide opportunities for practice of new skills. Parents are also encouraged to provide support and give feedback to each other. For Jacob's parents, this parent peer group may decrease their sense of isolation and reduce the mother's depression.

Parents identify their own individual goals for their children and themselves. Jacob's parents' goals would likely include learning ways to respond that would help Jacob to regulate his extreme emotional responses, comply with their requests, sleep in his own bed, separate from them, and feel confident about his ability to cope with new situations on his own.

Therapists work with the group in a collaborative way to introduce the program material and help parents apply behavior management principles to their own situations. Program topics include child-directed play, social and emotional coaching, encouragement, praise, tangible reinforcement, monitoring, predictable schedules and routines, ignoring, limit setting, natural and logical consequences, time-out, and problem solving. Jacob's parents would learn to apply "the attention principle" to help Jacob become less fearful of separations.

During play sessions and other interactions with Jacob, his parents would use emotion coaching to comment on times when he was calm, brave, confident, and independent. The therapists would also discuss the value of providing less attention around fearful and withdrawal behaviors. For instance, instead of providing extensive comfort at times when Jacob was upset at the thought of separation, they would be helped to provide a predictable separation routine, including brief reassurance, expression of confidence that Jacob will be fine in their absence, followed by ignoring of the protests and tantrums. For example, before leaving, a parent can say, "Jacob, I know you are sad that I am going to leave, but I'm sure that you're going to have a good time today. Remember how much fun you had yesterday building with the LEGO blocks? I love you, and I will see you this afternoon."

The fact that Jacob seems to enjoy school after the initial separation seems promising for his eventual adjustment to separations. Jacob's teacher would also be encouraged to reinforce the parent's message that Jacob can manage the separations. A similar approach would help Jacob's parents think about his tantrums and noncompliant behavior. They would be encouraged to let Jacob take the lead during daily play sessions, providing him with consistent parental attention and legitimate control over one part of his interactions with his parents. Jacob's parents would learn social and emotional coaching skills and would comment on times when Jacob was cooperative, friendly, calm, and helpful.

As the program progressed, the parents would identify target social behaviors they wanted to praise (e.g., cooperation, accepting "no"), as well as behaviors to ignore (e.g., tantrums, whining). They would learn how to set up an incentive system for specific target behaviors (e.g., compliance with their limit setting or requests to stay in his bed) and, finally, to use selected consequences (time-out or privilege removal) for repeated noncompliance or aggressive behavior.

In addition to learning cognitive-behavioral principles, parents are helped to understand and accept individual biological differences in their child's temperament, needs for

attention, and ability to regulate emotions and to adjust their parenting approaches accordingly. Jacob has a history of being emotionally volatile, irritable, and anxious. Jacob's parents would learn about proactive strategies to meet Jacob's temperament needs. Perhaps Jacob needs a longer and more structured bedtime routine, or maybe the parents need to provide more predictable structure to his day and engage in more positive play times with him so that he feels secure in his relationship with them.

The ADVANCE IYPT program (Webster-Stratton 1994) also covers material on adult and child anger management, adult mood regulation, working with schools and teachers, academic success, communication, problem solving with adults and children, and encouraging children's positive peer relationships. Because Jacob's social and behavioral difficulties extend to the school setting, goals for working with the school would be particularly relevant. In addition, because Jacob's mother has a history of depression, a focus on parental mood regulation will help her to understand how her own mood responses both provide modeling for and impact her responses to Jacob's behavior. Therapists would also help to determine whether a referral for the mother's depressive and anxious symptoms is warranted. Research with this program has indicated that the support of the group can lead to decreased mother depression and stress, but for parents with serious depression and anxiety, individual therapy and/or medication would be recommended.

The IYPT series also has a child treatment program, called Dinosaur School, and a teacher classroom management program. Webster-Stratton et al. (2004) found that children whose behavior was pervasive across home and school settings benefited from adding either the child or the teacher program to the parent program. If Jacob's behavior continues to be challenging after participation in the parent program, then adding either the child or the teacher program would be recommended.

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## Psychopharmacologic Perspective

Joan L. Luby, M.D.

### Diagnostic Formulation

Jacob, a 4½-year-old boy, presents with prominent symptoms of anxiety associated with behavioral rigidity, intense irritability, and oppositionality. Temper tantrums precipitated by Jacob's inability to adhere to rigid routines or minor frustrations and characterized by phys-

ical aggression directed at others occur multiple times daily. Separation and anticipatory anxieties are also daily occurrences. In this case, both the absence and the presence of key symptoms are informative to the diagnostic formulation. Of particular importance is the absence of a sufficient number of specific symptoms indicative of a depressive disorder. Specifically, although there is prominent irritability, sad mood is absent and there is no evidence of anhedonia, amotivation, or excessive guilt. Although there is a sleep disturbance and some fatigue, no other neurovegetative signs (e.g., change in appetite) are present, and Jacob neither appears preoccupied with negative or death themes in play nor expresses self-deprecation, hopelessness, or suicidal ideation.

Although irritable mood and disruptive behavior are prominent, the absence of any evidence of grandiosity, elation, decreased need for sleep, and racing thoughts suggests that bipolar disorder is an unlikely diagnosis. Although Jacob is described as oppositional and rigid, he is not described as having an inflated sense of powers and abilities. In addition, and central to a diagnosis of bipolar disorder, the case description does not indicate that Jacob demonstrates a sustained elated mood. Elated mood, as opposed to normative joyful moods highly typical of a preschool child, would be demonstrated by a sustained and intense elevated mood that arises without an apparent precipitant and cannot be alleviated.

Another important diagnosis to rule out in Jacob's case is an autism spectrum disorder. The presence of behavioral rigidity, anxiety that also has an obsessive component, and some suggestion of impairment in peer play raises some concern for this diagnosis. However, Jacob's social interest in peers and his ability for age-appropriate social interaction after becoming more comfortable in an unfamiliar situation suggest that his impairment in peer play is more anxiety related. Furthermore, Jacob's lack of stereotypies or restricted range of interests, as well as his lack of other developmental delays such as impairments in speech-language and motor skills, suggests that this diagnosis is also unlikely.

Anxiety appears to be the central and most impairing symptom for Jacob. Given the absence of key specific symptoms of a mood disorder, the most likely diagnosis is an anxiety disorder with comorbid ODD. On the basis of the symptoms described, Jacob would appear to meet criteria for separation anxiety disorder as well as generalized anxiety disorder. Considering the prominence of anxiety, the likelihood that the oppositional and disruptive behaviors are related to the underlying anxiety and rigidity must be considered. That is, because of his high levels of anxiety, Jacob needs his environment to be controlled and predictable. When the environment deviates, he becomes overwhelmed with anxiety and acts out disruptively. The case represents an interesting example of a child with both internalizing and externalizing psychopathology who does not have a clinical picture suggestive of a mood or autism spectrum disorder.

## DSM-5 Diagnosis

- **F93.0 Separation anxiety disorder**
- **F41.1 Generalized anxiety disorder**
- **F91.3 Oppositional defiant disorder**

## Treatment Recommendations

Before proceeding with treatment, the clinician should conduct a comprehensive evaluation that includes observation of dyadic play between the primary caregiver and Jacob. Ideally, the child should be observed on more than one occasion and with more than one caregiver so that state- and relationship-specific elements of his mental state can be considered. A number of standardized measures of early-onset psychopathology are now available for research use. Although some may be useful as an adjunct to a clinical evaluation, a detailed history and multisession observation are essential and have become the standard of care for the assessment of a preschool-age child (Thomas et al. 1997).

Dyadic psychotherapeutic treatment should be the primary intervention for anxiety disorders and ODD during the preschool period. Because insufficient empirical data are available to guide psychopharmacologic treatment for children in this age group, psychotherapeutic interventions, which have fewer inherent risks, are considered primary. Several forms of parent-child early intervention have now been empirically tested in preschool populations, including Parent Child Interaction Therapy and various adaptations (Schuhmann et al. 1998). Age-adapted forms of cognitive-behavioral therapy have also been tested in preschoolers (Scheeringa et al. 2011). Furthermore, the use of medications in preschoolers is, in almost all cases, off-label because controlled data on safety and efficacy remain unavailable. However, if Jacob's symptoms of anxiety and ODD remain impairing and unresponsive to a reasonable trial of psychotherapy, pharmacologic treatment could be considered as a next step. Medications should be initiated only after a detailed discussion with parents about these treatment alternatives, their off-label use, and their unknown effects on child growth and development, after which formal consent should be obtained.

In Jacob's case, symptoms of anxiety appear to be central to the clinical picture and may underlie temper tantrums and aggression. Therefore, an anxiolytic would be the medication class of first choice. Because paradoxical activation has been observed frequently with benzodiazepines in children, particularly in young children, this class of agents is not appropriate for treatment of preschoolers' anxiety disorders. Furthermore, sedation is a highly undesirable side effect in a preschooler, another reason why benzodiazepines are not a feasible treatment option. The SSRIs have been shown to be effective in the treatment of anxiety disorders in older children and would be the class of agents of first choice (Hammerness et al. 2006). However, some evidence suggests that paradoxical activation, a known side effect of the SSRIs in children, may occur even more frequently in younger children (Zuckerman et al. 2007). For this reason, as well as given the small size of preschool children, titration should be very slow, with careful monitoring for side effects. When preschool children are taking an SSRI, they should be monitored closely by parents and seen frequently in the clinic, especially as the dose is titrated upward.

The choice of a specific SSRI is based largely on the treating clinician's preferences, clinical experience, and comfort level. Because the largest database for children is available for fluoxetine, many clinicians prescribe this medication. This issue of which medications are more likely to produce activation remains unclear and anecdotal. In general,

medications would not be indicated for the treatment of ODD per se, unless symptoms were unusually severe and unresponsive to behavioral management. In Jacob's case, the symptoms of ODD will likely subside as his anxiety is diminished.

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# CHAPTER 22

## Won't Leave His Room

### Clinical High Risk for Developing Psychosis

Cheryl M. Corcoran, M.D.

#### Case Presentation

##### Identifying Information

Marcus is a 15-year-old adolescent referred for social withdrawal, declining school function, depressive symptoms, and school refusal. He lives with his mother and older brother. He was referred by his school counselor.

##### Chief Complaint

"I don't know why my school wanted me to come here today."

##### History of Present Illness

Marcus has always been shy and awkward, although he has had close friends and maintained an A to B average in school. His mother reports that during summer vacation, he spent July visiting extended family in South Carolina, where he spent time with cousins, hanging out and playing basketball. When he returned, his local friends in New York invited him to go to the movies and to play basketball. However, he usually declined, saying it was too hot to go outside. Instead, for the rest of the summer, he stayed in his room, up to 10 hours at a time, watching Cartoon Network programs and playing multiplayer online games. Instead of joining the family for dinner, he would grab a sandwich and go back to his room. Marcus began to stay up most of the night and sleep during the day. For his birthday, his mother offered to take him to his favorite restaurant, but he was resistant. She coaxed him to go. In the car, he slumped in the backseat, covering his face with his hands. At the restaurant, he kept his menu and used it to hide his face by holding it upright. He ate all the shrimp he ordered but without his usual delight.

With the beginning of the school year, Marcus's mother was optimistic he would do better. In the first few weeks of September, he went to school daily and mostly did his homework. On coming home, he went straight to his room, where he remained on his computer for hours. His room became increasingly messy, and he showered and changed clothing only with repeated prodding from his mother.

By October, Marcus had become irritable, especially with a younger cousin who wanted to spend time with him. His clear preference was to be alone. His friends stopped calling him. His mother said it was as if he had become a stranger, unlike himself, and she worried if he was using drugs or if this was just adolescence. His first report card had mostly Cs. His teachers reported that he was quiet in class, typically looking out the window or doodling and drawing. His English teacher saw his drawings and was impressed by their nihilistic themes, with images of explosions and violence. Although Marcus could complete other types of assignments, he had particular difficulty with writing assignments. He would write a first sentence and then stop, saying he was not sure what else to add. At school, the janitor found him sitting alone in the bathroom after hours; Marcus could not or would not say why he was there.

By December, Marcus refused to go to school, and again he would not say why. Resorting to desperate measures, his mother locked him out of the apartment during the day so that he would go to school. When she returned from work, she found him just sitting quietly. At the school's urging, Marcus's mother brought him in for a psychiatric evaluation.

## Past Psychiatric History

In second grade, Marcus was referred for evaluation and diagnosed by his pediatrician with "inattention without hyperactivity" and treated briefly with a stimulant, which reportedly was not helpful and was then discontinued.

## Medical History

Marcus was the product of a full-term, normal vaginal delivery. He had mild asthma when young, for which he was prescribed albuterol inhalers. He has not taken steroids, required emergency room admission, or been intubated as a result of his asthma.

## Developmental History

As an infant and toddler, Marcus was much easier than his brother, who was colicky. When his mother took him shopping, he sat in the cart quietly. Marcus began walking at 14 months. His mother thinks he started speaking later than his brother, but she is not sure. Marcus responded well to cuddling and played with other children. He was always a little clumsy and less athletic and outgoing than his brother.

When Marcus went to preschool and then kindergarten, he separated easily, but his teachers noted that he was shy and needed to be drawn out. He rarely initiated play with other children but joined in when invited. His mother describes him as more compliant and less mischievous than his brother.

Marcus was referred for evaluation in the second grade for inattention without hyperactivity. The reports have been lost, but his mother reports that he briefly took a prescribed stimulant of unclear dose, which was not helpful. Of note, Marcus was taller than the other boys in class—like a “gentle giant”—and other children provoked and teased him to see if he would respond. His teachers all liked him immensely and tried to protect him because they perceived him to be somewhat vulnerable.

Marcus’s school performance over several years was marked by As and Bs, compliance, and the development of friendships, although he was shy and awkward.

## **Social History**

Marcus lives in a one-bedroom apartment in northern Manhattan with his mother and older brother, with whom he shares the bedroom. Marcus has never known his father. When he was age 3, he was in foster care for a few months with his brother when his mother was hospitalized (see “Family History” below). Marcus has no history of abuse or neglect. The family is supported by his mother’s salary as a secretary and some income from his older brother.

## **Family History**

Marcus’s mother was hospitalized 12 years ago for an episode of psychosis, which has never recurred. She said she had thought she was hearing the voice of an older uncle, named Jimmy Carter, who had recently died. She said the doctors mistakenly thought she was having auditory hallucinations of the U.S. president. She was given chlorpromazine briefly and discharged within a few weeks. The symptoms have not recurred, and she has not taken any additional psychiatric medications or received any care since that hospitalization.

## **Mental Status Examination**

Marcus appeared younger than his stated age and was quite slender. He wore age-appropriate clothing, including a basketball jersey and jeans and a baseball cap turned backward. He appeared awkward and shy and sat quietly while his mother described the course of events leading up to the evaluation.

When interviewed alone, Marcus was compliant, answering all questions. He maintained fair eye contact and spoke softly, smiling occasionally while tapping his foot. He described his mood as “OK.” His thought pattern was a little tangential and at times odd.

When asked about the past few months, Marcus acknowledged that he preferred to be by himself. He felt uncomfortable around others. He was not sure how to act with friends and did not think they liked him much anymore. In crowds, he felt like people looked at him and thought he was weird or menacing, especially as a young, tall black male. He was not sure whether he should make eye contact with others. His neighborhood felt increasingly dangerous, and he felt like he had to look over his shoulder. However, he did not feel anyone singled him out or plotted against him in any way.

Marcus also reported that he was thinking a lot about politics and thought U.S. society as a whole was controlled by the Internet and mass marketing. He thought Barack Obama was a “jerk” and wondered if the U.S. government had something to do with the 9/11 attacks. Marcus acknowledged fantasizing about blowing up the world—building a tube to the center of the earth and dropping a nuclear bomb—so that all mistakes and problems would be erased. But Marcus has considered that a better approach would be to become a rap star and spread the message of God and love and peace instead.

Marcus also described having feelings of *déjà vu* every few months and wondering if he had dreamed about things before they happened, such as a teacher's absence from school. He felt sometimes that if he saw a white car drive by, something bad might happen. He thought these were strange ideas that did not make sense, and he was unsure why he thought them. He confirmed that his thoughts were clearly his own and he did not feel controlled by anyone or anything else.

When asked about perceptions, Marcus acknowledged that when he returned to New York City from South Carolina during the summer, the city seemed louder and smellier and dirtier than before. Therefore, he preferred to stay in the apartment. Sometimes, he thought he heard his name in the wind. Late at night, in his bedroom, he sometimes saw a black object moving briefly in the periphery of his vision. However, he denied voices or any other type of hallucination.

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## Psychotherapeutic Perspective

Jean M. Addington, Ph.D.

### Diagnostic Formulation

Marcus does not appear to meet criteria for any DSM-5 disorder (American Psychiatric Association 2013), although the clinician should rule out depression and seriously consider that Marcus may be developing a psychotic illness. The Structured Interview for Prodromal Syndromes (McGlashan et al. 2010) can be used to determine whether Marcus meets prodromal criteria or may actually have a psychotic illness. From the information presented, Marcus most likely meets criteria for attenuated psychosis syndrome (included in

the DSM-5 section “Conditions for Further Study”), which puts him at clinical high risk of developing psychosis. Most notable is his decline in functioning: isolation from friends and family, decline in school performance, and lack of self-care. He describes experiencing unusual thought content, ideas of reference, suspiciousness, grandiosity, and perceptual abnormalities. All of these symptoms are at the attenuated level, none meet psychotic intensity, some may be occurring infrequently, and all have begun or worsened in the past year. Marcus may also have depression, which would be a comorbid diagnosis because these attenuated psychotic symptoms are unlikely to be explained by depression.

## DSM-5 Diagnosis

- **Attenuated psychosis syndrome (listed in DSM-5 section “Conditions for Further Study”)**
- **Rule out unspecified depressive disorder**

## Treatment Recommendations

The initial treatment plan for Marcus would include further evaluation, the development of a formulation of the presenting problems, and a cognitive-behavioral approach to treatment. It is necessary to assess all presenting problems that are seen as troubling to Marcus, including those that could potentially increase the risk of developing psychosis, because he appears vulnerable to psychosis. This assessment would help not only to identify targets for treatment but also to develop an individualized case formulation. The recommended therapeutic approach for Marcus is based on a range of assessment, engagement, formulation, and treatment options from authors and researchers around the world, as described in a treatment handbook for those at risk of developing psychosis (Addington et al. 2006), plus cognitive-behavioral therapy (CBT; French and Morrison 2004).

For Marcus, a cognitive assessment would be useful for determining whether there is any evidence of cognitive decline so that appropriate expectations for school performance could be set. Further assessment would focus on Marcus’s symptoms, behavior, and beliefs about his symptoms. By conducting a comprehensive psychological assessment, the clinician is beginning to educate Marcus about the nature and likely cause of his symptoms and to develop a rationale for treatment that will follow the assessment. The model that is used to explain the possible onset of psychosis is the stress-vulnerability model (Nuechterlein and Dawson 1984), which fits well for those at clinical high risk of psychosis.

In developing the formulation, the clinician would want to consider predisposing, precipitating, perpetuating, and protective factors. For Marcus, predisposing factors or life experience would include being shy, awkward, and tall from an early age; the fact that Marcus spent a brief time in foster care; and the family history of psychosis or at least a vul-

nerability to psychosis. Precipitating and/or perpetuating factors, such as teasing in school need further exploration. Protective factors could be a supportive family and schoolteachers. After gaining a good sense of Marcus's life experiences, the clinician would focus on understanding the beliefs that Marcus has about himself and others. These include his core beliefs about himself that have developed from his life experiences and may include beliefs that he is not a good person, or that people are out to get him, or that he is not likable. Through a brief exploration of Marcus's history, the clinician can begin to understand Marcus's self-beliefs.

The next step would be to conceptualize Marcus's psychotic-like experiences in terms of events or intrusions. These include people looking at him in a menacing way, but the clinician would also want to pursue the origin of Marcus's political beliefs, as well as details about his seeing the white car and the black object or hearing his name called in the wind. An important goal is to clarify the events and intrusions that Marcus experiences and separate them from the way he makes sense of them. First, the clinician must identify the perceptual anomalies (psychotic-like experiences) and then understand how Marcus makes sense of them. For example, Marcus *thinks* people are looking at him (the event or anomaly) and he *believes* they think he is weird or menacing (how he makes sense of it). The impact on Marcus is that he isolates himself and keeps away from his friends. The connection is that Marcus's core beliefs about himself and the world play a major role in how he interprets the perceptual anomalies that he experiences and the attributions that he makes about these anomalies.

Therapeutically, work with Marcus would follow several steps (French and Morrison 2004). The first step would focus on normalizing, where possible, some of Marcus's experiences and dealing with the associated distress. Addressing the meaning of the perceptual anomalies and then generating and evaluating alternative explanations for these experiences are typical CBT strategies that would be used at this point. A next step is to address his safety behaviors, which are those responses to the intrusions that, instead of helping, actually serve to maintain the dysfunctional interpretations of intrusions. For example, Marcus sees people staring at him; he thinks they see him as "weird." His safety behavior is that he avoids their gaze, does not talk to people, and no longer goes out. The result is that they may indeed think he is "weird." A third step is to address and challenge his core beliefs. Strategies for these steps are well described in two texts (Addington et al. 2006; French and Morrison 2004). The clinician may also address Marcus's social isolation, which may be a safety behavior or may indicate that he needs some help with his social interaction.

In summary, a psychological approach would be based on an individualized formulation for Marcus, taking into account his life experiences, his beliefs about himself, the anomalies he experiences and his attributions about those anomalies, his safety behaviors, and his goals. The therapist's tasks have to be set in a context of support and consideration of how best to engage with this young person, recognizing the fear and panic that may be accompanying these early psychotic-like experiences.

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# Psychopharmacologic Perspective

Christoph U. Correll, M.D.

Andrea Auther, Ph.D.

Barbara A. Cornblatt, Ph.D., M.B.A.

## Diagnostic Formulation

Marcus is a 15-year-old male presenting for evaluation by his school counselor for social withdrawal, depressive symptoms, and school refusal. Marcus had a several-month functional decline, including social withdrawal, problems with hygiene, day-night sleep reversal, anhedonia, some odd behavior (e.g., hiding his face in public places, hiding at school), and difficulties with attention and concentration. He also developed irritable mood, accompanied by an emergence of nihilistic and violent thoughts, although these thoughts do not seem to have influenced his behavior.

Marcus had no known birth complications and had only mild childhood asthma. Several nonspecific developmental difficulties that could be precursors of schizophrenia (Cornblatt et al. 2003) were present, including delays in verbal and motor development, evaluation for inattention (without hyperactivity) in the second grade, and his being described as “a little shy” and “vulnerable.” Additionally, there is a possible familial loading for psychosis, although details of his mother’s hospitalization are unclear. Marcus also reported a variety of symptoms and experiences consistent with attenuated psychotic, or prodromal, symptoms. These include unusual ideas (conspiracy theories about 9/11 and destruction of the world), déjà-vu experiences, strange perplexing thoughts, and suspiciousness (feeling uncomfortable around people, thinking that people were looking at him and did not like him or feared him). He was beginning to feel unsafe in his neighborhood, which led to hypervigilant behaviors (e.g., looking over his shoulder). These symptoms, although disabling and distressing, are nevertheless at an attenuated level because Marcus did not have any specific indication that others were plotting to harm him or singling him out directly. Marcus also reported attenuated perceptual abnormalities, including changes in his environment, hearing his name in the wind, and seeing things out of the corner of



his eye. Last, he had attenuated disorganized communication (tangential and odd thought processes). Marcus's feeling that he could become a rap star and "spread the message of God and love and peace" is suggestive of mild (below prodromal level) grandiosity.

Other attenuated symptoms (negative, disorganized, and general), although not required to meet prodromal criteria, are also present, including declining school functioning, social isolation, and decreased goal-directed activities (anhedonia). Other potentially prodromal symptoms include odd behavior, trouble with focus and attention, impairment in hygiene, sleep disturbance, dysphoric mood, and perhaps intolerance to stress (e.g., at school).

Although Marcus does not have full psychotic symptoms, he reports mood and anxiety-related symptoms, as well as attenuated psychotic symptoms. Therefore, the following DSM-5 diagnoses should be considered: unspecified depressive disorder, indicated by anhedonia, decreased concentration, irritability, and decreased functioning; unspecified anxiety disorder, indicated by social avoidance and persistent worrying; and attenuated psychosis syndrome, suggested by the presence of several moderate attenuated positive symptoms, including suspiciousness, unusual thought content, disorganized thoughts, and perceptual abnormalities, which emerged within the past 12 months, are disabling, and require clinical attention and do not appear to be better explained by another psychiatric or medical condition.

On the basis of extensive research (Correll et al. 2010; Fusar-Poli et al. 2013), attenuated psychosis syndrome was added to DSM-5 Section III as a condition requiring further study, but it is also listed in Section II under the designation *other specified schizophrenia spectrum and other psychotic disorder*, where it is described as being "characterized by psychotic-like symptoms that are below a threshold for full psychosis (e.g., the symptoms are less severe and more transient, and insight is relatively maintained)" (American Psychiatric Association 2013, p. 122). Proposed criteria in DSM-5 Section III include presence of delusions, hallucinations, or disorganized speech in attenuated form (but with relatively intact reality testing) that are of sufficient severity or frequency to warrant clinical attention because of distress or disability. The symptom(s) must have been present at least once per week for the past month *and* must have begun or worsened in the past year. Furthermore, the symptom(s) cannot be better explained by another mental disorder or attributable to effects of a substance or medical condition. Finally, the patient can never have met criteria for any psychotic disorder.

Less likely differential diagnoses are schizotypal or schizoid personality disorder (if symptoms are persistent and no worsening occurs in the absence of antipsychotic treatment) and the bipolar disorder prodrome because depressive, anxious, and attenuated positive and negative symptoms have been observed in patients who ultimately developed bipolar disorder (Correll et al. 2014).

## DSM-5 Diagnosis

- F32.9 Unspecified depressive disorder
- F41.9 Unspecified anxiety disorder

- Attenuated psychosis syndrome<sup>1</sup>
- Rule out schizotypal personality disorder
- Rule out schizoid personality disorder

## Treatment Recommendations

Although Marcus may not meet DSM-5 criteria for a specific disorder, his functional decline and moderate to severe levels of attenuated positive and negative symptoms (with recent onset or worsening) warrant intervention (Correll et al. 2010; Fusar-Poli et al. 2013). Pharmacologic treatment would be directed at current symptom amelioration as well as prevention of a full-blown disorder, particularly a psychotic illness. We recommend a symptom- or problem-based strategy, using first the most benign treatment possible and moving to higher-risk interventions if needed. For Marcus, five potential treatment targets exist: 1) depressive and/or anxiety symptoms, 2) problems with attention and concentration, 3) social isolation, 4) academic dysfunction, and 5) attenuated psychotic symptoms. First-line interventions should include psychoeducation (patient and family) and individual, group, and/or multifamily group psychotherapy, with CBT having the most evidence for attenuated psychotic symptoms (Stafford et al. 2013). Moreover, because of the heightened risk for psychosis in people who have attenuated psychotic symptoms who smoke marijuana heavily, especially during adolescence (Kristensen and Cadenhead 2007; Valmaggia et al. 2014), Marcus should be advised to abstain from any regular drug use.

If first-line interventions are unsuccessful, then pharmacologic interventions targeted to specific problems should be considered. Marcus's depressive and anxious symptoms could be treated with an antidepressant (e.g., a selective serotonin reuptake inhibitor). Antidepressants may also improve the other deficit areas (e.g., school attendance, socializing) if they are related to depression and/or anxiety. Also, open-label evidence suggests that antidepressants may prevent worsening of positive symptoms and emergence of psychosis (Cornblatt et al. 2007). Although evidence for attenuated psychosis syndrome is limited to one randomized trial (Amminger et al. 2010), treatment with omega-3 fatty acids (1.2 g fish oil/day, with a ratio of 2 parts eicosapentaenoic acid [EPA] to 1 part docosahexaenoic acid [DHA]) can be considered, and it may also improve depression. Because of the remote possibility of a bipolar prodrome, the family should be educated and Marcus should be carefully monitored for emergence of antidepressant-induced mania/hypomania and/or suicidality. If irritability worsens and other potential symptoms of mania emerge, the antidepressant may need to be replaced by a mood stabilizer with antidepressant activity (e.g., lamotrigine or lithium). If attention and concentration problems persist, cognitive remediation may be recommended. Because attention-deficit/hyperactivity disorder (ADHD) does not seem to be present and because stimulants may aggravate attenuated positive symptoms, stimulants are not currently indicated.

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<sup>1</sup>Listed in DSM-5 under "Other Specified Schizophrenia Spectrum and Other Psychotic Disorder" in Section II as well as under "Conditions for Further Study" in Section III.

Meeting attenuated psychosis syndrome criteria puts Marcus at an increased risk for developing psychosis within 3 years. However, on the basis of research in specialized centers (Fusar-Poli et al. 2012), the 3-year risk for psychosis is 31.5%, meaning that two-thirds of patients fulfilling criteria for attenuated psychosis syndrome will not develop psychosis within 3 years. Therefore, we advocate the use of an antipsychotic only in case of further worsening of attenuated psychotic symptoms despite adherence to the treatment plan. Because of the greater risk for adverse effects in antipsychotic-naïve individuals, an antipsychotic with the least likelihood of sedation, extrapyramidal symptoms, and weight gain should be considered, and risks and benefits should be monitored regularly.

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# CHAPTER 23

## Cutting Helps Me Feel Better

### Nonsuicidal Self-Injury

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#### Case Presentation

##### Identifying Information

Casey is a 16-year-old girl who lives with her parents, older brother, and younger sister and attends 10th grade in a regular education class at her local public school. She was referred for outpatient treatment after being treated at a local psychiatric emergency department for a superficial laceration to her wrist.

##### Chief Complaint

Casey reported, “I didn’t make a suicide attempt. Cutting helps me feel better.”

##### History of Present Illness

Casey was brought to the emergency room by her parents, who were informed via a phone call from the school nurse that Casey had intentionally cut her wrist in the school’s bathroom. This was the first they had heard about Casey cutting herself, and on the recommendation of the nurse, they brought Casey to the local emergency department for an evaluation. Casey reports that she first engaged in nonsuicidal self-injury (NSSI) 13 months ago to decrease self-critical thoughts and feelings of anxiety. Although she reports typically engaging in NSSI about once per month, she says she has engaged in NSSI twice per week during the last month. Casey reports that this increase in NSSI occurred following a verbal altercation with a friend. She denies any intent to die from her self-injurious behavior. Al-

though she also denies any past history of suicide attempts, she endorses having passive suicidal ideation (e.g., “I wish I would just disappear”) approximately twice per month when her mood is low.

Casey reports a long history of intense emotional reactivity in response to stressful events, dating back to childhood. Her mother reports that Casey was often oppositional and defiant of adults and “threw tantrums when she did not get her way.” Her father added that Casey is self-critical and often comments that she is “ugly” and “stupid.”

Casey reports first learning about NSSI from a friend in seventh grade but did not think much of it at the time. Approximately 2 years later when she was in ninth grade, Casey’s boyfriend ended their relationship, and she no longer wanted to spend time with their mutual friends. Soon after, she started befriending a different group of teens, several of whom occasionally engaged in NSSI. In the week following the termination of her romantic relationship, Casey scratched her wrist with a safety pin until she drew blood, following a verbal altercation with her father. She reports that the scratching made her feel less upset. She also reports that after scratching her wrist, she called her ex-boyfriend on the telephone to let him know what she had done, and she also told her new group of friends about the incident. This was her first episode of NSSI. Casey also reports that around the same time as the onset of NSSI, she lost interest in activities she used to enjoy. She reports that she felt down most of the day, nearly every day, for 3 months following the termination of her relationship.

Casey reports engaging in NSSI when her emotions are unbearably strong, when she is lonely, and when she would like to punish herself for something. She reports that cutting always makes her feel a little better. Casey often uses a knife or razor blade to make cuts on her arms, legs, and sometimes belly. Occasionally, she will use a safety pin to prick holes in her skin to the point of drawing blood. Casey states that getting into fights with loved ones or friends, feeling that people are angry or annoyed with her, and feeling abandoned are common triggers for her NSSI. Casey reports that she feels a loss of control when she has the urge to engage in NSSI and that “there’s no stopping it.” This feeling of losing control, coupled with distress about accumulating scars on her body, reportedly causes Casey significant distress and impairs her ability to perform academically. Casey reports having been lucid each time she has engaged in self-injury. She denies ever having used substances, ever having experienced symptoms of psychosis or delirium, and ever experiencing symptoms of posttraumatic stress disorder (PTSD). Although in the past Casey was diagnosed with major depressive disorder and treated with fluoxetine, she reports that her mood can still vacillate drastically within a short period of time. She also reports feeling anxious about her friends potentially abandoning her.

## Past Psychiatric History

Shortly after Casey’s romantic relationship ended in ninth grade, she began seeing a psychiatrist for a major depressive episode and received a prescription for fluoxetine, which she continues to take. Although she had started engaging in NSSI prior to seeing the psychiatrist for depression, Casey did not report this behavior to the clinician at that time. Casey

reports that although the fluoxetine helped improve her mood, it has not decreased her NSSI. Casey has never received psychosocial treatment and has never been admitted to a hospital for psychiatric treatment.

## **Medical History**

Casey and her parents deny any significant medical history.

## **Developmental History**

Casey's parents report that as a small child, Casey was "outgoing," "smart," and "precocious." She attained all developmental milestones within normal limits. Casey's parents also report, however, that Casey was sexually abused by a neighbor on two occasions when she was age 10. Casey's parents report that on both occasions, the neighbor inappropriately touched her genitals and exposed his genitals. After these episodes, the parents report, Casey became more withdrawn than usual. Casey refused to see a clinician or counselor after the sexual abuse occurred, and her parents did not push her to do so; however, they report that it was around this time that Casey started to become easily upset by stressful events and became increasingly emotionally reactive.

## **Social History**

Casey lives with her biological parents, 17-year-old brother, and 8-year-old sister. Her father is an attorney, and her mother is a homemaker. Casey is currently in tenth grade at a medium-size suburban public school in an affluent community and has been in the same school district since kindergarten. She reports having "a lot of friends" but does not engage in any extracurricular activities. She is an A student. Casey describes her home life by saying, "I hate my parents." She reports that she believes her parents are overly controlling in their parenting style and are extremely critical and hostile.

## **Family History**

Casey's father reports a history of alcohol abuse and problems controlling his anger on occasion, and her mother reports a history of recurrent depression. Both parents have been successfully treated and managed via outpatient psychosocial treatment. Casey's parents deny the presence of any psychopathology in her siblings and are unaware of any family history of psychopathology beyond the immediate family.

## **Mental Status Examination**

Casey and her mother arrived on schedule at the outpatient clinic. Casey was dressed appropriately in jeans and a sweatshirt. She sat quietly in her chair for most of the interview, looking at the floor and making only occasional eye contact while giving brief one- to two-word responses to direct questions. Casey's mood was "sad and angry," and she displayed somewhat labile affect, appearing flat during much of the interview but raising her voice to

the level of screaming and crying when discussing problems at home and school. Casey was oriented to time, place, and person, and her speech, thought process, and content were normal. Casey denied hallucinations and delusions, denied any violent ideation or behavior, and reported twice-monthly passive suicidal ideation and once-daily thoughts of NSSI, with no current plan or intent to engage in self-injury of any kind.

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## Psychotherapeutic Perspective

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## Diagnostic Formulation

The assessment, diagnosis, and treatment of self-injurious and suicidal adolescents need not be as daunting a task as one might assume, provided one has the appropriate instruments and knowledge base. Researchers have identified evidence-based distal and proximal risk factors that, when combined, increase the likelihood of suicidal behavior among adolescents (Miller et al. 2007). A structured diagnostic interview, such as the Schedule for Affective Disorders and Schizophrenia for School-Aged Children—Present and Lifetime Version (Kaufman et al. 1996), is useful for assessing some of these risk factors among adolescents, including the presence of diagnosable mental disorders, prior suicidal behavior, stressful life events, and relevant histories (e.g., developmental, medical, and family). Self-report inventories, such as the Suicidal Ideation Questionnaire (Reynolds 1987), and interviewer-administered measures, such as The Self-Injurious Thoughts and Behavior Inventory (Nock et al. 2007), are effective measures for evaluating the frequency, intent, and function of suicidal and nonsuicidal self-injurious behaviors.

Inflicting pain to feel better seems paradoxical. Casey states that “cutting makes me feel better,” which is overwhelmingly supported by research that shows that NSSI is most often used to reduce or eliminate negative affect (see Klonsky 2007, for a review). Although NSSI as a behavior is high risk given its physical harm to self and potential lethality, perhaps more clinically concerning is that engaging in NSSI has been established as a risk factor for attempted suicide in adolescents (Andover et al. 2012). Casey reports experiencing

several proximal and distal risk factors, which suggest greater risk of her crossing the threshold from suicidal ideation to action. These factors include suicidal ideation twice per month, weekly NSSI, history of sexual abuse, prior apparent major depressive episode, emotional reactivity, perceived hostile family environment, family psychiatric history of alcohol abuse and depression, modeling of self-injury by peers, and interpersonal conflicts. However, NSSI, by definition, does not evidence suicidal intent. Rather than performing self-injurious behavior with intent to die, individuals engage in NSSI to serve other functions. Specifically, NSSI can serve an emotion regulation function (automatic negative and positive reinforcement) or interpersonal regulation function (i.e., social negative or positive reinforcement), as posited by Nock and Prinstein's (2004) functional model of the behavior.

Casey meets DSM-5 criteria for NSSI (American Psychiatric Association 2013), a proposed diagnosis included in the DSM-5 section "Conditions for Further Study." She has engaged in the behavior on 5 or more days in the past year without consistent suicidal intent (Criterion A). She reports that she has engaged in NSSI to obtain relief from negative emotions or cognitions (Criterion B1) and that the frequency of her NSSI increased in response to interpersonal conflicts with a close friend (Criterion B2). Casey's depressive symptoms and interpersonal difficulties immediately precede her engagement in NSSI (Criterion C). Unlike tattooing, her behavior is not socially sanctioned (Criterion D), and its consequences cause clinically significant distress (Criterion E).

Casey's long history of emotional sensitivity and reactivity predating her sexual abuse suggests that her symptom presentation is enduring and warrants consideration of DSM-5 personality disorders. Casey exhibits several features common to borderline personality disorder (BPD), including unstable intense interpersonal relationships, recurrent self-mutilating behavior, affective instability, and difficulty controlling anger. Furthermore, her childhood sexual abuse, perceived family conflict, critical self-thoughts, and psychiatric family history are factors commonly associated with a diagnosis of BPD (Linehan 1993). However, without administration of a semistructured diagnostic clinical interview, it is not clear that Casey meets the sufficient number of DSM-5 criteria (i.e., at least five of the nine listed) for a BPD diagnosis to be assigned. Although assigning personality disorder diagnoses to adolescents is considered controversial by some clinicians, a growing body of empirical evidence suggests that there are some adolescents for whom a diagnosis of BPD is appropriate and stable (Courtney et al. 2013; Miller et al. 2007). In fact, many adolescents, especially females, diagnosed with BPD exhibit a similar presentation and course as their adult counterparts and therefore deserve a thorough diagnostic evaluation and relevant treatment (Miller et al. 2007).

Among individuals with BPD, high rates of comorbidity are common, particularly depression and PTSD (Harned et al. 2010; Linehan 1993). Casey's "sad and angry" mood, lack of engagement in extracurricular activities, and family psychiatric history of depression are common features of a major depressive episode. However, her symptoms require further assessment to determine whether she still meets criteria for major depressive disorder. Casey's history of sexual abuse and subsequent withdrawal and emotional reactivity also require further investigation to determine whether she is experiencing other symptoms of PTSD.



## DSM-5 Diagnosis

- Nonsuicidal self-injury (listed in DSM-5 section “Conditions for Further Study”)
- F32.9 Unspecified depressive disorder
- Z62.820 Parent-child relational problem
- Rule out major depressive disorder, single episode, in partial remission
- Rule out posttraumatic stress disorder
- Rule out borderline personality disorder

## Treatment Recommendations

Investigations indicate that outpatient psychotherapy treatments directly targeting suicidal behaviors are effective in reducing suicide risk and associated behaviors (Linehan 1993). Miller et al. (2007) reported promising preliminary research evaluating dialectical behavior therapy (DBT) with multiproblem adolescents engaging in suicidal and NSSI behavior. In the first randomized controlled trial (RCT) comparing DBT for adolescents (DBT-A) with enhanced usual care, Mehlum et al. (2014) found that adolescents receiving DBT-A had significant reductions in suicidal and NSSI behaviors, suicidal ideation, depression, hopelessness, and BPD after a 16-week intervention. More research needs to be done, and several other RCTs evaluating the efficacy and effectiveness of DBT with suicidal adolescents as well as other populations are under way (Miller 2014).

DBT is a comprehensive, multimodal intervention that uses individual psychotherapy, multifamily skills training groups, family therapy, telephone consultation, and therapist consultation to address multiple problems and suicide risk factors simultaneously (Miller et al. 2007). Informed by behavioral science, dialectical philosophy, and Zen practice, DBT relies on a collaborative, nonjudgmental approach to improve patient motivation to change, enhance patient capabilities, promote generalization of new behaviors, structure the environment, and enhance therapist capability and motivation.

Using DBT as a framework, Casey’s individual therapy should focus on assessing and targeting the cognitive, behavioral, emotional, and systemic factors contributing to and maintaining her NSSI and suicidal ideation, including her strong emotions, interpersonal conflict, reinforcement of self-injury by peers, and self-criticism. Once Casey’s life-threatening behaviors are controlled, individual sessions can target other behaviors interfering with Casey’s quality of life, including her symptoms of depression and PTSD. The purpose of concurrent multifamily skills training group and telephone consultation is to enhance Casey’s (and her parents’) ability to regulate her emotions, respond skillfully to conflict, and manage her behavior. Finally, intermittent family therapy sessions should be used to assess and target environmental contingencies at home that influence Casey’s suicidal behavior or interfere with her quality of life (e.g., a critical and hostile family environ-

ment). Continuous monitoring and assessment (e.g., diary cards and behavioral analyses) inform the selection and emphasis of DBT strategies and should be used to update treatment goals in all modes of therapy.

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## **Psychopharmacologic Perspective**

Whitney Daniels, M.D.

Niranjan S. Karnik, M.D., Ph.D.

Hans Steiner, M.D.

### **Diagnostic Formulation**

This case describes a 16-year-old girl with a formal psychiatric history of depressive symptoms and increasing NSSI, starting at age 14. She is now seeking outpatient treatment for the second time in her life. Following this emergency room visit, Casey would benefit from outpatient treatment to establish a long-term treatment plan addressing mood symptoms and history of trauma.

From a biological perspective her past medical history is noncontributory. She has a variety of genetic vulnerabilities, which include her biological father's history of alcohol abuse and poor emotion regulation and her biological mother's diagnosis of major depressive disorder. Given Casey's reported symptoms and immediate family history, it is reasonable to consider a diagnosis of major depressive disorder. The presence of PTSD should also be investigated given her history of trauma (two incidents of sexual abuse). Casey has received some benefit from fluoxetine, a selective serotonin reuptake inhibitor (SSRI). In the context of this benefit, however, she also reports that self-injury continues to increase, a symptom that could possibly be explained by SSRI activation (Bridge et al. 2007; Steiner 2004). The clinician needs to ask further questions to rule out bipolar diagnosis, given that activation in the context of SSRI therapy in a child may signify the presence of bipolar affective disorder (Kim et al. 2007).

On the basis of the history provided, it is difficult to determine whether substance use disorder may be a large contributor to Casey's presenting picture. However, it is important

to consider the genetic and biological risk of a substance use disorder, given the reported family history of her father with alcoholism. In addition, Casey's history of trauma also puts her at risk for self-harm (Portzky and van Heeringen 2007), as well as for substance use or a substance use disorder. There is less evidence pointing toward a primary dissociative disorder. Despite this, it should remain on the differential so as to prompt further questions to rule out such a diagnosis. A primary dissociative disorder may seem less plausible given the circumscribed nature and context of Casey's reported symptoms.

Casey is a teenage girl with a history of increasing NSSI behavior in the context of minimally treated depressive symptoms. On hearing of this constellation of symptoms, combined with the girl's history of trauma, a clinician might first consider Casey's symptom trajectory as pointing in the direction of BPD. However, in this particular case, given the patient's age and presentation, it is best to understand and recognize these issues early on, in an effort to focus less on the diagnosis of BPD and instead provide the intensive treatment that might lead away from this diagnosis in the future.

## DSM-5 Diagnosis

- F33.2 Major depressive disorder, severe
- Rule out posttraumatic stress disorder
- Rule out borderline personality disorder
- Rule out substance use disorder
- Rule out dissociative disorder

## Treatment Recommendations

Integrated treatment combining psychotherapy and medications, as described in the Treatment for Adolescents With Depression Study (March et al. 2006; Steiner 2004), would be most useful for Casey at this time. Psychotherapy will provide much needed containment for Casey and her described symptoms, whereas medications may provide some longer-term stabilization from a psychopharmacologic standpoint. Casey has a history of not following through with individual psychotherapy, for an unknown reason. Despite this, considering that she has now re-presented for outpatient care in the context of a recent emergency room visit, with encouragement from her parents, perhaps Casey may be able to engage in outpatient intensive individual psychotherapy. With what little is known of Casey's biological father's and mother's diagnoses and reported behaviors at home, it would also be prudent for the family to engage in family therapy; this would provide a level of psychotherapeutic treatment reinforcement for Casey's individual treatment (Watanabe et al. 2007).

Casey's psychopharmacologic history indicates that she has had one trial of fluoxetine, which has minimally improved her symptoms of depression. Information regarding the dosing schedule has not been provided, and if the dose has not been maximized, it may be

reasonable to increase the dose gradually to the maximum dose to reach optimal benefit. Persistent symptoms may also prompt the clinician to change the agent to a different SSRI or to a serotonin-norepinephrine reuptake inhibitor (Hughes et al. 2007). If Casey still has only a mild to moderate symptom resolution, the clinician may consider an additional agent for augmentation. Agents typically used for augmentation that have evidence for efficacy in adults but not children and adolescents include atypical antipsychotics such as aripiprazole or quetiapine. Alternatively, the medication class might be changed to a mood stabilizer, such as divalproex sodium, which might have more intrinsic antidepressant properties. Utilization and careful monitoring of a mood stabilizer may also prove helpful if one is more concerned about the emergence of bipolar affective disorder through an initial presentation of a depressive episode.

In a biopsychosocial formulation, it would be appropriate to understand Casey's symptoms with the knowledge of her history of trauma exposure. Casey may be experiencing a hypersensitive response to psychological and social stress (Jacobson and Gould 2007). This possibility will need to be taken into account when monitoring her symptoms and response to medication. Not only do symptoms of depression need to be monitored, but additional anxiety symptoms will likely need to be addressed with the appropriate pharmacologic intervention. Steiner et al. (2007) reported that boys given a mood stabilizer experienced improvement of symptoms of depression and PTSD.

The safety concerns in Casey's case include understanding the contraindications that would worsen her symptoms and, in turn, her prognosis. Just as fluoxetine may have created some activation contributing to self-injury, other activating medications may do the same. Therefore, it is necessary to consider avoiding those medications that have obvious stimulating properties, such as bupropion or a stimulant. Increased activation can contribute to increased agitation in this particular case.

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# CHAPTER 24

## From Foster Care to the State Hospital

### Psychotic Symptoms in a Child Who Is the Victim of Neglect

Patricia K. Leebens, M.D.

#### Case Presentation

##### Identifying Information

Lena is a 14-year-old Hispanic eighth grader in special education. She is a ward of the state and has been in foster care for the last 2 years since removal for neglect from her single mother. She was recently hospitalized because of bizarre behavior, suicidal ideation, agitation, and running away. She has been transferred to the state psychiatric hospital for ongoing treatment and to await placement.

##### Chief Complaint

Lena reports, “I always get into trouble because I want to live with my mom.”

##### History of Present Illness

Prior to her most recent hospitalization, Lena ran away from her foster placement and was brought to an emergency room by the police after she was found pacing, disheveled, talking to herself, and agitated at a bus station. She threatened to kill herself if the police did not take her to her mother. At the emergency room, her toxicology screen was negative, but she was thought to be psychotic and/or traumatized. In the emergency room, she was treated with haloperidol and lorazepam for agitation. Because of her persistent suicidal threats and agitation, she was hospitalized for 3 weeks and treated with risperidone up to 4 mg/day and chlorpromazine as needed; the treatment resulted in limited periods of stabilization. Lena

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also continued her current medications: fluoxetine 40 mg/day, methylphenidate 60 mg/day, and divalproex sodium 450 mg twice a day. Risperidone was discontinued prior to transfer because of weight gain and constipation.

### **Past Psychiatric History**

Lena was first noted to be hypermotoric, inattentive, and aggressive with peers in her Head Start program at age 4. Her pediatrician diagnosed attention-deficit/hyperactivity disorder (ADHD), combined type, and prescribed methylphenidate, with modest benefit. Lena was also noted to be very anxious prior to the use of methylphenidate, often having great difficulty separating from her mother. Because of her limited academic progress, language delays, social delays, and excessive absences in first grade, Lena was held back and repeated the grade.

Lena was referred for psychiatric and psychological evaluations at age 8 because of difficulties at home and in school. On the Wechsler Intelligence Scale for Children—Third Edition (Wechsler 1991), her full-scale IQ was 82, with significantly greater performance IQ than verbal IQ. A speech and language evaluation revealed expressive language delays. Academic achievement testing indicated that Lena was 12–14 months behind in writing and spelling but at grade level for math computation. The neurological examination was positive for left-right confusion and clumsiness. Projective testing revealed an anxious, easily overwhelmed girl, excessively preoccupied with body integrity and aggression, with many images referring to “blood dripping down walls.” Some of Lena’s responses on the Rorschach Inkblot Test (Rorschach 1994) were unusual but not frankly psychotic. Her psychiatric examination was notable for extreme hyperactivity, aggressive play, excessive anxiety, and limited eye contact, although she was evaluated while taking methylphenidate. She was diagnosed with ADHD, combined type, and posttraumatic stress disorder (PTSD).

Lena received no treatment until she was hospitalized psychiatrically at age 12 for extreme aggression and suicidal ideation (plan to stab herself), following removal from her mother’s care. Between ages 12 and 14, she had three psychiatric hospitalizations for aggressive behavior and for threatening to kill herself if she were not sent back to her mother. She was treated with a variety of stimulants, without much benefit, as well as risperidone, divalproex sodium, fluoxetine, paroxetine, sertraline, guanfacine, and clonidine, with mixed results.

### **Substance Abuse History**

All informants deny that Lena uses substances, and previous toxicology screens have been negative.

### **Medical History**

Lena had recurrent otitis media from age 18 months to age 4 years and had tubes placed in her ears at age 3. She had four febrile seizures before age 3. She was diagnosed with asthma at age 5 and treated with albuterol. She has no history of serious illnesses, surgeries, broken

bones, head trauma, or loss of consciousness. She was in a minor motor vehicle accident with her mother at age 8, with no injury. Menses began at age 11 and have been regular. She is not sexually active, although she may have been touched inappropriately by a boyfriend of her mother's (allegation unsubstantiated) between ages 8 and 10.

## **Developmental History**

Lena's mother has a history of schizophrenia and was taking fluphenazine and fluoxetine when she became pregnant. She did not take her antipsychotic medications the last 5 months of the pregnancy. Lena was exposed to cocaine and alcohol in utero, but her mother claimed that she stopped using when she learned she was pregnant. Lena was born 3 weeks early. The labor and delivery were uncomplicated, and Lena's birth weight was 6 lbs 9 oz. Lena's mother became psychotically depressed and was hospitalized 3 weeks after Lena's birth. Lena lived with her maternal grandmother for the first 4 months of life. Lena's developmental milestones were described as "normal." She was an "active" baby who did not sleep much. She had delayed expressive language, which was attributed to speech confusion because her grandmother spoke Spanish and her mother spoke English. A Birth to Three developmental evaluation at age 30 months did not indicate the need for intervention, although she was behind in speech and social development.

## **Social History**

Lena, the youngest of three children, was born to a 39-year-old woman of Dominican heritage. Lena's mother lives with her boyfriend. Lena's 19-year-old half-brother is incarcerated on drug charges, and her 22-year-old half-sister is employed and lives with her three children.

Lena and her siblings grew up with the mother and maternal grandmother. Her mother was hospitalized multiple times with psychosis and substance abuse complications. The mother lost custody of Lena during her hospitalizations, and Lena's grandmother often cared for Lena. The girl went into long-term foster care 2 years ago during one of her mother's hospitalizations, following the death of the maternal grandmother from heart disease. Neither Lena nor her siblings have any contact with their respective fathers.

## **Family History**

The maternal family psychiatric history is remarkable for ADHD, dyslexia, substance abuse, depression, anxiety, psychosis, incarceration, and psychiatric hospitalizations. Medical history is notable for diabetes (grandmother, great-uncle), heart disease (grandmother, great-uncles), asthma (half-sister), and epilepsy (great-aunt). Nothing is known about Lena's paternal family.

## **Mental Status Examination**

Lena presented as an attractive but unkempt 14-year-old Hispanic girl in age-appropriate, casual clothing. She spoke English with a slight accent. She answered questions in one word



or short sentences. She sat between her biological mother and her state caseworker, who both provided warm support. She cooperated with an hour-long interview, although she appeared guarded, often looking from side to side as though distracted by something. She was restless and often shifted back and forth in her chair. On two occasions, she looked startled and stood up as though she were going to leave the room until her mother took her hand and asked her to sit. She had fleeting eye contact and appeared anxious, often looking around and pushing her chair against the wall. She described her mood as “fine,” although she looked dysphoric and distressed. She denied current suicidal or homicidal ideations or plans but admitted that she had felt that way in the past. She also acknowledged that she did not want to be at this hospital and that she thought she was going to get to go home with her mother after leaving the other hospital. She had a flattened affect, although she sometimes laughed nervously and at times inappropriately when discussing her current symptoms. She initially denied auditory or visual hallucinations but later said, “Well, maybe sometimes.” She refused to participate in a formal mental status examination, saying, “I’m not very good at that.” She refused to look at her hospital room until her mother agreed to go with her. She paced and was agitated at the departure of her mother following the intake process.

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## **Psychotherapeutic Perspective**

Nancy C. Winters, M.D.

### **Diagnostic Formulation**

The assessment of a child or adolescent presenting with disorganization, agitation, suicidality, and symptoms suggestive of psychosis is always complex, and diagnostic certainty is often not achieved for some time, particularly when a youngster has a complicated developmental, psychiatric, and social history, as Lena does. Assessing the validity of psychotic-like symptoms can be a challenge in a youth with a mixture of developmental delay and mood lability (Frazier et al. 2007). Moreover, differentiating psychotic mood disorders from schizophrenia can be problematic in an adolescent and may become possible only as the course unfolds.

Therefore, a comprehensive evaluation that assesses the contribution of medical, neurodevelopmental, psychological, interpersonal, and sociocultural factors is essential (Birmaher et al. 2007). The evaluation should include a detailed, longitudinal history of depressive and manic symptoms based on interviews with Lena and her caregivers. The pres-

ence of psychotic symptoms, both positive and negative, and their concurrence with mood symptoms should be carefully examined. Additional developmental information should include age at onset of mood symptoms and relation of the symptoms to negative life events, as well as an understanding of Lena's exposure to neglect, abuse, and violence and the impact of these experiences on her psychological development. A culturally sensitive family assessment should be performed to understand the key relationships in Lena's social network and the strengths of family members that may be helpful to her treatment. It is also of great importance to understand Lena's motivation for making suicidal threats and her mother's responses to the threats: Does Lena believe that making threats may result in a return to her mother? Is her mother most involved with Lena when Lena is hospitalized and thereby unwittingly reinforcing this behavior? The evaluation should explore any specific traumatic events that may have precipitated Lena's running away or that may have occurred while she was at large. Neuropsychological and projective testing will be helpful in gaining more information about how Lena understands her internal and external experience and whether a psychotic disorder is likely to be present. No less important is an examination of why previous attempts at treatment have failed such that Lena is now in her fifth hospitalization.

Lena has many risk factors for severe mood disorder, including comorbid conditions of anxiety (including possible PTSD), ADHD, and learning disorder. Other significant risk factors for severe depression include Lena's exposure to major negative life events, including neglect, attachment disturbance, and separation from her mother. Lena currently presents with symptoms of suicidality, running away, psychomotor agitation, dysphoric and anxious affect, disheveled appearance, and guarded communication, and she reports that "maybe sometimes" she has hallucinations. The case presentation contains no specific information indicating a history of manic symptoms or of psychosis in the absence of mood symptoms. Thus, this presentation is best described as a recurrent major depression with psychotic features. However, given the increased risk of bipolar disorder in adolescents with psychotic depression, as well as the history of psychosis (possibly schizoaffective disorder) in Lena's mother, Lena is at high risk of developing either bipolar disorder or a schizophrenic spectrum disorder such as schizophrenia or schizoaffective disorder (Birmaher et al. 2007). Finally, although personality factors cannot be definitively evaluated in the context of Lena's young age and in the context of her major depression, especially in the presence of psychotic symptoms, the clinician needs to be aware of personality development as it relates to behavior. Lena's emerging pattern of dysfunctional affect regulation, self-endangering impulsivity, suicidality, difficulty controlling anger, and efforts to avoid abandonment could signal that she is at risk for borderline personality disorder.

## DSM-5 Diagnosis

- **F33.3 Major depressive disorder, recurrent episode, severe, with psychotic features**
- **P90.2 Attention-deficit/hyperactivity disorder, combined presentation (by history)**

- **F81.0 Specific learning disorder with impairment in reading (by history)**
- **F81.81 Specific learning disorder with impairment in written expression (by history)**

## Treatment Recommendations

Lena's psychotic depression and impulsive self-endangering behavior would be most safely addressed in a secure psychiatric setting until she is stable. Her suicidality needs to be monitored closely, along with her depression and psychotic symptoms. Lena has many of the predictors of poor outcome in depression, including greater severity, chronicity, multiple recurrent episodes, comorbidity, family problems, low socioeconomic status, and exposure to ongoing negative events such as abuse and family conflict. Therefore, she needs an intensive multimodal treatment plan that addresses these issues. Given the severity of her depressive symptoms, medication will be an important part of her treatment and may be the most effective initial intervention (as discussed later in the section "Psychopharmacologic Perspective").

With regard to psychosocial treatments, Lena may initially be able to benefit only from supportive interventions. As her thinking improves, other psychosocial interventions should be considered. Although no specific guidelines exist for psychosocial treatment of psychotic depression in adolescents, the consensus is that psychoeducation, supportive management, and family involvement are important in the treatment of depression disorders (Birmaher et al. 2007). Because Lena's concerns about her relationship with her mother are quite prominent, family intervention should be started immediately, and Lena should participate to the extent that she is able unless doing so worsens her symptoms. The initial phase should involve psychoeducation about Lena's symptoms and how to best support her recovery. If further investigation indicates that Lena's mother will be unable to take care of Lena, family intervention should have the goal of exploring how Lena and her mother can have a closer relationship without living together. If Lena will be returning to live with a particular foster parent, the foster parent should also be involved in the family intervention at a point decided on by the family and therapist. The wraparound planning process, a community-based model of intervention used for youth with serious emotional disturbance, may be helpful for Lena and her family (Winters et al. 2007). A specialist facilitator would help Lena and her family to form a team that will have an ongoing role in planning an individualized array of services and supports that build on Lena's and her family's strengths and meet their needs as the family perceives them.

When Lena's thought process is amenable to engaging in her own psychotherapy, her somewhat limited verbal abilities would have to be considered in selecting treatment. She may benefit from adaptations of cognitive-behavioral therapy, interpersonal psychotherapy, and psychodynamic techniques that are used with younger children (Birmaher et al. 2007). If her mental status improves enough, she might find the relationship orientation of interpersonal psychotherapy beneficial (Klomek and Mufson 2006). Cultural factors should

also be taken into account in adapting psychotherapeutic interventions for Lena because minority status may increase the risk for depression and suicidality. Because Lena's suicidal thinking and threats have led to her hospitalizations, she needs some very specific help in managing these thoughts and impulses. Dialectical behavior therapy, which some evidence indicates can be useful for suicidal adolescents, would be important to consider for Lena if a trained therapist is available (Katz et al. 2004).

Given Lena's language-based learning disorder, ADHD, and emotional problems, she is likely to have significant challenges in school and will require an individualized education program. During her residential psychiatric treatment, her academic functioning and ability to relate to peers need to be carefully assessed. Because some evidence indicates that peer attachments are particularly relevant to depressive symptoms and suicide in girls, enhancing these relationships may be protective. When Lena's depression and psychotic symptoms resolve, her need for medication for ADHD should also be reassessed. Before she returns to school, conjoint planning should be done to determine whether she needs a day treatment program or other school-based mental health service. Her teachers need to be involved in recognizing symptoms in Lena that may be warning signs and developing a crisis plan allowing for preventive action.

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## **Psychopharmacologic Perspective**

Harvey N. Kranzler, M.D.

### **Diagnostic Formulation**

Lena's case is representative of many cases of children and adolescents referred for longer-term inpatient treatment who present on admission with diagnostic questions and incomplete information about their past psychiatric treatment. Lena was transferred to the state psychiatric hospital from the local hospital after having been found pacing, disheveled, agitated, and threatening to kill herself if not taken to her mother. She had been evaluated to be psychotic and possibly traumatized and was stabilized at the acute hospital with risperidone up to 4 mg/day and chlorpromazine as needed, in addition to her previous maintenance medications of fluoxetine 40 mg/day, methylphenidate 60 mg/day, and valproic

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acid 450 mg twice a day. This was Lena's fifth psychiatric hospitalization in the last 3 years. Her past medication history includes a number of unspecified stimulants, as well as trials of paroxetine, sertraline, guanfacine, and clonidine of unknown dosage and duration, with mixed or no benefit. The lack of specific data concerning past medications frequently occurs on admission, yet obtaining this information is an important part of the assessment and treatment planning.

Lena has a long past psychiatric history, with a diagnosis of ADHD as early as age 4 years. At age 8, she had a comprehensive psychiatric evaluation because of unspecified difficulty at home and school. On psychological testing, she had a full-scale IQ of 82, with performance IQ greater than verbal IQ; she was noted to have an expressive language delay on speech and language evaluation; she had soft neurological signs on neurological evaluation; and projective testing showed evidence of anxiety, aggression, and possible psychotic ideation in her preoccupation with body integrity, with images of "blood dripping down walls." She was noted to be hyperactive, aggressive, and highly anxious, and she maintained limited eye contact. The history did not mention further psychiatric treatment until her first hospitalization at age 12 for suicidal ideation and severe aggression, with three subsequent hospitalizations for similar symptoms. Family psychiatric history is significant, with her mother having a diagnosis of schizophrenia and substance abuse disorder, as well as other family members having ADHD, learning disabilities, depression, anxiety, psychosis, psychiatric hospitalizations, and incarcerations. Lena was exposed to drugs in utero, and her mother developed postpartum psychotic depression requiring hospitalization. For much of her early life, Lena was cared for by her maternal grandmother, but when the grandmother died, Lena was placed in long-term foster care. The loss of primary caretakers and her constant wish to be returned to her mother are important factors in Lena's psychological and behavioral difficulties. There is a possible history of sexual abuse, but this allegation was unsubstantiated.

At admission, Lena was guarded and restless and made only fleeting eye contact with the admitting clinician yet related well both to her mother and the state caseworker who accompanied her. She was noted to have flat affect, anxiety, dysphoria, and occasional inappropriate laughter. Lena was uncooperative during the formal mental status examination, but she demonstrated no evidence of overt thought disorder or paranoid delusions. She initially denied auditory and visual hallucinations but hinted that she may have experienced hallucinations in the past. There was no mention in the mental status examination and past history of pressured speech, flight of ideas, manic symptoms, or vegetative symptoms of depression.

Lena presents with enough evidence for a diagnosis of psychosis because of her flat affect, guardedness, inappropriate laughter, and possible auditory and visual hallucinations. The past history of being found unkempt, disheveled, and agitated, as well as the images of blood dripping down walls on projective testing, may indicate past psychotic symptoms. At this time, a definitive diagnosis of childhood-onset schizophrenia cannot be made because Lena does not meet the full DSM-5 criteria (American Psychiatric Association 2013) on the basis of the admitting data. However, her language disorder, disruptive behavior, and pre-

morbid functioning in social, motor, and language domains, in addition to her mother's diagnosis of schizophrenia, point in the direction of a schizophrenic process that may be developing (Gogtay and Rapoport 2007). One cannot rule out an affective component to her diagnosis, even though the case presentation includes no evidence of overt symptoms of mania or depression except dysphoric appearance and a history of suicidal threats. Lena's family history of significant mood disorder, her irritability, history of suicidal ideation, and dysphoria indicate that her diagnosis may evolve into a schizoaffective disorder or a mood disorder with psychosis. There is no evidence that a medical condition or substance abuse contributes to her psychosis, and her relatedness to her mother and the caseworker point away from a diagnosis of autism spectrum disorder. Lena may have attenuated psychosis syndrome based on evidence of previous brief transient psychotic symptoms in response to stress, emotional lability, and cognitive deficits, as well as comorbid ADHD by history. The diagnosis of attenuated psychosis syndrome is not included in Section II of DSM-5 but is included in Section III, in "Conditions for Further Study." Lena has a vague past history of anxiety but no evidence of an overt anxiety disorder at present. Although Lena has had significant losses and may have been exposed to traumatic experiences while growing up, she does not meet the DSM-5 criteria for PTSD, despite her being irritable and hypervigilant. Lena does have a past history of ADHD and manifests impulsivity, distractibility, fidgetiness, and oppositionality. Once the psychotic and affective symptoms are ameliorated, one needs to assess whether any symptoms of ADHD are still evident.

## DSM-5 Diagnosis

- **F29 Unspecified schizophrenia spectrum and other psychotic disorder, multiple episodes, currently in acute episode**
- **F90.2 Attention-deficit/hyperactivity disorder, combined presentation (by history)**

## Treatment Recommendations

Lena's treatment requires a team approach to gather past psychiatric and medical information unavailable at the time of admission, including a better medication history with specific information about response and adverse effects of previous medications. Continued mental status evaluation may clarify whether Lena presently has any delusions or auditory or visual hallucinations. A medical and psychiatric evaluation is necessary, including a full blood workup; baseline height, weight, and body mass index; vital signs; Abnormal Involuntary Movement Scale (Guy 1976); electrocardiogram; psychological testing, including neurocognitive and projective tests; and a neurological evaluation, including magnetic resonance imaging and electroencephalography, to assess for potential lower seizure threshold (Kranzler and Cohen 2013). Structured assessment instruments, such as the Brief Psychiatric Rating Scale for Children (Overall and Pfefferbaum 1982) and the Schedule for Af-

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fective Disorders and Schizophrenia in School-Age Children (Ambrosini 2000), may be helpful.

At least two of the medications that Lena has been receiving, fluoxetine 40 mg/day and methylphenidate 60 mg/day, should be tapered and discontinued because they have the potential for exacerbating an underlying psychotic process or may be contributing to activation, irritability, akathisia, and possible suicidal ideation. Risperidone is an appropriate antipsychotic for her diagnosis, but 4 mg/day is a relatively high dose, which may be a factor in her flat affect, restlessness, and irritability secondary to extrapyramidal symptoms. Valproate, 450 mg twice a day, is an appropriate mood stabilizer to treat Lena's agitation and aggression, but a blood level should be obtained. The clinician may want to consider a careful taper and discontinuation of the valproate and then the risperidone during inpatient treatment in a washout effort to assess more accurately the diagnosis and side-effect profile. This may not be possible if Lena has a recurrence of severe psychosis or agitation, but at least a careful tapering and monitoring of emerging symptoms or resolution of side effects may provide useful information. One cannot review all of the alternative antipsychotic and mood-stabilizing medications that may be considered for the treatment of Lena's symptoms, which are well described in the literature (Kranzler and Cohen 2013).

The psychopharmacologic management of Lena's psychiatric symptoms will enable her to become a partner with the ongoing psychotherapeutic modalities in her treatment and allow her development to continue in a more normal trajectory. The recommendation is to select a particular medication and dosing regimen based on clearly identified target symptoms and evidence-based data of efficacy and tolerability for Lena's age and stage of development. The clinician needs to monitor vital signs at least weekly, weight and body mass index at least monthly, and full blood work at least every 3–4 months (Kranzler and Cohen 2013). Furthermore, the clinician should make one change at a time, with a "start low and go slow" medication algorithm to achieve the lowest effective dose with the maximum benefit. At all times, the clinician should provide clear explanations of the rationale for each test or change in medication and obtain informed consent from the legal guardian, as well as educated assent from the adolescent (Correll 2008). A standardized pediatric side-effect scale (Correll 2008) should be used at baseline and at regular intervals to assess ongoing potential side effects. The use of scales such as the Clinical Global Improvement Scale (Guy and Bonato 1970) or the Brief Psychiatric Rating Scale for Children (Overall and Pfefferbaum 1982) to assess the patient's progress, either monthly or at least quarterly, may be helpful in monitoring improvement or lack thereof. Potential ongoing aggression and suicidality should be monitored using the Modified Overt Aggression Scale (M-OAS; Sorgi et al. 1991) and the Columbia Suicide Severity Rating Scale (C-SSRS; Posner et al. 2011).

If at least two trials of antipsychotic medications do not treat the underlying psychotic process, Lena's condition may be refractory to treatment with the usual antipsychotic and mood-stabilizing medications. In this case, the clinician should consider a trial of clozapine (Kranzler and Cohen 2013), which has the potential to ameliorate her symptoms and treat her psychosis and mood symptoms with a decreased need for polypharmacy. Although this medication requires increased blood work, medical monitoring, and management of

side effects, when other antipsychotic medications and mood stabilizers are insufficient to improve or resolve her symptoms, clozapine may allow Lena to be discharged to a less restrictive residential treatment facility or home, even if the diagnosis of childhood-onset schizophrenia, schizoaffective disorder, or mood disorder with psychotic features emerges over time.

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# **PART IV**

## **Kids in Crisis**

### **Psychopathology in the Context of Social Stressors**

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# Introduction to Kids in Crisis

Peter S. Jensen, M.D.  
Cathryn A. Galanter, M.D.

**IN THIS SECTION,** we deliberately present cases in which moderate to severe environmental stressors are part of the clinical presentation. Important in such cases is the understanding of the potential role played by environmental factors, any biological or constitutional factors related to the preexisting vulnerabilities, the presence of full-blown DSM-5 conditions, and the degree of impairment. Another critical factor is how the clinician chooses to cobble together the necessary psychotherapeutic, environmental, supportive, and psychopharmacologic approaches to provide an optimal intervention.

In “Suicidal Ideation After Supervised Visits With Biological Mom: Depressed Mood in a Child in Foster Care” (Chapter 25), the commentators identify the precipitating role of the visit to the child’s biological mother on the child’s suicidal ideation. The commentators differ in their diagnostic formulation. Both the psychotherapeutic and the psychopharmacologic commentators identify depressed mood that does not meet full criteria for a major depressive episode and some symptoms of posttraumatic stress disorder (PTSD) in a child with a history of trauma; however, the psychotherapeutic commentator diagnoses adjustment disorder with mixed disturbance of emotions and conduct with rule-outs of major depressive disorder and PTSD, and the group of psychopharmacologic experts diagnose PTSD. This varied diagnostic interpretation of this constellation of symptoms with a history of trauma appears commonly in clinical practice. In spite of the different diagnostic interpretations, both commentaries recommend trauma-focused cognitive-behavioral therapy (TF-CBT). This is not surprising given its demonstrated efficacy for both PTSD and depressive symptoms in community settings (Jensen et al. 2014). The experts take somewhat different approaches in the extent to which they prioritize the use of TF-CBT, medication adjustments, and/or family support. Another difference is the extent to which the importance of the environment (including a loving foster mother) is supported, reinforced, and acknowledged as the key aspect of the overall approach to helping the child in the context of treatment.

As in discussions of earlier cases, any differences in opinion across commentators do not reflect differences in expertise because all are internationally prominent experts, but rather reflect differences in how the professionals tend to approach their cases, given their different backgrounds, therapeutic persuasions, and previous experiences. What would be interesting would be to conduct a multisite trial of cases similar to that discussed in Chapter 25, and to compare and contrast the benefits of the commentators' treatment approaches. In the meantime, the best we can do is widen our perspective by becoming aware of other treatment approaches and considering them fully as a part of our therapeutic armamentarium and then discuss all of these options in the context of a supportive, problem-solving approach with the parent and family.

In "The Legacy of War: Irritability and Anger in an Adolescent Refugee" (Chapter 26), both the psychotherapeutic and the psychopharmacologic commentators recommend TF-CBT as a first-line treatment for what appears to be the child's clear response to a traumatic history. Important differences do emerge, however, in the extent to which the depressive symptoms are seen as key targets of the intervention. Differences also emerge in the extent to which commentators identify other key stressors in the environment as potential targets of intervention, or at least in understanding the roles of the stressors as possible etiological factors.

In the case of "Moody Child: Depression in the Context of Parental Divorce" (Chapter 27), it is unclear whether the patient meets the full criteria for major depressive disorder. Of course, life stressors in and of themselves cannot be used to rule out whether the diagnosis of depression should be made. One clinician might make the diagnosis of major depressive disorder, another might refer to persistent depressive disorder (dysthymia), and a third might favor a diagnosis such as adjustment disorder with mixed anxiety and depressed mood. Such differences in depressive diagnoses are seen in this and earlier chapters. Note, however, that psychotherapy is recommended in both cases as the initial treatment by both commentators.

In "Without My Mom, I'm Not Me: Childhood Bereavement" (Chapter 28), the experts draw distinctions between major depressive disorder and other specified trauma- and stressor-related disorder, persistent complex bereavement disorder. The role of environmental factors, such as the death of the mother in this case, illustrates how conditions within the child (depressive disorder) may at least in part arise from circumstances outside of the child.

Nowhere in child psychopathology does assessment of the environment take on more form and force than in cases of very young children. In "Never Met a Stranger: Disinhibited Attachment in a Toddler" (Chapter 29), both the psychotherapeutic and the psychopharmacologic commentators express reluctance to use medications and discuss the implicit importance of addressing the child's attachment difficulties. Although these similarities may be in part due to our choice of commentators, the commonalities of their opinions indicate that the use of medications in very young children remains problematic and controversial, except in selected cases of autism or extreme aggression or in children ages 3–5 with severe attention-deficit/hyperactivity disorder (ADHD), as demonstrated by a multi-

site preschool ADHD treatment study (Abikoff et al. 2007). Even with ADHD, however, there is no unambiguous green light because responses to medication are more variable in young children than in older children with ADHD. In young children, ADHD is also moderated by comorbidity, side effects are more common, and response to treatment is often less than optimal (Abikoff et al. 2007; Ghuman et al. 2007; Posner et al. 2007; Swanson et al. 2006; Vitiello et al. 2007).

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# CHAPTER 25

## Suicidal Ideation After Supervised Visits With Biological Mom

### Depressed Mood in a Child in Foster Care

Lisa M. Cullins, M.D.

Bhavin Dave, M.D.

Paramjit T. Joshi, M.D.

### Case Presentation

#### Identifying Information

Timothy is an 11-year-old black male who has been in foster care for 2 years.

#### Chief Complaint

Timothy states, “I want to kill myself.”

#### History of Present Illness

Timothy was removed from his biological mother’s care 2 years ago and placed in foster care secondary to sexual abuse and neglect. According to Timothy’s social worker, when the children were left unsupervised by their mother, Timothy’s older brother would fondle Timothy and coerce him to fondle his younger sister. He has remained in the same foster home since his removal, with supervised visits with his biological mother.

Two days prior to evaluation, Timothy was eagerly awaiting his visit with his mother because it was 4 days before his birthday. His mother had missed many visits, including the prior week’s visit, and he was certain she would attend this visit. She did not show or call. Consequently, Timothy began to exhibit increased irritability, aggression, and agitation at home



and school; developed enuresis; and began to run impulsively into streets. His foster mother states, “He was out of control.” Timothy also began to state, “I want to kill myself,” and to describe plans to either jump off a building or set himself on fire. His foster mother took him to the emergency room, and Timothy was subsequently hospitalized.

## Past Psychiatric History

Timothy had received no psychiatric treatment prior to placement in foster care. Shortly after his removal from his biological mother’s care, Timothy was taken for an initial outpatient psychiatric evaluation for disruptive behaviors, including difficulty following directions and waiting his turn, poor attention and concentration, forgetfulness, hyperactivity and impulsivity, decreased focus, and distractibility both at home and at school. Timothy reported more than 10 school suspensions for “fighting.”

Timothy endorsed hypervigilance, hyperstartle, fear of the dark, insomnia, and nightmares. He also endorsed intermittent irritability and anger but denied neurovegetative symptoms or mania. Timothy denied a past history of suicidal and homicidal ideation, perceptual disturbances, phobias, and obsessive-compulsive disorder. Timothy’s foster mother stated, “Timothy is fine when he gets his way; when he doesn’t, then he acts up.” His foster mother stated that whether or not he sees his family at a scheduled visit, his behavior “is much worse for at least a day or two after.”

He started weekly individual therapy after this initial outpatient psychiatric examination and has continued since but has avoided discussing the trauma. He has been taking extended-release methylphenidate with good response and no side effects for the past 2 years.

## Current Medications

Timothy takes extended-release methylphenidate (36 mg) every morning.

## Medical History

Timothy’s medical history is unremarkable. He has no known drug allergies.

## Developmental History

Timothy’s developmental history is unknown.

## Social History

Timothy lives with his foster parents and their 17-year-old foster daughter. Timothy’s 17-year-old biological brother and 10-year-old biological sister live in separate foster homes. Timothy’s biological mother was sexually abused by her uncle, and Timothy’s brother is the product of this sexual assault. Timothy is in a public school and reportedly functions at grade level academically.

## Family History

Timothy’s biological sister was diagnosed with “disruptive behavior disorder” and posttraumatic stress disorder (PTSD). She is being treated successfully with bupropion. His biolog-

ical brother has been receiving individual therapy. His biological mother has a history of depression, also treated successfully with bupropion.

## **Mental Status Examination**

Timothy appeared his stated age. He was cooperative. No psychomotor agitation or retardation was noted. His affect was constricted and his mood dysphoric. His thought processes were linear, and content exhibited suicidal ideation with a plan to jump off a building or set himself on fire. He denied homicidal ideation or perceptual disturbances. Timothy was alert and oriented to person, place, and time. His estimated intelligence was below average. His insight and judgment were poor.

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# **Psychotherapeutic Perspective**

Anthony P. Mannarino, Ph.D.

## **Diagnostic Formulation**

Timothy, an 11-year-old with below-average intelligence, has been in foster care for 2 years because of neglect in the family of origin and sexual abuse by an older brother. His two siblings live in different foster homes. Timothy has supervised visits with his biological mother, but she missed the two most recent visits, including the one just prior to his birthday. Over an extended period, he has exhibited symptoms consistent with attention-deficit/hyperactivity disorder (ADHD; American Psychiatric Association 2013). Also, he displays oppositional and aggressive behaviors, which increase markedly after visits with his biological family. After the most recent missed visit with his mother, Timothy has become depressed and expressed suicidal ideation with a plan.

## **DSM-5 Diagnosis**

- F90.2 Attention-deficit/hyperactivity disorder, combined presentation (past history)
- F43.25 Adjustment disorder with mixed disturbance of emotions and conduct
- Rule out major depressive disorder, single episode

- Rule out posttraumatic stress disorder
- Rule out oppositional defiant disorder
- Rule out disruptive mood dysregulation disorder
- Rule out mild intellectual disability

## Rationale for Diagnosis

Timothy's diagnosis of ADHD seems reasonably clear from the history, although a complete developmental and social history was not available. He presents with both serious internalizing problems (depressive symptoms) and ongoing externalizing difficulties (oppositional and aggressive behaviors) but does not yet meet full criteria for either a depressive disorder (major depressive disorder or disruptive mood dysregulation disorder) or oppositional defiant disorder. Hence, the current diagnosis is adjustment disorder with mixed disturbance of emotions and conduct. Additionally, PTSD is a possible diagnosis for Timothy given his history of neglect and alleged sexual abuse and the presence of traumatic stress symptoms (hypervigilance, increased startle response, fear of the dark, insomnia, reckless behavior, nightmares).

## Additional Rule-Out Diagnoses

To make a more definitive diagnosis related to depression, I would recommend that Timothy be administered the Children's Depression Inventory (Kovacs 1985) and that his foster mother complete the parent version of the inventory. Also, I believe that additional information should be sought about the traumatic events to which Timothy may have been exposed. Although the social worker has indicated that Timothy was exposed to neglect and sexual abuse, there is no information regarding this boy's perception of these events. Therefore, I would recommend that Timothy be administered either the Traumatic Events Screening Inventory for Children (Ford et al. 1999) or the UCLA PTSD Reaction Index (Steinberg et al. 2013) (the DSM-5 version of the PTSD Index is currently being validated) and that the foster mother be asked to complete the parent version of the UCLA PTSD Index. These instruments would provide information about abuse, violence, and other forms of trauma to which Timothy may have been exposed, as well as PTSD symptoms in relation to these events.

## Treatment Recommendations

Although Timothy likely should continue to take stimulant medication for his ADHD symptoms, his symptoms of distractibility, irritability, and angry outbursts may be related to his trauma history, in which case trauma-focused treatment may result in a reduction of these symptoms. Therefore, as the primary intervention, I would recommend trauma-focused cognitive behavioral therapy (TF-CBT; Cohen et al. 2006) for Timothy and his fos-

ter mother. TF-CBT has the most empirical support of any treatment for children and adolescents who have been sexually abused and is effective in reducing depressive symptoms, PTSD symptoms, and moderate behavioral problems (Cohen et al. 2004; Deblinger et al. 2011). Also, research demonstrates that these treatment gains are sustained for at least 1 year following the end of the intervention (Deblinger et al. 2006; Mannarino et al. 2012). Importantly, TF-CBT is appropriate for children who have experienced multiple traumatic events, as appears to be true with Timothy. Because an acute hospitalization would be too brief to allow implementation and completion of TF-CBT, this treatment would be initiated on an outpatient basis. It would be helpful, though, if the inpatient team could educate Timothy's foster mother about its potential benefits.

TF-CBT is a components-based model that is derived from cognitive-behavioral principles but also draws from attachment theory, developmental neurobiology, family therapy, and humanistic therapy (Cohen et al. 2006). It is a short-term treatment approach (12–20 sessions), with a significant parenting component. In Timothy's case, it would be appropriate for the foster mother to participate in TF-CBT with him. The components of TF-CBT can be summarized by the PRACTICE acronym: **P**sychoeducation and parenting skills, **R**elaxation, **A**ffective regulation, **C**ognitive processing, **T**rauma narrative and processing, **I**n vivo mastery, **C**onjoint sessions, and **E**nhancing safety.

The early treatment sessions with Timothy would be devoted to the skills components of TF-CBT. Psychoeducation could be beneficial to Timothy to help him understand the impact of sexual abuse and other traumatic events and to normalize his traumatic stress symptoms. The relaxation component could assist in reducing hyperarousal symptoms. The affective regulation component would focus on Timothy's angry feelings and would be geared toward helping him to use words to express his disappointment and anger, instead of using externalizing behaviors. The foster mother would also receive the psychoeducation component and work with the therapist to develop appropriate behavioral interventions for Timothy's externalizing problems in the foster home (parenting skills).

The cognitive processing component would focus on the connection between thoughts, feelings, and behaviors. Timothy's depressive symptoms may be related to self-blame for his biological mother's missing visits, and this component would be geared toward helping him to identify inaccurate cognitions and to replace them with more accurate and helpful thoughts. Assuming that Timothy was indeed sexually abused by his older brother, the trauma narrative and processing would be the opportunity for him to tell his story about what occurred, including associated secondary adversities. The major goal of the trauma narrative and processing is to help children to overcome their avoidance, which is the hallmark of PTSD.

In addition to medication treatment and psychotherapy, I would strongly recommend that Timothy's therapist consult with the local child protective service system regarding his ongoing visitation with his biological mother. Because he has been in foster care for 2 years, a permanent placement plan needs to be devised. Also, the child protective service system caseworker needs to be apprised of the detrimental impact of missed visits with his biological mother.

If this initial treatment were not successful, and the placement plan was for Timothy to return to his biological mother's care, I would recommend family sessions for him and his mother, possibly including his siblings for some sessions. These sessions should address abuse and neglect issues, attachment concerns, and permanency planning.

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## Psychopharmacologic Perspective

Lisa M. Cullins, M.D.

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Paramjit T. Joshi, M.D.

### Diagnostic Formulation

Timothy is an 11-year-old black male who was hospitalized secondary to suicidal ideation with a plan. The major biological contributors to Timothy's presentation are the family history of mood and anxiety disorders and sexual abuse. The developmental history is unknown, but potential exposure to substances in utero could contribute to cognitive delays, ADHD symptoms, and emotional dysregulation. The major psychosocial contributors to Timothy's psychopathology are his history of neglect and sexual abuse, placement in foster care, and ongoing educational difficulties and disruptive behavior in the classroom.

Timothy needs to be assessed for PTSD. He suffered significant early trauma. Sexual abuse was recounted once; otherwise, he has either avoided or had difficulty recalling the trauma. Neglect is the most common reason for foster care placement and is a traumatic event whose magnitude and pervasiveness are often overlooked (Bass et al. 2004). Timothy endorsed hypervigilance, recurrent nightmares, hyperstartle, difficulty concentrating, irritability, anger, fear of the dark, and insomnia, all of which are symptoms consistent with PTSD.

Another consideration is whether Timothy has major depressive disorder. Timothy mostly experienced intermittent, reactive mood. Occasional sustained periods of unprovoked irritability and anger lasted for several days. He denied neurovegetative symptoms except insomnia and poor concentration, which overlap with PTSD symptoms. The only time

he had suicidal ideation was during the 2-day period prior to hospitalization. Although Timothy exhibits some symptoms of major depressive disorder, he does not appear to meet full criteria.

Adjustment disorder with depressed mood should also be considered as a diagnosis for Timothy. Missed visits with his mother have been a chronic stressor. However, two consecutive missed appointments and another missed birthday magnified this stressor. Timothy had never previously expressed suicidal ideation, recklessly run into traffic, or been “out of control.” Adjustment disorder secondary to this intensified chronic stressor could be considered; however, a preexisting disorder such as PTSD, with exacerbated symptoms triggered by traumatic memories, is more likely.

Timothy exhibited classic symptoms of ADHD, corroborated by his teacher, foster parent’s report, and rating scales.

## DSM-5 Diagnosis

- F43.10 Posttraumatic stress disorder
- F90.2 Attention-deficit/hyperactivity disorder, combined presentation
- Rule out major depressive disorder
- Rule out adjustment disorder with mixed disturbance of emotions and conduct
- Z62.29 Upbringing away from parents
- Z62.891 Sibling relational problem
- Z62.820 Parent-child relational problem
- Z69.010 Encounter for mental health services for victim of child neglect by parent
- Z69.020 Encounter for mental health services for victim of nonparental child sexual abuse

## Treatment Recommendations

Timothy should be hospitalized to maintain safety until he no longer reports suicidal ideation and/or a short- and long-term safety plan can be developed. In addition to TF-CBT, medication to better target mood and anxiety symptoms should be considered given Timothy’s overall persistent decline in functioning. Efficacy studies have shown that selective serotonin reuptake inhibitors (SSRIs) are not the first-line treatment for PTSD in youth. Instead,  $\alpha$ -adrenergic agonists, atypical antipsychotics, and several mood stabilizers may attenuate some PTSD symptoms. However, the evidence is limited, and more controlled trials are needed (Strawn et al. 2010). Because of the dearth of literature on pharmacologic treatment of pediatric PTSD and the fact that Timothy’s mother and sister had a similar clinical

history and had positive responses to the second-line treatment bupropion, the same drug should be considered to target Timothy's mood and anxiety symptoms with the plan to switch to an SSRI if he does not respond. Targets should include improved mood and decreased irritability. Extended-release methylphenidate should be continued at the same dose to target ADHD symptoms while bupropion is slowly increased. Follow-up with an outpatient psychiatrist is essential for monitoring his progress.

A critical element in Timothy's treatment plan is TF-CBT, utilizing cognitive-behavioral and family therapy techniques as well as principles of attachment to address separation and loss, mood and anxiety, self-esteem, coping skills, and development of a trauma narrative. Concurrent sessions with his foster mother and biological mother should provide psychoeducation regarding Timothy's diagnosis, treatment, and effective parenting strategies, with a goal of promoting improved communication and positive behavior.

Uncertainty of reunification, adoption, or long-term foster care perpetuates symptomatology. Unreliability and inconsistency fuel anger, resentment, sadness, anxiety, frustration, ambivalence, confusion, irritability, and disruptive behaviors. Therefore, the court decision regarding Timothy's reunification status and permanency of current placement should be recommended to occur within a clear time frame so he might develop some sense of stability.

Despite numerous challenges, Timothy has many protective factors: continuity in a loving foster home and regular outpatient care over the previous 2 years, a period of time during which foster children experience an average of four to five placement disruptions (Carpenter et al. 2001) and have poor access to and/or fragmented health care (Staudt 2003). Finally, he exhibits the yearning to be loved, nurtured, protected, and cared for unconditionally.

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# CHAPTER 26

## The Legacy of War

### Irritability and Anger in an Adolescent Refugee

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Christopher M. Layne, Ph.D.

#### Case Presentation

##### Identifying Information

Ibrahim is a 16-year-old boy from Somalia. He lives with his grandmother and 23-year-old uncle.

##### Chief Complaint

Ibrahim was referred by his grandmother to the staff psychologist at a refugee community center because of anger problems and “spacing out” in class. He complains, “School is too hard—I can’t learn like I used to. I get so mad when the kids make fun of me because of my accent.”

##### History of Present Illness

Ibrahim’s grandmother took him to a psychologist at the refugee community center where she attends English classes and where Ibrahim receives after-school tutoring. She requested that Ibrahim be assessed after he was suspended from school for 2 days because of fighting. According to his grandmother’s report, Ibrahim “has not been the same” since they fled from Somalia. He is much more irritable and angry and is not interested in soccer or reading, which he enjoyed before his parents were killed. He is becoming more difficult for her to handle. She attributes his behavior to the influence of his friends, who lack supervision at home because their parents are “always working.” Ibrahim stays out with his friends until midnight on some school nights and sometimes does not come home at night on weekends.

He has had difficulty transitioning into mainstream classes from his English-intensive classes. Ibrahim is often teased by youth in the mainstream classes he attends. They make fun of his accent, and because he is 2 years behind his age group, they call him “stupid” and a “slow-poke.” He often argues with peers at school and was recently suspended for fighting. Ibrahim and his group of friends have also been in several fights with some Bosnian refugee boys who live in his apartment complex. Ibrahim reported that the boys were “disrespecting” them by mocking their language and clothes.

Ibrahim has a difficult time paying attention in class. His mind often wanders and sometimes goes blank. Time passes without his being aware of it. He often thinks about his family, particularly about the night when his parents were killed, although he tries not to think about what happened. When thoughts of what happened come up, he begins to feel frightened, sad, and angry. His teachers must sometimes call his name in class several times to get his attention. When Ibrahim refocuses mentally on what is currently going on around him, he feels disoriented and confused. Even though he tries hard to concentrate, he has difficulty remembering what he just learned. He reported that because he cannot use his arm properly since it was broken in the same attack in which his parents were killed, he is reminded of the attack whenever he plays sports. He has earned poor grades in physical education classes because he refuses to participate in most sports activities but will not tell his teacher why.

## Past Psychiatric History

While he was 11 years old and living in Somalia, Ibrahim witnessed the brutal murder of his parents by an antigovernment rebel group. His father was a police officer for the government and was deliberately targeted. Ibrahim was awakened by loud yelling when the rebels entered the family home in the middle of the night and shot his father point-blank in front of their family. When his mother threw herself onto her husband after he was first shot, the rebels also shot her. Enraged, Ibrahim charged at the attackers, who broke his arm with the dull edge of a machete as a warning to flee and not seek retribution. The rebels then forcibly abducted his terrified older sister, most likely as a “war bride,” and threatened to kill Ibrahim and his grandmother if they did not flee immediately. Ibrahim and his grandmother fled across the border to Kenya in a refugee caravan.

During this refugee flight, the pair became involuntarily separated after rebels began to threaten and pursue their caravan. Alone, afraid, and suffering from his untreated injuries, Ibrahim was taken in by other members of his tribe, who allowed him to travel with them. The group hid from the rebels by traveling mostly at night. After arriving at a refugee camp in Kenya, Ibrahim was reunited with his grandmother and lived there with her for the next 3 years. While living in the refugee camp, Ibrahim and his grandmother lived in fear that rebels would come across the border to attack them or that local inhabitants would rob them.

Although Ibrahim has participated in a mentoring program supervised by a school counselor, he has never participated in therapy or been prescribed any psychotropic medication.

## **Substance Abuse History**

Ibrahim has experimented with alcohol with his friends. He has stolen beer on occasion from his uncle and drunk it.

## **Medical History**

Ibrahim did not receive proper treatment for his broken arm for several weeks, until he received medical treatment by the Red Cross in the refugee camp. His arm is slightly bent and cannot fully extend as a result. This physical disability evokes intrusive thoughts of the night his parents were killed, his sister was abducted, and he and his grandmother were forced to flee. He tries to distract himself from these memories by listening to loud music.

## **Developmental History**

According to his grandmother, Ibrahim met all developmental milestones at the appropriate ages.

## **Social History**

Ibrahim lives with his grandmother and 23-year-old uncle, who was in the Somali army at the time Ibrahim's family was attacked. Ibrahim has an older sister who has been missing since his parents were killed. When he was age 14, Ibrahim and his grandmother moved from Kenya to Denver, Colorado, where they have lived for the past 2 years. Ibrahim immigrated to the United States with his grandmother; his uncle joined the family in Denver a year later after being released from prison, where he had been held for opposing a local warlord in Somalia. Ibrahim's grandmother reports that her son, Ibrahim's uncle, drinks too much and sometimes yells at Ibrahim.

The grandmother works full time at a local hotel where she cleans rooms, and the uncle works at a local food-processing factory. Ibrahim is consequently unmonitored after school. He is enrolled in an after-school tutoring program at the refugee center but attends only several times a week. Ibrahim has several close Somali friends who live in his apartment complex. Ibrahim states that he "gets along fine" with his grandmother but considers her "old-fashioned" and says that she "does not understand what life is like for teenagers here in the United States." His grandmother, on the other hand, worries that Ibrahim is becoming "too American and forgetting his native culture." She expressed concern about his fighting and stated that even though she and his uncle are there to help him, Ibrahim sometimes makes comments such as, "Since my parents got killed, I have to protect myself because there's no one to look out for me." Ibrahim must often translate for his grandmother because he has learned English much more quickly than she has. He finds it stressful to translate for her at the bank, at stores, and with his teachers during parent-teacher conferences.

## **Family History**

Ibrahim's grandmother reports that she has had intermittent episodes of depression since immigrating to the United States. She attributes these depressed thoughts and feelings to

the family's poor financial situation, the need to adapt to a new setting and culture, and her inability to help her grandson in school. She still grieves over the loss of her daughter and son-in-law (Ibrahim's parents), whose murders she witnessed, and she worries about the fate of her abducted granddaughter and how to locate her. Ibrahim's uncle has abused alcohol since immigrating. His alcohol use has led to inconsistent work attendance and the loss of a job because of frequent absences and poor work performance.

## Mental Status Examination

Ibrahim met with the psychologist during a tutoring session. He was dressed in baggy clothes that made it difficult to gauge his body weight. He was quiet, giving brief answers when asked direct questions. He appeared sullen and mildly agitated, making little eye contact throughout the discussion. He did not display evidence of psychosis, and his thinking appeared logical and coherent. He reported that he would never hurt himself or try to kill himself because it would be "against my religious beliefs." He said he gets in fights because he is unable to control himself when people yell at him, and he just wants to "smash their faces." He also reported getting very upset when he hears screaming because it reminds him of his mother being killed and his sister being abducted.

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# Psychotherapeutic Perspective

Judith A. Cohen, M.D.

**IN THIS** commentary I address Ibrahim's trauma and traumatic/complicated grief psychosocial treatment issues. If I were his therapist, I would also consider systemic issues, but these considerations are beyond the scope of this commentary.

## Diagnostic Formulation

Ibrahim displays symptoms of posttraumatic stress disorder (PTSD) as they are commonly manifested in youth who have experienced severe and/or repeated traumatic events, compli-

cated by multiple deaths; loss of cultural, familial, and peer supports; and economic and other psychosocial stressors. Ibrahim's DSM-5 (American Psychiatric Association 2013) symptoms of PTSD include the following:

- Criterion A—exposure to multiple life-threatening traumas, including witnessing his parents' murders and threats of serious personal physical injury and death from the murderers
- Criterion B—intrusive thoughts about his family and the night when his parents were murdered, accompanied by psychological distress
- Criterion C—avoidance of thinking about his parents' murders; not participating in sports because his inability to use his arm properly reminds him of the trauma
- Criterion D—persistent negative emotional state (anger, fear, sadness); exaggerated negative beliefs about others and the world (“Since my parents got killed, I have to protect myself because there's no one to look out for me”); markedly diminished interest and participation in significant activities (e.g., soccer, reading, after-school program, family)
- Criterion E—irritability and angry outbursts (fighting), difficulty concentrating, poor attention, reckless or self-destructive behavior (alcohol use)

Ibrahim's impairment is present in school, with peers, and at home.

## **Epidemiology and Comorbidity**

Many youth with PTSD also have another DSM-5 diagnosis. The most common comorbid conditions include anxiety disorders, depressive disorders, externalizing disorders (e.g., oppositional defiant disorder, attention-deficit/hyperactivity disorder, conduct disorder), and substance use disorders. Ibrahim has used alcohol and has some problems with fighting, but his more concerning symptoms are related to depression. He does not deny suicidality but instead says that this would be “against my religious beliefs,” suggesting that perhaps he has thought about and would even consider suicide if it were not proscribed by his religion. In addition to assessing his difficulty concentrating, survivor guilt, irritability, and substance use (which might represent an attempt to self-medicate affective symptoms), I would more thoroughly assess Ibrahim for depressive and suicidal symptoms.

## **Instruments**

Self-report instruments such as the UCLA PTSD Reaction Index (Steinberg et al. 2013) or the Child PTSD Symptom Scale (Foa et al. 2001) are helpful for assessing PTSD symptoms in teens. The clinician should also ask caretakers and other adults, such as Ibrahim's grandmother or teachers who know him, to complete the caregiver version of this Reaction Index. A depression screen such as the Beck Depression Inventory—Second Revision (Beck et al. 1996) would also be helpful. Although inadequate information is provided in the case

presentation, Ibrahim might also be experiencing traumatic grief (currently included as persistent complex bereavement disorder in DSM-5 Section III, “Conditions for Further Study”), related to witnessing his parents being killed and his sister’s abduction and perhaps other experiences. The Inventory of Complicated Grief—Revised for Children (Melhem et al. 2013) may be helpful in assessing complicated grief responses.

## DSM-5 Diagnosis

- F43.10 Posttraumatic stress disorder
- Rule out alcohol use disorder
- Rule out major depressive disorder
- Rule out oppositional defiant disorder
- Rule out the proposed DSM-5 diagnosis of persistent complex bereavement disorder, including its traumatic bereavement specifier
- Status postfractured arm with residual disability

## Treatment Recommendations

To address Ibrahim’s PTSD and possible comorbid conditions, I would recommend individual or group trauma-focused cognitive-behavioral therapy (TF-CBT; Cohen et al. 2006, 2012) or trauma and grief component therapy for adolescents (TGCT-A; Layne et al. 2008; Saltzman et al., in press). Among the currently available evidence-based treatments for pediatric PTSD, TF-CBT has the strongest empirical evidence, with positive outcomes in 15 randomized controlled treatment trials, including two for African war-exposed youth like Ibrahim (McMullen et al. 2013; O’Callaghan et al. 2013). TF-CBT can be provided either individually (to youth and their parents or caregivers) or in group settings. TF-CBT effectively addresses multiple problems similar to those that Ibrahim displays, including PTSD, traumatic grief, behavior and conduct problems, and depressive symptoms, and because it is widely disseminated, community therapists are likely to be available to provide TF-CBT to Ibrahim. I would strongly encourage Ibrahim’s grandmother to participate in TF-CBT with him to increase her understanding about his PTSD symptoms and to help her support him. (Although her involvement would be optimal, if Ibrahim refused or if his grandmother were unable to participate in treatment, I would provide TF-CBT to Ibrahim without his grandmother.)

Psychoeducation about PTSD and trauma reminders would help Ibrahim and his grandmother to make sense of many of Ibrahim’s behaviors. For example, yelling and screaming remind Ibrahim of the night his parents were murdered, and these trauma reminders lead to anger and fighting—both traumatic responses. Similarly, Ibrahim tries to avoid thinking about his family and Somalia because these serve as trauma reminders for him. Psychoed-

education could help his grandmother to recognize and respond to this behavior as PTSD avoidance rather than as Ibrahim “forgetting his native culture.”

After his father’s murder, Ibrahim and his mother were horrifically punished for showing emotion (his mother was murdered, and Ibrahim was brutally injured). Ibrahim thus learned under extreme duress not to express feelings. Similarly, following his parents’ murder, his sister’s kidnapping, and his own separation from his grandmother, Ibrahim learned that he had to protect himself because there was no one to look out for him. Although these coping strategies may have been helpful or even necessary in his previous dire circumstances, now that he is safe, they are no longer adaptive. TF-CBT would provide Ibrahim with the opportunity to develop and practice more adaptive coping strategies through relaxation, affective modulation, and cognitive processing skills. His grandmother would also learn these skills and support Ibrahim’s use of them, particularly when he experiences trauma reminders.

After Ibrahim masters these skills in TF-CBT, I would assist him in developing a narrative of his personal trauma experiences and making meaning of these experiences. With appropriate preparation and with his agreement, we would have several conjoint parent-child sessions with his grandmother as parent. During these sessions, Ibrahim would share his narrative with his grandmother, they would discuss their feelings and thoughts about these experiences, and we would develop a plan for maintaining the family members’ safety. Families who participate in TF-CBT often find these conjoint sessions to be the most rewarding part of the treatment process. Although hearing her grandson’s narrative would likely be painful, the grandmother would be reassured that Ibrahim has not forgotten his native culture, and hopefully their ability to communicate about other issues would improve. Perhaps being able to talk about Ibrahim’s traumatic experiences would decrease the grandmother’s depression and make her more available to Ibrahim as well, thereby possibly making her better able to address family issues, including the uncle’s behaviors.

TF-CBT addresses issues related to safety, such as making healthy choices about when and whether to fight or about using drugs and alcohol for affective regulation. TF-CBT also provides traumatic grief components, which ideally would be provided conjointly to Ibrahim and his grandmother (who is also suffering from the traumatic loss of her daughter and son-in-law).

If Ibrahim preferred group treatment, I would recommend group TF-CBT or TGCT. Both group models have evidence of efficacy for war-exposed youth. In group TF-CBT, each youth develops his or her own trauma narrative during several individual breakout sessions (one-on-one sessions with the therapist and the youth), whereas in group TGCT the group members construct and share their individual trauma or loss narratives within a group setting, with the option of working through their most difficult experiences in individual pull-out sessions. Group TGCT has evidence of improving both PTSD and traumatic grief symptoms (Layne et al. 2008). A potential benefit for youth like Ibrahim is that group TF-CBT has been shown to improve conduct and prosocial symptoms as well as PTSD and depressive symptoms (McMullen et al. 2013; O’Callaghan et al. 2013). Either group model would likely be highly effective in addressing Ibrahim’s problems.



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# Psychopharmacologic Perspective

Schuyler W. Henderson, M.D., M.P.H.

Cyrus Mathew, M.D.

## Diagnostic Formulation

Originally from Somalia, Ibrahim is a 16 year old who immigrated to the United States at age 14 with his grandmother, who is concerned about his anger problems and school performance. At age 11 he witnessed the brutal shooting of his mother and father, saw the abduction of his sister, and had his arm broken by an antigovernment rebel group.

Ibrahim meets DSM-5 criteria for PTSD. As a result of severe traumas, which he both experienced directly and witnessed, he has symptoms in the four symptom clusters (a change from three clusters in DSM-IV-TR [American Psychiatric Association 2000]): intrusion, avoidance, changes in mood and cognition, and alterations in arousal and reactivity. Ibrahim has intrusive symptoms of distressing memories and dissociative reactions that leave him confused and disoriented when he refocuses on what is occurring around him. He consistently avoids most sports because his now misshapen arm evokes memories of the slaughter of his parents—memories that he seeks to suppress. His traumatic experience has had an impact on his mood and his cognitions about the world and people in it; despite the fact that his grandmother and uncle try to help him, he feels that he is alone and that there is no one to protect him since his parents' deaths. He also experiences irritability, has angry outbursts and fights at school, and has problems with focus and concentration. These symptoms have included potentially reckless behaviors (e.g., staying out all night). The symptoms have also resulted in social and occupational dysfunction.

The overall constellation of PTSD symptoms in DSM-5 remains the same as in DSM-IV-TR. Fundamentally, a diagnosis requires a traumatizing event with residual impact on those constituents of the self over which one has the least apparent conscious control: memories, the autonomic nervous system, and the homeostasis of psychic integration. In DSM-5, the traumatic event no longer has to require subjective feelings of fear, helplessness, or horror (Criterion A2 in DSM-IV-TR), qualifiers that made intuitive sense but did not improve diagnostic accuracy and could not account for the heterogeneity of immediate feelings during a traumatic event. The most significant change in DSM-5—the inclusion of a preschool subtype—does not pertain immediately to Ibrahim. Overall, however, a

finding of PTSD may be common in refugee youth, with reports of prevalence rates from 50% to 90% in various studies (Lustig et al. 2004).

Careful screening for major depressive disorder in Ibrahim is indicated. Although he meets certain criteria, others are not evident in the history provided, and some symptoms such as his difficulty concentrating may be better accounted for by PTSD. He clearly has lost interest in activities that previously amused him, is irritable, and demonstrates mild psychomotor agitation on mental status examination, but further inquiry would be needed to determine whether he has experienced sleep problems, changes in weight or energy level, feelings of worthlessness or guilt, or suicidal ideation. The incorporation of potentially depressive symptoms into a diagnosis of PTSD may prevent overdiagnosis of comorbidities (e.g., giving two diagnoses instead of one), but there is some evidence that when depression and PTSD coexist, depression is more closely associated with impairment in functioning in refugee populations (Momartin et al. 2004).

A differential diagnosis might also include an adjustment disorder or other specified trauma- and stressor-related disorder,<sup>1</sup> although at this point Ibrahim's constellation of symptoms and their severity are better explained by PTSD. Ibrahim should also be screened for an alcohol use disorder because it might complicate his treatment course unless addressed early. Ibrahim is experimenting with alcohol, has stolen alcohol from his uncle, and may be using alcohol to cope with painful internal experiences. If his drinking is contributing to social and or school problems, he may meet DSM-5 criteria for an unspecified alcohol-related disorder; however, clinical judgment is required to elucidate whether these difficulties are caused by alcohol use or, more likely, his PTSD.

## DSM-5 Diagnosis

- **F43.10 Posttraumatic stress disorder**
- **Rule out major depressive disorder**
- **Rule out alcohol use disorder**

## Treatment Recommendations

Approaching Ibrahim's treatment requires a multimodal approach that addresses his psychological and social needs (Cohen et al. 2010). Although this section is devoted to psychopharmacology, the first treatment of choice is psychotherapy, specifically a trauma-focused psychotherapy. However, if psychotherapy does not lead to relief of symptoms or if further inquiry confirms the presence of a major depressive disorder, medication may be used to augment psychotherapy or to provide symptom relief.

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<sup>1</sup>The newly proposed persistent complex bereavement disorder included in Section III of DSM-5 could be considered, but as a condition for further study it cannot be formally diagnosed.

All children and families deserve explanations for any recommended treatment modalities, but the explanation for the use of psychopharmacology requires particular attention. Although informed consent is rightfully understood to be a universal ethical requirement, it is also a culturally informed model for a relationship between physician and patient; families may have different expectations for how much is explained to them, what the role of the explanation is, and what their role is in consenting. Similarly, there are cross-cultural challenges in explaining the function and efficacy of medicines. Under these circumstances, the physician-patient interaction requires not only an interpretation of language but sensitivity to how the language and the roles of physician, patient, and parent are being understood. Within-family differences in expectations, roles, and cultural familiarity with treatment modalities and psychopharmacology may also need to be negotiated.

The first line of psychopharmacological treatment would be a selective serotonin reuptake inhibitor (SSRI). Although there is little evidence for the use of SSRIs in pediatric populations with PTSD, SSRIs have established efficacy in adults with PTSD (Stein et al. 2000). One open-label study compared children and adolescents with adults and demonstrated improvements in core PTSD symptoms in both groups using citalopram 20–40 mg/day (Seedat et al. 2002). Additionally, some evidence supports the use of fluoxetine (Yorbik et al. 2001) or the addition of sertraline to TF-CBT (Gentile 2014) in children and adolescents.

In pediatric populations, there is no sustained evidence to support the use of other medications, although sympathetic tone and symptoms of hyperarousal have been targeted with clonidine and  $\beta$ -adrenergic antagonists. Despite the paucity of empirical evidence, pharmacological interventions may be incorporated into a multisystemic approach, including, but not limited to, as an adjunct to psychotherapy and other resilience-building strategies (Cohen et al. 2010), particularly those that focus on the child's strengths and environmental supports (Layne et al. 2009; Saxe et al. 2006) and engage the child in school-based mental health services, social services, and community supports.

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# CHAPTER 27

## Moody Child

### Depression in the Context of Parental Divorce

Nicole E. Mahrer, Ph.D.

Sharlene A. Wolchik, Ph.D.

#### Case Presentation

##### Identifying Information

Jamie is an 11-year-old girl who was brought for an evaluation by her mother because of concerns about moodiness and clinginess. She lives with her mother and her 7-year-old brother and attends fifth grade in a regular education class.

##### Chief Complaint

Jamie has become increasingly irritable and moody over the last couple of months. Also, she becomes distressed when her mother spends time with adults rather than with her.

##### History of Present Illness

During the past few months, Jamie has frequently experienced sudden changes in moods and has been increasingly sullen and irritable. According to Jamie's mother, Jamie has seemed sad and unhappy or tense and anxious most days over the past couple of months. She often fights with her brother and her friends. Jamie's relationship with her mother is also strained. Both Jamie and her mother expressed sadness that their relationship has deteriorated over the past few months, and Jamie's mother noted that although Jamie was obedient and helpful before her parents' divorce, Jamie is now often disobedient and hostile toward her mother. Furthermore, Jamie gets upset whenever her mother wants to spend time with adult friends outside the house. When her mother talks about such plans, Jamie pleads with her mother to change her plans. Jamie frequently cries as her mother gets ready to leave the house to meet friends. On several occasions during the last month when she has been angry with her mother, Jamie has made statements like "I wish I were dead" or "I am going to run away." However, Jamie has neither talked about specific plans to commit suicide nor run away from home, and she denies current suicidal ideation. Jamie and her

mother deny any changes or problems with Jamie's sleeping, energy level, or weight. In addition, Jamie denies specific worries about harm coming to her or her family.

Jamie's moodiness began about 1½ years ago, shortly after her parents decided to divorce and her father moved out of the family's home. Her symptoms have become more frequent and intense over the last few months. Although her mother cannot identify an environmental precipitant for the increase in symptoms, she noted that after her ex-husband moved out of the house, she herself went through about a year when she was depressed and struggling with adjusting to life as a single mother. She also noted that although she was very worried about the effects of the divorce on her children, she probably did not spend as much time with them as she should have during this period and that she did not have the patience or mental energy to really "be there" for her children. Jamie's mother also reported that since the divorce was finalized 6 months ago, she has been trying to reestablish her own social network, so she has been spending more time outside the home than she did before the divorce was finalized. She also mentioned that about 4 months ago the family moved, which means that the children are enrolled in a new school and have much less contact with their friends and cousins who lived in their old neighborhood. Jamie's mother commented that on the rare occasion that Jamie sees her old friends, she seems to "act like herself" again.

## Past Psychiatric History

Jamie has never participated in therapy and has never been given a prescription for psychotropic medication.

## Medical History

Jamie's medical history is unremarkable.

## Developmental History

As an infant and toddler, Jamie was somewhat reserved and shy in new situations, although this was never seen as an indicator of pathology and did not impair her functioning.

## Social History

Jamie lives with her biological mother and her 7-year-old brother. Her parents physically separated about 1½ years ago and were legally divorced 6 months ago. Her mother, an accountant at a small company, has primary custody of both children. The family moved about 4 months ago, and the children enrolled in a new school. Jamie spends time with her father at least once a week. These visits are not scheduled; the father drops by the house and if the children are there, he spends time with them. The frequency and nature of the contact between Jamie and her father have been stable since he moved out of the house. Jamie's mother noted that over the last year or so, she and her ex-spouse have rarely argued or fought. The family has no history of neglect or abuse. Jamie is currently in fifth grade. Prior to her parents' separation and divorce, Jamie's grades were mostly As and Bs; for the last year she has received mostly Cs. After her typical summer break from piano lessons, Jamie refused to start taking lessons this fall, despite seeming to enjoy her lessons over the previous 3 years. She also dropped out of her Girl Scout troop the previous month.

## **Family History**

Jamie's parents and brother have never been treated for psychological problems. Jamie's maternal grandfather has a history of alcohol abuse.

## **Mental Status Examination**

Jamie was well dressed for the interview. She appeared her stated age. She provided brief responses to the questions. Jamie's affect was sad and somewhat anxious. She denied current suicidal ideation but stated that she sometimes wishes she were dead. Her thinking was logical and coherent. There was no evidence of psychosis.

## **Structured Assessment Measures**

Jamie's score on the Children's Depression Inventory (CDI; Kovacs 1992) and the Revised Children's Manifest Anxiety Scale, Second Edition (RCMAS-2; Reynolds and Richmond 2008), were in the clinical range. Her mother's ratings of Jamie on the Child Behavior Checklist (CBCL; Achenbach 1991) were in the clinical range on the Internalizing Behavior Problems subscale and in the nonclinical range on the Externalizing subscale. Measures assessing family functioning indicated a high number of divorce-related stressors on the Divorce Events Schedule for Children (Sandler et al. 1988) and low levels of parental warmth and high levels of inconsistent discipline on the Child Report of Parental Behavior Inventory (Schaefer 1965). Jamie's score on the Children's Perception of Interparental Conflict Scale (Grych et al. 1992) was not elevated.

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# **Psychotherapeutic Perspective**

Clarice J. Kestenbaum, M.D.

## **Diagnostic Formulation**

At first glance, Jamie's problems seem straightforward: she appears to be a sad and anxious preteen girl in the wake of her parents' divorce. However, 18 months after her father left home, Jamie continues to have symptoms that indicate psychopathology: anxiety and anger when her mother goes out; tearfulness and loss of interest in formerly enjoyable activities, such as Girl Scouts and piano lessons; social withdrawal; a drop in academic performance; and feelings that "I wish I were dead."



Moreover, Jamie's scores on two structured instruments (CDI and RCMAS-2) were in the clinical range, and her mother's rating on the CBCL was in the clinical range on the Internalizing Behavior Problems subscale.

Other stressors besides parental divorce include Jamie's moving to a new neighborhood, enrolling in a different school, and losing contact with former friends. Her mother's depression could have influenced Jamie's state of mind as well.

To evaluate Jamie's current state, one would need to know more about her early development. Did Jamie, a quiet and shy little girl, have difficulty separating from her mother in the preschool years? Was her attachment secure or insecure (Kestenbaum 2003)? Was her mother depressed prior to the divorce (Olfson et al. 2003; Weissman 2002)? Did Jamie's symptoms predate the divorce?

Although the negative effects of divorce on children are well established, as noted by Huurre et al. (2006), Kelly (2000) noted in a 10-year review that children of divorced parents, compared with children from intact homes, have many psychological symptoms that can be accounted for in the years prior to the divorce.

I would also want to know whether Jamie has a nonverbal learning disorder that impairs her organizational skills necessary for academic success in middle and high school. I would obtain a neuropsychological test battery before beginning treatment to determine whether Jamie's academic problems result from psychological conflict or neuropsychiatric deficits.

Jamie meets criteria for DSM-5 (American Psychiatric Association 2013) persistent depressive disorder (dysthymia) of at least 1 year's duration, as demonstrated by her loss of interest in piano lessons and Girl Scouts, poor concentration in school, and occasional feelings of hopelessness. She also meets criteria for separation anxiety disorder; she is greatly distressed when her mother leaves for brief periods or spends time with friends. She also may have a specific learning disorder.

## DSM-5 Diagnosis

- F34.1 Persistent depressive disorder (dysthymia), early onset
- F93.0 Separation anxiety disorder
- Rule out specific learning disorder

## Treatment Recommendations

Of the several treatment options I could recommend, my first choice for Jamie would be individual psychodynamic psychotherapy. Several relatively recent evidence-based studies have demonstrated the benefits of psychodynamic therapy for adolescent disorders (Gerber et al. 2011; Shedler 2010). Moreover, clinical illustrative vignettes have been described for 60 years (Freud 1958). Interpersonal therapy and cognitive-behavioral therapy have been researched more assiduously during the past decade; nevertheless, I believe Jamie would benefit from an in-depth examination of her life through psychodynamic psychotherapy. I would explore unconscious conflicts, utilize the transference plus real relationship, analyze resistance, and help her gain insight into her behavior and feelings of loss of "the way things were" that con-

tribute to her depression, while establishing a strong therapeutic alliance. The therapy would involve her dreams and fantasies using a variety of techniques such as storytelling and narrative therapy that I have found useful in working with adolescents (Kestenbaum 1985). The ability to put one's life into perspective is a process that children most likely do not possess until adolescence. Most children can recall life events in sequential fashion unless the process of recall is interrupted by a traumatic event such as death or divorce.

The use of narrative and storytelling is suitable for exploring the inner lives of children, particularly those who do not wish to talk about their feelings and behaviors. In this technique, the young child dictates a story to the therapist so that spontaneity and flow will not be hampered by rules of spelling or grammar. I keep a special loose-leaf notebook for each child who wants to write a "book," with plenty of space for illustrations. I ask questions about the characters and their backgrounds and motives and record the information in a separate notebook for future reference. Thus, a dual purpose is served: the child has a store of information to include in his or her book, and I have psychodynamic material to help me plan the direction of treatment. Occasionally, young adolescents are willing to engage in "talk therapy" as well.

In Jamie's case, I would add a family component, arranging to see the parents on a regular basis or referring them to a family therapist. The parents could be seen together or, as in many divorce cases, on an individual basis. One goal is to ascertain whether the mother is still depressed and needs her own treatment. The father needs to have regular planned visits with Jamie rather than hit-or-miss appearances. Without treatment, I believe Jamie is at risk of developing major depression in adult life (Weissman 2002).

If the neuropsychological tests indicate that Jamie has learning difficulties, I would recommend remediation by a learning specialist.

If these measures fail to demonstrate improvement in Jamie's mood and behavior within 2 months, I would then add an antidepressant medication to the therapy, most likely a selective serotonin reuptake inhibitor (SSRI) approved by the U.S. Food and Drug Administration (FDA).

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## **Psychopharmacologic Perspective**

Bruce Waslick, M.D.

### **Diagnostic Formulation**

Although Jamie presents with some symptoms of major depressive disorder, such as depressed/irritable mood and diminished interest in activities, as well as some symptoms of

separation anxiety disorder, such as excessive distress when separation from her mother occurs or is anticipated, the full diagnostic criteria for either disorder are not met. Given that her depressive and anxious symptoms appeared in response to identifiable stressors (i.e., parents' separation and divorce and the concomitant changes in her social relationships and environment), she experiences impairment in multiple life domains (e.g., family, school), and the more severe symptoms have been present for less than 6 months, the criteria for adjustment disorder with mixed anxiety and depressed mood are met. Because the questionnaires and the clinical interview show cognitive (e.g., feelings of estrangement) and affective (e.g., sadness about the relationship) problems in the parent-child relationship, a parent-child relational problem may be indicated.

## DSM-5 Diagnosis

- **F43.23 Adjustment disorder with mixed anxiety and depressed mood**
- **Rule out major depressive disorder and unspecified depressive disorder**
- **Rule out separation anxiety disorder and unspecified anxiety disorder**

## Treatment Recommendations

Treatment intervention recommendations for Jamie need to take into account the final diagnostic impression, evidence-based treatment principles, available mental health resources, and family preferences. Jamie does not appear to be a serious danger to herself or others, and although she is experiencing suicidal thinking, it appears to be passive rather than active, she has no well-formed plan, and she appears to have no suicidal intent and no history of previous dangerous behavior. Outpatient care would seem to be appropriate for her presentation.

The best formulation from the diagnostic assessment suggests that Jamie's current presentation is most compatible with an adjustment disorder. In general, medication interventions are not considered first-line, necessary, or appropriate for most children such as Jamie experiencing an adjustment disorder. First-line interventions would generally include non-medication interventions such as counseling or psychotherapy for the individual child or for the family. Supportive counseling that addresses reactions to change and loss or technique-specific psychotherapy addressing mood and anxiety symptoms could be indicated. In rare circumstances, medications addressing acute symptoms of elevated anxiety or insomnia (melatonin, antihistamines, or low-dose benzodiazepines) may be prescribed on an as-needed basis if the symptoms occur in predictable situations and are particularly severe, but most child psychiatrists would tend to avoid the use of medications for clinical presentations such as Jamie's, at least as first-line interventions.

Given that Jamie is currently experiencing clinically significant levels of anxiety and depressive symptoms and also that she is manifesting clear issues with functional difficul-

ties, she needs to be monitored over time to make sure these symptoms resolve. If longitudinal monitoring indicates that the symptoms and functional impairments are not resolving or improving with nonmedication intervention and that the initial adjustment disorder diagnosis needs to be modified to a more accurate diagnosis, such as a major depressive disorder and/or a specific pediatric anxiety disorder (e.g., separation anxiety disorder), the decision making regarding pharmacologic intervention becomes much more complex. Medication intervention may then be appropriately considered to help alleviate the symptoms of depression and anxiety experienced by the child.

Antidepressant medications have been studied in children and adolescents with mood and anxiety disorders. Although the evidence for the superiority of antidepressants over placebo for pediatric depression in short-term randomized controlled trials is not overwhelmingly and uniformly positive, some evidence suggests that antidepressants can be an important component of a comprehensive treatment plan approach (Bridge et al. 2007). At the time of this writing, only fluoxetine and escitalopram have been approved by the FDA for the acute treatment of major depression in children and adolescents ages 8–17. Although other agents have been studied, no other medication has approval for this indication in this age group. The research track record of antidepressants for the acute treatment of pediatric anxiety disorders is actually stronger than that for pediatric depressive disorders (Bridge et al. 2007). Additionally, fluoxetine, sertraline, and fluvoxamine carry FDA approval for the treatment of pediatric obsessive-compulsive disorder (OCD) for youth ages 7–17. With the caveat that in DSM-5 OCD is no longer classified as an anxiety disorder but often features severe anxiety symptoms as a manifestation of the disorder, these three antidepressants are considered to have favorable risk-benefit profiles in at least one pediatric disorder with prominent symptoms of anxiety and might be considered to be reasonable treatment options in this case.

The available evidence and practice guidelines suggest that SSRIs, a subclass of antidepressants, are the medications of first choice for pediatric depressive and anxiety disorders. Other non-SSRI antidepressants (i.e., tricyclic antidepressants, serotonin-norepinephrine reuptake inhibitors) have been studied in youth with these disorders, but none have strong research support for their use as a first-line agent. Other antidepressants used to treat depression in adults (i.e., bupropion, monoamine oxidase inhibitors) have not been adequately studied in youth to make any kind of reasonable evidence-based recommendation and should likely be used only in treatment-refractory cases. Likewise, alternative medication approaches to anxiety commonly used in adults (i.e., benzodiazepines, buspirone) remain understudied in children and adolescents.

Providing the family with adequate information about the potential benefits and risks of SSRI therapy is important prior to initiating therapy. SSRIs are generally safe and well tolerated in adults and children. Serious adverse events are possible but occur relatively infrequently. Significant concern has been raised about whether SSRI therapy increases the risk of treatment-emergent suicidality specifically in youth and young adults. Since 2004, the FDA has required that SSRIs and all antidepressants carry a black box warning about treatment-emergent suicidality for pediatric patients, encouraging close observation of

youth taking SSRIs, especially during the initial phases of treatment (Hammad et al. 2006). A full understanding of the adverse event profile of these medications may lead some families to consider SSRI therapy unacceptable either for initial treatment intervention or at any time.

In Jamie's case, the family clearly will have a variety of options available in terms of reasonable treatment plans. Some, but not all, evidence in adolescents with depression suggests that combining SSRI therapy with an evidence-based psychotherapy may be the best and safest treatment for major depression (March et al. 2004) and for commonly occurring pediatric anxiety disorders (Walkup et al. 2008), but equivalent studies are not currently available for preadolescent patients with depressive disorders at this point. An approach commonly used in clinical practice in these situations, and suggested by some treatment guidelines (Birmaher et al. 2007; National Institute for Clinical Excellence 2005), is a "sequenced" approach, such as beginning with psychotherapy treatment, observing the acute response to psychotherapy, and then adding medication for subjects who show little or no improvement or whose symptoms worsen during acute treatment. Alternatively, SSRI therapy could be the first treatment in the sequence, with psychotherapy added for treatment nonresponders, depending on patient characteristics and family preferences.

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# CHAPTER 28

## Without My Mom, I'm Not Me

### Childhood Bereavement

Cynthia R. Pfeffer, M.D.

#### Case Presentation

##### Identifying Information

Ben, a 13-year-old male, lives with his father after his mother died when he was 11 years old. He attends eighth grade at a local public school.

##### Chief Complaint

Ben and his father consulted a child psychiatrist because of increasing problems since his mother's death 2 years earlier.

##### History of Present Illness

In the first year after his mother's death, Ben received much support from his family, friends, friends' parents, and school psychologist and principal. His maternal grandmother was his caretaker when his father traveled for business. During these times, Ben was anxious, cried inconsolably, and intensely longed for his mother. He told his grandmother that at night he pretended to talk to his mother and prayed that his father was safe.

In October of the second year after his mother died, Ben and his father moved from Pittsburgh, Pennsylvania, to New York City, where his father started a new job without need for professional travel. Ben was enrolled in a large public middle school where he felt lost because he had multiple teachers and infrequent visits with the school psychologist. He missed his former school and his friends and grandmother. His academic performance declined. He had persistent insomnia; felt sad, irritable, empty, and hopeless; and had a feeling that a part of him died. He intensely longed for his mother. He felt guilty that he was not at the hospital before his mother died. He lost interest in watching baseball and football games on TV, an activity he shared with his father. He was truant from school approximately three times weekly and sought out teenagers with whom he drank alcohol and



smoked marijuana. These drugs enabled him to avoid painful feelings about his mother's death. He wanted to die in hopes that he could be with his mother.

## Past Psychiatric History

When Ben was 11 years old, his mother, who had been ill with breast cancer for 3 years, unexpectedly died from a brain hemorrhage during a course of chemotherapy to treat metastasis to the lungs and brain. Ben's father had been optimistic that treatment would enable his wife to live for many years. To avoid telling Ben that his mother's cancer had worsened, his father had told Ben that his mother was treated with medications to prevent recurrence of her past cancer.

Ben did not see his mother during the week she died because he had cold symptoms and was told that he could spread his infection to her. Ben's father, summoned to the hospital when his wife became comatose, did not know how to tell Ben that his mother was fatally ill. The doctors advised that Ben should come to the hospital to be with his mother and talk about her deteriorating condition. Before his father could take Ben to the hospital, his mother died. Ben was at school when she died.

Immediately after her death, Ben's father called the school principal requesting help to tell Ben that his mother had died. The school psychologist and principal helped Ben's father during this sad discussion. Ben was overcome by the news and reacted intensely with crying, agitation, and repeated statements that if he had been at the hospital his mother would have gotten better. His father explained that the doctors said she was improving but she had begun to bleed in her brain, which caused her death. Ben repeatedly asked his father, "Who will take care of me if something happens to you?" His father patiently told Ben how much he loved him and that he would be with him, always.

Ben, an only child, was very close to his mother. While his father traveled for business, his maternal grandmother helped his mother care for Ben. When his mother became ill, Ben showed anxiety and reluctance to attend school. The school psychologist helped him overcome fears about his mother dying.

Ben's worries about parental death began at age 5 years, after his father was almost killed in a car accident and was hospitalized for 2 days. Four months after the car accident, Ben experienced agitation, crying, insomnia, and clinging to his mother. He was treated with psychotherapy by a child psychiatrist for several months to decrease anxiety symptoms.

## Substance Abuse History

After moving to New York City, Ben began abusing marijuana and alcohol several times a week with other teenagers while truant from school.

## Medical History

Ben had been a healthy child with normal developmental milestones and no hospitalizations, chronic illness, or allergies.

## Developmental History

Ben had chronic fears of separation from his parents and chose to be with his parents rather than with schoolmates. He feared that something bad would happen to his parents. He had no academic or learning problems until his mother's death 2 years earlier.

## **Social History**

Ben was an only child raised by his parents in Pittsburgh. His maternal grandmother was also a significant caretaker. His father worked as financial officer of a retail business, and his mother was an administrative assistant in a physician's office. He always had a few close friends. When he was 8 years old, his mother was diagnosed with breast cancer. Her treatment had progressed successfully, but she died unexpectedly from a cerebral stroke after 3 years of illness. One year after his mother died, Ben and his father, who would start a new job, moved from Pittsburgh to New York City.

## **Family History**

Ben's mother was the only person in her family to have cancer, and there was no maternal or paternal family history of psychiatric disorders.

## **Mental Status Examination**

Ben is a handsome young adolescent who showed signs of pubertal development. He responded logically to the psychiatrist's questions and spoke about his dysphoria and constant thoughts of his mother. He appeared sad, did not consistently look at the psychiatrist, and fidgeted. Ben acknowledged that he was anxious and worried that his father might die and that he would be left alone. He thought it would be better if he himself died and went to be in heaven with his mother. He denied auditory, visual, or tactile hallucinations or delusions. He wanted to feel better and described his drug experiences as helpful in decreasing his emotional pain.

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# **Psychotherapeutic Perspective**

Natalie Jacobowski, M.D.

Paula K. Rauch, M.D.

## **Diagnostic Formulation**

A complete diagnostic formulation will require additional information, including Ben's understanding of how his recent experiences may have affected his current presentation. Assessment should include evaluation of Ben's premorbid academic functioning, including any learning difficulties, social skills, and attentional symptoms that may have affected

his school transition and his presenting symptoms. Family history of anxiety and depression in his parents or grandmother could be a genetic contributor or have an impact on their parenting styles.

Ben's early difficulties with anxiety and separation increase his risk for mood or anxiety disorders in the context of his early challenges. When Ben was age 5, his father nearly died in a car accident. Ben's emergent anxiety symptoms may have been a result of his developmental stage, his temperament, parenting, or a combination of these factors. At this early age, magical thinking and egocentrism can lead a child to feel overly responsible, especially if parents are anxious or overwhelmed. The parents' coping at that time is not described. His mother's cancer diagnosis, treatment, and untimely death were complicated by poor communication. Ben's grandmother became a caregiver, and this important relationship plus the one with his Pittsburgh school community was disrupted by the move. The grandmother and people at the school knew his mother and were likely important bereavement supports.

## Persistent Complex Bereavement Disorder

The untimely death of a parent is one of the most painful losses. Ben had an intense reaction when he learned his mother had died. His strong emotions of sadness, anger, and anxiety; intense yearning for her; and memories of her are symptoms of intense grief. For some individuals, these symptoms do not diminish with time, and intense grief persists longer than expected and impairs functioning and has been classified as *complicated grief*. In DSM-5 (American Psychiatric Association 2013), complicated grief is reclassified as *persistent complex bereavement disorder* and is included as a condition requiring further study. Complex bereavement and major depressive disorder overlap in some ways but also have important differences. In complex bereavement, guilt focuses on regrets related to the deceased, whereas in depression, guilt relates to more general feelings of worthlessness. Ben's persistent wish to die to be with his mother is a common symptom of complex bereavement. Persistent complex bereavement disorder is apparent in his intense longing, sorrow, and pain related to his mother's death; feelings of emptiness and aloneness; feeling as if part of him died; emotional avoidance via substance use; and difficulty pursuing interests and future planning. His symptoms resulted in impaired functioning, and the bereavement lasted more than 6 months, longer than cultural norms.

## Major Depressive Disorder

Bereavement is associated with profound sadness but does not typically result in a major depressive episode. Depression should not be considered a normative reaction to death and requires depression-specific treatment. Grief reactions may include feelings that resemble those in Criterion A for major depressive disorder, so careful assessment is needed. Emptiness and loss are the predominant emotions in grief, whereas persistent depressed mood and inability to experience happiness or pleasure are predominant in major depressive disorder. A major depressive episode is characterized by pervasive unhappiness; in contrast, individuals struggling with grief may have periods of positive emotions. The description of

Ben's mood and loss of interest in previously enjoyed activities suggests a major depressive episode. His sustained symptoms for longer than 2 weeks and impaired functioning meet criteria for major depressive disorder. The Children's Depression Rating Scale—Revised or Children's Depression Inventory can be used for initial assessment and tracking of symptoms over time (Klein et al. 2005).

## **Separation Anxiety**

Ben's difficulties with separation meet criteria for separation anxiety disorder. He has persistent and excessive worry about something happening to his parents, reluctance to go to school, and fear of being alone. These symptoms lasted for more than 4 weeks and result in impaired functioning.

## **Alcohol and Marijuana Use**

Ben's mood and anxiety symptoms preceded his alcohol and marijuana use. His recurrent substance use has resulted in truancy and school failure, but detail about his substance use is limited. Further understanding is necessary both for diagnostic assessment and for determining the impact of his substance use on treatment.

## **DSM-5 Diagnosis**

- **F33.1 Major depressive disorder, recurrent episode, moderate, without psychotic symptoms**
- **F43.8 Other specified trauma- and stressor-related disorder, persistent complex bereavement disorder**
- **F93.0 Separation anxiety disorder**
- **Rule out alcohol use disorder**
- **Rule out cannabis use disorder**

## **Developmental Considerations for Treatment**

Ben's mother's illness and death occurred during his latency, a developmental stage that features fairness and cause-and-effect logic. Cancer is not fair, striking kind, young parents, and often defies causal logic with no identified etiology. Ben's parents excluded him from honest conversations about his mother's illness and recurrence. Her death was experienced as sudden and thus increased the risk for Ben's traumatic reaction. Children of this latency age often worry about the health of surviving family members (Rauch and Muriel 2006). Ben's preexisting anxiety and his father's prior life-threatening car accident likely added to

worries about his father's well-being. School is a second home for children and is especially stabilizing at times of family disruption (Moore and Rauch 2010). Ben was well supported at his old school and enjoyed the comfort of his educators knowing his late mother. When a parent struggles to have open communication about an illness, school staff may play a crucial role in facilitating important conversations, as was the case for Ben and his father. Moving and leaving that school was a significant loss for Ben.

Entering early adolescence, which is a time of both separation from parents and identity formation, Ben faces the need to elaborate his personal narrative about his relationship with his late mother, her illness, and her death. He would benefit from help with this process as his relationship with her evolves through bereavement. Unfortunately, his depression, anxiety, and substance use currently impair his grieving process.

## Treatment Recommendations

Ben's substance use, truancy, and passive suicidal ideation warrant admission to an acute residential treatment (ART) program for stabilization and further assessment. Helping Ben manage his emotions without reliance on substance use would be an initial goal of treatment. Assessment should include neuropsychiatric testing for executive function deficits or nonverbal learning disability, which may be having an impact on his coping with bereavement. Ben can start to engage in cognitive-behavioral therapy (CBT) and learn elements of dialectical behavioral therapy (DBT) during his ART admission. Decreasing cognitive aspects of his depression and anxiety (through CBT) and improving his ability to tolerate intense emotion (through DBT) can help Ben better manage the emotions that contribute to his substance use.

Family assessment should occur at the ART. Ben needs his father to be fully engaged. If his father has depression or anxiety, he would benefit from his own treatment. Communication between Ben and his father is likely problematic. Historically, Ben's father's avoided discussing his wife's illness and recurrence and needed help to tell his son about her death. Parent guidance and initial family therapy interventions can help Ben's father build needed communication skills.

There are no evidence-based therapies for children and adolescents to address complicated grief, but in adults, a short-term treatment approach called *complicated grief treatment* is the most extensively studied.<sup>1</sup> A child's relationship with a deceased parent is not static; it evolves as the child moves through development. During the ART assessment, Ben will need help to articulate his narrative of his mother's illness, death, and the grieving within his family and community. Sharing this with his father could help Ben fill in gaps

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<sup>1</sup>The objectives of this 16-week therapy are to identify and resolve complications of grief and to facilitate adaptation to loss. The treatment involves elements of both behavioral activation and reducing avoidance of thoughts or feelings about the death (Shear 2015).

and get answers to his questions, express his mix of feelings to his father, and facilitate their ongoing dialogue.

There is evidence Ben might benefit from continuing CBT for anxiety after discharge (Roblek and Piacentini 2005), alone or in combination with fluoxetine to treat major depression (March et al. 2004), depending on severity of symptoms on discharge and the family's preferences. Family therapy integrated into Ben's individual therapy, or in addition to it, is likely indicated to help father and son process the many changes they face. The case presentation does not discuss Ben's father's social network or potential romantic partners, but a new romance often causes conflict for bereaved children and their surviving parent. The relationship between Ben's father and maternal grandmother is not described. Relationships between a surviving parent and the late spouse's family commonly become strained, with significant impact on the child. Reengaging Ben's grandmother would likely support his grieving process.

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## **Psychopharmacologic Perspective**

Karen Dineen Wagner, M.D., Ph.D.

### **Diagnostic Formulation**

Ben is a 13-year-old boy whose mother died 2 years previously. Although his mother had been ill with cancer, her death was unexpected for Ben. His initial reaction to learning of her death was age appropriate: crying, agitation, and believing he might have been able to help his mother if he had been in the hospital with her. His concern about who would take care of him if something happened to his father was also developmentally appropriate. Following his mother's death, Ben received substantial support from family, friends, friends' parents, educators, and the school psychologist to help him deal with his mother's death. However, 1 year after his mother's death, Ben moved with his father out of state and thereby experienced the loss of his friends and grandmother. In addition, his sessions with a new school psychologist were infrequent. In that ensuing year, he developed symptoms of depression, including sadness, irritability, diminished interests, insomnia, hopelessness, emptiness, guilt, and thoughts about suicide to reunite with his mother. Other problems in-

cluded truancy, decline in academic performance, and alcohol and marijuana use. Ben's depression is also exacerbated by his anxiety; he fears being left alone if his father should die. Fear of separation from his parents has been a long-standing problem for Ben. Although Ben's initial reaction to the death of his mother was a normal grief reaction, the development of significant depressive symptoms and continued intense longing for his mother with overall functional impairment is beyond the realm of a normal grief reaction.

Ben exhibits symptoms of major depressive disorder, including depressed and irritable mood, diminished interests, insomnia, hopelessness, guilt, and suicidal ideation. Other symptoms such as low energy, weight loss, and psychomotor agitation/retardation were not mentioned in the vignette but may be present. To rule out a diagnosis of bipolar disorder, the clinician should also inquire whether Ben has had manic or hypomanic symptoms, which could be related to his alcohol and marijuana use. Although he exhibits anxiety, he does not appear to have sufficient symptoms to specify a current anxiety disorder. Administration of the Children's Depression Rating Scale—Revised (Poznanski et al. 1984, 1985) would be helpful to further elucidate the extent and severity of his depressive symptoms.

## DSM-5 Diagnosis

- F32.1 Major depressive disorder, single episode, moderate
- F10.10 Alcohol use disorder, mild
- F12.10 Cannabis use disorder, mild
- F93.0 Separation anxiety disorder (past history)

## Treatment Recommendations

The initial treatment plan should include an assessment of Ben's father to determine whether he has adequately coped with the loss of his wife so that he can deal effectively with Ben's grief. Ben would benefit from individual psychotherapy, as well as a support group for children who have lost a parent. The extent of his alcohol and cannabis use requires further assessment, and he may need substance abuse counseling. Because he has been frequently truant from school and his grades have declined, he will require academic remediation. Importantly, medication treatment is warranted given the severity of Ben's depressive symptoms, his hopelessness, and his suicidality related to a desire to join his dead mother.

Selective serotonin reuptake inhibitors (SSRIs) have the most evidence of efficacy in the treatment of depressed adolescents (Emslie et al. 2002, 2009; March et al. 2004; Wagner et al. 2003, 2004) and would be the treatment of choice. If Ben's father prefers a medication approved by the U.S. Food and Drug Administration (FDA), the SSRIs fluoxetine and escitalopram would be selected because they have FDA approval for treatment of major depression in adolescents. The clinician should discuss with Ben and his father the FDA warning about possible increased suicidality with antidepressant use in children and

adolescents and the need for careful monitoring of suicidality (U.S. Food and Drug Administration 2004). The clinician may wish to inform them that a meta-analysis of antidepressant trials in youth showed that the benefits for treatment of depression far outweigh the potential risks of suicidal thinking or attempts (Bridge et al. 2007). Commonly occurring side effects of SSRIs, such as headache, nausea, abdominal pain, insomnia, and increased sweating, should be discussed prior to treatment and monitored during the course of treatment. Suicidality should be assessed at every visit.

Fluoxetine treatment should be initiated at a low dosage of 10 mg/day and the dosage increased gradually on the basis of clinical response up to 40 mg/day over the course of 8–10 weeks. Alternatively, escitalopram should be initiated at 10 mg/day and increased on the basis of clinical response to 20 mg/day. If Ben shows no improvement in his condition when taking fluoxetine 40 mg/day or escitalopram 20 mg/day, then treatment with fluoxetine or escitalopram should be discontinued. The Treatment of SSRI-Resistant Depression in Adolescents study suggests the use of an alternative SSRI when an adolescent patient fails to respond to one SSRI (Brent et al. 2008). If Ben has a partial response to alternative SSRI treatment, then augmentation with lithium, bupropion, or an atypical antipsychotic could be considered. If no improvement is seen after a trial with the alternative SSRI, then treatment with a different class of antidepressant, such as venlafaxine, bupropion, mirtazapine, or duloxetine, should be initiated. CBT added to an antidepressant has been shown to increase treatment response approximately 10% (Brent et al. 2008; March et al. 2004). If an effective medication is identified, it should be continued for at least 6–12 months after symptom remission at the full therapeutic dose that was used to achieve remission (Emslie et al. 2004). If Ben fails to respond to a different class of antidepressant, then reassessment of diagnosis, family situation, comorbid disorders, and medication adherence should be done.

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# CHAPTER 29

## Never Met a Stranger

### Disinhibited Attachment in a Toddler

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Charles H. Zeanah, M.D.

#### Case Presentation

##### Identifying Information

Tonya was 18 months old and in foster care when she first came to clinical attention. She was living with her foster parents and several other foster children. She had been removed from her parents' custody 2 months previously because of neglect, and she was evaluated and treated in a comprehensive intervention program for young maltreated children.

##### Chief Complaint

Tonya's foster mother reported, "She'll go off with anyone."

##### History of Present Illness

After being removed from her parents' custody because of neglect, Tonya was briefly placed with relatives. However, because the relatives allowed unsupervised visits by her parents, despite being admonished by child protective services, Tonya was removed from the "kin" foster placement and placed in a regular foster home.

Within days of her placement, Tonya began calling the foster mother "Mom." The foster mother initially took this as a good sign. However, Tonya began to have difficulties in her new home. According to her foster mother, Tonya was "moody." She would be cheerful one moment but rapidly switch to showing frustration or throwing a tantrum, especially when her foster parents tried to set limits. When unfamiliar clinicians made a home visit, Tonya readily approached them and initiated a game that included physical touching. Additional home visits over several weeks revealed a pattern of Tonya's readily approaching and engaging strange adults in play and also taking liberties with them, such as leaning against them, hugging their legs, and if they picked her up, touching their hair or glasses. They found this off-putting. Further, when distressed or injured, Tonya often sought comfort from unfamiliar adults rather

than her foster mother. Her foster mother found this disconcerting and was embarrassed by Tonya's behavior with strangers. Even after 6 weeks in this foster placement, Tonya did not seek comfort preferentially from her foster mother, who reported that Tonya "cannot get attached to me." Her foster mother was worried that Tonya might "put herself in harm's way." Tonya walked up to strangers without hesitation both in and out of the home. Her foster mother also was worried that Tonya was not listening to her; when Tonya was in a novel situation and began to explore the environment, she did not check back with her foster mother. In addition, when Tonya was injured or startled, she did not turn to her foster mother for comfort. Multiple observations of interactions between Tonya and her foster mother, both at home and in the clinic, did not show any attempts by Tonya to engage her foster mother in play or to share any experiences or toys with her. Tonya also was unable to effectively play with peers and became emotionally dysregulated when other children came into physical contact with her. In addition to displaying intermittent cheerfulness and social engagement, Tonya lacked signs of depression such as sleep or appetite disturbance, fatigue, or loss of interest in activities.

During supervised visits with her biological parents, Tonya was noted by clinicians who observed the visits to be fussy or irritable and not to use her parents to settle.

## Past Medical and Psychiatric History

Tonya has no previous history of medical or psychiatric problems. She also has had no known prenatal exposure to substances.

## Developmental History

Tonya's biological parents reported that Tonya "did everything early." They noted that she crawled at 3 months, walked at 5 months, and walked "good" at 8 months. Both parents reported that Tonya was "a friendly person" who approached anyone, even strangers, and asked for hugs.

When Tonya was 18 months old, a screening developmental assessment was conducted as part of her involvement with child protective services. Her gross motor, fine motor, problem-solving, and personal-social skills were all within the expected limits for children her age. She was noted to have speech and language delays, with an expressive vocabulary that was limited to fewer than eight words. She continued to exhibit markedly indiscriminate behavior in a variety of settings. In addition, Tonya ate rapidly and often too much. She did not exhibit any evidence of developmental delays other than language difficulties.

## Social History

Tonya was born after an unplanned but wanted pregnancy by unwed parents. Both of Tonya's biological parents spent an unspecified amount of time in foster care when they were children. Tonya was found by a motel manager wandering alone through a motel parking lot where her parents had been residing for several weeks. She was dirty and unkempt, and she approached several adults in the parking lot, one of whom alerted the manager. After finding the parents not in their room, the manager called the police, who in turn summoned child protective services. The latter identified an emergency placement for Tonya.

When Tonya's parents returned to the motel, they were interviewed by a Child Protective Services investigator. They denied any physical or sexual abuse of Tonya, and child protective services found no previous allegations regarding Tonya. Her parents claimed that they had left Tonya asleep for "just a few minutes" to go to the store.

## **Family History**

Although little was known about the family's history of psychological illness, psychiatric evaluation of Tonya's biological parents revealed some important findings. Tonya's biological mother had significant disturbances of mood, consistent with an unspecified mood disorder and schizotypal personality disorder. A diagnosis of mild intellectual disability was confirmed by the mother's scores on the Wechsler Adult Intelligence Scale—Third Edition (Wechsler 1997) and the Vineland Adaptive Behavior Scales, Second Edition (Sparrow et al. 2005). Psychological evaluation of Tonya's biological father did not reveal any psychiatric diagnosis, but he did report symptoms of mild depression and anxiety. He demonstrated poor cognitive and reasoning abilities and declined to reveal any details about his own past history or childhood involvement with child protection, although child protective services confirmed that he had been sexually abused.

## **Mental Status Examination**

Tonya was an engaging and normally developing young child. Initial concerning behaviors included her marked indiscriminate behavior with unfamiliar adults, unwillingness to approach or check with her parents when either injured or in an unfamiliar environment, and overeating. Her mood and affect were labile, and in the presence of her biological parents, she often became fussy and irritable and was not easily comforted by them. Although she initially had an expressive language delay, her intelligence, attention span, thought process, and play content were normal and consistent with those of other children her age. She did not exhibit any indications of developmental delays, stereotypies, repetitive behaviors, or hyperactivity.

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# **Psychotherapeutic Perspective**

Alicia F. Lieberman, Ph.D.

## **Diagnostic Formulation**

The assessment of toddlers is guided by the principle that their functioning is profoundly influenced by the stability and emotional quality of their relationships with their primary caregivers. Observation of Tonya in interaction with her biological parents, foster mother, and

unfamiliar clinicians during home visits offers a multifaceted view of the child's quality of attachment, range of social skills and coping mechanisms, and age-expected cognitive and motor milestones. Tonya's developmental history of neglect and possible traumatic stressors, including separation from attachment figures, allows for a differential psychiatric diagnosis based on etiology. Tonya's presenting problem—that "She'll go off with anyone"—is a useful barometer of functioning but should not be used as the exclusive organizing focus of the assessment because the foster mother's subjective attributions to the child may color her reports. The parents' and caregivers' behavior toward Tonya should be carefully evaluated as part of the assessment because young children can be very quick to adapt their behavior to match the perceived expectations from caregivers. Tonya's lack of preferential responses to her foster mother may reflect her experience-based expectation that the caregiver does not respond to her signals of need.

Tonya's presenting problem of indiscriminate sociability toward strangers is consistent with a DSM-5 (American Psychiatric Association 2013) diagnosis of disinhibited social engagement disorder (DSED). She displays the key criterion for this diagnosis—"a pattern of behavior in which a child actively approaches and interacts with unfamiliar adults" (p. 268)—and shows all four of the index behaviors: reduced or absent reticence in approaching and interacting with unfamiliar adults; overly familiar verbal or physical behavior; diminished or absent checking back with adult caregivers after venturing away; and willingness to go off with an unfamiliar adult with minimal or no hesitation. She also meets Criteria B, C, D, and E because Tonya's behaviors are not limited to impulsivity but include socially disinhibited behavior; she has experienced an extreme of insufficient care that includes early deprivation and repeated changes of primary caregivers that is presumed to be responsible for the disturbed behavior, and she is older than 9 months.

A co-occurring diagnosis of reactive attachment disorder is applicable, although this was not the presenting problem. It is notable that although Tonya referred to her foster mother as "Mom" within days of her placement, after 2 months in her care she does not initiate reciprocal social exchanges, does not engage in age-appropriate social referencing, and does not turn preferentially to the foster mother when hurt or distressed. These behaviors indicate that Tonya meets Criterion A for reactive attachment disorder. She also meets Criterion B because of her limited positive affect and episodes of unexplained irritability. Criterion C, which is shared with the diagnosis of DSED regarding extremes of insufficient care, is evidenced in Tonya's case by at least four concrete indicators: neglect by biological parents; separation from biological parents; separation from the relatives with whom she was initially placed; and possible marginal care by her foster mother, who showed negative attributions to the child by stating that Tonya "cannot get attached to me," although Tonya was calling her "Mom" within days of her placement, and who becomes embarrassed (rather than concerned or protective) by Tonya's indiscriminate behavior. Indeed, the foster mother may be contributing to Tonya's lack of a focused attachment by not responding to her signals of need. For example, the report does not indicate that the foster mother initiated care when Tonya was injured or startled; instead, she seemed to wait for the child to seek out care—an unrealistic expectation from a toddler with a history of neglect and disrupted care. A compounding factor may be that the foster mother is caring for several other foster children and may not have the physical and emo-

tional resources to give Tonya the individualized care the child needs to form an attachment. Thus, the combination of early neglect, repeated separation from caregivers, and current marginal care are likely responsible for Tonya's behavior and fulfill Criterion D, which presumes a link between the care in Criterion C and the disturbed behavior in Criterion A. Criteria E, F, and G are also met because Tonya does not show symptoms of autism spectrum disorder, is younger than age 5, and has a developmental age older than 9 months.

Tonya's fussiness and inability to settle with her parents warrants investigation about her experiences with them. Tonya may be manifesting a combination of protest and detachment as two phases in the separation response described by Bowlby (1973). Fussiness and withdrawal may also be manifestations of fear. Ongoing assessment should elucidate possible exposure to physical abuse and/or domestic violence to rule out posttraumatic stress responses triggered by the visits with the biological parents.

Intellectual disability can be ruled out because of Tonya's overall age-appropriate developmental performance in gross motor, fine motor, problem-solving, and personal-social skills. She does not meet criteria for autism spectrum disorder. Although she is described as being unable to play effectively with peers and becoming dysregulated when other children come into physical contact with her, attention-deficit/hyperactivity disorder (ADHD) can be ruled out because her behaviors are more parsimoniously explained as a response to repeated separation and neglect.

## DSM-5 Diagnosis

- **F94.2 Disinhibited social engagement disorder, severe**
- **F94.1 Reactive attachment disorder**

## Treatment Recommendations

The most important mental health intervention for toddlers in the foster care system is permanent placement with consistent and competent attachment figures. Placement of a toddler in foster care is not advisable unless the child is at immediate risk and the parents are unable to profit from parenting interventions, because separation from attachment figures may be pathogenic in infancy and early childhood. The rule for the child welfare system and mental health providers must be concurrent planning to protect the child and create the conditions for swift permanent placement if the child cannot be reunified with the biological parents. It is noteworthy that the child protection system removed Tonya from her first placement with relatives only because the relatives were allowing visits with the biological parents—something that the system itself was offering and is a legal requirement unless countermanded by the courts. Given that Tonya is not attached to her foster mother, these relatives should be reassessed for their adequacy and willingness to provide long-term care if reunification with parents is not feasible. If the relatives can provide safe and emotionally supportive caregiving, Tonya should be placed with them, with an agreed-on program of visitation with the biological parents.

The biological parents should be assessed for their mental health and cognitive functioning, motivation for reunification services, and potential to provide adequate parenting.

If the assessment yields promising findings, Tonya's parents should be offered intensive reunification services, including parenting intervention such as child-parent psychotherapy (Lieberman and Van Horn 2008). Treatment should include 1) monitoring of the parents' capacity to provide safety and protection; 2) monitoring of the parents' consistent participation in services; 3) co-creating with the parents a treatment plan to address Tonya's needs, including age-appropriate emotional needs and fear of separation and loss; 4) modeling an attitude of interest and investment in intersubjective attunement to help the parents reflect on Tonya's emotional experiences; 5) providing psychoeducation and developmental guidance to acquire developmentally appropriate parenting practices and correct negative attributions; 6) helping the parents reflect on the link between their childhood and parenting experiences; 7) creating experiences of pleasure through play, storytelling, reading books, singing, and other age-appropriate activities; and 8) identifying possible traumatic events in the parents' lives and addressing their impact to alleviate the transmission of traumatic patterns in their parenting of Tonya (Lieberman and Van Horn 2005, 2008).

Tonya's ability to relate preferentially to her parents and the adequacy of the parents' individual functioning and ability to provide appropriate caregiving are critical considerations in decisions about increased visitation and overnight visits. The child's safety should be monitored by the clinician and the child protection worker. Parent-child reunification should take place when it is safe to do so to prevent consolidation of preferential attachment to the current caregiver(s) and the deleterious effects of disrupting these bonds. Treatment should continue after reunification to monitor the stability of the parents' parenting and the child's well-being. If the reunification services do not succeed in promoting safe and responsive parenting practices and preferential child attachment, permanent placement with the relatives should be the preferred option if they continue to provide adequate care. Ongoing contact with the parents should be encouraged if this is deemed beneficial for the child. If the relatives are not able to provide long-term care, an adoptive home is the next preferred alternative.

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## Psychopharmacologic Perspective

Mary Margaret Gleason, M.D.  
L. Eugene Arnold, M.D., M.Ed.

### Diagnostic Formulation

Tonya's case illustrates both vulnerability and resilience. Tonya is an 18 month old with a family history suggesting genetic loading for developmental/psychological problems and

exposure to neglect. She has attained normal development after a few months in her third home, a foster home. Nevertheless, she continues to show aberrant behaviors, including indiscriminate social interactions; lack of checking back with her caregiver; negative mood valence, especially in the presence of the biological parents; and problematic eating patterns.

The chief complaint and most pervasive symptom is a pattern of indiscriminate social interactions and intrusive physical and social behaviors, for which DSED is the best fit. Tonya meets Criterion A for DSED because of her 1) reduced reticence in approaching unfamiliar adults, 2) culturally inappropriate overly familiar behaviors, 3) reduced checking back with adult caregiver after venturing away, and 4) willingness to go off with a stranger. Tonya has experienced two of the three types of extreme pathogenic care (social neglect, multiple caregiving changes, and institutional care). DSED signs have been reported in 22% of children in foster care and in 20%–30% of children in institutional care (Gleason et al. 2011; Zeanah et al. 2004). The disorder cannot be diagnosed before a developmental age of 9 months, the age by which preferential attention to attachment figures typically appears. DSED can occur in the context of a secure or a problematic attachment relationship (Gleason et al. 2011). Because Tonya does not seek comfort from her foster mother, she likely has not developed focused attachment behaviors. Although Tonya shows behavioral impulsivity, this appears to be limited to social interactions, as required by DSED criteria, rather than generalized impulsivity, as in ADHD (a distinction with limited validity in toddlers). Comorbid DSED and reactive attachment disorder are not precluded in DSM-5, but Tonya's overall presentation is inconsistent with the very withdrawn patterns seen in reactive attachment disorder.

Besides DSED, a more extensive differential diagnosis should consider Tonya's symptoms beyond social indiscriminance. Her increased distress around her biological parents suggests reexperiencing symptoms of posttraumatic stress disorder (PTSD), a disorder that is well validated in older toddlers of Tonya's age (Scheeringa et al. 2001).

Mood reactivity in young children exposed to adversity can indicate reactions to reminders of trauma or may represent a primary mood process. Although major depression is well validated in preschoolers, it has not been validated in children as young as 18 months (Task Force on Research Diagnostic Criteria 2003). Reactive attachment disorder also includes mood symptoms, as well as social withdrawal and lack of active attachment behaviors.

Although Tonya presents with social problems and language impairment, these are qualitatively different from autism spectrum disorder, and her rapid language improvement is inconsistent with autism spectrum disorder.

DSM-5 still has some limitations when applied to very young children, despite attempts to consider development. A growing evidence base demonstrates validity of reactive attachment disorder, major depression, PTSD, sleep disorders, and feeding disorders in preschoolers and older toddlers (Task Force on Research Diagnostic Criteria 2003), but few other DSM disorders have been examined and most have not been validated in children under age 2 years. Especially in infants and toddlers, early childhood psychopathology and mental health are best understood within the context of the primary caregiving relationship, to which both child and caregiver contribute. The caregiving relationship provides



the context in which young children experience the world and learn to organize affective experiences.

## DSM-5 Diagnosis

- F94.2 Disinhibited social engagement disorder
- F80.9 Language disorder
- Rule out posttraumatic stress disorder (partial resolution)

## Treatment Recommendations

DSED has a chronic course. Even in quality caregiving settings, and despite secure attachment relationships, signs and impairment may persist into adolescence (Smyke et al. 2012).

The most important intervention in cases like Tonya's is the provision of consistent, sensitive, and nurturing caregiving. The only empirically supported treatment is high-quality foster care, which was studied in children removed from institutional care (Smyke et al. 2012): higher caregiving quality was related to larger declines in signs of DSED. Use of relationship-focused interventions may be appropriate to consider as well, although they have not been studied as treatments for DSED. Attachment Biobehavioral Catch-up (ABC), developed for foster parents and very young foster children, is associated with increases in appropriate attachment-related behaviors, decreased problematic child behaviors, and normalized diurnal cortisol patterns (Dozier et al. 2008). Other attachment-focused therapies, also not specifically developed for children with DSED, such as the well-established Child Parent Psychotherapy (Lieberman et al. 2005) or the promising Circle of Security (Hoffman et al. 2006), may be useful in treating this population. When reunification with biological parents is the goal, a multimodal treatment approach should address the child's needs within those relationships as well as with the foster parents, using dyadic or family therapy and parent psychopharmacology or psychotherapy.

Medication does not play a role in treatment of DSED in infants and toddlers. There is neither evidence nor a theoretical basis for psychopharmacologic treatment. This statement, however, does not contradict the increasing evidence that biological factors play an important role in DSED. Specific genotypes thought to be related to central nervous system plasticity are associated with differential outcomes of DSED in children in institutional care compared with those removed and placed into foster care (Drury et al. 2012). There are likely further biological factors involved with the development and perpetuation of DSED. However, disorders with known biological patterns do not ipso facto require pharmacologic treatment. Increasing data, including from early childhood, show that psychotherapeutic interventions, such as environmental exposures, can be biologically active and may have longer-lasting effects than medication (Dozier et al. 2008).

No rigorous studies have examined the efficacy, effectiveness, or safety of medication for toddlers for any disorder, and only two large randomized controlled trials have been reported in preschoolers (both for ADHD) (Charach et al. 2011). In both trials, efficacy rates were lower and adverse-effect rates were higher in preschoolers than in school-age children. A follow-up of the Preschool ADHD Treatment Study of methylphenidate indicated that early pharmacotherapy was not protective (Riddle et al. 2013). Notably, early exposure to some pharmacologic interventions in rodent models suggests that persistent changes in neurochemistry occur after early exposure to psychopharmacologic agents (Maciag et al. 2006). Therefore, the risk-benefit ratio clearly directs clinicians away from medication to treat DSED.

For children in foster care, interventions must go beyond psychotherapeutic modalities and incorporate multimodal approaches. Attention to developmental needs is often necessary. A child's emotional and physical safety during visits with the biological parents should be monitored, especially when the child becomes more distressed during or after visits, as Tonya does. It can be useful to have the primary attachment figure attend parental visits and serve as an emotional secure base during visits. If visits cannot be done without causing distress, they must be reevaluated. Legal advocacy is an important part of working with children in foster care. A guardian ad litem can protect the child's interests against a variety of competing forces. Permanency planning for young children should be timely, as required by the Adoption and Safe Families Act (1997). Placement disruptions should be done only when necessary and with attention to the child's emotional needs. For this reason, initial placement with preadoptive foster parents may be optimal.

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# **PART V**

## **Diagnostic and Treatment Decision Making**

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# CHAPTER 30

## Diagnostic Decision Making

Cathryn A. Galanter, M.D.

Peter S. Jensen, M.D.

**FOR THIS BOOK** we brought together more than 100 of the field leaders in child and adolescent mental health to present cases and explain their diagnostic impressions and treatment recommendations. We chose commentators who offer a range of perspectives in terms of how they conceptualize the cases and what types of treatment they recommend.

### Variation Among Clinicians

A self-evident yet easily overlooked fact is that clinicians' perceptions and beliefs arising out of their experiences—personal, educational, or professional—have significant impact on how each professional practices. Children and adolescents may be treated by a team of collaborating professionals who offer different perspectives and treatments based on their specialized expertise and training. These varied perspectives help make our field rich and exciting. However, variability can be troubling when it leads to inaccurate diagnosis and inappropriate treatment. In the current climate of evidence-based medicine, with an increasing number of evidence-based assessments and treatments available for children and adolescents, most clinicians struggle to maintain both the art and the science of medicine, seeking an approach that is both individualized *and* scientifically accurate.

Many potentially troubling examples of variability in diagnosis and treatment are documented in the literature. For example, the interrater reliability between clinicians for the assessment and diagnosis of childhood psychopathology is often poor (Piacentini et al. 1993; Rettew et al. 2009). If two clinicians evaluate the same child and arrive at different diagnoses, one must assume that children are often misdiagnosed and consequently may re-

ceive inappropriate treatment. Recent studies demonstrated increasing rates in the reports of psychiatric diagnoses such as bipolar disorder (Blader and Carlson 2007; Moreno et al. 2007) and diagnostic variability of autism (Lord et al. 2012). These findings contributed to reconsideration of the diagnostic criteria for the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5; American Psychiatric Association 2013); the development of a new disorder, disruptive mood dysregulation disorder; and the subsumption of Asperger's disorder and pervasive developmental disorder within autism spectrum disorder. At times, the diagnostic system may have limitations leading to variability in how criteria are applied. At other times, the clinician's interpretations may have an impact on his or her diagnostic decision making. Multiple factors can lead to this variability and to deviations in treatment. Research has shown that treatment may vary across settings, as illustrated by the differences in antipsychotic medications most commonly prescribed in various inpatient state hospital settings (Pappadopulos et al. 2002) and differences in treatment for attention-deficit/hyperactivity disorder (ADHD) in specialty mental health care versus primary care practices (Zarin et al. 1997; Zito et al. 1999) or even within primary care settings (Epstein et al. 2014). When such variations in diagnosis and treatment reflect clinician rather than patient differences, significant adverse consequences for children seem likely.

One way for clinicians to avoid harmful diagnostic or treatment decisions or medical errors is to think carefully about clinical decision making. A great deal of research in medicine, and some of it in mental health, focuses on how clinicians make decisions about their patients (Galanter and Patel 2005). In this chapter we review some of the concepts that are particularly germane to clinical decision making and the use of this book.

## Clinical Problem Solving

Children and parents present to the clinician with their own concerns. The clinician then interprets each story, or narrative, into a medical framework, which can be used to arrive at a diagnosis and treatment options. During this process, clinicians are faced with the dual challenge of building an alliance while needing to be careful diagnosticians.

The "translation" process has several steps, and clinicians are at risk for error along the way. Beginning with a patient's narrative, the clinician translates and restructures this story into a coherent medical and psychological framework. As part of this process, the clinician elicits additional information. For example, a parent may bring an adolescent daughter to treatment with concerns that she is isolating herself in her room, fighting more with her brother, and no longer keeping up her grades. Clinicians then need more information to determine how to interpret this story. Are the daughter's irritability, anhedonia, and decreased concentration associated with depression, or is she perhaps paranoid and internally preoccupied because of an emerging psychotic disorder?

One model, the epistemological framework for medical comprehension and problem solving (Evans and Gadd 1989; Patel et al. 1989, 2001), is useful as a way to consider the diagnostic decision making of clinicians. Investigators have proposed that clinical informa-

tion is represented hierarchically. We have modified the framework, as shown in Figure 30–1, so that it is especially applicable to problem solving in child and adolescent psychiatry and so that it shows decision nodes (points in the process where clinicians make decisions) as well as suggested interventions that might support clinician decision making.

The model begins with *observations* (to the left in Figure 30–1). These are units of information that are recognized as potentially useful during problem solving. In psychiatry, observations are clinical material from both the history and the mental status examination. For example, in the case of the adolescent described earlier, observations include the parent's report that the daughter stays in her room, the adolescent's report that hanging out with her friends "isn't as fun as it used to be," and the clinician's report that the patient's mental status during the interview was significant for her never smiling and crying at times. *Findings* are observations with diagnostic implications. They are the observations that indicate a symptom or example of pathology. Negative findings are observations that indicate the absence of a symptom (e.g., if a patient denies a specific behavior). Returning to the example of the adolescent, the findings would be that she is socially withdrawn, is anhedonic, and has constricted affect in the dysphoric range. She also denies hallucinations and demonstrates a linear thought process. At the next level are *facets*—clusters of findings suggestive of diagnostic components. Examples in psychiatry include a depressive episode or a panic attack. Finally, the level of *diagnosis* subsumes all these sublevels. For the adolescent described earlier, the diagnosis was major depressive disorder. Investigators have used the framework of the hierarchical model to characterize clinical reasoning (Patel et al. 1994) as well as doctor-patient interaction (Patel et al. 1989).

We indicate the steps (or decision nodes) of diagnostic problem solving as part of our modifications of the framework. These decision nodes include data gathering (acquisition of observations), interpretation of observations (translating observations to findings), and data synthesis (combining findings to determine facets and make diagnoses) (Bowen 2006; Graber et al. 2005). Our model also includes suggested interventions that support different aspects of the decision-making process. These interventions are elaborated on in the "Recommendations" portion of the chapter.

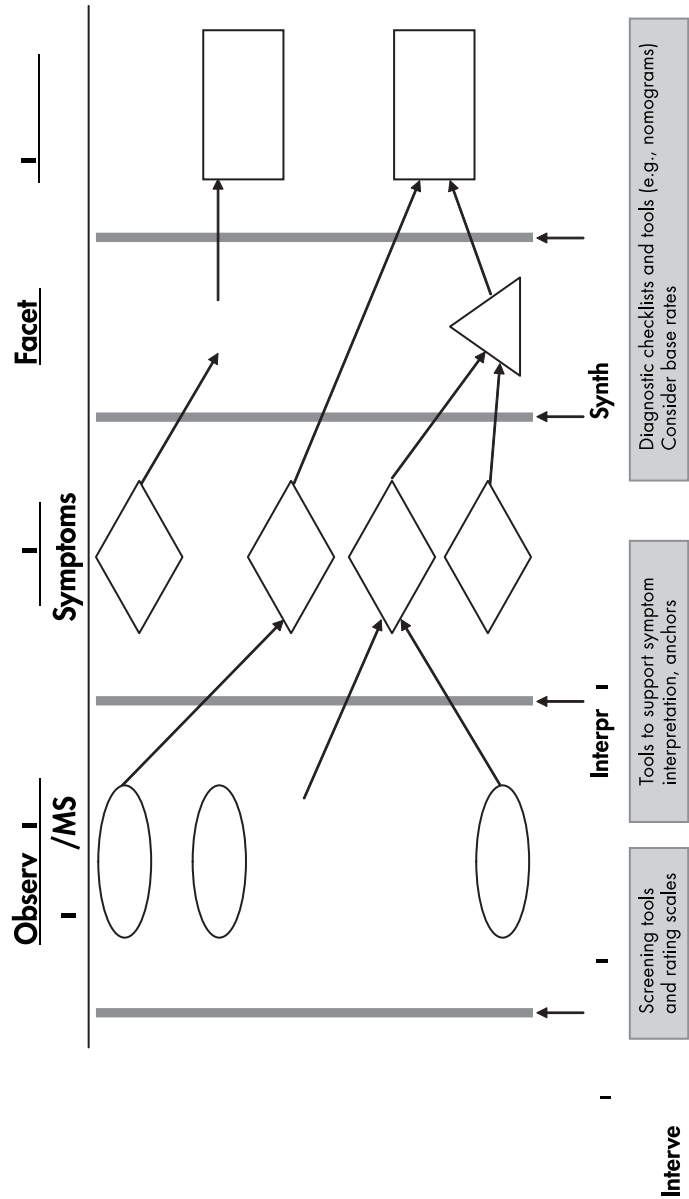
## Analytic Thinking and Pattern Recognition and Changes With Experience

Investigators in cognitive psychology and in medical decision making have identified different ways that clinicians diagnose patients (for reviews, see Bowen 2006; Norman 2005, 2006). Clinicians use both analytic and intuitive problem solving, while applying formal knowledge (e.g., about pathophysiology) and procedural knowledge (Bowen 2006; Norman 2005, 2006).

An important aspect of problem solving is that it changes as clinicians gain experience. Not surprisingly, the process by which an intern or resident solves diagnostic problems dif-



Modified Epistemological Framework With Decision Nodes and Intervention Opportunities



**FIGURE 30-1.** Modified epistemological framework with decision nodes and intervention opportunities. MSE = mental status examination.

fers from that of a clinician who has been practicing for many years. As clinicians gain experience with patients, they learn to recognize patterns more easily and also learn when symptoms do not fit the patterns (Bordage 1999; Norman et al. 2007).

Cognitive scientists who study expertise in physicians have demonstrated differences in the ways that experts and nonexperts use their knowledge and reasoning strategies. Theories of human memory indicate that humans can manage only 5–10 “chunks” of information in their short-term or working memory (Miller 1956). Studies of physicians by Patel and colleagues show that experts are better able to organize information into manageable and related chunks, they do not process irrelevant information, and they generate specific knowledge-based problem-solving inferences based on expertly recognized patterns of clinical information (Patel and Groen 1991; Patel et al. 1994). These patterns, called *schemas* or *prototypes*, allow for management of greater amounts of information (Bordage and Zacks 1984; Patel et al. 2001). Such schemas are helpful in that they allow a physician to make effective use of the limitations of working memory by decreasing the cognitive burden. In addition, they serve as a “filter” for distinguishing between relevant and irrelevant information (Patel et al. 2001).

Scientists have elaborated different cognitive and behavioral theories to describe how clinicians conceptualize illness, including exemplar models of categorization (Norman 2005; Schmidt et al. 1990) or illness scripts, which are storylike narrations of a case condition (Barrows and Feltovich 1987). When a patient’s symptoms do not match the exemplar model or script, clinicians may rely on more analytic processes. These are slower, and clinicians may be more aware of these more labored and conscious processes (Norman 2006). As clinicians become more experienced, they develop more coherent explanations of patients’ illnesses and are more selective in their use of data (Patel and Groen 1991). Another model, dual-process theory, recognizes two types of decision making, one that is faster and relies on patterns and intuition, and the other, which is more analytical, typically employed for more complex cases (Croskerry 2009).

Experts are also able to conceptualize illness in a more medically or psychologically sophisticated manner. For example, in one study in internal medicine, investigators examined how novice and expert residents in internal medicine presented a case of knee pain (Bordage 1999; Chang et al. 1998). The more experienced resident described “multiple discrete episodes with abrupt onset of extremely severe pain involving a single joint, with evidence of inflammation on exam,” whereas the novice explained that the pain “started last night” and “hurts a lot” and that “he’s had this problem twice before.” The expert resident was also able to clearly lay out the pertinent positive and negative findings, which supported the correct diagnostic conclusion of acute gout. The novice resident reported the positive findings and some of the negative findings and admitted to being unsure about the concluded (and incorrect) diagnosis. Although this is an example from medicine, one might expect to find similar examples in child and adolescent psychiatry; for example, a less experienced clinician might describe the adolescent introduced in our earlier example by stating, “She has spent several months isolated in her room and has been fighting with her brother,” whereas a more advanced clinician would speak about “several months of

gradually increasing depressed and irritable mood, with decreased enjoyment of activities and increasing social withdrawal from her parents and friends at school.”

## Cognitive Errors, Heuristics, and Biases

The concepts of cognitive errors, heuristics, and biases are important when considering problem-solving methods and decision making. Much of the earlier work in decision making began in economics (e.g., Bernoulli 1738/1954; for a review, see Baron 2000). As early as the eighteenth century, economists and scientists could calculate a probability of a given outcome on the basis of mathematical formulas. If humans made decisions on the basis of these equations, or if their decisions always matched the outcome of the equations (even if the decision-making process were unconscious), their decision-making process would be normative (Baron 2000) and “rational.” One example of this type of rational decision making is to accurately use probability and base rates to estimate the likelihood of a given disease. For example, clinicians know that common disorders are more likely to occur than rare disorders. Returning to the adolescent who was isolating herself in her room, she more likely has major depressive disorder than schizophrenia because the former is a fairly common condition and the latter is very rare in early adolescents.

In the second half of the twentieth century, Nobel Prize–winning economist Daniel Kahneman and his long-time collaborator Amos Tversky argued that people do not always behave rationally (e.g., do not base their decisions on all available information) as the normative model proposed (Tversky and Kahneman 1974). Instead, people tend to use heuristics, or shortcuts, in their thought processes. These cognitive strategies can result in biases under certain circumstances. Many biases have been studied and described in the literature (for reviews in the medical arena, see Bornstein and Emler 2001; Chapman and Elstein 2000; Elstein and Schwartz 2002). Medical decision-making experts have articulated the need to study biases so as to understand the cognitive processes underlying physicians’ decision making and to learn where improvements may be made (Chapman and Elstein 2000). We have identified a number of these biases in Table 30–1.

One common heuristic, for example, is the *availability* heuristic. People tend to overestimate the frequency of an easily recalled (available) event and underestimate the frequency of an ordinary or difficult-to-recall (unavailable) event. For example, conditions of particularly hard-to-treat patients, illnesses that receive media attention, or disorders that were the subject of a recent conference are often thought to be more common than they actually are. For example, bipolar disorder received widespread coverage in the scientific and lay literature in the late 1990s and the first decade of this century. This publicity likely led to increased recognition of cases that may have gone undiagnosed, but it is also likely to lead to overdiagnosis. Another common error is *premature closure*. This bias occurs when a clinician decides on a diagnosis prematurely without gathering sufficient evidence to rule out other diagnoses. In child and adolescent psychiatry, many of the patients clinicians treat have comorbidity. Thus, even if a clinician established one diagnosis, it is important to rule out other conditions, especially those that are commonly comorbid with the first condition.

**TABLE 30-1.** Heuristics, biases, and cognitive errors useful to consider in diagnostic and treatment decision making

<b>Heuristics, biases, and cognitive errors</b>	<b>Definitions</b>
Anchoring	Overfocusing on salient aspects of patient presentation very early in diagnostic procedure, with no subsequent adjustment (Tversky and Kahneman 1981)
Availability	Overestimating probability of a diagnosis because it is especially memorable or salient or has been recently encountered (Christensen-Szalanski and Bushyhead 1981; Custers et al. 1996; Poses and Anthony 1991)
Base-rate neglect	Failing to consider prevalence rates of disease, including both overestimates and underestimates of likelihood (Ajzen 1977; Kahneman and Tversky 1973; Yates 1990)
Clinician's illusion	Believing that people with a disorder in the population as a whole are more likely to be chronically ill because of experience with those in treatment (Cohen and Cohen 1984)
Commission bias	Tending to intervene instead of "first do no harm" (Sharpe and Faden 1998)
Confirmation	Selectively gathering and interpreting evidence that confirms a diagnosis and ignoring evidence that contradicts it (Christensen-Szalanski and Bushyhead 1981; Eddy 1982; Elstein 1988; Joseph and Patel 1990)
Effect of description/unpacking principle	Providing more detail of an event, which increases its judged probability (Redelmeier et al. 1995; Tversky and Koehler 1994)
Framing	Choosing riskier treatments when they are described in negative (e.g., mortality) rather than positive (e.g., survival) terms (Bornstein et al. 1999; Christensen et al. 1995; Marteau 1989; Mazur and Hickam 1990; McNeil et al. 1982; Tversky and Kahneman 1981, 1992)
Hindsight	Overestimating probability of a diagnosis when the correct diagnosis is already known (Arkes et al. 1981; Dawson et al. 1988; Fischhoff 1975)
Number of alternatives	Choosing a treatment more often when additional alternatives are added (Redelmeier and Shafir 1995; Schwartz and Chapman 1999)
Omission bias	Being reluctant to intervene because of fear of causing harm (Elstein et al. 1986; Spranca et al. 1991)
Order effects	Giving more weight to information presented at the beginning and end of the case (primacy and recency) than to information presented in the middle (Bergus et al. 1995)

**TABLE 30–1.** Heuristics, biases, and cognitive errors useful to consider in diagnostic and treatment decision making (*continued*)

Heuristics, biases, and cognitive errors	Definitions
Outcome bias	Fixating on a decision course with positive ends, causing the possibility of minimizing or ignoring the gravity of circumstances; based partially on hopes rather than rational decision making (Gruppen et al. 1994)
Premature closure	Committing to a diagnosis without gathering all the data necessary to rule in or out other possibilities (Kassirer and Kopelman 1989; Kovacs and Croskerry 1999; Voytovich et al. 1985)
Regret	Overestimating probability of a diagnosis with a severe outcome because of anticipated regret if diagnosis were missed; the anticipated emotional response to a decision process becoming a part of the input to decision making (Dawson and Arkes 1987; Feinstein 1985; Wallsten 1981)
Representativeness	Overemphasizing pattern recognition, estimating the probability of a disease by judging how similar the case is to a diagnostic category or prototype, which can lead to base-rate neglect (Ayanian and Berwick 1991; Casscells et al. 1978; Elstein 1988; Tversky and Kahneman 1974)

Examining biases has been formally applied in a number of medical fields, wherein authors have examined medical records to determine the cause of diagnostic errors. For example, Graber et al. (2005) reviewed 100 cases and categorized diagnostic error into three categories: no-fault errors, system-related errors, and cognitive errors (faulty knowledge, faulty data gathering, and faulty synthesis). Approaches such as that of Graber and colleagues are useful in determining how to best support and improve clinical decision making.

## Recommendations

To decrease diagnostic errors, clinicians might usefully keep in mind several lessons from the decision-making literature. These “lessons” are presented below, organized according to the different steps of the diagnostic problem-solving sequence (see Figure 30–1): gathering data, interpreting data, and synthesizing data (Bowen 2006; Graber et al. 2005).

### Gathering Data

Clinicians are at risk of making mistakes while gathering data. For example, clinicians may make the error of premature closure (Graber et al. 2002). Several recommendations may be helpful in avoiding errors in the data gathering step.

**Use screening tools and rating scales to support decision making.** Screening tools and rating scales can be helpful for several reasons. A generalized screening tool, such as the Child Behavior Checklist (Achenbach 1991) or the Strengths and Difficulties Questionnaire (Goodman 1997), can help ensure that the clinician is not missing anything. Disorder-specific scales are helpful for gathering more specific data about a condition. Some scales also include data about how likely it is that a child has a condition given a specific score. For children with comorbid conditions or complicated presentations, rating scales can help structure the patients', parents', and clinicians' decision making and help sort through a great amount of data. Rating scales can also help in tracking a child's improvement over time. Clinicians can think of a score as a "lab value" to follow to see whether a child is responding to an intervention. Several Web sites, such as the American Academy of Child and Adolescent Psychiatry's (2014) Toolbox for Clinical Practice and Outcomes and Massachusetts General Hospital's (2010) School Psychiatry Program and Madi Resource Center, list screening tools and rating scales, a good number of which are available in the public domain.

**Use a psychiatric review of systems.** Conducting a brief psychiatric review of systems helps to rule in or out certain conditions. This review can help clinicians avoid missing comorbid conditions or misattributing symptoms to one disorder instead of attributing symptoms correctly to another. For example, in a child or adolescent with depressed mood and neurovegetative symptoms, it is important to rule out periods of mania or hypomania.

Additionally, many symptoms in childhood disorders are shared among disorders. For example, sleep disturbance, poor concentration, psychomotor agitation, and irritability can occur with anxiety disorders, mood disorders, substance abuse, and ADHD. By quickly attributing these symptoms to one condition, a clinician may miss that they are actually part of another condition. Using a brief psychiatric review of systems can help avoid such errors.

**Consider commonly co-occurring conditions.** Studies that compare diagnoses obtained from structured interviews with those obtained through treatment as usual (e.g., admission or discharge diagnoses from a chart) have generally found that structured interviews are more likely to identify comorbid diagnoses (Jensen and Weisz 2002; Lewczyk et al. 2003). Clinicians may be inclined to stop questioning once they have established a diagnosis. This error can be avoided by keeping epidemiology in mind to help identify comorbid conditions. Clinicians who are familiar with which conditions "travel together" are less likely to miss something. For example, oppositional defiant disorder, conduct disorder, learning disorders, and anxiety disorders are the most common comorbid conditions with ADHD. Mood disorders such as major depressive disorder or bipolar disorder may also co-occur. A careful assessment of a child with ADHD should include ruling out the most common comorbid conditions.

**Obtain details about specific symptoms.** When determining whether a symptom is absent or present, the clinician needs to obtain as much detail as possible and make an effort to get specific examples and find out what precipitated the symptoms.

## Interpreting Data

In addition to eliciting information, clinicians need to think carefully about how to interpret the data. This step is comparable to the conversion of an observation to a finding. A clinician uses judgment to determine whether information is clinically relevant, whether a symptom is pathological, and with which disease state the symptom may be associated (e.g., whether a finding of inattention is associated with ADHD, anxiety, or major depressive disorder). “Anchors” can be used to help describe symptoms (e.g., manic symptoms in young children) and to assist clinicians in discerning what is clinically significant (e.g., by indicating which developmental delays are subthreshold and which are severe enough to qualify as autism spectrum disorder). In research instruments, anchors often help clinicians determine what qualifies as minimal, moderate, and severe and are especially useful in helping clinicians be more reliable in interpreting symptoms. For example, investigators found increased interrater reliability when anchors were included as part of clinician rating scales (Hughes et al. 2000). The field would likely benefit from decision support tools that include anchors, especially for less common disorders for which clinicians are less likely to have accumulated an inventory through experience with patients. The value of anchors and vivid descriptions for diagnostic decision support was recognized by the DSM-5 committees. This led to additions to DSM-5, such as the inclusion in the ADHD criteria of examples of how symptoms present in adults, as well as richly illustrated examples of impairment (i.e., better anchors) as part of the severity tables for intellectual disability and autism spectrum disorder (American Psychiatric Association 2013). However, we recommend that in child and adolescent psychiatry, both in the absence and in the presence of such decision support tools, it is crucial to examine a symptom in its developmental and psychosocial context, as we describe in the following subsections.

**Think about symptoms developmentally.** When working with children, a clinician needs to think of how they present from a developmental context and to interpret their symptoms developmentally. For example, healthy toddlers have more frequent tantrums than healthy school-age children. Thus, whether tantrums and their frequency should be considered pathological or normative will vary as children age. Another example is that according to research and the current diagnostic criteria, children (but not adults) with major depressive disorder may present with irritability (and not sadness) as their primary mood symptom. A young child may normatively exhibit pronounced anxiety in the presence of a stranger (the clinician), whereas a similar level of anxiety in youth and adults might be considered more likely pathological.

**Look at symptoms in a psychosocial context.** Many of the youth described in this book have experienced severe psychosocial stress, such as the death of a parent, parental divorce, or trauma. Their presentations must be considered in light of these experiences. However, clinicians must take care not to overweigh the stressor when thinking about a diagnosis. As an example, many children, such as those in the foster care system or those who have been otherwise traumatized, may in fact suffer from depression and not posttraumatic

stress disorder *per se*. Clinicians need to take a careful psychosocial and trauma history and be careful not to overdiagnose all traumatized children as having posttraumatic stress disorder or to assume that the symptoms that are present are necessarily caused by psychosocial stressors.

In addition to evaluating the potential impact of psychosocial contexts on symptoms, clinicians often make interpretations and inferences about how the context lends meaning and form to specific symptoms. At times, clinicians may be tempted to discount symptoms because of the context. For example, in two related studies, investigators presented clinicians with vignettes of children who had symptoms of conduct disorder, but the vignettes varied in whether they presented symptoms only, symptoms in the context of a negative environment, or symptoms caused by internal dysfunction (Kirk and Hsieh 2004; Wakefield et al. 2002). These investigators found that clinicians were less likely to diagnose conduct disorder if the child's behavior occurred in the context of a negative environment. Additionally, Kirk and Hsieh (2004) found that the clinicians' professions correlated with the likelihood of diagnosing conduct disorder—social workers were less likely to diagnose conduct disorder than were psychiatrists or psychologists—thus indicating that professionals' training and experiences may affect how they conceptualize diagnosis.

This concept of considering symptoms and a disorder in context is very complex (see Jensen et al. 2006). Although we believe that a phenomenological approach to diagnosis is essential at this stage in the profession's knowledge, this approach must be enhanced by clinicians' understanding of psychosocial contextual factors and awareness that such factors may shape treatment decision making. For example, a child with severe and long-standing ADHD and conduct disorder expressed in the context of a disordered environment may benefit from an array of services, including a therapeutic foster care setting, intensive parent training, and medication, whereas a child with similar problems in a more benign environment may respond simply to carefully managed medication.

**Gather data in different settings and from multiple informants.** Often, learning about a child's behavior in multiple settings helps the clinician to better understand a child's difficulty. For some disorders, such as ADHD, data from two settings are required to make a diagnosis. For children, who spend much of their time at school, feedback from the school is incredibly useful. For example, if a child has difficulty with attention in school but not at home, the clinician might consider whether the child has a learning disorder. Children with selective mutism may be talkative at home but silent at school or in the grocery store. Understanding how the child's behavior manifests to different persons and across different settings provides useful information about the variability of symptoms and behaviors from the viewpoints of and in the presence of particular raters.

Differences observed and reported by raters within or across settings can be understood not merely as differences in behavior but also as a function of any or all of three other factors: variations in demands and tasks, different interpersonal relationships (e.g., mother-child vs. father-child vs. teacher-child relationship), and biases in the judgments of a rater (see next paragraph). On the other hand, consistency of reports about the child across in-



formants and settings creates additional confidence in the clinician's determination that the behaviors should be interpreted as a symptom within the child, as opposed to an adverse psychosocial context.

**Be wary of biased informants.** In addition to considering the possibility that various informants can be biased, the clinician also should be careful not to attribute too much of the pathology to biased reporting alone. Investigators have demonstrated that parents with depression or anxiety (compared with parents without) may report more symptoms in their children than are reported from the child (Najman et al. 2000, 2001), the teacher (Chilcoat and Breslau 1997), the other parent (Jensen et al. 1988a, 1988b), or all of the raters (Jensen et al. 1988a, 1988b). Additionally, family characteristics (e.g., parents' marital status or gender) have an impact on the reports of symptoms by parents, teachers, and children (Jensen et al. 1988a).

## Synthesizing Data

The clinician should keep several principles in mind when integrating data. When combining information to come up with a diagnosis, the clinician risks weighing some information too heavily and forgetting other information.

**Keep base rates in mind when thinking about diagnosis.** As part of their training, clinicians may learn about the epidemiology of childhood mental disorders; however, they are rarely taught how to make use of these data. Research indicates that physicians are especially poor at calibration (i.e., predicting how often an event will occur over a series of cases) because they do not know the local base rates of a disease that they see in their practice (Wigton 2008). To avoid potential biases, the clinician should realize that a child or adolescent is much more likely to have a common disorder than a rare one.

Rates of conditions also vary across different settings. For example, childhood schizophrenia is very rare. Thus, the young adolescent who isolates herself in her room is unlikely to be schizophrenic. Even if a child has psychotic symptoms, he or she is *still* unlikely to have schizophrenia. This inference would especially apply in school settings and outpatient community clinics. However, this calculation changes slightly at an inpatient state hospital or at a tertiary care inpatient unit specializing in psychotic disorders. In these settings, psychotic symptoms are still more likely to represent bipolar disorder or depression with psychotic features (both more common than schizophrenia), yet a child presenting to one of those settings is more likely to have schizophrenia than a child presenting to an outpatient community clinic.

**Think of each query as a test.** Clinicians do not yet have laboratory tests to guide them in diagnosing child and adolescent mental disorders. As we noted in an earlier subsection (see "Use screening tools and rating scales to support decision making"), some screening tools can be used like a laboratory test, by supplementing clinical decision making on the basis of history and mental status examination. Additionally, at times clinicians

can think of each query as a test from which to adjust the likelihood of a certain disorder. Thus, the pretest probability that a child has schizophrenia is very low. The probability increases given psychotic symptoms but still remains very low.

**Be systematic about making a diagnosis.** Experienced clinicians may be more likely to rely on pattern recognition when making diagnoses. However, less experienced clinicians and experienced clinicians working with complicated cases need to be systematic about considering symptoms to arrive at a diagnosis. In situations like this, rating scales or symptom checklists can help support decision making.

**Evaluate and integrate information from different informants.** In child and adolescent psychiatry, clinicians gather data from children, their parents, their teachers, and other informants. Thus, clinicians often need to integrate discrepant information. This task is often a matter of clinical judgment whereby the clinician scrutinizes the discrepant data and decides whether both data points are valid and, if not, which informant might be more reliable.

This process of evaluation and integration takes into account many of the aspects described previously in the “Interpreting Data” section. However, several other rules of thumb may be useful. One example is using the “or” rule: if either informant endorses a symptom, the clinician might count that symptom as positive (Cohen et al. 1987). Another rule of thumb for integrating data is that parents tend to be better informants for externalizing symptoms, such as oppositional defiant disorder, whereas children and adolescents are often better reporters for internalizing symptoms (Jensen and Watanabe 1999). As another example, investigators have demonstrated that parent-rated scales are better predictors of bipolar disorder than are child- or teacher-rated scales (Youngstrom et al. 2004).

**Consider the need for several observation opportunities or an extended evaluation.** In some cases, a clinician may have great difficulty giving a definitive diagnosis after one meeting with a child. This problem presents for several reasons. Children and adolescents may take several sessions to be comfortable enough to share (or show) all the data pertinent to an accurate diagnosis. Additionally, for some conditions, mental status may fluctuate. For example, diagnosing bipolar disorder would be premature if the child presents with manic symptoms during a trial of antidepressants. However, if the child has a manic episode 1 year later that is unrelated to medication, the clinician can be more confident of the bipolar disorder diagnosis.

**Use DSM-5 as a framework to structure decision making, but use the Robins and Guze model to conceptualize diagnosis.** DSM-5 is very useful as a framework to structure clinical decision making, and it serves as a bridge to communicate between clinicians and patients using a consistent and validated language. DSM-5 offers clear guidelines and rules on how to consider symptoms, in relation to both course and cross-sectional diagnoses. For example, it provides guidelines about the length of an episode in bipolar disorder and also for differentiating psychosis occurring during a mood episode from psychosis that is distinct from a mood episode.

However, DSM-5 may inadvertently lead the unwise user to assume that the causes (and treatments) of the disorder lie only within the child's biological substrate. For this reason, we recommend also considering Robins and Guze's (1970) framework, as well as the child-oriented modifications by Cantwell (1995). Robins and Guze's framework includes distinct clinical characteristics (or symptoms), distinct biological characteristics, genetics, and outcome. This broader framework was introduced to validate and distinguish overlapping disorders; therefore, these different categories are useful when considering diagnosis beyond current phenomenology.

## Conclusion

In this casebook, the expert case writers tended to use different methods for data collection, even though we encouraged all to draw on common data gathering methods, including using reliable and valid rating scales. At times, they also varied in how they interpreted data (the step of converting observations to findings in the epistemological framework). All of them used DSM-5. We applaud the extent to which the current DSM edition provides a common framework that to some extent guides data collection and synthesis across clinicians. We caution, however, that whenever data collection frameworks are incomplete or incorrect (i.e., if one only collected DSM-5 symptom information and failed to conduct all necessary aspects of a complete evaluation), all subsequent data synthesis and interpretation steps are likely flawed, including ultimate DSM-5 diagnoses. Nonetheless, we predict that the reader will reach the same conclusion we do: available evidence across our 29 cases suggests that DSM-5, although always in need of improvement, does fairly well as a data collection and synthesis framework if accompanied by all the other necessary aspects of a high-quality evaluation.

Even with this common ground, variations in ultimate diagnoses and treatment decisions did occur within cases, despite the fact that two expert teams drew on the same observations (i.e., information provided by the case writer[s]). Therefore, to the extent that the expert teams varied, we suggest that important differences exist among clinicians—even among expert clinicians—in their approach to synthesizing and interpreting clinical data and in the extent to which they arrive at the same or different treatment decisions. We hope that this casebook begins to usefully illuminate these differences, lighting the path forward for future studies to better understand diagnostic and treatment decision-making processes. The extent to which clinicians' current differences in decision making reflect biases or incomplete understanding of patients and the success of all future attempts to improve patients' outcomes will depend on how well research studies and diagnostic systems focus and direct this light.

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# CHAPTER 31

## Research and Clinical Perspectives on Diagnostic and Treatment Decision Making

### Whence the Future?

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**FOR MORE THAN FOUR DECADES**, the classic contribution of Robins and Guze (1970) has outlined our commonly accepted approach for validating a given set of commonly occurring symptoms as a *mental disorder*—namely, by showing that the purported disorder demonstrates a number of distinguishing characteristics. This approach was further modified by Cantwell (1996), with validation of a putative disorder assumed to be accomplished if the candidate disorder can be shown to be discriminable from other disordered states (as well as normal functioning) by any or all of the following: clinical descriptors, psychosocial factors, demographic factors, biological factors, family genetic factors, family environmental factors, natural history, and response to treatment.

Despite the usefulness of this approach to date, most current diagnoses, as implemented within DSM-5 (American Psychiatric Association 2013) and its precursors, fall short of an ideal validation standard. According to former National Institute of Mental Health Director Thomas Insel, M.D., the strength of all DSM editions to date has been “re-



liability”—that clinicians use the same terms in the same ways—but the weakness is its lack of validity (Insel 2014). He further noted that in other areas of medicine, the symptom-based diagnoses that were once used have been largely replaced by a more thorough understanding of pathophysiology. He argued that in psychiatry, we need a new nosology, defined by a different set of assumptions: 1) that mental disorders are biological disorders involving brain circuits that implicate specific domains of cognition, emotion, or behavior; 2) that each domain must be understood across its dimension of functioning; and 3) that mapping the cognitive, circuit, and genetic aspects of mental disorders should eventually yield new and better targets for treatment.

This need for a better nosology is not unique to childhood disorders but also bedevils most adult conditions defined by DSM-5. For example, recent genetic findings challenge the distinction among schizophrenia, bipolar disorder, and neurodevelopmental disorders such as autism (Cross-Disorder Group of the Psychiatric Genomics Consortium et al. 2013). As a consequence, the field of psychiatry may be entering a transitional phase during which it will need to move from using traditional descriptive diagnoses (categories and/or dimensions) to clinical entities that relate more closely to the underlying workings of the brain.

If one were to ask whether the current DSM “carves nature at its joints,” the research literature principally answers in the negative. For example, in a study of the diagnostic criteria for depression using a sample of monozygotic and dizygotic twins, Kendler and Gardner (1998) examined the diagnostic criteria for number of symptoms, severity, and duration, finding that number of symptoms and severity (but not duration) predicted increased likelihood of subsequent episodes in both the index case and the twin. However, a natural cut point did not occur at four symptoms; even persons with fewer than five symptoms, as well as those having less severe symptoms (below diagnostic threshold), were at greater risk for subsequent episodes of depression, both in the index case and the twin. These findings suggested that even subthreshold depressive symptoms reveal the same underlying diathesis. In addition, no support was found for the requirement of 2 weeks’ duration or some threshold of clinical severity. Thus, major depressive disorder appeared to be a diagnostic convention imposed on a continuum of depressive symptoms of varying severity, impairment, and duration. Similar findings have been found in the area of genetic studies of ADHD, where heritability analyses of full-syndrome versus subthreshold symptom states suggested that the condition likely reflected a continuum versus an all-or-none, present/absent psychopathological state (Rasmussen et al. 2002).

This situation may not differ much from other areas of medicine—thus, if respiratory disease specialists were to conduct surveys of the nationwide prevalence of “respiratory illness,” inclusion of conditions ranging from upper respiratory illness, chronic obstructive pulmonary disease, and asthma to mild upper respiratory illnesses would likely result in nearly 100% rates of “disorder.” Turning the question on its head, Spitzer (1998) asked why the field of psychiatry needs such studies when other areas of medicine do not.

To avoid the conceptual muddles noted above, to answer the question “When is a case a case?” the first issue that must be addressed is clarifying “a case for what purpose?” For example, Sonuga-Barke (1998) noted that to distinguish between various definitions of disorder, one must clarify whether one wishes to define mental disorder for purposes of the

clinical utility of such a definition (the “pragmatic” view) and construct validity (the ontological view). Although the ultimate goal of classification is *usefulness* (Frances 1998), as Eisenberg (1995) noted, there are many “usefulnesses.” What works for researchers to define some presumably homogeneous entity (i.e., the attempt to “carve nature at its joints”) may not work well for clinicians and policy makers, who often wish to know “who needs care.”

One potential route out of such impasses of objectives was first described by Zarin and Earls (1993), who recommended that methods of decision analysis be applied to such issues. They noted that the essential components of diagnostic decision making—choice of external validator, choice of discriminator, and choice of cutoff scores—might be implemented very differently, depending on the clinician investigator’s objective: 1) to determine which children need psychiatric care, where overall assessments of disability are most relevant; 2) to determine what clinicians do in real-world practice—that is, services research—which often varies from the “ideal-world” practice; or 3) to determine which children are valid cases of a specific disorder, for purposes of research into etiology, genetic factors, treatment response, and likelihood of persistence and/or recurrence.

Thus, “caseness for what purpose” is the relevant question, and one must appreciate that any cutoff or discriminator will result in some false negatives and some false positives. The choice of cutoffs will often depend on the relative costs of false negatives versus false positives vis-à-vis the clinical or research objectives.

## **Problems in Defining Caseness of Mental Disorder**

Inspection of the range of challenges in determining mental disorder caseness in children and adolescents suggests that many of these issues are not unique to children and adolescents per se but are shared with the caseness challenges that are part and parcel of adult studies (as noted earlier), as well as with other aspects of medicine. These issues include questions concerning categorical versus dimensional distinctions, choice of cutoffs, distinguishing diagnosis from the need for treatment, cultural factors affecting diagnosis and impairment, and the role of context. In work with child and adolescent populations, however, a set of somewhat unique factors appears to be of relatively greater import in defining mental disorder—namely, the role of children’s caretaking environments vis-à-vis mental disorder and special considerations that must be taken into account with young persons, principally as a function of the rapid rates of change occurring within their developing biological, psychological, and social capacities. We discuss these special challenges below, beginning first with those issues common to children and adults.

### **Categories Versus Dimensions**

A major conceptual consideration underpinning determination of mental disorder involves reflection about 1) whether the underlying construct is a true category, qualitatively

different from other disordered as well as normal states, or 2) whether caseness simply reflects difficulties in functioning at the extreme end of a continuum. Although most psychiatric disorders, child and adult alike, can be shown to be quantitatively different from “normal” states, such differences do not necessarily reflect qualitative differences. Large differences between two groups on a number of markers do not necessarily make them different in kind. For example, tall persons and short persons are not said to be from two different species simply because there appears to be a “tall syndrome” — weighing a lot, having long fingers, and requiring large hat sizes. Both quantitative and qualitative distinctions are needed to make an effective argument that a “mental disorder” requires the presence of differences in kind. Finding different kinds *might* constitute a partial argument in support of a particular definition of mental disorder, yet both quantitative and qualitative differences are needed to make the case for different kinds. Although two different kinds, even when such can be identified, may have the same final common pathway, in terms of the observable phenomenology, two cases of the same kind may have very different outcomes, making the sole use of qualitative distinctions as an indicator of mental disorder problematic (Andreasen et al. 1988). To use the model of height, being short alone does not indicate whether someone is “pathologically” short or normally short. This differentiation requires knowledge of other associated factors, such as the presence of a disturbance in an endocrine system or bone metabolism (Eisenberg 1995).

At present, little evidence is available to indicate *natural* dichotomies between “cases” and “noncases” in child and adolescent psychopathology. That is, even for disorders for which a great deal of empirical evidence has been brought to bear on the selection of thresholds between normality and disorder in DSM studies (e.g., Lahey et al. 1994), DSM diagnoses are perhaps best considered to represent expert judgments more than natural dichotomies. This view has led many scholars to advocate *dimensional* approaches to the definition and assessment of child and adolescent psychopathology rather than *categorical* diagnostic approaches. Yet both clinical practice and policy making often require dichotomous decisions about the mental health of youth. Clinicians must make dichotomous decisions to treat or withhold treatment on a daily basis; researchers seek to classify the “phenotypes” of psychopathology to conduct neurobiological and genetic studies; and policy makers often engage in activities such as counting the number of youths who need but have not received mental health services. Thus, a tension exists between the need for categorical definitions of mental disorder for many important purposes and the lack of evidence to support such dichotomous categorizations.

## Cutoffs and Their Determination

Because qualitative distinctions have been difficult to demonstrate and, even when demonstrable, do not appear to be a fully trustworthy guide to caseness determination, clinicians and researchers alike rely on some more or less arbitrary cutoff on a severity or impairment dimension to determine caseness. Other than severity and impairment, factors that have been considered as potential cutoffs for determination of mental disorder include the family’s acknowledgment of the need for treatment, their considering the child’s condition a “problem,”

and the degree of family burden (Angold et al. 1998). At least in part, the search for appropriate cutoffs has been spurred on by the fact that the sole application of DSM criteria has yielded implausibly high rates of disorder for those wanting to make arguments for parity of health coverage for these conditions (Regier et al. 1998; Spitzer 1998). In addition, the presence of a diagnosis does not necessarily indicate the need for treatment, any more than the presence of a mild upper respiratory infection or warts necessitates commitment of health care dollars or treatment resources—even though most would agree that such conditions are not “normal” from the perspective of actual differences in tissue structure and/or function.

## The Impairment Criterion

The most common cutoff applied to determine mental disorder caseness is the construct of impairment, such that to be considered a true case of disorder, one must suffer from some degree of impairment. This is an interesting distinction, and one not necessarily applied equally to other supposed disorders. For example, persons with hypertension may have no apparent impairment at the time of diagnosis, and treatment is employed because of the statistical likelihood of future impairment as a result of the untreated condition. In fact, the treatment itself is likely to result in side effects that could be reasonably construed as impairment.

Even if one accepts that impairment is needed to establish mental disorder caseness, the problem of determining the precise cutoff for the degree of impairment is inescapable. Although a number of strategies have been employed to minimize the numbers of false positives and false negatives (Lahey et al. 1994; Piacentini et al. 1992), such strategies still must rely on some other criterion against which the determination of a “false” positive or negative is made. Critical considerations are how much impairment and as judged by whom. The requirement of impairment may seem a comfortable position at first glance, but close inspection reveals that the many definitions of *impairment* can yield dramatically different rates of disorder (Angold et al. 1999).

Similarly, it is not uncommon that a child, or adult for that matter, will be severely impaired and have many symptoms of a disorder but not meet full DSM-5 criteria. For example, subthreshold major depressive disorder or symptoms of depression not meeting full DSM-5 criteria for major depressive disorder are often associated with impairment. Moreover, children and adolescents who do not meet full criteria for a disorder but have many symptoms as well as impairment may have high rates of conversion to the disorder. For example, the Course and Outcome of Bipolar Youth Study purposely enrolled youth who did not meet full criteria for bipolar disorder but who were impaired. Most of these youth did not meet criteria because their episodes were too brief, yet approximately 30% of them converted to bipolar I or II disorder within a 2-year follow-up period (Birmaher et al. 2006).

In part, the current requirement for impairment as embodied in DSM-5 and previous DSM editions stems from the fact that clinicians have no sure knowledge of the underlying disease processes for mental disorders, children’s as well as adults’. As with hypertension, the presence of an asymptomatic malignant tumor, although not resulting in current impairment, is known to have certain consequences if left untreated; therefore, medical necessity is generally taken for granted. From a symptomatic perspective, asymptomatic hypertension

and tumors might be viewed as analogues to mental disorders' "subthreshold" conditions. For example, once reliable markers have been obtained for the likelihood of future onsets of autism, mood disorders, or schizophrenia, prevention and early intervention strategies become possible. Eisenberg (1995) noted that as science progresses, so do the assumptions of what constitutes mental disorder. More than 100 years ago, knowledge of hemoglobinopathies such as thalassemia was limited to the overdescription of the clinical phenomenology of symptoms and affected bodily organs. After decades of research, precise knowledge of the point mutations in the molecular structure of the hemoglobin molecule underlying these conditions is now available, and persons totally asymptomatic can be identified and are considered "cases" from the perspective of prevention, early intervention, and genetic counseling. With time, better knowledge of the basic neural, psychological, and social processes underlying the mental disorders should allow clinicians to worry less about what should be a "case" and more about the health merits and ethical issues involved in intervening with an illness process that is reasonably well understood, at least in terms of prediction of subsequent health impairments.

## Cultural and Contextual Considerations

Within a given culture, symptoms, impairment, and mental disorder are likely to be defined in the context of what is expected and "normal" within that culture rather than because of some underlying etiological process or biological substrate (Cantwell 1996). Therefore, diagnostic systems such as DSM have a nearly impossible task of trying to accomplish a reliable description for all possible purposes, even though "purposes" are likely to vary greatly from setting to setting and culture to culture. For example, as found in various studies of children in Puerto Rico (Piacentini et al. 1992; Shaffer et al. 1996), although parents of Puerto Rican children rate their children (compared with mainland U.S. samples) as having somewhat more symptoms on the Child Behavior Checklist and similar levels of symptoms on face-to-face diagnostic interviews using the Diagnostic Interview Schedule for Children, they attribute much lower levels of overall impairment to those same symptoms than do parents of mainland children (Shaffer et al. 1996).

Rather than reifying a "mental disorder" as a simple symptom count that crosses some relatively arbitrary threshold, Rogler (1993) suggested that within given cultures, a quick decision with substantial face validity can be accomplished for many purposes to avoid attributing symptom, case, or impairment status to conditions or situations that actually reflect some form of goal-directed, culturally situated behavior. Although this idea is eminently sensible, we are unaware of any systematic testing of such approaches to determine whether they can be reliably done and whether multiple culturally informed raters would agree among themselves with such "face valid" decisions. Such an approach, if cautiously implemented, even in Anglo-American cultures, may help avoid according mental disorder status to some conditions that many would regard instead as adaptive responses (e.g., certain forms of conduct disorder; Richters and Cicchetti 1993) and avoid criticisms that diagnostic approaches too often ignore the obvious (Jensen and Hoagwood 1997).

In an important sense, expert clinicians' judgments concerning symptom, impairment, and mental disorder status that make use of all available data over time are an irreplaceable

LEAD (Longitudinal Expert diagnostician All Data; Spitzer 1983), if not gold, standard, yet such judgments also are situated in culture and time, reflecting in part both scientific findings and cultural norms (Eisenberg 1995). As culture changes or science advances, these determinations do as well. To this extent, the judgment of what constitutes a “case” (in terms of medical necessity or need for treatment) can never be fully satisfied by statistical approaches or complex equations and must instead take into account societal values, willingness to pay, determination of what constitutes a “problem in living” versus a disorder (e.g., the boundaries between transient sadness and major depressive disorder), and the assembled experience and norms of the expert mental health care providers within that cultural context. Without some metric that has carefully calibrated itself by taking into account these dimensions, any determination of “mental disorder” (apart from scientifically established qualitative differences in underlying disease processes) must remain more or less arbitrary.

## **Children’s Caretaking Environments**

Important contextual considerations concerning impairment pertain to the finding that under many circumstances, persons may be impaired, yet their symptom picture is such that it does not fit full DSM criteria. For example, Angold et al. (1999) noted that a substantial subset of children evidence quite substantial impairment, yet these children often only meet various DSM criteria and not the full criteria for a disorder. Nonetheless, along a number of important external validators, these same children can be shown to suffer substantially and can benefit from treatment. Most frequently, these difficulties are problems concerning their external surroundings, particularly their caretaking environments. Although such difficulties might also be considered “problems in living,” a substantial body of evidence suggests that these difficulties are related to the onset and persistence of diagnosable conditions. To the extent that such conditions may reflect pathogenic processes that result in current suffering and may consolidate over time into an enduring pattern of problematic behavior, such situations may be on a par with other latent disease processes whose effects are seen only over time (e.g., hypertension) but are afforded full disorder status. To address this problem, Angold et al. (1999) recommended that greater use be made of the not otherwise specified (NOS) (“unspecified” in DSM-5) categories because children categorized as having an NOS disorder usually need and benefit from care at the same levels as those who meet traditional DSM disorder status. Similarly, Emde (1994) and others have suggested that alternative diagnostic schemas are required to include “relationship disorders,” particularly in the early years of life. However, such schemas might also be applicable to other ages. But in young children, individual problems are so embedded in the caregiving relationships that their primary diagnostic location may need to occur at the level of the relationship because interventions and process-based understanding are most explanatory at that level of analysis (Anders 1992).

## **Definitions for Different Ages, Ethnic Groups, or Genders**

It is not clear at this point whether the most valid definitions of child and adolescent psychopathology should or should not differ according to the individual’s age, gender, or ethnicity. Similarly, it is not known if different measures of distress and impairment would

optimize the identification of impaired cases in youths of different ages, genders, and ethnicities, apart from the cultural factors noted previously in this section. Different symptoms, or different symptom thresholds, might identify impaired youths at different ages or with different demographic characteristics, but this possibility has not been adequately examined to date. Although an array of epidemiological evidence suggests that children of different ages and genders are at a greater risk for various disorders and comorbidities (Nottelmann and Jensen 1995), beyond differences in rates, it is not clear whether there are actually different syndromes in these subgroups.

Differences in psychopathology related to age, gender, and ethnicity are unlikely to be identified, however, unless professionals look for them. For example, in relation to ethnic differences, the inclusion of the few symptoms of *ataque de nervios* that are not included in other DSM-5 syndromes might allow clinicians to determine if this potential culturally specific syndrome is found in Hispanic adolescents but not in adolescents from other ethnic groups. The inclusion of a small number of such additional diagnoses in future population-based studies would be of great importance to the understanding of potential age, gender, and ethnic differences in psychopathology.

A final important consideration that must be addressed in regard to issues of caseness for children and adolescents involves children's actual trajectories of functioning. Given the rapidly evolving nature of a child's burgeoning capacities, important information can be gleaned from the *rate* of the child's growth and development, and evidence of delays (e.g., failure to thrive, mental or growth retardation) might constitute grounds for consideration of caseness. A major impediment to such issues in the case of children and adolescents is the fact that as currently written, most diagnostic criteria are static across ages and, as a general rule, symptoms presenting at most ages are taken at face value without consideration of the extent to which a given symptom (e.g., motor activity, inattention, fears of specific objects, separation fears, aggression to others) may actually be normative at given ages. Although no good evidence to date indicates that such considerations make any difference, these issues have been insufficiently explored, and studies that have examined these questions have likely been greatly underpowered, particularly when examining these issues in nonclinical settings.

## What the Sensible Clinician Should Do

In our view, the experienced clinician takes into account the issues discussed in the previous section—that is, not placing too much emphasis on categorical versus dimensional distinctions; distinguishing diagnosis from the need for treatment; examining the impact of cultural factors on diagnosis and impairment; evaluating the role of context and care-taking factors; evaluating and, when appropriate, combining information from multiple informants; and carefully considering developmental factors. In an attempt to characterize this process, we suggest that a reasonable clinician consider doing the following, although not necessarily in this order:

- Determine the nature of the presenting problems and chief complaints, considering who needs help and why
- Evaluate the developmental nature of symptoms
- Examine cultural and contextual factors affecting presentations
- Ascertain levels of impairment
- Understand key aspects of the syndrome
- Determine the presence of comorbidity, family perspectives, and other factors that may affect choice and/or ordering of treatments

In contrast to using research-based approaches that often focus principally on assessing symptoms primarily conceptualized as “within the child,” working with these additional considerations requires a “Meyerian” (Adolf) approach to historical diagnosis (Lief 1948). “An accurate diagnosis much more akin to detective work or archeology—a quasi-judicial procedure,” according to Meehl (1973). Figure 31–1 shows how a sensible clinician might approach the complex mass of information presented by a patient and family, and how this clinician can organize his or her approach to intervention.

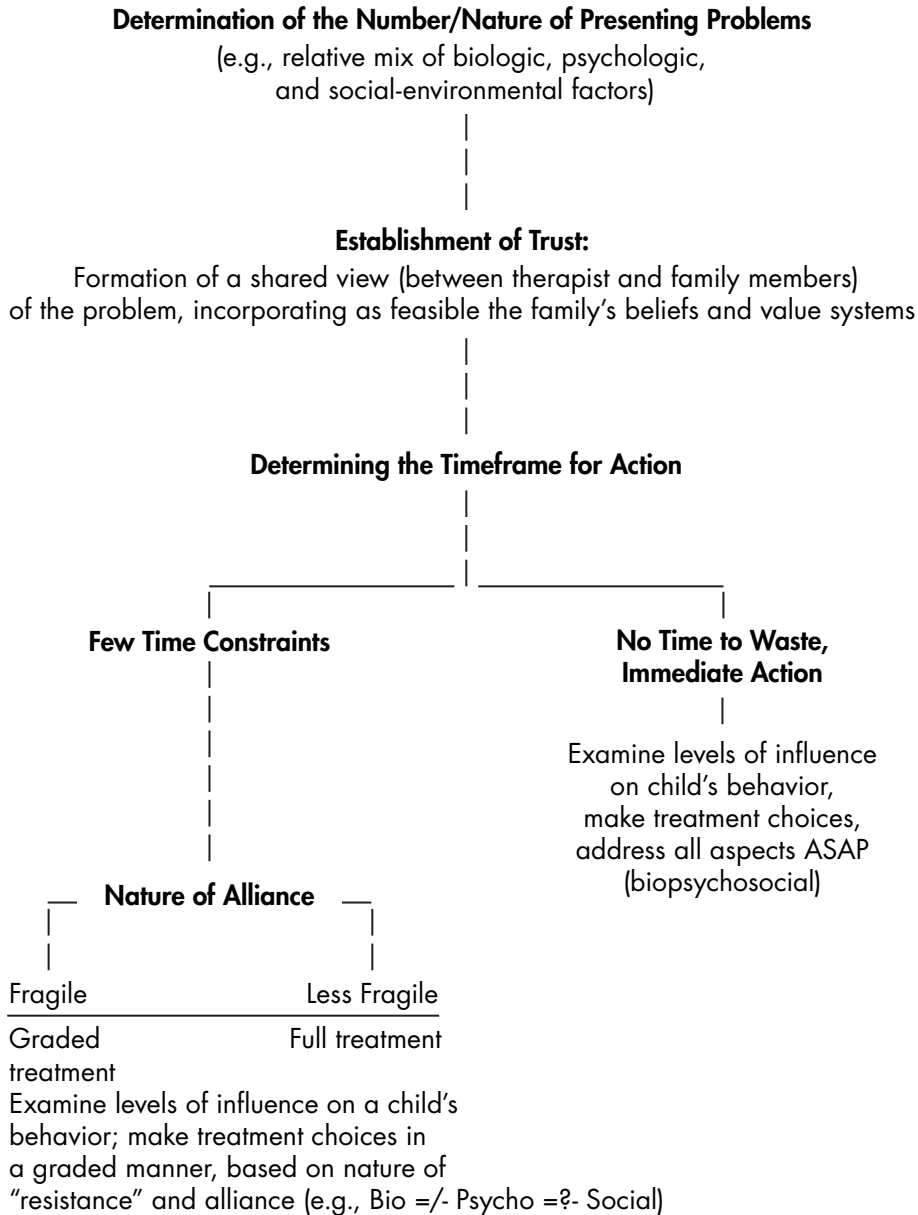
As suggested by Figure 31–1, a number of moderating factors may affect the clinician’s decision making or recommendations in the ordering, timing, and/or combining of treatments. Such factors include 1) the child’s degree of impairment (for children with greater impairment, most clinicians will increase the range, type, and amount of treatments); 2) interference with developmental lines (in a case with presumed interference, the clinician may be more likely to make or suggest environmental modifications that serve to increase the child’s developmental opportunities, with the assumption that normal developmental processes will take hold if not otherwise thwarted); 3) the responsiveness of the child’s problem to intervention type(s) (all things being equal, the clinician is likely to recommend or choose specific treatments known to have an impact on the disorder, symptom, or type of impairment); and 4) the setting specificity of the problem and the intervention (if problems are setting specific, the clinician is likely to target the intervention to that setting).

In addition to these considerations, several other principles are likely to operate to guide clinicians’ decision making: individualizing the clinical approach and working with families in the therapeutic process described. These are discussed in the following two sub-sections.

## **Individualized Clinical Approach**

Given the enormous complexity of the range of factors shaping the child’s clinical presentation, treatment approaches must tailor the intervention and embed it within the child’s specific developmental stage/status and ecological niche. Such considerations mean that the clinician must of necessity take into careful account whether an intervention will be implemented in a single setting or must cross multiple settings (e.g., home, school), whether it should focus on one or multiple domains of functioning (e.g., self-concept, parent-child behavior management, peer relationships), and how it should incorporate a family’s values and inputs into the treatment design and selection.





**FIGURE 31–1.** Sensible clinician's approach to intervention.

Almost no areas of medicine use a “one size fits all” approach to treating pathology: medication dosages are adjusted to a patient’s body size or surface area, the pace and order of cancer chemotherapies are changed to address each patient’s type and severity of side effects, and even surgical procedures are modified to be better tolerated by frail or compromised patients. Likewise, a good clinician worth his or her salt does not continue with a tightly focused didactic approach with parents if significant dissension between parents threatens to scuttle the entire therapeutic enterprise. Nor does a skilled therapist continue trying to “unload” his or her therapeutic goods on a family if overarching issues of trust/distrust or like/dislike seem to be undermining the family’s confidence in the therapist’s abilities. Yet too many of the modern-day managed care–driven treatments seem to forget that these issues are paramount to the integrity of the treatment.

## Parents and Families as Partners in the Therapeutic Process

To address concerns about the palatability of therapies to families, an effective clinician is usually very attentive to relating to children and families as partners in the therapeutic process. Therapies that fail to build this principle into the approach to families are likely to miss a critical component of treatment effectiveness. Unlike more traditional biomedical procedures that are presumably active once the intervention has been delivered or ingested (e.g., medications), the psychotherapies are inextricably intertwined with the psychopathological conditions, to the extent that both are embedded in behavioral patterns of human social exchange. Without the full enlistment of all critical family members in using their behaviors to change the child’s behaviors, success is much less certain. This recruitment of family effort is possible only to the extent that the therapy itself represents a *partnership* between therapist and family participants and to the degree that the therapist communicates this principle effectively and convincingly to these would-be therapeutic partners. Such partnerships, in the course of both pharmacotherapy and/or psychotherapy, are key to long-term success.

## Putting It All Together: Understanding and Applying Principles of Behavior Change

Clinicians should proceed with treatment only if 1) they possess a clear theory and/or understanding of the principles of treatment (e.g., what are the *necessary though not sufficient* elements of change in this treatment paradigm); 2) given these therapeutic principles, they know what types of person- or family-specific obstacles may hamper the delivery and effectiveness of the treatment (including the family’s commitment to the *therapeutic partnership*); and 3) they know which modifications in pacing, ordering, and timing of treatments must be accommodated to minimize the effects of these potential obstacles on the active components of treatment. For example, an overarching hierarchy of therapeutic principles (based on the clinicians’ best “wisdom”) might be constructed that supersedes (or must pre-

cede) the implementation of an effective psychosocial intervention. Such principles might include the family's or parents' need for control and autonomy in directing family affairs, the apparent consistency of an intervention with the family's values, sufficient marital harmony so that both parents can actively support the intervention, trust and/or liking for the therapist, the apparent sensibility and credibility of the intervention to the family, the "fairness" of the intervention to family members affected by it, the family partners' ability to attend to and learn the intervention, and the presence of appropriate and sufficient emotional reserves and equilibrium in those who must deliver and receive the intervention.

Together, the presence of these therapeutic principles coupled with elements or principles of change might constitute the *necessary and sufficient* ingredients to deliver a reasonably effective psychosocial intervention with an active treatment component. However, in a *therapeutic partnership*, some autonomy is likely to be surrendered to the partner or therapist (if change is to occur), but this best occurs in the presence of trust, liking, and confidence in the therapist. If the intervention is inconsistent with family values, seems unfair, or "just doesn't make sense" from the family's perspective, a very high degree of trust is needed before such an intervention can proceed (if at all), or the differences between the therapist's and family's values and treatment rationales must be fully adjudicated. Likewise, the presence of marital difficulties, preoccupation with other problems, or severe emotional distress (sadness, anger, anxiety) in any of the therapeutic partners must be monitored. Just as the cancer chemotherapist delays the delivery of more antitumor agents when the platelets drop too low, the psychotherapist monitors these core emotional levels within the family therapeutic partners and at critical junctures addresses these issues directly, in the service of providing the most effective psychotherapy for the child's identified difficulties.

We close this chapter by noting the enormity of the decision-making challenges that face a clinician who attempts to deal with a troubled child and concerned family. Although DSM-5 provides much guidance, diagnostic categories often fail to capture the critical issues of context, a child's development, and the nature of the child's fit within his or her particular setting. However, keeping so many issues and clinical principles in view is difficult for the clinician when facing diagnostic and treatment decision-making challenges. We suggest that there are indeed models and theories that are simultaneously developmental, contextual, and adaptational and that accord with much of the basic research that guides modern-day biology (e.g., see Jensen et al. 2006). Sustained dialogues among clinicians, researchers, and DSM developers are essential for continuing the improvement in mapping DSM approaches to patients. We hope that this casebook will constitute a useful stimulus to these dialogues.

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