Integrating Poverty and Gender into Health Programmes

A Sourcebook for Health Professionals

Foundational Module on Poverty

World Health Organization
Western Pacific Region

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Photograph credits: pp. 1, FAO/19729/G. Bizzarri; pp. 3, FAO/19785/G. Bizzarri; pp. 33, FAO/19666/G. Bizzarri; pp. 54, International Labour Organization/Deloche P. ; cover, pp.12, 36, 64, WHO/WPRO.

WHO Library Cataloguing in Publication Data
Integrating poverty and gender into health programmes: *a sourcebook for health professionals:* foundational module on poverty.

1. Poverty. 2. Equity. 3. Health status. 4. Socioeconomic factors. 5. Health programmes.

ISBN 92 9061 212 6 (NLM Classification: WA 30)

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ACKNOWLEDGEMENTS

This module is one of a complete set entitled *Integrating Poverty and Gender into Health Programmes: A Sourcebook for Health Professionals*. It was prepared by a team comprising Sarah Coll-Black (consultant and principal writer), Anjana Bhushan, Technical Officer Poverty, Gender and Human Rights, and Kathleen Fritsch, Regional Adviser in Nursing, World Health Organization Regional Office for the Western Pacific, based on preliminary work done by Marie-Therese Feuerstein (consultant). Breeda Hickey edited the module. Design and layout were done by Zando Escultura.

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ABBREVIATIONS

ADB	Asian Development Bank
AIDS	Acquired immunodeficiency syndrome
ANC	Ante-natal care
ARI	Acute-respiratory infection
ARV	Antiretroviral
CMH	Commission on Macroeconomics and Health
CS	Consumption survey
CVD	Cardiovascular disease
DAC	Development Assistance Committee
DALY	Disability-adjusted life year
DHS	Demographic and Health Survey
DFID	Department for International Development of the United Kingdom
DOTS	Directly observed treatment, short-course
DTP3	Diphtheria-tetanus-pertussis
EPI	Expanded Programme on Immunization
GAVI	Global Alliance for Vaccines and Immunization
GDP	Gross domestic product
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
GNI	Gross national income
GNP	Gross national product
HDI	Human development index
HIV	Human immunodeficiency virus
IEC	Information, education and communication
IMCI	Integrated management of childhood illnesses
IMF	International Monetary Fund
IMR	Infant mortality rate
LBW	Low birth weight
LCHS	Living Conditions Household Survey
LSMS	Living Standards Measurement Survey
MDG	Millennium development goal
MMR	Maternal mortality ratio
NCD	Noncommunicable disease
NGO	Nongovernmental organization
NTP	National TB Programme
OECD	Organization for Economic Cooperation and Development
PER	Public expenditure review
PHC	Primary health care

PPA	Participatory poverty assessment
PPP	Purchasing power parity
PRSP	Poverty Reduction Strategy Paper
RBM	Roll Back Malaria
TB	Tuberculosis
U5MR	Under-five mortality rate
UN	United Nations
UNAIDS	Joint United Nations Programme on AIDS
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Programme
WB	World Bank
WHO	World Health Organization

PREFACE

As analysis of health outcomes becomes more refined, it is increasingly apparent that the impressive gains in health experienced over recent decades are unevenly distributed. Aggregate indicators, whether at the global, regional or national level, often tend to mask striking variations in health outcomes between rich and poor, or men and women, both across and within countries.

At the same time, the understanding of poverty has broadened from a narrow focus on income and consumption to a multidimensional notion of education, health, social and political participation, personal security and freedom, and environmental quality.[1] Thus, it encompasses not just low income, but lack of access to services, resources and skills; vulnerability; insecurity; and voicelessness and powerlessness. Multidimensional poverty is a determinant of health risks, health seeking behaviour, health care access and health outcomes.

It is estimated that about 70% of the world's poor are women.[2] Similarly, in the Western Pacific Region, poverty often wears a woman's face. Indicators of human poverty, including health indicators, often reflect severe gender-based disparities. In this way, gender inequality is a significant determinant of health outcomes in the Region, with women and girls often at a severe societal disadvantage.

Although poverty and gender significantly influence health and socioeconomic development, health professionals are not always adequately prepared to address such issues in their work. This publication aims to improve the awareness, knowledge and skills of health professionals in the Region on poverty and gender concerns.

The set of modules that comprise this Sourcebook are intended for use in pre-service and in-service training of health professionals. It is expected that this publication will also be of use to health policy-makers and programme managers, either as a reference document or in conjunction with in-service training.

All modules in the series are linked, but each one can be used on a stand-alone basis if required. There are two foundational modules, of which this is one, that respectively set out the conceptual framework for the analysis of poverty and gender issues in health. Each of the other modules is intended for use in conjunction with these two foundational modules. The Sourcebook also contains a module on curricular integration to support health professional educational institutions in the process of integration of poverty and gender concerns into existing curricula.

All modules in the Sourcebook are designed for use through participatory learning methods that involve the learner, taking advantage of his or her experience and knowledge. Each module contains facilitator's notes and suggested exercises to assist in this process.

It is hoped that the Sourcebook will prove useful in bringing greater attention to poverty and gender concerns in the design, implementation and monitoring and evaluation of health policies, programmes and interventions.

Introduction

Introduction

Humanity has experienced impressive gains over recent decades. Improvements in health are understood to be fuelled by economic growth, increased education, particularly among women, and the availability of new health technologies.[3] The World Health Organization (WHO) reports that, on average, life expectancy has increased globally by almost 20 years from 46.5 years in 1950-1955 to 65.2 years in 2002.[4] Infant mortality rates (IMRs) have fallen from 104 per 1000 live births in 1970-75 to 59 in 1996.[5] Within the Western Pacific Region average life expectancy now stands at 70.5 years.[6] The Asian Development Bank (ADB) reports that among member states the under-five mortality rate (U5MR) declined from 225 per 1,000 live births in 1960 to 88 per 1,000 in 1995.[7]

However, these gains have largely failed to reach the poor. Persistent and growing inequalities in health are increasingly evident, both between and within countries. A closer examination of health outcomes among the poorest 20% and the richest 20% of the global population paints a bleak picture. The poorest 20% of the global population are roughly 10 times more likely to die before the age of 14 than the richest 20%.[8] A similarly stark indication of the unequal distribution of improved health outcomes is that 99% of annual maternal deaths occur in developing countries.[9] This rich-poor gap in health outcomes highlights the constraints poverty places on the health of the poor. Conversely, the gains in health outcomes experienced by the richest 20% of the global population clearly illustrate what is possible. Importantly, some global health inequalities are widening.[10]

With increasing global commitment to reducing inequality and the realization of human rights, now, more than ever before, international attention is squarely directed towards poverty reduction. This is the primary focus of the Poverty Reduction Strategy Papers (PRSPs) launched by the World Bank and the International Monetary Fund (IMF). PRSPs chart out a country's plan for socioeconomic development and poverty reduction. The Millennium Declaration, signed in 2000, committed United Nations Member States to a series of time-bound and measurable targets. These targets, known as the Millennium Development Goals (MDGs), aim to achieve on human development and poverty reduction.[11] The first goal is to halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day please see Section 6 for an overview of the MDGs).[12] Mounting evidence on the interrelationship between poverty and health increasingly suggests that addressing health outcomes among the poor may be a viable poverty reduction strategy. In particular, the Commission on Macroeconomics and Health (CMH) recently called attention to the strong links between health, economic development and poverty reduction.[13]

This growing concern with improving the health of the poor as a poverty reduction strategy, coupled with the growing disparity between the health of the rich and the poor, is creating an environment where health professionals at the community, provincial, national and international level increasingly require the knowledge, skills and tools to more effectively respond to the health needs of poor and marginalized individuals and communities. Yet, health professionals are not always adequately prepared to address such issues.

This module is designed to help fill this gap by building the capacity of health professionals to analyse and address the interrelationship between poverty and health. It is divided into six sections.

- **Section 1** defines WHAT poverty is, its consequences and multiple dimensions. It also identifies a variety of measures and indicators of poverty, including methods of determining the prevalence of poverty and inequality within a community.
- **Section 2** explains WHAT the links between poverty and health are.
- **Section 3** discusses WHY it is important for health professionals to address issues of poverty, from efficiency, equity and human rights perspectives.
- **Section 4** discusses HOW health professionals and the health care system as a whole can address issues of poverty, with a special focus on low-income women and those from other marginalized or vulnerable groups.
- **Section 5** provides notes for facilitators.
- **Section 6** contains a collection of tools, resources and references to support health professionals in their work in this field.

1. What is poverty?

1. What is poverty?

Meeting the first MDG, outlined previously, requires that poverty reduction efforts reach those most in need. But, what exactly is meant by poverty and who are the poor? Similarly, how are poverty data, such as those in Table 1, derived? This seemingly simple question continues to inspire dialogue and debate among researchers, policy-makers and development workers, while experience continues to elucidate new facets of poverty that challenge and broaden traditional definitions. Statistical indicators of poverty are presented in Table 1; the various descriptive terms that are used to describe the opposing conditions of poverty and well-being are highlighted in Box 1.

Generally, poverty is defined as encompassing different deprivations that constrain the ability of individuals and households to enjoy a given level of well-being. An individual, household or group with a standard of living below this threshold is thus considered poor. Experience shows that applying this definition to material conditions alone is an insufficient measure of poverty. This method assumes that well-being is a function of material standard of living. In practice this translates into a focus on the **level of income or consumption** enjoyed by an individual, household or group.[14] When this level of income or consumption is below a given level, the individual, household or group is incapable of meeting their basic human needs, such as buying food and clothing. Extensive research, experience and the views of the poor about their own situation, have led to an understanding of poverty as a multidimensional phenomenon.[15]

A **multidimensional** understanding of poverty moves beyond a narrow focus on low levels of income to deprivation in terms of economic

Box 1: Terms used in discussing poverty and well-being

Poverty	Well-being
Income or consumption poverty	Human development
Social exclusion	Capacity or functioning
Vulnerability	Livelihood sustainability
Lack of basic needs	Agency
Relative deprivation	Capabilities
Marginalized	Entitlement
Low-income	

Source: Adapted from Maxwell S. *The meaning and measure of poverty.* [Overseas Development Institute Poverty Briefing Paper]. London, Overseas Development Institute, 1999.

Table 1: Poverty statistics from selected countries in WPR

Country	Percent of population living below US$1 per day	Percent of population living below national poverty line	Percent of urban population living below national poverty line	Percent of rural population living below national poverty line	Human Development Index
Cambodia (1999)	-	35.9	25.2	40.0	0.556
China (2000)	16.1	-	<2.0	3.5	0.721
Fiji Islands (1990)	20.0	25.5[a]	27.6[a]	22.4[b]	0.754
Korea (2000)	<2	3.6	-	-	0.879
Lao PDR (1997)	26.3	38.6	26.9	41.0	0.525
Malaysia (1999)	<2	8.1	3.8	13.2	0.790
Mongolia (1998)	13.9	35.6	39.4	32.6	0.661
Papua New Guinea (1996)	-	38.0	16.0	41.0	0.548
Philippines (2000)	14.6	34.2	20.4	47.4	0.751
Viet Nam (1998)	17.7	37.4	9.0	44.9	0.6

[a] Refers to the percentage of poor households

[b] Refers to the percentage of poor households in rural villages only

Sources: Asian Development Bank. *Key indicators of developing Asian and Pacific countries.* Manila, 2003a; and United Nations Development Programme. *Human development report 2003 Millennium Development Goals: a compact among nations to end human poverty.* New York, Oxford University Press, 2003.

opportunities, education and health outcomes and lack of access to services, resources and skills. This broader definition of poverty also includes aspects such as voicelessness, vulnerability and powerlessness of people to influence decisions that effect their lives. Further, Sen argues that the absence of freedom, autonomy, and dignity are primary in any discussion of poverty.[16] He explains that income is valuable only as it increases the capability of individuals, that is, the opportunities or freedom to choose the type of life they value.[17] A multidimensional understanding of poverty also more closely approximates how the poor see their own situation. They often define their situation in terms of lack of basic needs, but also, insecurity, lack and inaccessibility of services, ill-health and powerlessness.[18] In particular, this broader definition appears to be a useful means of understanding poverty in the Pacific. Studies show that income poverty is not pervasive in the Pacific, which is often attributed to strong family structures and a subsistence lifestyle. Rather, poverty in the Pacific may be manifested as vulnerability to natural disasters, isolation or remoteness, a lack of economic choices (or opportunities to earn a cash income), limited access to educational, health and financial services and exclusion.[19] The vulnerability of many Pacific Island developing nations to external shocks (including natural disasters and market failures) and their small resource base has led to their inclusion among Least Developed Countries.[20]

An important aspect of poverty is that it often overlaps with and reinforces other types of social exclusion, such as those based on race, ethnicity, geographical location (urban/rural) and gender. Rooted in **structural deprivation**,[21] social exclusion multiplies the effects of poverty by reinforcing social barriers that perpetuate inequalities. The social exclusion of ethnic groups, for example, is often reflected in the relatively lower levels of development and higher rates of poverty in the areas where they live. For example, the Human Development Index (HDI)[22] of provinces in the Philippines ranges from a high of 0.925 in Metro Manila to a low of 0.372–0.560 in provinces with higher concentrations of indigenous and other minority groups, including the Muslims of Mindanao.[23] In Viet Nam, roughly 70% of ethnic minorities and only 23% of the Kinh/Chinese majority were considered poor in 2002.[24] Likewise, the United Nations Development Programmes (UNDP) reports that the vast majority of the population living below the poverty line in the Lao People's Democratic Republic are members of ethnic minorities.[25] In many countries, urban areas are often favoured over rural areas in public resource allocation. This often leads to skewed development, with poverty falling more slowly in rural areas, as seen in China, for example. In 1999, the three richest metropolises—Shanghai, Beijing and Tianjin—dominated the top of China's HDI ranking while the bottom was comprised of rural provinces from the Western part of the country.[26] Similarly, the HDI in urban areas of Mongolia (0.723) is 14% higher than the HDI in rural areas (0.636) and 90% of the poor in Cambodia reside in rural areas.[27]

According to the United Nations, 50% of the world's population are women, but they perform nearly two thirds of the work, receive one tenth of the world's income and own less than one hundredth of the world's property.

UNDP estimates that 70% of the world's poor are women.[28] Across countries, women's experience of poverty is shaped by socially constructed roles that are prescribed for men and women. Worldwide, women carry a double burden, combining productive activities with reproductive activities, such as childrearing and other household duties. Globally, women, on average, earn only slightly more than 50% of what men earn and often find employment in the informal sector, where they experience greater insecurity. In addition, compared to men, women often have limited or no control over the means of production, such as cash, collateral and credit, and lack access to education, skills, employment opportunities and political representation. Within the household, women are often further disadvantaged by a skewed distribution of resources and power. Women's experience of poverty thus encompasses their reliance on social networks, the importance of reproductive rights, their vulnerability to violence and the pressure to comply with cultural norms.[29]

The interaction of poverty and gender has given rise to the notion of **"the feminisation of poverty."** This is evidenced by a growing number of women-headed households and the systematically poorer socioeconomic outcomes experienced by women compared to men. Studies show that women-headed households are more likely to be poor than male-headed households.[30] As well, women lag behind men in almost every social and economic indicator of well-being.[31] An estimated two-thirds of the illiterate adult population are women and although women tend to live longer than men, they are more often sick and disabled.[32] Women also face immense pressure on their time and often experience time poverty (lack of time to complete all their tasks).

Although distinct, these different aspects of poverty overlap and reinforce each other in important ways.[33] This inter-relationship between the various dimensions of poverty, coupled with the fact that many of these dimensions are imperfectly correlated, is a major reason for a multidimensional concept. This interrelationship is illustrated by the MDGs of which seven of the eight are interrelated and reinforcing, thus capturing the complex nature of poverty. Progress (or lack of progress) in any of these seven goals supports (or hinders) progress towards reaching the other goals.

Poverty is often defined as individual or household income or consumption falling below a given level. In this module, however, poverty is understood to be multidimensional, encompassing not just low income, but lack of access to services, resources and skills, vulnerability, insecurity and voicelessness and powerlessness.

Box 2: Human rights, development and poverty reduction

Development and poverty reduction are increasingly conceptualized in terms of the realization of human rights. This is rooted in the belief that human rights exist innately for all of humanity and cannot be given up nor taken away by governments. Human rights encompass civil, cultural, economic, political and social rights, and are universal, interrelated and indivisible. These internationally agreed upon principles and norms are embodied in international declarations and treaties, which aim to protect individuals against actions that interfere with their fundamental freedoms and human dignity (please see Section 6, Annex A).

Human rights are primarily concerned with the relationship between individuals and the State. Government obligations—based on international human rights treaties that States enter into voluntarily—are to respect, protect, promote and fulfil human rights. This includes regulating the actions of non-state actors. As such, actions that restrict or deny the attainment of human rights violate international human rights law. International human rights law recognizes that it may not be possible in all cases for governments to immediately ensure the enjoyment of all human rights by citizens. States are therefore responsible for the deliberate and concrete *progressive realization* of human rights.

A rights-based approach to development and poverty reduction recognizes that while development is a human right, the process by which it is achieved must also remain consistent with international human rights law. Specifically, the norms, standards and principles of the international human rights system must be integrated into development plans, policies and processes.

Because the international human rights system grants individuals and communities a set of entitlements that are enshrined in international human rights law, it offers powerful political leverage for individuals and groups to demand action from States. Such entitlements, or rights, may empower individuals and communities and be used as a springboard for human development and poverty reduction.

Sources: World Health Organization. *25 questions and answers on health and human rights*. Geneva, 2002b (Health and Human Rights Publication Series Issue No. 1); Hunt P. *Economic, social and cultural rights: the right of everyone to the enjoyment of the highest attainable standard of physical and mental health* [report of the Special Rapporteur, Paul Hunt, submitted in accordance with Commission resolution 2002/31]. New York, Commission on Human Rights, 2003; Braveman P., Gruskin S. Poverty, equity, human rights and health. *Bulletin of the World Health Organization,* 2003a, 81 (7):539-545; and Conway T., *et al.* Rights and livelihood approaches: exploring policy dimensions. *Natural Resource Perspectives*. Number 78. London, Overseas Development Institute, May 2002.

How to identify the poor

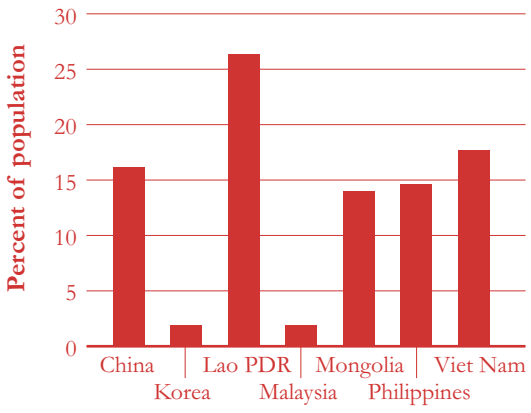
Having agreed upon a definition of poverty, the next step is to identify the poor and measure poverty. While a seemingly simple task, such an exercise raises a number of questions and requires several value judgements (for example, see Box 11 in Section 4). Since the poor are often defined as those whose well-being falls below a given threshold, it is useful to determine how such a threshold, or **poverty line**, is constructed. A poverty line may be set in absolute terms, which reflects the minimum amount needed to survive, such as daily calorie requirements, or in relative terms, and is defined in relation to the average standard of living in a specific country at a given point in time.

Income poverty

International poverty lines

Although poverty is often conceptualized as low income, in practice it is often challenging to measure poverty in terms of household income. In practice, much poverty data are derived from measures of household consumption or expenditure and other proxies of income (see Box 10 for a discussion of measurement challenges). Generally, an absolute poverty line is measured in terms of the amount of income (or consumption) required to purchase a basket of goods that satisfy an individual's basic needs. This basket may contain food items or food and non-food items. Ideally, the basket should reflect culturally prevalent patterns of consumption and not simply the cheapest food and goods available. A common indicator of **absolute poverty** is the World Bank-defined international poverty line of US$1 per day,[34] as this is considered the minimum income needed for survival. This standardized poverty line allows for comparison between countries and monitoring the number of people living in poverty over time. The World Bank estimates that, from 1987-1998, the share of the global population living in absolute poverty decreased from 28% to 24%.[35] But, because of population growth, the absolute number of people living in extreme poverty remained virtually the same.[36] In Asia and the Pacific, the overall incidence of poverty decreased from 34% in the early 1990s to 24% in the late 1990s.[37] Figure 1 presents the proportion of population living below US$1 a day in selected countries in the Region.

Figure 1: Proportion of population living below US$1 per day, selected countries in the Region



Source: Asian Development Bank. *Key indicators of developing Asian and Pacific countries.* Manila, Asian Development Bank, 2003a.

National poverty lines

Many countries construct national poverty lines that reflect a nationally acceptable standard of living or meet locally defined minimum capabilities.

Table 2: National poverty lines, selected countries in the Region

China[a]	Rural poverty (extreme): 637 Yuan per capita per day Rural poverty (low income): 882 Yuan per capita per day
Mongolia[b]	Ranges from Tg 19500 to Tg 25300 per capita per month depending on the region
Philippines[c]	P13,823 annual per capita income

[a] Source: Based on the Rural Survey Organization of the National Bureau of Statistics. *National Rural Household Survey* in Wang P., Ren T. *Development-oriented poverty alleviation and monitoring in China* [Paper presented at the Regional Conference on Poverty Monitoring in Asia]. Manila, Asian Development Bank, 2004.

[b] Source: Government of Mongolia. *Economic growth support and Poverty Reduction Strategy.* Ulaanbaatar, 2003.

[c] Source: National Statistical Coordination Board, Region 10 Division. *Technical notes: income distribution and inequality: Lorenz curve, Gini coefficient and the Pietra ratio.* Government of the Philippines, 2003.

Table 3: Area-specific poverty lines, Cambodia 1999 (riels per person per day)

	Food poverty line	Poverty line
Phnom Penh	1,737	2,470
Other urban areas	1,583	2,093
Rural areas	1,379	1,777

Source: Ministry of Planning, Kingdom of Cambodia. *National human development report Cambodia: societal aspects of the HIV/AIDS epidemic in Cambodia, progress report 2001.* United Nations Development Programme, 2001.

These nationally constructed indicators of poverty account for country-specific variations, such as economic and social circumstances, climatic conditions, and culturally appropriate variation in prevalent consumption habits (see Table 2 for some examples). National poverty lines may be further adjusted to reflect within-country disparities, such as the urban-rural divide, as seen in Table 3. While they offer a more precise view of poverty in a given country, it is difficult to compare national poverty lines between countries because they are based on different consumption bundles and may be computed using different methodologies. For example, national poverty lines in developing countries are generally based on a measure of absolute poverty—often expressed in terms of a minimum calorie requirement (food poverty line)—while those in developed countries often refer to relative poverty (defined below).

A **relative poverty line** moves beyond measuring the realization of basic human needs to capture relative deprivation within a society. The poverty line is thus defined in relation to the average standard of living enjoyed by citizens in a given society at a specific point in time.[38] In Australia, low-income households are defined as those having an equivalent disposable income that is below 50% of the median income for all households.[39] Accordingly, 13.5% of households in Australia are deemed to belong to the low-income category. Estimating a normal or average standard of living is generally subjective and thus does not permit comparison between countries. As well, because this kind of poverty line automatically adjusts with income growth or decline, comparison over time is not feasible.

Relative poverty can also be estimated by measuring the distribution of welfare within a society. For example, the distribution of welfare can be measured by dividing the population into quintiles and ranking them from richest to poorest. Here, the poverty line corresponds to a point in the distribution below which people are considered poor, often the lowest 20% or bottom quintile.[40] This definition of poverty is intrinsically linked to the distribution of welfare in a society and thus the level of inequality. While measuring relative poverty may not appear to be relevant in low-income economies, a relative poverty line can effectively focus attention on the poorest of the poor.

Box 3: Measuring poverty

Once a poverty line has been set, there are a number of ways to assess the extent of poverty within a society. For example:

a. The **head-count** measures the number of people or percentage of the total population subsisting below the poverty line;
b. The **poverty gap** determines the distance of the poor from the poverty line or, in other words, the amount of resources needed to raise the standard of living of the poor to the poverty line; and
c. The **poverty severity** (the poverty gap squared) assesses the degree of income inequality among the poor.

Source: *World Bank.* World development report 2000: attacking poverty. *New York, Oxford University Press, 2001.*

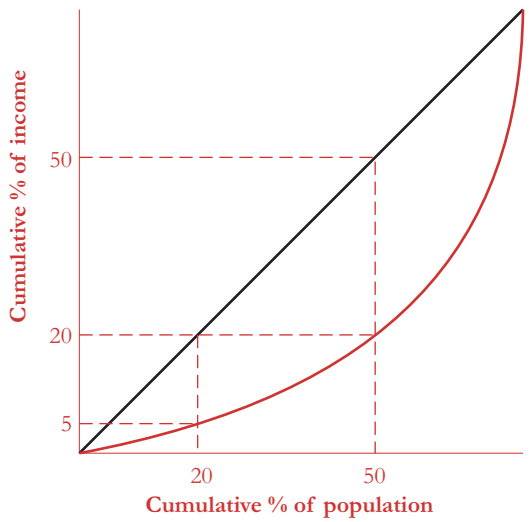
Inequality

The distribution of welfare within a society may also be measured by considering the level of inequality, more specifically. Measures of inequaity describe the difference between individuals, households or groups within a population, although it is usually easiest to consider inequality in outcomes rather than in opportunities.[41] As with poverty, there are many distinct dimensions to inequality that overlap and reinforce one another, yet remain imperfectly correlated.

One measure of inequality is the *Gini coefficient*, which determines the extent to which the distribution of income or consumption within a society deviates from an equitable distribution. This is

done by first plotting a *Lorenz curve* (the lower, curved line in Figure 2), which graphs the cumulative percentage of total income in a society against the cumulative number of recipients, from richest to poorest. The Gini coefficient then measures the area between the Lorenz curve and the line of equality (the 45-degree line), expressed as a percentage of the total area under the line of equality. The Gini coefficient ranges from 0, which indicates complete equality, to 1, which indicates complete inequality. Importantly, the Gini coefficient is restricted to measuring the extent of inequality in a society and says nothing about the overall level of well-being. For example, in 2002, the global Gini coefficient was estimated at 0.66, higher than that of countries with the greatest level of inequality (for example, the Gini coefficient for Brazil wass 0.61). This reflects the fact that the richest 5% of the world's population receives 114 times the income of the poorest 5%.[42] In Cambodia, the poorest 10% of the population shares only three percent of the total consumption. In contrast, the richest 10% of the population enjoys 30% of total consumption.[43] Table 4 presents the Gini coefficients for selected countries in the Western Pacific Region. The degree of inequality in health, education or other variables may be measured through the use of the *concentration index* (see Box 11 for a description of the concentration index).

Figure 2: A hypothetical Lorenz curve



Source: National Statistical Coordination Board, Region 10 Division. *Technical notes: income distribution and inequality: Lorenz curve, Gini coefficient and the Pietra ratio.* Government of the Philippines, 2003.

Table 4: Income inequality, selected countries in the Region

Country	Gini coefficient
Cambodia	0.45
China	0.40
Fiji Islands	0.49
Hong Kong	0.43
Korea	0.32
Lao PDR	0.36
Malaysia	0.44
Micronesia, Fed. States	0.41
Mongolia	0.35
Papua New Guinea	0.48
Philippines	0.46
Singapore	0.42
Viet Nam	0.36

Source: Asian Development Bank. *Key indicators of developing Asian and Pacific countries.* Manila, Asian Development Bank, 2003a.

Multidimensional poverty

Composite measures

A number of composite indicators have been constructed to capture the multidimensional nature of poverty. To ensure measurability, these indicators combine measures of income with other quantitative indicators of well-being. For example, the MDG include targets for health, education, hunger, gender equality, environmental sustainability, as well as income poverty. UNDP's HDI is an example of a composite indicator. The HDI captures the most basic human capabilities—good health, knowledge and access to resources—by measuring three variables: life expectancy, educational attainment and income.[44] The accuracy of these composite measures is often clouded by the need to assign relative weights to the range of indicators that may be included and, thus, may influence estimations.[45]

Participatory approaches

In practice, it is often challenging to use standardized measures to assess the more

Box 4: UNDP composite indicators

UNDP has created a number of useful composite indicators. The most commonly cited is the **Human Development Index** (HDI), which captures achievements in:

- life expectancy at birth
- adult literacy rate (two-thirds weight) and the combined primary, secondary and tertiary gross enrolment (one-third weight)
- GDP per capita (expressed as Purchasing Power Parity [PPP] in US$)

Building on the HDI, the **Human Poverty Index** for developing countries (HPI-1) measures deprivations in these three basic dimensions of human development. In turn, the **Human Poverty Index** for selected OECD countries (HPI-2) assesses the same deprivation as the HPI-1 and includes social exclusion, as measured by the rate of long-term employment.

The **Gender-Related Development Index** (GDI) adjusts the average achievement measured by the HDI to reflect inequalities between men and women.

The **Gender Empowerment Measure** (GEM) moves beyond a focus on capabilities to one on women's participation. It captures gender inequality in:

- Political participation and decision-making power, as measured by women's and men's percentage shares of parliamentary seats.
- Economic participation and decision-making power, as measured by women's and men's percentage shares of positions as legislators, senior officials and managers and their shares of professional and technical positions.
- Power over economic resources, as measured by women's and men's estimated earned income (PPP US$).

Source: United Nations Development Programme. *Human development report 2003 Millennium Development Goals: a compact among nations to end human poverty*. New York, Oxford University Press, 2003.

intangible dimensions of poverty, such as voicelessness, insecurity, powerlessness and vulnerability. Some aspects may be captured through household-based surveys; for example, methods such as polls or national surveys on political participation may be used to assess voicelessness and powerlessness. Participatory approaches, on the other hand, offer a more comprehensive means of assessing the multidimensional nature of poverty. A participatory approach is based on indicators constructed by local communities. These indicators are rooted in criteria that local residents consider important and relevant for assessing poverty and well-being. This approach can effectively determine the characteristics and prevalence of poverty and inequality within a community. But inequality between communities or poverty on a broader scale is more difficult to determine. This is because people tend to compare themselves to their immediate neighbours and not with the next town or city.

Because poverty often overlaps with ethnicity, gender and other socially constructed categories of exclusion it is often insightful to disaggregate and separately consider poverty indicators for these groups. Exploring the levels of poverty and inequality within these groups and between these communities and the general population may provide important insights.

While there is general agreement that poverty is multidimensional, measurement challenges often mean that poverty is described using standardized indicators, which are applied to income or consumption data or health and educational outcomes.

Box 5: What causes poverty?

Identifying the factors that cause and perpetuate poverty—specifically untangling the linkages, association and hierarchy between these factors—has proven to be a difficult and complex process. The focus of this inquiry often turns to low levels of economic growth and the unequal distribution of growth within countries. Although a rich debate in this area continues, some suggestions on possible factors come from the World Bank, the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD) and Professor Amartya Sen.

The World Bank explains that to understand the determinants of poverty, it is useful to think in terms of people's assets, the returns to (or productivity of) these assets, and the volatility of these returns. People's assets may include:

- human assets, such as the capacity for basic labour, skills, good health;
- natural assets, such as land;
- physical assets, such as access to infrastructure;
- financial assets, such as savings and access to credit; and
- social assets, such as networks of contacts and political influence over resources.

Briefly, the World Bank notes that returns on these assets and volatility of these returns depends on access to these assets, which is influenced by political and social forces, access to markets, including local, national and global forces that influence markets, and the performance of state and social institutions.

In the DAC Guidelines on Poverty Reduction, the OECD suggests that among the root causes of poverty, some are linked to:

- immutable factors like climate, geography and history;
- deficient governance, including corruption, lack of respect for human rights, weak institutions and inefficient bureaucracies, lack of social cohesion and political will to undertake reforms;
- inequity by gender or other social and economic categories;
- environmental degradation and rapid population growth; and
- the emerging poverty issue of HIV/AIDS.

Together, these factors may lead to inadequate economic growth. Other key causes of poverty include: lower productivity and incomes caused by governance and equity defects, economic policy and market failures, capital flight, low savings and investments, distorted incentives; high inflation; crumbling physical and social infrastructure; protectionism in potential export markets and volatility and falling trends in the terms-of-trade; and debt overhang, both national and international.

In turn, Sen's work on famines proposes that starvation does not arise from people being deprived of their individual entitlements to things or entitlement set (a way of characterising a person's overall command over things), which are the "totality of things a person has by virtue of his or her rights". Rather, starvation results from a fundamental lack of entitlements that creates an environment where people are unable to sell or trade their labour and basic skills to meet their needs. Sen goes on to argue that poverty arises from the absence of fundamental rights and freedoms that deny people the capabilities (for example, income, education, health, human rights and civil liberties) to achieve different combinations of functioning (what they may value doing or being) and beings (states of existence people want to experience).

Sources: World Bank. *World development report 2000: attacking poverty*. New York, Oxford University Press, 2001; Organisation for Economic Cooperation and Development. *The DAC guidelines: poverty reduction*. Paris, OECD Development Assistance Committee, 2001; Overseas Development Institute. *Economic theory, freedom and human rights: the work of Amartya Sen* [ODI Briefing Paper]. London, Overseas Development Institute, November 2001; and Hume D., Moore K., Shepherd A. *Chronic poverty: meaning and analytical framework*. United Kingdom, Chronic Poverty Research Centre, 2001 (Chronic Poverty Research Centre Working Paper 2).

2. What is the relationship between poverty and health?

2. What is the relationship between poverty and health?

On every health indicator studied by the World Health Organization, the poor fare worse than the better-off in any given society.

–World Health Organization 2000a

The growing international commitment to tackling all aspects of poverty has led to a greater concern for the health of the poor. Improving health outcomes among poor individuals and communities is increasingly recognized as a key goal in economic development and poverty reduction. This is supported by evidence on the interrelationship between poverty and health at the household, community and national levels. The poor consistently identify good health as central to their survival and their vulnerability to the impoverishing effects of ill-health as a key dimension of their poverty.[46] Thus, good health is not only valued intrinsically,[47] but is an important building block for present and future education and employment opportunities and livelihood security. Evidence is also mounting on the strong linkages between a lower burden of disease and increased economic growth and poverty reduction at the level of country or society. The universal enjoyment of good health is also acknowledged as a fundamental human right. This complex interrelationship between health and poverty is reflected in the MDGs: the first seven goals, of which three aim to improve health outcomes, are mutually reinforcing and directed at reducing the multiple dimensions of poverty.

The interrelationship between poverty and health can be represented by two reinforcing cycles:

- **The vicious cycle:**
  Poverty breeds ill-health.
  Ill-health causes poverty.
- **The virtuous cycle:**
  Higher income is linked to good health.
  Good health is linked to higher income and welfare.

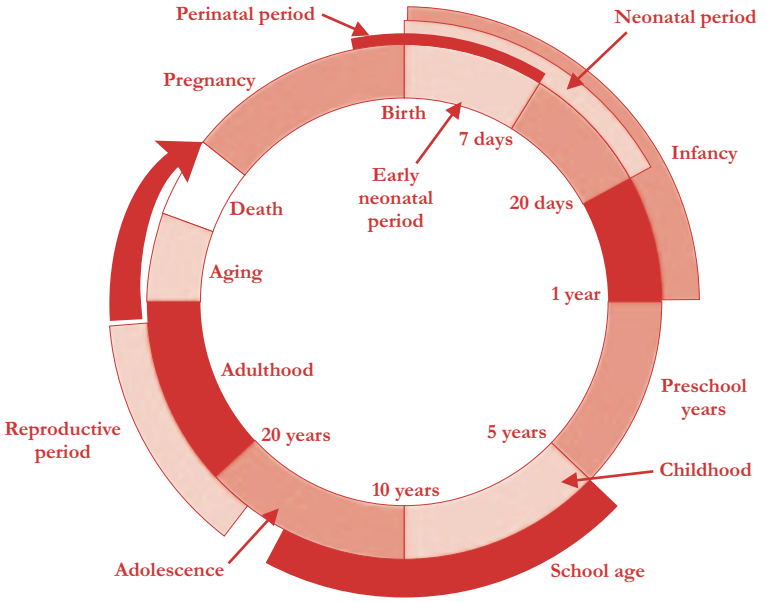
WHO's Constitution defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Whether at the household, community or national level, poverty is seen to be a major determinant of ill-health. This arises from the cumulative adverse effects of living in a state of poverty. By virtue of being poor, marginalized individuals and households face higher exposure to the determinants of ill-health and as a result carry a disproportionate burden of morbidity. Although health care is an effective means of addressing this greater burden of morbidity, evidence increasingly suggests that poor populations experience systematically lower access to health care services than non-poor populations. Even where health services are available, the costs of seeking them are often more than poor patients and households can bear, thus forcing the poor to further delay or disrupt treatment. This results in a higher incidence of mortality among the poor than the non-poor. Because the costs of seeking health care often drive poor patients and their families into greater poverty, periods of ill-health may lead to a continuing cycle of poverty and ill-health.

A thorough exploration of inequalities in health may use a lifecycle approach to consider exposure to the determinants of ill-health, the incidence and prevalence of morbidity, access to and the cost of health care and health outcomes. This is because health is a complex phenomenon that encompasses mortality and morbidity from birth until old age, including reproductive health.[48] Figure 3 presents an overview of the human lifecycle.

However, the generally poor quality and, in some cases, lack of data—especially those that are disaggregated—pose a significant constraint to analysing the health of the poor.[49] When the availability of data permits, three general categories are discussed in the sections below. WHO analyses that nearly 90% of deaths under the age of 15 occur before the age of 5 years.[50] Therefore, the first category considers young childhood (up to 5 years). The second category is adulthood. The third category is maternal health, which is given special attention because of the striking disparity that persists between the maternal mortality rate (MMR) among women living in poor and non-poor countries and households.

Figure 3: The human lifecycle



Source: Claeson M., *et al.* Health, nutrition and population. In: World Bank. *PRSP sourcebook*. Washington D.C., 2004.

Inequalities in the determinants of health

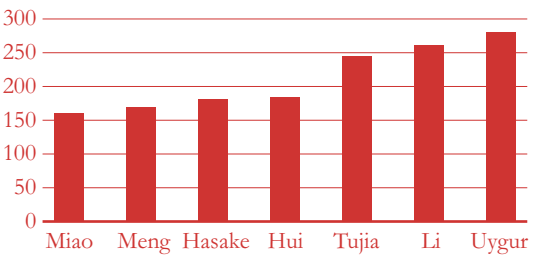
The multidimensional nature of poverty inherently places the poor at greater risk of ill-health than the non-poor. This is because poverty encompasses numerous determinants of ill-health, many of which lie beyond the health sector and encompass social, economic and environmental conditions. Low household income, low educational attainment, inadequate living conditions, including limited access to clean water and sanitation, and malnutrition are facets of poverty that directly impinge on the health of poor and marginalized communities. These are compounded by the inability of the poor to shield themselves from these risks through the adequate consumption of goods and services. These factors reinforce one another in important ways and, together, typically lead to overall worse health outcomes among the poor.

Many aspects of poverty overlap with and reinforce social exclusion on the basis of gender, geographical location (namely, rural or urban), and ethnicity. Thus, women often have lower levels of education and experience greater exposure to indoor air pollution and malnutrition than men. Likewise, rural populations may have less access to water and sanitation facilities, fewer educational opportunities and a greater risk of malnutrition than urban populations. The latter, in turn, may experience greater exposure to outdoor air pollution. Furthermore, the marginalization of ethnic groups is often manifested in their greater risk of ill-health (see Figure 4). In this manner, the synergy between poverty and social exclusion may result in worse health outcomes among vulnerable and marginalized communities.

Household income

An increase in household income is associated with improved health outcomes among children.[51]

Figure 4: Prevalence of smear-positive TB by ethnic group, China.



Source: Ministry of Health of the People's Republic of China. *Report on nationwide random survey for the epidemiology of tuberculosis in 2000*. Beijing, 2000.

Adult nutrition and health-seeking have also been found to improve with income level.[52] However, evidence reveals that higher income has a larger impact on the health of children in households where women exert a greater degree of control over household income and participate more actively in household decision-making than in those where women's decision-making power is weak. Women's income has been found to have a larger impact than men's income on child survival and nutrition.[53] Studies also suggest that use of health services, as measured by antenatal visits and visits during the first trimester of pregnancy, is less common among women who have relatively little control over household resources.[54]

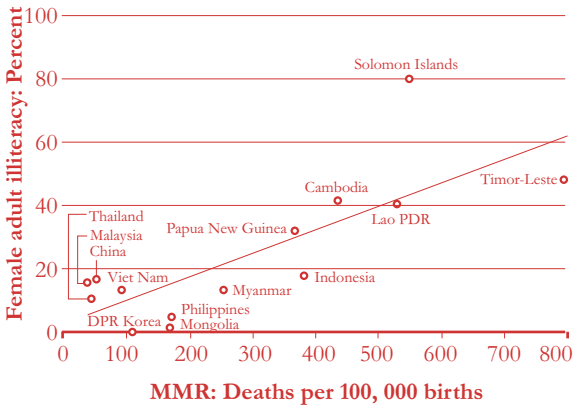
Education

Educational achievements are strongly associated with income and education is positively correlated with improved health outcomes. Education, specifically health-related knowledge and awareness, has been shown to contribute to better nutrition and child-feeding practices, better sanitary practices and increased usage of maternal and child health services.[55] However, health-related information is unevenly distributed across socioeconomic groups. A study in Xieng Khuang and Oudomxay provinces of the Lao People's Democratic Republic, for example, found that HIV/AIDS awareness was 53% among the Tai-Kadai, 34.86%, among the Khmou, and 9.77% among the Hmong ethnic groups.[56]

Globally, girls' education is understood to play a catalytic role in human development. The positive effects of girls' schooling have been shown to transcend generations, resulting in better health outcomes among women, their children and eventually their grandchildren.[57] Data from 40 countries reveal that the mortality rate of children under 5 years is highest in households where mothers have no schooling. Households where mothers have some primary schooling experienced lower under 5 mortality rates (U5MRs) and the rates are lower still in households where mothers have secondary schooling.[58] Studies further suggest that the rate of mortality among children under 5 years may be reduced by 5%-10% with every additional year of maternal education.[59]

The positive impact of women's education on the health of their children is further substantiated by a study of 63 countries. The study found that the decline in malnutrition from 1970-1995 is largely attributable to improvements in education for women.[60] Since educated women typically have a better understanding of health practices and improved nutrition, and are more likely to increase spacing between births, they are also less likely to die in childbirth than are uneducated women (as seen in Figure 5). The World Bank estimates that, for every 1,000 women, an extra year of education can prevent 2 maternal deaths.[61]

Figure 5: Female illiteracy and maternal mortality in the East Asia and Pacific Region



Source: United Nations Children's Fund, East Asia and Pacific Regional Office. *Towards a region fit for children: an atlas for the sixth East Asia and Pacific ministerial consultation*. Bangkok, UNICEF EAPRO, 2003.

Living conditions

For the poor, living conditions are often characterized by inadequate housing, overcrowding and unsafe and unhygienic environments that may be prone to flooding and pollution. Acute respiratory infections, which caused an estimated 2 million child deaths in 1998, are associated with poverty and poor housing conditions.[62] Nearly half the world's population cooks with solid fuels, thus exposing women and young children to high levels of pollutants. Indoor smoke from solid fuels causes an estimated 36% of lower respiratory infections, 22% of chronic obstructive pulmonary disease and 1.5% of trachea, bronchus and lung cancer.[63] Indoor air pollution is likewise associated

with tuberculosis (TB), cataracts and asthma.[64] A recent survey in Mongolia revealed a direct correlation between *ger* heating[65] and the incidence of respiratory disease among children.[66] Furthermore, overcrowding nurtures the spread of infectious diseases, such as TB and measles.

The adverse effects of inadequate housing on the health of the poor are perhaps most clearly illustrated by the strong association between ill-health and lack of access to safe water and sanitation. WHO estimates that 1.7 million deaths worldwide are attributed to the ingestion of unsafe water, inadequate water for hygiene and lack of sanitation.[67] These factors also contribute to 1.5 million child deaths and account for 88% of deaths from diarrhoea.[68]

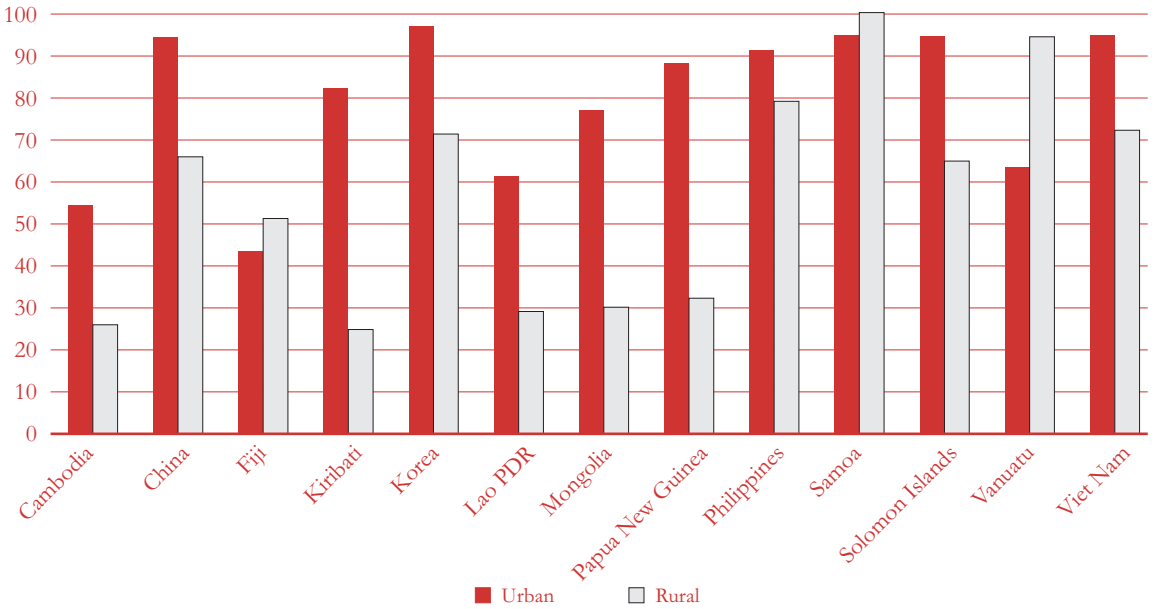
Poor populations are typically at greater risk of water-borne disease than non-poor populations. This is because they are less likely to have access to clean water and sanitation than the non-poor. In Cambodia, for example, only 30% of the population has access to an improved drinking water source.[69] The percentage of households with piped water or a protected well in the Lao People's Democratic Republic ranges from 77% in urban areas to 45% in rural areas.[70] In 2002, the majority (66%) of the rural population in Mongolia used water from unprotected sources. In contrast, only 9% of the urban population relied on unprotected sources for their water. Moreover, in urban areas of Mongolia, access to piped water from a central source is associated with higher income: only 25% of the poor and as many as 50% of the non-poor have access to piped water. This is a particular problem among urban *ger* settlements.[71] Figure 6 shows the urban-rural gap in access to an improved drinking water source in selected countries in the Region.

An eight-country study found that, when households with no sanitation move from no improved water source to an "optimal" water source, they experienced a 6% reduction in the prevalence of diarrhoea in children under 3 years (from a base of 25%). Moving from no sanitation to "optimal" sanitation was similarly associated with a 10% drop in recent diarrhoea in households with no improved water source.[72]

Malnutrition

Hunger and malnutrition are closely associated with poverty. On average, the minimum calorific daily requirement of adults is 3000 calories. This requirement varies over stages of the lifecycle and

Figure 6: Proportion of urban and rural populations using improved drinking water source (2000), selected countries in the Region



Source: United Nations Children's Fund. *The state of the world's children 2004*. New York, UNICEF, 2003.

across different types of work performed: pregnant or breastfeeding women and young children have higher than average nutritional requirements, as do manual labourers, for example. Limited income and food insecurity typically deprive the poor of a regular and adequate diet. This lowers productivity, thus further decreasing wages and leading to greater poverty. Although the risk of malnutrition is present across all stages of the lifecycle, malnutrition in infancy and early childhood are of particular concern, as the effects of malnutrition on human development accumulate over the stages of the lifecycle. Gender inequality is also often manifested in a greater risk of malnutrition for women and girls than for men or boys.[73]

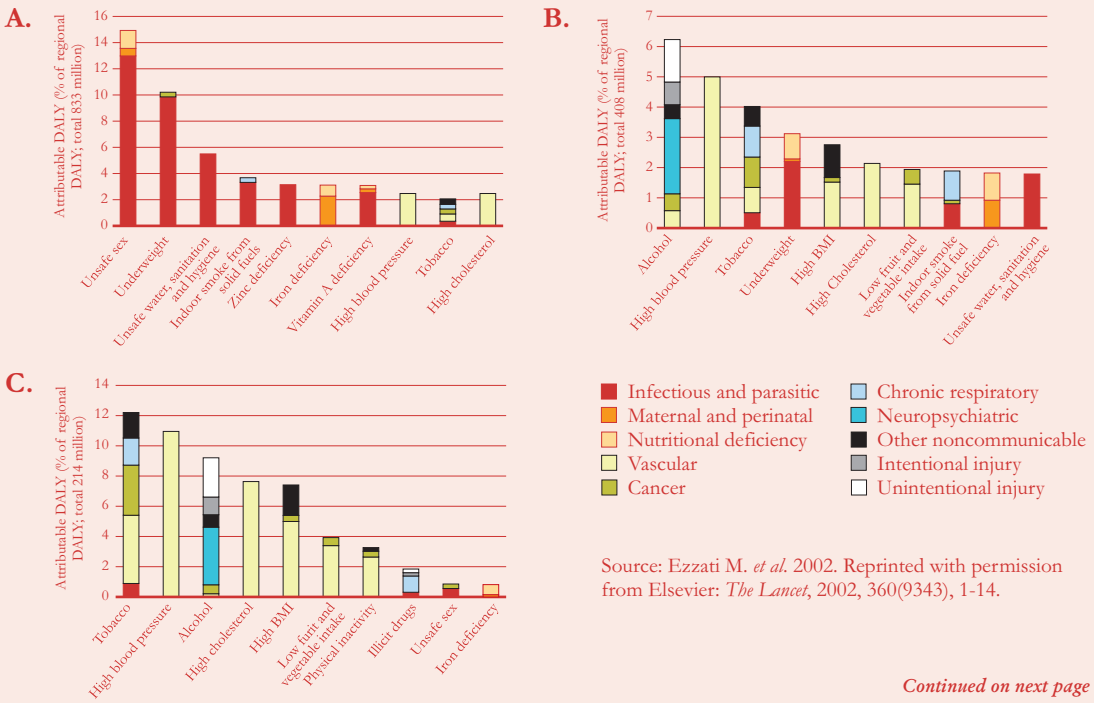
Low birth weight (LBW) babies face a higher risk of disease and a greater probability of dying in the neonatal period or in infancy than do their counterparts.[74] Should they reach childhood, they

Box 6: Risks and determinants of ill-health

The terms "risks" and "determinants" of ill-health are often used interchangeably. WHO defines *risk* as "a probability of an adverse outcome, or a factor that raises this probability." In contrast, *determinants* of ill-health comprise factors that significantly influence the nature or condition of health outcomes. In this way, determinants of ill-health may be seen to be the root causes of ill-health and not elements that increase the probability of falling ill. In many cases, determinants of health encompass socioeconomic conditions over which individuals and households have little, if any, direct control.

WHO reports that ten risk factors cause one-third of all deaths globally, namely: underweight; unsafe sex; high blood pressure; tobacco consumption; alcohol consumption; unsafe water; inadequate sanitation and hygiene; iron deficiency; indoor smoke from solid fuels; high cholesterol; and obesity (see Figure 7).[75]

Figure 7: Burden of disease due to leading regional risk factors divided by disease type in high-mortality developing regions (A), lower-mortality developing regions (B), and developed regions (C).
[Attribution of disease burden to specific disease categories (rather than to risk factors) is an example of categorical attribution, according to the International Classification of Diseases (ICD) system.]



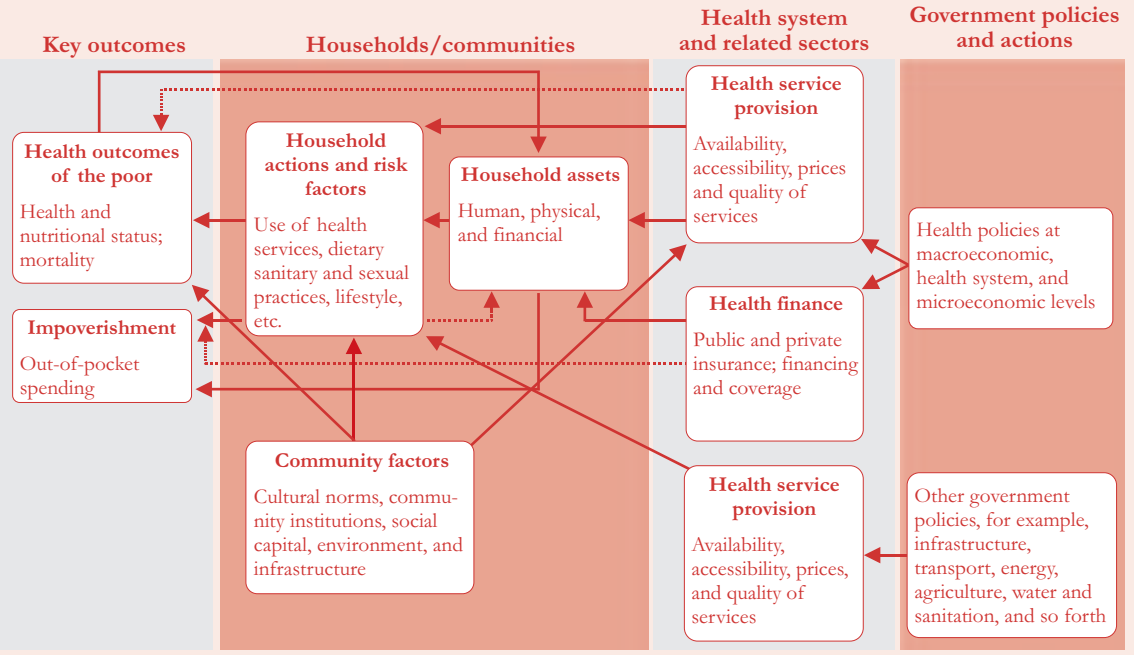
Source: Ezzati M. *et al.* 2002. Reprinted with permission from Elsevier: *The Lancet*, 2002, 360(9343), 1-14.

Continued on next page

are more likely to experience cognitive impairments than their peers, which may never be fully redressed later in life,[76] and they tend to be smaller (stunted) and suffer a higher burden of disease throughout childhood and into adulthood.[77] Furthermore, studies show that there is an association between nutritional status and mortality from diarrhoea, with undernourished children experiencing more severe and prolonged diarrhoea, and an increased risk of dying from acute lower respiratory infections and pneumonia.[78] Even when better nutrition is achieved later in life, the effects of undernutrition in childhood may never be overcome and may be transmitted across generations. An underweight girl will grow into a stunted adolescent and into a stunted woman, who is more likely to have LBW babies. Worldwide, underweight remains the leading cause of the disease burden among the poorest.[79] Recent evidence also suggests a link between intrauterine

Box 6 (continued)

Figure 8: Determinants of health outcomes



Source: Claeson M., *et al.* Health, nutrition and population. In: World Bank *PRSP sourcebook*. Washington D.C., World Bank, 2004.

In contrast, the World Bank outlines a four-part framework on the causes of ill-health (see Figure 8) that recognizes that health outcomes are influenced by the complex interactions at the household, community, health systems and policy levels. Within this framework, various factors at the household and community levels directly shape health outcomes (these are often referred to as *proximate determinants of health*). These direct influences include health services use, dietary and sanitary practices, and lifestyle, which are unequally distributed across households to the disadvantage of the poor. Inequalities in these direct influences arise from the varying levels of household assets, both physical (income and other productive assets) and human (knowledge, literacy and education), and their distribution within the household. For example, low levels of income constrain household caring practices and health service utilization. Community variables, the environment and infrastructure also shape the direct influences on health outcomes, as they may likewise limit the ability of the poor to seek health care and practice proper nutrition and sanitation. At the level of the health system, the availability and accessibility of health services (including distance), the cost of seeking care and the actual or perceived quality of care, also determines health outcomes. These factors are referred to as *underlying determinants of health*.

Sources: World Health Organization. *The World health report 2002: reducing risk, promoting healthy life*. World Health Organization, 2002c; Claeson M., *et al.* Health, nutrition and population. In: World Bank *PRSP sourcebook*. Washington D.C., 2004; Claeson M., *et al. Health, nutrition and population sourcebook for the Poverty Reduction Strategy Paper part 1-text*. Washington D.C., World Bank, 2000; and Wagstaff A. Poverty and health sector inequalities. *Bulletin of the World Health Organization*, 2002, 80(2).

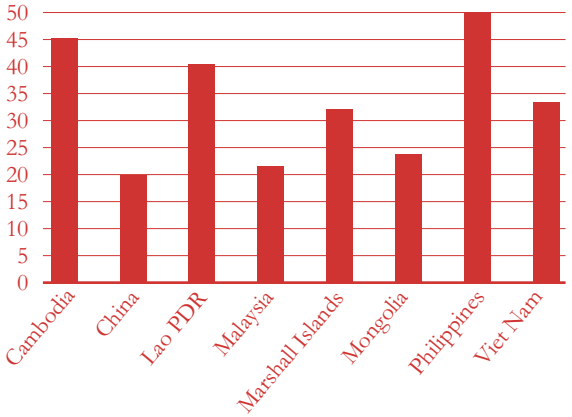
growth retardation (leading to low birth weight) and chronic diseases in adulthood.[80]

Malnutrition encompasses not just protein-energy malnutrition but also deficiencies in micronutrients, such as iron, vitamin A, iodine and zinc. Iron deficiency is one of the most prevalent nutrient deficiencies affecting an estimated two billion people.[81] This is because of the high iron demands of infant growth and pregnancy.[82] Among children, vitamin A deficiency has been found to increase the risk of dying from diarrhoea, measles, and malaria by 20%-24%.[83]

Inequalities in incidence and prevalence of disease

The increasing availability of disaggregated data reveals that, despite the shift in the global burden of diseases towards noncommunicable diseases (NCDs), communicable diseases typically continue to weigh heavily on developing countries and, in particular, on poor households and communities within these countries. For example, the incidence and prevalence of communicable diseases, maternal and perinatal conditions, childhood disease (measles, tetanus, diphtheria, ARI and diarrhoea) and malnutrition are higher among the poor than the non-poor, both within and between countries.

Figure 9: Proportion of under-fives with moderate and severe underweight, selected countries in the Region
(includes the most recent data from the period 1995-2002)



Source: United Nations Children's Fund. *The state of the world's children 2004*. New York, UNICEF, 2003.

Although the gap between the health of the poor and non-poor is largely attributed to communicable diseases, evidence is beginning to suggest that the poor also suffer a "double burden of disease." This double burden arises from the persistently high levels of communicable diseases in developing countries coupled with an increasing rate of NCDs, including cardiovascular diseases (CVD) such as stroke and heart attack, diabetes, chronic lung disease, cancers, diseases of the bones and joints, and mental illness.

Young childhood

The health of infants and children is seen to be a good barometer of overall population health. Evidence shows that the relative risk of child underweight among households living on US$1 or less per day is roughly two or three times higher than among those living on more than US$2 per day.[84] Similarly, a survey of over 50 developing countries reveals that, on average, stunting is over 3 times more likely among children from the poorest income quintile than among those from the wealthiest quintile.[85] Some of the poorest countries in the Region face the highest rates of malnutrition and severe underweight among children under 5 years, as seen in Figure 9. When children in Cambodia were measured using an international scale, 45% were found to be stunted, 45% underweight and 15% too thin for their height.[86] An estimated 40% of children in the Lao People's Democratic Republic suffer from severe to moderate underweight and stunting.[87]

Street children living in the mega cities of developing countries are at particularly high risk of ill-health, including malnutrition and communicable diseases, and they generally do not benefit from public services. Their vulnerability increases their risk of taking addictive substances and engaging in unprotected sexual activity.

Source: *Feuerstein M.T.* Poverty and health: reaping a richer harvest. *London, Macmillan Education Ltd, 1997.*

Within countries, as well, the burden of malnutrition and underweight falls more heavily on children from poor households than on those from non-poor households. For example, the prevalence of underweight was found to be 40%

Table 5: Prevalence of childhood diseases, selected countries in the Region

Country	% of children under 5 with ARI in the two weeks prior to the survey	% of children under 5 with diarrhoea in the two weeks prior to the survey
Cambodia		18.9
Lao PDR	1.0	6.2
Mongolia	2.3	8.0
Papua New Guinea	12.6	16.5
Philippines	16.2	7.4
Viet Nam	9.3	11.3

Source: United Nations Children's Fund. *The state of the world's children 2004*. New York, UNICEF, 2003.

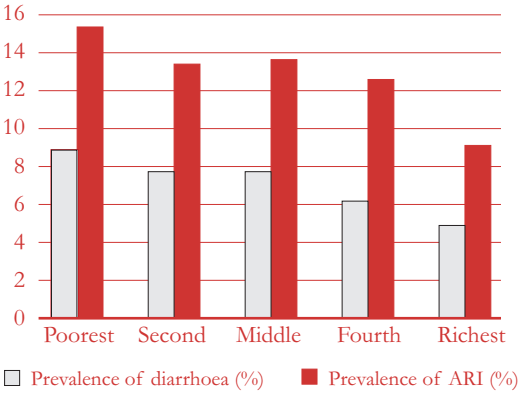
among children whose mothers were illiterate and only 10% among children whose mothers had completed higher education.[88] In Cambodia, a household-based survey estimated that 51% of children of mothers with no education are stunted compared with only 36% of children of mothers with a secondary education or higher.[89] According to a survey conducted in 2000, the percentage of underweight children in Mongolia ranges from 7.1% in urban areas to 19.4% in *soums*.[90]

As noted above, underweight is a contributing factor in 60% of all child deaths in developing countries. More specifically, 50%-70% of the burden of diarrhoeal diseases, measles, malaria and lower respiratory infections in childhood is attributable to undernutrition.[91] Even mild malnutrition places children at risk. The prevalence of such diseases is thus higher among children living in developing countries than among children living in developed countries (Table 5). Within countries as well, children from poor households and communities suffer a higher burden of disease than children from non-poor households, as seen in Figure 10.

Adulthood

In the Region, the largest burden of communicable diseases falls on developing countries. For example, the seven high-burden countries that account for 94% of TB prevalence in the Region are low- or lower-middle income economies.[92] Within countries, poorer communities face a disproportionate burden of communicable

Figure 10: Prevalence of diarrhoea and ARI (%) by income quintile, Philippines



Source: Gwatkin D. *et al. Socioeconomic differences in health, nutrition and population in the Philippines*. Washington D.C., Health Nutrition and Poverty Thematic Group of the World Bank, 2000a.

diseases. Data from the 1993 rural household survey in China revealed that the poorest quintile of the population experienced an incidence of infectious disease that was estimated to be three times higher than that of the richest quintile.[93] Similarly, a World Bank country assessment report in China suggests that infectious diseases are concentrated among poor and remote areas.[94] Studies in Mongolia, Philippines and Viet Nam likewise observe a higher prevalence of TB among the poor than the non-poor. TB patients in Mongolia are typically unemployed, poor or extremely poor.[95] In the Philippines, the prevalence of TB was found to be higher among the urban poor than urban non-poor communities.[96] A study in northern Viet Nam found that a significant percentage of TB patients were from the lowest income quintile (64%). In contrast, only 20% of the study population was from the lowest income quintile.[97] Furthermore, some evidence suggests that malnutrition places the poor at increased risk of progressing from TB infection to disease.[98] In the Region, malaria is concentrated among remote forested and hilly areas, affecting indigenous peoples and migrants. Malaria occurs seasonally in poor rural communities near rice fields and hill areas in China.[99] In rural areas, infection rates are highest during the rainy season corresponding with intense agricultural labour.[100]

More than 95% of people infected with human immunodeficiency virus (HIV) live in developing

countries and a positive association between HIV and absolute poverty exists at the global level.[101] Cambodia and Papua New Guinea are now experiencing generalized epidemics (where HIV prevalence is consistently higher than 1% among pregnant women). In other countries in the Region, the epidemics are concentrated (where prevalence is consistently higher than 5% among any defined subpopulation) or low-level (where prevalence is consistently lower than 5% among any defined subpopulation).[102] Estimates from 2001 suggest that the proportion of HIV/AIDS deaths attributable to unsafe sex is 13% in East Asia and the Pacific.[103] But socioeconomic factors contributing to the rapid spread of HIV/AIDS, including illiteracy, gender inequality, increased mobility within and between countries and rapid urbanization, are all poverty-related.[104] Evidence from Cambodia and Viet Nam reveal a strong association between poverty, lack of education and an increased risk of infection.[105] More specifically, poverty and marginalization may force people to engage in risky behaviour, such as commercial sex work. Studies show that poor sex workers can more easily be forced to engage in unprotected sex than their non-poor counterparts.[106]

Evidence is beginning to reveal that a large share of the global burden of NCDs also falls on developing countries. Population ageing and changes in the distribution of risk factors are accelerating the NCD epidemic in developing countries.[107] The major risk factors for NCDs, including high blood pressure, high cholesterol, tobacco use, alcohol, unhealthy diet, physical inactivity and obesity, are becoming more prevalent in developing countries and among poor communities. In the Region, 85% of the burden of NCDs falls on low and middle-income countries.[108] More specifically, 75% of the 30 million people with diabetes and 90% of the 3.5 million new cancer cases each year in the Region are in developing countries.[109] Worldwide, neuropsychiatric conditions, largely depression, are the most important cause of years lived with disability (YLDs), accounting for 35%.[110] Recent studies also reveal that the poor suffer from depression and common mental disorders more than the non-poor do.[111]

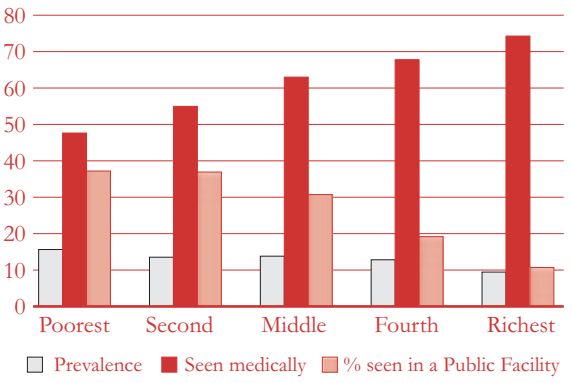
Maternal health

A survey of over 50 developing countries found that women from the poorest income quintile are almost twice as likely to be malnourished than are women from the richest income quintile.[112] In Cambodia, an estimated 20.7% of women suffer from chronic energy deficiency (having a BMI less than 18.5). However, the share of women suffering from chronic energy deficiency ranges from 21.6% among women in rural areas to 16.1% among women in urban areas.[113] The prevalence of anaemia among pregnant women is estimated to be 40% in the Region, reaching over 50% in Cambodia, the Philippines and Viet Nam.[114] The incidence of anaemia among women living in rural areas of Mongolia is remarkably higher than among women living in urban areas, standing at 71% and 45% respectively.[115] A similar trend is seen in Cambodia, where the prevalence of anaemia among women is 59.1% in rural areas and 51.2% in urban areas. Furthermore, women with no education in Cambodia are more likely to suffer from anaemia than their better-educated counterparts. The prevalence of anaemia was found to be 62.1% among women with no education, 57.8% among women with primary education and 49.9% among women with secondary education or higher.[116]

Inequalities in access to health services

Health care can reduce the burden of disease on the poor, thereby contributing to poverty reduction. In 1990, a study in 94 developing countries estimated that half of the improvement in life expectancy was attributable to the provision of preventive and curative health services.[117] However, although the poor face a greater risk of ill-health and suffer higher rates of morbidity than the non-poor, studies show that they experience systematically lower access to appropriate health care services than the non-poor. This is known as the inverse care law, which states "the availability of good medical care tends to vary inversely with the need for it in the population served."[118] Furthermore, while health interventions targeting disease and conditions associated with poverty, such as the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM), may experi-

Figure 11: Treatment of acute respiratory infection (%), Philippines



Source: Gwatkin D. *et al. Socioeconomic differences in health, nutrition and population in the Philippines*. Washington D.C., Health Nutrition and Poverty Thematic Group of the World Bank, 2000a.

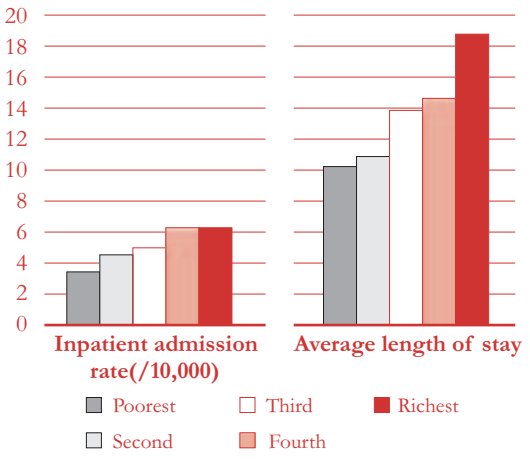
ence more success in reaching the poor than do general health services, evidence increasingly suggests that the benefit of such interventions are enjoyed by the non-poor at the expense of the poor. According to Gwatkin, this is known as "the fallacy of equitable impact": in other words, it is often wrongly assumed that interventions against conditions that are concentrated primarily among the poor can be expected to benefit primarily the poor victims of those conditions.[119]

The inverse care law and fallacy of equitable impact appear to be reproduced across the lifecycle. Studies show that sick children from poor families are less likely to be taken to an appropriate health care provider than are children from non-poor families.[120] In Viet Nam, for example, estimates from 2001-2002 suggest that less than half of the children who died before 5 years received any medical care prior to death.[121] As seen in Figure 11, although the prevalence of ARI is higher among poor children in the Philippines, they are less likely to be seen medically than are their non-poor counterparts.

Studies have likewise found that an estimated 20%-40% of malaria cases and deaths receive treatment in formal health facilities.[122] A number of studies from the TB community are beginning to suggest that the current DOTS case detection strategy may be "missing" cases, especially in hard-to-reach and marginalized communities. In Lilongwe, Malawi, TB notification rates from a densely populated planned area, characterized by better socioeconomic status, were compared with those of a similarly populated unplanned squatter area. The study concluded that 46% of expected smear-positive TB cases in the squatter area were "missing."[123] A cross-sectional survey of TB patients showed that 62% were poor. Although this was a higher proportion of poor than that seen in the general population, the poor came from planned areas, indicating that the very poor from unplanned areas were not accessing DOTS.[124] Similarly, in northern Brazil, TB notification rates were higher among middle socioeconomic areas and lower in the more deprived areas.[125] Based on a survey in northern Viet Nam showing that the prevalence of longterm cough among men and women was not significantly different, the case detection rate among male TB patients was estimated to be 39% and a mere 12% for female TB patients.[126]

A similar trend is revealed when comparing the burden of NCDs in developed and developing countries. Generally, cancer patients in developing countries seek care from health services when they are already incurable, as only 20% of patients are diagnosed at an early stage. This is in contrast to developed countries where 80% of patients with cancer of breast, cervix, and mouth are diagnosed in the early stages.[127] In Figure 12, data from Viet

Figure 12: Inpatient care by expenditure quintiles, Viet Nam



Source: Bhushan I. *Presentation to Health Systems Development Technical Advisory Group* [PowerPoint presentation]. Manila, World Health Organization, Regional Office for the Western Pacific, 2001.

Table 6: Share of public health spending received by the poorest and richest quintiles

Country	Poorest quintile	Richest quintile
Malaysia, 1989	29	11
Viet Nam, 1992	12	29

Source: Hsiao W., Liu Y. In: Evans *et al.*, eds. *Challenging inequities in health: from ethics to action.* New York, Oxford University Press, 2001.

Nam illustrate this inverse relationship between income and access to health care (measured by inpatient admission rate and length of stay).

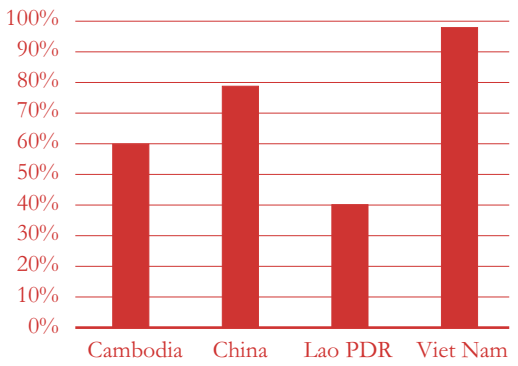
Inequalities in access to health care arise from a number of financial and non-financial barriers that delay and prevent the poor from accessing health services. These barriers are considered below.

Geographical access

The availability of health services is a function of health financing and resource allocation. The higher burden of morbidity among the poor suggests that health resources should be at least proportionately allocated in their favour. However, experience shows that the poor generally benefit less from government spending on health than the non-poor (Table 6). In developing countries, the poorest 20% of the population typically receives less than 20% of the benefits from public health spending.[128] The non-poor usually benefit the most from government subsidies, which are often dedicated to supporting hospital-based curative services in urban centres. In Vanuatu, for example, in 1996, almost three quarters of the health budget were allocated towards urban rather than rural services. As a result, only 20% of the population benefited from public spending on health services.[129] In many countries, this allocation of health resources leaves primary health underfunded. This results in poor coverage of primary health facilities and other health interventions targeting the poor. Therefore, poor individuals generally have to travel longer and farther to access health services than do the non-poor. This is especially apparent in rural areas, where many of the poor often reside.

A number of studies show the incomplete coverage of successful child health interventions,

Figure 13: Proportion of one-year-olds fully immunized against DTP, selected countries in the Region (2001)



Source: United Nations Children's Fund. *The state of the world's children 2004*. New York, 2003.

or, more specifically, that child survival interventions are not reaching the children most in need.[130] Jones *et al.* estimate that two-thirds of child deaths could have been prevented by interventions that are currently available and affordable.[131] In the 42 countries that account for 90% of child deaths in 2000, it was observed that measles vaccine reached two-thirds of children younger than 5 years and all other child survival interventions covered less than 60% of the population.[132] Within countries, the poorest children are generally the least likely to be vaccinated, to receive vitamin A supplements or to sleep under an insecticide-treated bednet.[133] In Viet Nam, immunization for DTP3 by province ranges from 43%-100%.[134] The proportion of one-year-olds who were fully immunized against DTP in countries in the Region in 2001 is found in Figure 13.

The low coverage of health services is reflected in the limited coverage of antenatal care and the number of births attended by skilled health personnel. On average, data from over 50 developing countries show that births to women in the poorest income quintile are five times less likely to be attended by a trained health professional (doctor, nurse or midwife) than are women from the richest quintile.[135] In developing countries in the Region, the coverage of antenatal care ranged from a low of 27% in the Lao People's Democratic Republic and 38% in Cambodia, to 78%-90% in China and 97% in Mongolia.[136] This trend is found within countries as well, where non-poor house-

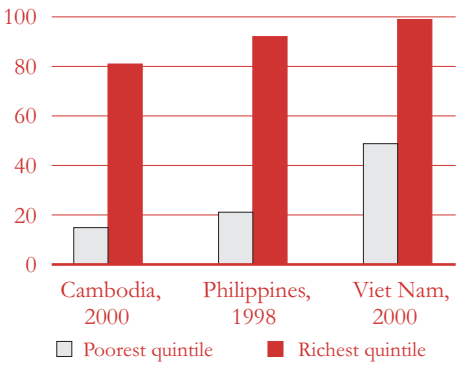
holds and communities have greater access to skilled health personnel than do poor ones. In the Philippines, for example, over 90% of women from the poorest income quintile gave birth at home while a mere 20% of the richest chose home births. Conversely, a trained provider attended the deliveries of less than 10% of women from the poorest quintile, while almost 80% of births to women from the richest quintile were assisted by one.[137] Figure 14 presents the percentage of women in the poorest and richest quintiles receiving delivery assistance from a doctor or nurse/midwife in Cambodia, the Philippines and Viet Nam.

In many countries, the coverage of health facilities does not mirror the distribution of poor populations. Nationally, 75% of the Lao population has access to health services. But, their coverage is unevenly distributed across regions of the country, reaching a high of 82% in the south and a low of 67% in the north.[138] In the north, almost 30% of the population lives 16 km from a health centre.[139] In many countries, poverty is concentrated in rural areas, where the coverage of primary health services is generally low. This neglect of rural areas is also apparent in Cambodia, where only 13% of government staff are located in rural areas, where 85% of the Cambodian population resides.[140] Health services are likewise unevenly distributed in Mongolia. The rural population in Mongolia uses health facilities only half as often as the urban population.[141] This may be partially due to the fact that in 2002 the ratio of physicians and nurses to population ranged from 1:206 and 1:393, respectively, in Ulaanbaatar to a high of 1:794 and 1:502, respectively in Zavhan.[142] The incomplete coverage of services in areas populated by poor populations means that when the poor fall ill, they must travel longer and farther to health care facilities than the non-poor.[143] This lengthens the time required to access health services and increases the overall cost of seeking care.

Economic costs

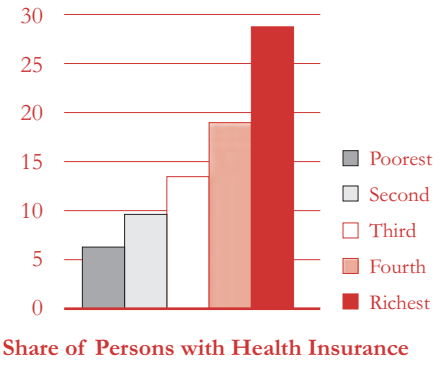
Even when health services are available, the cost of seeking care may be more than poor patients and households can bear. The total cost can be disaggregated into the direct costs (such as fees charged for health care), indirect costs (such as the cost of transportation and food) and opportunity costs (such as time away from work). The absolute cost of seeking care may be lower for the poor than the non-poor. But, as a share of non-food expenditure, the relative cost of seeking healthcare is higher for the poor than the non-poor. In several countries, more than 1% of all households spend half or more than half of their non-food expenditure on health care.[144] In Mongolia, estimates from the 1998 Livelihood Measurement Survey found that poor households spent 3% and non-poor 2% of their income on medical and pharmaceutical costs.[145] The opportunity cost is likewise greater for the poor. This is because the poor often earn

Figure 14: Women receiving delivery assistance from a trained provider (%), Cambodia, Philippines and Viet Nam



Source: Gwatkin D. *et al.* 2003 in Carr D. Improving the health of the world's poorest people. *Health Bulletin 1*, Washington D.C. Population Reference Bureau, 2004.

Figure 15: Share of persons with health insurance by income quintile, Viet Nam



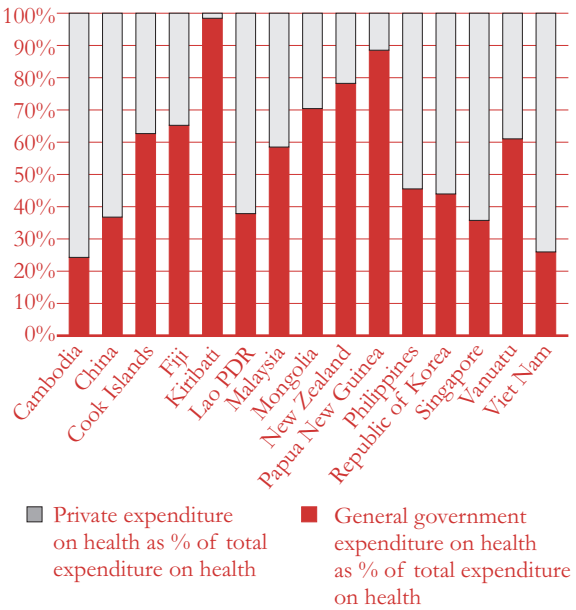
Source: Bhushan I. *Presentation to Health Systems Development Technical Advisory Group* [PowerPoint presentation]. Manila, World Health Organization, Regional Office for the Western Pacific, 2001.

income from their labour. Any reduction in labour supply or decrease in productivity due to periods of illness results directly in a decrease in individual and family income. Poor families may be especially hard hit if the breadwinner falls ill.

Limited savings and a general lack of health insurance further constrain the ability of poor households to meet the direct and indirect costs of seeking care. The social insurance programme in Viet Nam, for example, covered 28.7% of the richest income quintile and only 6.2% of the poorest income quintile (see Figure 15). By the end of 2001, Viet Nam Health Insurance covered an estimated 13.5% of the Vietnamese population.[146] An estimated 9.5% of the rural and 42.1% of the urban population in China are covered by insurance.[147] Should a poor household enjoy insurance coverage, significant financial resources may still be required to meet the costs of the insurance premium, the co-payments for services covered by insurance, and the complete cost of services not covered by the insurance scheme.[148] Therefore, as in many other countries, out-of-pocket payments are the most important source of health care financing in Viet Nam (see Figure 16). On average, the Vietnamese spend nearly US$23 per capita per year on health care. This includes formal user fees, informal payments to public services, payments for private services, self-medication and pharmaceuticals prescribed by health providers.[149] Out-of-pocket payments finance more than 50% of household healthcare costs, which consist mainly of drugs, in the Lao People's Democratic Republic.[150]

Limited health insurance and the lack of social safety nets leaves households vulnerable to catastrophic health care expenditure. Estimates show that in 1998 the average user charge per admission for inpatient care in a public hospital in Viet Nam was equivalent to 45% of the poorest quintile's average non-food expenditure and 4% for the richest quintile.[151] Households in Vientiane, in the Lao People's Democratic Republic , spend 1.8% of household consumption on medical care, while households in the Southern and Northern Regions of the country spend 2.6% and 2.5%, respectively.[152] This is further exacerbated by the irregular and seasonal nature of agricultural income in countries where the poor are generally

Figure 16: Private expenditure and government expenditure on health as a proportion of total expenditure on health, selected countries in the Region



Source: World Health Organization. *The World health report 2002: reducing risk, promoting healthy life*. Geneva, 2002c.

found in rural areas. A case study in three poor rural counties in China found that financial difficulties prevented 41% of sick peasants from seeking medical treatment.[153] As poor households often lack collateral against which they may borrow funds from formal financial institutions to finance the cost of seeking health care, they must often resort to borrowing from informal moneylenders and selling productive assets, such as land. For example, a study in Cambodia estimates that as much as 40% of new landlessness was due to ill-health.[154] Selling assets, especially land, can deprive households of a future income stream.

Informal fees charged by health service providers further amplify the total cost of seeking care and may further deter poor patients from seeking treatment. In Viet Nam, the United Nations explains that households report paying much more (14 times as much) in user fees at public health clinics than the government reports in user fee revenue collection.[155] Seeking to reduce their expenditure on health care, the poor often consult private providers (who are often the cheapest and

least trained), including traditional practitioners, or choose to self-medicate. A 1993 study in Viet Nam found that a high proportion of sick individuals from across income quintiles seek care and/or simply buy medication (96% for the poorest quintile and 99% for the richest). Disaggregating the data further revealed that the poor are more likely to consult private pharmacies, and thus, choose to self-medicate, than are the non-poor (70.2% for the poorest quintile and 54.7% of the richest).[156] In many instances, the poor quality of services requires that the poor make repeated visits to multiple health providers. In China, much of the total cost of seeking care may go to unnecessary or inappropriate drugs.[157]

As a result, many poor patients are forced to delay seeking treatment, which further reduces their capacity to work. Delaying treatment also has important public health consequences. The longer patients remain sick, the greater the risk of other people becoming infected and the greater the cost to the health system when the patient does seek treatment. This is because treatment may be more complex and time-consuming when delayed.

Lack of knowledge and awareness

A general lack of health information and awareness among poor and marginalized groups may result in low demand for health services. As discussed previously, educational attainment and health literacy are closely associated with income. Health information may not reach poor and marginalized populations for a variety of reasons, including physical distance to health centres and limited outreach in many areas. Low levels of education and linguistic or cultural barriers may likewise make health information or other information, education and communication (IEC) materials inaccessible. Evidence suggests that even when information on HIV reaches the poor, they may not understand the messages or may not perceive the risk to be important within their day-to-day struggle for survival and thus, may fail to take preventive measures.[158] This may be especially true for people belonging to ethnic monitories, who often live in rural and remote areas and face unique cultural and linguistic barriers. Such barriers may range from an inability to communicate with health care providers because of differences in languages to different understandings of the health/disease process. This may contribute to the lower access ethnic minorities generally have to health services. The immunization rates for children between 12 and 23 months, for example, vary among ethnic communities in the Lao People's Democratic Republic, ranging from 22.8% for Tai-Kadai and 19.2% for Khmou to 4.08% for Hmong.[159] Among ethnic Lao children 1-2 years of age, 60% have two or three doses of polio vaccine, while only 45% of ethnic minority children receive these vaccines.[160]

Low levels of knowledge and awareness may lead to erroneous beliefs about illness that may delay patients from seeking care. A low educational level has been linked to poor knowledge and erroneous beliefs about TB.[161] For example, in a study in Manila, the urban poor thought that vices (for example, drinking or gambling) and hard work played a larger role in contracting TB than did person-to-person transmission.[162] In a Mongolian study, patients who were afraid of being diagnosed with TB delayed seeking treatment.[163] No information or limited information about health services may likewise deter patients from seeking care. When asked about the various problems they face in accessing health services, 42.2% of women in Cambodia explained that they did not know where to go. Lack of knowledge of where to seek care was cited more often by women with no education (45.5%) and by women living in rural areas (42.8%).[164]

Inequalities in quality of health care

Even where health services are accessible, they may not effectively respond to the needs of poor patients. Evidence shows that even if poor children are taken to appropriate health facilities, they are less likely to receive proper treatment than are non-poor children.[165] In many countries, the (perceived or actual) quality of primary health care[166] is substandard and tends to be even lower in health facilities located in underserved areas. Limited resources, including poorly remunerated health workers, constrain the quality of care extended to poor patients. Many health centres are characterised by a general lack supplies and equipment, shortage of essential medicines and

neglected or dilapidated infrastructure. A government report from Cambodia notes that health centres are often in a dismal state, with no electricity, a limited supply of essential medicines and other products.[167] A study in Viet Nam revealed that 50% of commune health centres are not working full time as regulated and that 36% of commune-level facilities had multiple supply stock-outs every year.[168] In Mongolia, doctors in rural areas often lack essential supplies, such as transportation and medicines. This irregular supply of medicine forces patients in rural areas to buy their syringes and medicines from private traders, which are often of low quality and out-of-date.[169]

Health services are likewise seen to include long waiting times, inconvenient hours, rude and disrespectful staff, and an overall low quality of care.[170] Poverty, gender and ethnicity can influence the way in which health services are delivered, how providers perceive their patients and the responsiveness of services in meeting the needs of patients. Furthermore, there is some evidence that health service providers are not sufficiently aware or sensitive to the needs and preferences of the poor.[171] Poor women have been found to be particularly sensitive to the behaviour of health staff and may not access formal services when providers are perceived to be disrespectful and insensitive to their needs.[172]

The generally low remuneration of health staff in underserved areas can lead to poor quality services, absenteeism and many vacancies. For example, the limited availability of health staff in public facilities in Cambodia has been directly associated with the low level of remuneration for health professionals. Low salaries force health professionals to engage in other income-generating activities, such as farming or running a private clinic.[173] Absentee rates among public facility health workers reached 19% in Papua New Guinea.[174] In Mongolia, rural doctors rarely benefit from in-service training.[175] Poorly remunerated staff may be unmotivated and insensitive to the needs of the poor. Furthermore, evidence shows that in many areas, health staff seek to augment their income through private consultations held during working hours (and perhaps in the public health clinic).

The low quality of health services in many areas is reflected in the maternal mortality ratio (MMR), which is widely regarded as a good indicator of accessible and functioning health services, without which obstetric emergencies frequently prove fatal.[176] For example, the MMR in Mongolia remains above the regional average of 100 per 100,00 live births, although 96% of deliveries take place in institutions and 99% are assisted by trained attendants. The main challenges is the weak capacity of health facilities, characterised by inadequate skills for managing complications in pregnancy and childbirth and a shortage of essential equipment, medicine and supplies, especially in remote *aimags* and *soums*.[177]

Inequalities in mortality

Worldwide, the risk of mortality mirrors income and wealth distribution. In the Region, average life expectancy at birth ranges from a high of 84.6 for women in Japan to a low of 51.9 for men in the Lao People's Democratic Republic.[178] This variance in average life expectancy between countries in the Region follows the global trend: deaths beyond the age of 70 constitute over 60% of deaths in developed countries and only 30% of deaths in developing countries.[179] Furthermore, WHO estimates that people living in absolute poverty are five times more likely to die before reaching the age of 5 and two and a half times more likely to die between the ages of 15 and 54 years than are people in higher income quintiles.[180]

As discussed earlier, the burden of communicable diseases weighs more heavily on the poor than the non-poor. More specifically, communicable diseases[181] have been shown to account for 58.6% of deaths and 63.6% of loss of disability-adjusted life years (DALYs) among the poorest 20% of the world's population.[182] In comparison, communicable diseases cause only 7.7% of deaths and 10.9% of DALY loss among the richest 20%.

Young childhood

According to WHO, the global child mortality rate decreased from 147 per 1,000 live births in 1970 to about 80 per 1,000 live births in 2002.[183] Yet more

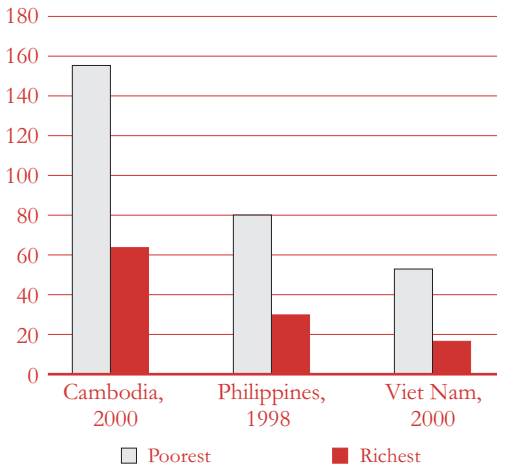
than 10.5 million deaths occur among children younger than 5 years of age each year, of which nearly all occur in developing countries.[184] The vast majority of these deaths result from preventable diseases (acute respiratory infections, diarrhoea, measles and malaria) and malnutrition.[185]

The large and increasing variance in child mortality rates between regions and countries is highly correlated with levels of development. The risk of death in childhood is 10 times higher among the poorest 20% of the global population than among the richest 20%.[186] Forty-two developing countries account for 90% of all under-5 child deaths. Of these 42 countries, four are in the Region, namely, Cambodia, China, the Philippines and Viet Nam.[187] In the Region, the under-five mortality rate (U5MR) ranges from a high of 138 per 1,000 live births in Cambodia—having increased from 115 per 1,000 live births in the early 1990s—to 4 per 1,000 live births in Singapore.[188]

Differences in income can account for up to 70% of variance in infant mortality observed across and between countries.[189] Evidence from over 60 countries reveals that children from households in the lowest income quintile face a significantly higher risk of dying before the age of 5 than do children from richer households.[190] In Cambodia, the U5MR is 147 per 1,000 among the poorest fifth of the population.[191]

Similar trends have been observed among children born to less educated mothers and into rural households. In 20 developing countries, women with no education and in rural agricultural communities experienced the highest rates of U5MR.[192] The infant and child mortality rates among children born to mothers with no education were estimated to be almost double those of children born to women with a secondary education.[193] A survey in Mongolia found that the infant mortality rate (IMR) among children of mothers with primary education or less was 99.7 and the U5MR was 141.8 in 1998. Among children of mothers with more than secondary education, the IMR and U5MR were 55.3 and 73.6, respectively.[194] Similarly, in 2000, the IMR was found to be 102.5 and U5MR to be 135.5 among children of mothers with no education and only 60.3 and 75.9 respectively among children of mothers with secondary education or higher.[195]

Figure 17: U5MR among children in the poorest and richest income quintiles, Cambodia, Philippines and Viet Nam



Source: Gwatkin *et al.* 2003 in Carr D. Improving the health of the world's poorest people. *Health Bulletin 1*, Washington D.C. Population Reference Bureau, 2004.

In general, reductions in child mortality have been much slower in rural than urban areas.[196] The IMR in rural areas is almost double that in urban areas of Viet Nam. This may be partially explained by the fact that the IMR among ethnic minorities is up to double the national average and more than three times higher than that of the Kinh/Chinese majority.[197] Similarly, IMRs and U5MRs are more than twice as high in rural areas of the Lao People's Democratic Republic than in urban areas.[198] Furthermore, a study in Xieng Khuang and Oudomxay, the Lao People's Democratic Republic, revealed large inequalities in the distribution of U5MR between ethnic groups. The U5MR was 141.3 per 1,000 live births for Tai-Kadai, 146.3 for Hmong-Mien and Tibeto-Burman combined and 22.8 for Austroasiatic.[199] Care should be exercised, however, when comparing data for countries in the Region at different stages of development, for example China and the Philippines. These countries have large urban populations, and consequently large numbers of urban poor and very poor. It is important to disaggregate data according to income quintile or socioeconomic status when assessing IMRs and U5MRs.

Adulthood

Worldwide, there were an estimated 45 million deaths among adults over 15 years of age in 2002. On average, almost 75% of these deaths were caused by NCDs, 18% by communicable disease (18%) and 10% by injuries.[200] However, within the Region, communicable diseases continue to impose a high burden on developing countries. Death rates associated with malaria are highest in the Lao People's Democratic Republic, Papua New Guinea, and Kiribati;[201] malaria was recorded as the second most common cause of mortality in Cambodia and the leading cause of mortality in Lao People's Democratic Republic in 2004.[202] Table 7 reveals a similar trend for mortality rates from TB in the Region. Evidence from China shows that women from the poorest quintile experienced mortality rates from communicable diseases that were 3.5 times higher than the wealthiest income group.[203]

Table 7: Mortality from TB, selected countries in the Region

	Death rates associated with TB (per 100,000 people)
Cambodia	77
China	19
Lao PDR	31
Korea, Republic of	10
Malaysia	22
Mongolia	19
Philippines	67
Viet Nam	20

Source: Asian Development Bank. *Key indicators of developing Asian and Pacific countries*. Manila, 2003a.

The absolute number of deaths from NCDs was higher in developing countries than in developed countries in 1990.[204] Furthermore, NCDs are a significant and growing burden among low and middle-income countries, where they account for 79% of deaths.[205] An estimated 12% of the total deaths in the Region in 1998 were due to chronic obstructive pulmonary disease, the majority of which occurred in rural areas.[206] Generally, the most economically productive age groups (26-64 years) are hardest hit by CVD and diabetes. In Mongolia, cardiovascular diseases and cancer caused more than 58% of all deaths.[207] CVD is the top cause of mortality (measured as a share of total deaths) in China causing 39.4% and 29.3% of deaths in urban and rural areas, respectively.[208]

Injuries impose a significant burden, especially among young men. Remarkably, 70% of the 4.5 million victims of injuries are men.[209] Injuries include deaths caused by road traffic accidents, violence and self-inflicted injuries. Injuries are of particular concern to the poor because poverty often forces the individuals into precarious and potentially life-threatening employment. Violence is increasingly understood to be an important cause of injury among women as well and has been linked to numerous physical health problems (including injury, chronic pain syndromes, and gastrointestinal disorders) and mental health problems (including anxiety and depression).[210]

The multiple deprivations poor women experience directly impacts upon their health. Although women generally live longer than men, they are more likely to suffer from disease and disability than men. The health of poor women is compromised by their heavy work burden and childbearing, and unequal access to food may undermined their nutritional status. Communicable diseases cause a higher proportion of death and DALY loss among poor women than among poor men even after maternal conditions are removed.[211] However, one-third of DALY loss by women aged 15 - 44 years in developing countries results from reproductive health problems.[212] For women, an important aspect of poverty is vulnerability to violence. This concern is reflected in the fact that gender violence and rape account for 5% of DALY loss among women in developing countries. [213]

Maternal mortality

The poor-rich gap in health outcomes is most striking for maternal mortality. Worldwide, an estimated 500,000 women die every year from complications associated with pregnancy. Maternal mortality and morbidity are the greatest cause of premature death and disability among women 15 - 44 years.[214] Moreover, for every woman that dies as a result of childbirth, many more suffer disabilities that can affect them for the rest of their lives. In the

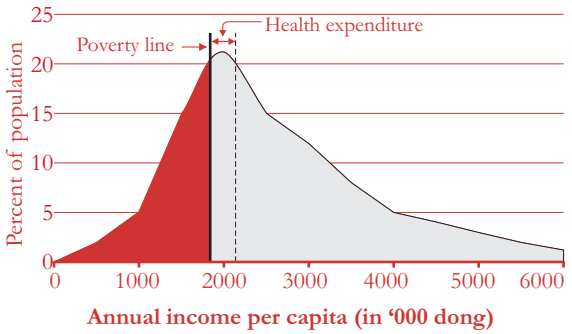
Region, the MMR ranges from 4.42 per 100,000 per live births in Australia, to 530 per 100,000 live births in the Lao People's Democratic Republic.[215] As with other health outcomes, MMRs vary within countries as well. In China, the MMR in Quinghai, a poor province in the Chinese interior, was almost ten times higher than that in Zhejiang Province, a more prosperous coastal area.[216] Women in rural and mountainous areas in Viet Nam face MMRs two or three times higher than the national average.[217] In the Lao People's Democratic Republic, the MMR is more than three times higher in rural than in urban areas.[218] Almost half of all maternal deaths in Mongolia occur among the herding communities.[219]

Ill-health leads to greater poverty

For the poor, the link between poverty and ill-health is clear: ill-health leads to greater poverty and good health is key to ensuring higher productivity and increased income. The consequences of ill-health are the primary reason for impoverishment among many of the poor.[220] Case studies conducted by the World Bank on people and households that had become poorer identified illness, injury or disease as the single most common cause of greater poverty.[221] Studies in East Asia explain that catastrophic illness, including TB, HIV, and severe malaria triggered 50% of financial crises in poor families.[222] Among Mongolian households surveyed in 2000, serious disease forced 15% to the brink of poverty or into poverty. Financial constraints prevented 20% of households from following medical prescriptions or forced them to delay the prescription.[223] In the 1998 National Health Survey in China, the major source of impoverishment for poor rural households was identified as lack of labour (23.18%) and disease or injury (21.66%). These findings imply that ill-health may be the major reason for impoverishment in rural China as a lack of labour may arise from illness or injury.[224]

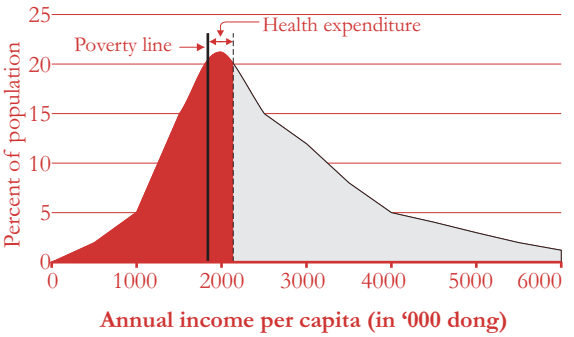
Thus, falling sick is an expense that the poor can ill afford. First, as discussed previously, the cost of seeking medical care weighs more heavily on the poor than the non-poor. The impoverishing effects of medical costs are especially severe if poor families are forced to sell productive assets, such as livestock or land, or take children from school. In this manner, the cost of seeking treatment alone is often catastrophic for the poor. Estimates from Viet Nam suggest that overall spending on health care added approximately 4.4% to the head count under the food-based poverty line in 1993 and 3.4% in 1998. Another estimate of the impoverishing effect of health expenditure, using Vietnam Living Standards Survey (VLSS) 1997-98 data, is presented in Figures 18a and 18b.[225] Using data from the 1998 National Health Survey in China, the impact of out-of-pocket medical expenditure on the headcount and poverty gap in various regions of rural China was estimated. Out-of-pocket health expenditure was found to raise the number of rural households living below the poverty line by 44.3% and increase the poverty gap by almost 146.6%.[226]

Figure 18a: Share of population below the poverty line in Viet Nam before health expenditure



Source: VLSS 1997/1998.

Figure 18b: Share of population below the poverty line in Viet Nam after health expenditure



Source: VLSS 1997/1998.

Because the poor have few other assets, their livelihood is derived mainly from their labour. Good health is thus an asset and ill-health a liability for the poor. Any reduction in labour supply or decrease in productivity of the poor due to periods of illness, results directly in a decrease in individual and family income. However, the impact of illness on household income may vary. Reductions in productivity from isolated periods of illness may be relatively short. whereas premature mortality or long-term disability, especially of the breadwinner, may have catastrophic effects on the household. The impact of HIV/AIDS on families in Asia and Africa, where household surveys show that families living with HIV/AIDS experienced a 40%- 60% reduction in income, is a poignant example of the devastating effect of ill-health.[227] Similarly, gender-based violence can perpetuate the poverty of women by reducing their opportunities for work outside the household, their ability to care for themselves and their children, their mobility and access to information and children's schooling.[228]

According to the CMH, some of the strongest evidence on the relationship between health and economic prosperity comes from studies on the links between nutrition and productivity. Several studies have found evidence of a casual effect of iron deficiency on reduced work capacity.[229] Studies from China and Sri Lanka demonstrate the positive effect of iron supplements on the energetic efficiencies (the amount of physiological energy required to perform a given task) of women cotton mill and tea plantation workers, respectively.[230] After 12 weeks of iron supplements, the study in China observed a 5% increase in gross and net energetic efficiencies relative to the control subjects and a 17% increase in the production efficiency of the workers as well. However, although work output did not increase, more time was spent on leisure activities. In Sri Lanka, an increase in voluntary activity was likewise noted. The correlation between iron deficiency and lower productivity was demonstrated in a study of roughly 400 male rubber tree tappers and weeders in Indonesia, of whom 45% were initially anaemic.[231] The productivity of anaemic workers increased to the level of non-anaemic workers, or by 20%, after receiving daily iron supplements for a two-month period.

Similarly, there is increasing evidence of the association between poor nutritional status and illness in childhood and lower long-term productivity. In the Philippines, studies of agricultural workers find that adults who were stunted through poor childhood nutrition were less productive and earned lower wages than adults of average height.[232] Furthermore, poor health and nutritional status during childhood may directly affect a child's school performance and attendance.[233] Specifically, deficiencies in key micronutrients, such as in iron and Vitamin A, can retard the development of cognitive abilities.[234]

The effects of ill-health on human development spill over into the next generation. Households in countries that experience high infant mortality rates tend to have bigger families. Larger numbers of children lower the ability of families to invest in the health and education of each child, which leads to poorer health outcomes and lower educational attainment. This lower investment in human capital decreases future productivity and earning.[235] The intergenerational impact of poor health outcomes among women is especially telling. A study from Matlab, Bangladesh, shows that only 25% of infants whose mothers died in childbirth survived until their first birthday in comparison to 91% of infants whose mothers lived. In contrast, a father's death was associated with an increase of about 6 per 1,000 in the child mortality rate (with no differences between sons and daughters), while a mother's death was associated with an increase of almost 50 per 1,000 for sons and 144 per 1,000 for daughters. In 2002, an estimated 25.6% of children died after the death of their mothers in Viet Nam.[236]

Evidence is mounting of the impact of a higher burden of disease and lower economic growth and reduced poverty reduction at the level of country or society. When aggregated to the national level the costs of ill-health to individual households outlined above is staggeringly high. The CMH estimates that the economic cost of avoidable diseases amounts to hundreds of billions of US dollars for the poorest countries each year.[237] However, the impact of a high burden of disease on national development has been estimated to be much greater than the sum of individual costs.

This results from the long-term cost of reduced parental investments in children observed in countries with a high burden of infant and child mortality. As well, poor population health depresses the returns on investments in business and infrastructure. For example, absenteeism and high turnover in the labour force from ill-health can result in increased recruitment costs.[238]

A few studies have sought to estimate the economic impact of a specified disease burden on countries. Since the majority of disease and deaths from TB occurs between the ages of 15 - 54 years, the impact of TB on national economic growth is large. Thailand is estimated to have lost US$57 million from the total indirect cost of lost productivity arising from TB morbidity.[239] A five-fold difference in GDP has been observed between malarious and non-malarious countries, which had an average GDP in 1995 of US$1,526 and US$8,268, respectively.[240]

Box 7: Virtuous cycle: does better health lead to reduced poverty and economic growth?

Good health nurtures human development through many avenues over the life cycle. Beginning in childhood, good health is a primary building block for physical and intellectual development evidenced by enhanced school attendance and learning. This in turn leads to higher labour productivity and expanded opportunities, thereby contributing to greater economic security and growth. During adulthood, good health allows poor individuals to participate in the labour market, produce goods, such as agricultural products, and participate in social life. This translates into higher income and greater livelihood security. Furthermore, less time spent caring for ill family members likewise results in higher productivity and diminished poverty.

Health is increasingly recognized as central to poverty reduction and human development at the level of a country or society. Studies suggest that improved health status (as measured by longer life expectancy) is associated with greater economic growth. Estimates predict that the real income per capita of a country with a five year longer life expectancy than its less healthy counterpart (both countries are otherwise identical) will grow by 0.3%—0.5% per year faster. One study notes that this additional growth is substantive, "considering that 1965-1990, countries experienced an average per capita income growth of only 2% per year."

Good population health leads to poverty reduction and long-term economic growth through a number of avenues including improved human capital and, in particular, greater investments in education, higher labour productivity; increased rate of national savings and higher rates of foreign investment; and demographic changes.

As the average life expectancy of a population increases, the propensity to save in a society rises. This is because individuals have a stronger incentive to save and invest in skill development and education, leading to increased productivity in the long run. Better health and improved educational attainment together constitute higher human capital, which is key to increased labour productivity, both at the level of the individual and society. In turn, a healthy and educated workforce is more likely to attract foreign direct investment.

The benefits of increased nutrition may not immediately translate into increased productivity or higher wages, as the studies from China and Sri Lanka suggest. Rather, the benefits may be exhibited through increased voluntary activities and leisure time or greater investments in children. Increased health and educational investments in children, among other factors, lead to reduced rates of infant and child mortality. This is the first step toward the demographic transition, that is, the transition from high to low rates of mortality and fertility. During this period, income per capita may rise dramatically, provided the broader policy environment permits the absorption of new workers into productive employment. Thus, it is not surprising that the CMH explains how, at any given initial income interval, countries with lower IMR experienced higher economic growth than countries with higher IMR.

Sources: Bloom D., Canning D. *The health and wealth of nations*. 2000; Bloom D., Canning D., Jamison D. Health, wealth and welfare. *Finance and Development,* 2004, 41(1):10-15; World Health Organization. *The World health report 2000: health systems: improving performance.* Geneva, 2000b; and World Health Organization. *Macroeconomics and health: investing in health for economic development* [Report of the Commission on Macroeconomics and Health], Geneva, 2001a.

3. Why is it important for health professionals to address poverty concerns in health?

3. Why is it important for health professionals to address poverty concerns in health?

As the preceding analysis shows, poor individuals, households and communities currently benefit less from investments in health than do the non-poor. This given, there are three main arguments for integrating a poverty focus into health interventions: efficiency, equity and human rights.

Equity in health may be more precisely defined as the "absence of systematic disparities in health (or major social determinants) between groups with different levels of underlying social advantage or disadvantage, such as different positions in the social hierarchy."

Source: Braveman P., Gruskin S. Theory and methods: defining equity in health. *Journal of Epidemiology and Community Health*, 2003b, 57:254-258.

Efficiency

Presently, national and international interventions aimed at reducing the overall burden of disease appear to be failing to reach the poor. Given that the poor suffer a disproportionate burden of mortality and morbidity, efforts targeting poor individuals, households and communities would have a greater impact on reducing the overall burden of disease, both within countries and globally. Pro-poor health care strategies are required to overcome the inverse care law and fallacy of equitable impact. Strategies designed to reduce the disproportionate burden of disease and death among the poor would increase the efficiency of health interventions.

The efficiency of interventions that target the poor is reinforced by the key role improving the health of the poor plays in poverty reduction strategies. Pro-poor health strategies designed to reduce health-related risks faced by the poor, to ensure the poor benefit from health care services and to prevent further impoverishment arising from the cost of services can protect poor people from many of the impoverishing effects of ill-health. At a national level, such interventions can lead to greater economic growth, through the mechanisms discussed above, and to greater poverty reduction.

Equity

The disproportionate burden of disease on the poor and their relatively poorer health outcomes are increasingly conceptualised in terms of inequities in health. Building on measurements of inequalities, which objectively describe differences between individuals or groups, inequities refer to a subset of inequalities that are seen to be unfair, unjust and thus avoidable.[241] Although experience shows that some variation in health status is unavoidable, such as that due to biological differences (between men and women, for example), inequalities in health are increasingly understood to mirror social divisions within society, such as those based on income, ethnicity and geographical location. These inequalities are thus recognized as being unfair and unjust because of the constraints poverty and social exclusion place on the ability of individuals to influence their health outcomes: the poor have few choices, less access to resources and services and, thus, experience systematically poorer health outcomes than the non-poor. In this way, inequities in health reflect the underlying distribution of wealth, income, and social privilege rather than individual choice. Efforts are therefore required-both from within and beyond the health sector-to address the disproportionate burden of morbidity and mortality suffered by the poor, their limited access to health care services and the impoverishing effects of health care payments.

Human rights

The right to the highest attainable standard of physical and mental health, or the right to health, is rooted in the Universal Declaration of Human Rights and has been endorsed by numerous other human rights treaties (for more details on health as a human right, see Section 6). To date, every country in the world is party to at least one human rights treaty that addresses health-related rights.[242]

Non-discrimination, a key concept in the right to health, forbids: "any discrimination in access to health care and the underlying determinants, as well as to means and entitlements for their procurement, on the grounds of race, colour, sex, language, religion, political or other opinion,

Box 8: A human rights-based approach to health

Such an approach consists in:

- Using human rights as a framework for health development
- Assessing and addressing the human rights implications of any health policy, programme or legislation
- Making human rights an integral dimension of the design, implementation, monitoring and evaluation of health policy and programmes

Source: World Health Organization. *25 questions and answers on health and human rights*. Geneva, 2002b (Health and Human Rights Publication Series Issue No. 1).

Box 9: The Siracusa Principles

In the interest of public health, governments may limit human rights. Even in these circumstances, governments must ensure: that the restriction is provided for and carried out in accordance with the law; that the restriction is in the interest of a legitimate objective of general interest; the restriction is strictly necessary in a democratic society to achieve the objective; there are no less intrusive and restrictive means available to reach the same objective; and the restriction is not drafted or imposed arbitrarily.

Source: World Health Organization. *25 questions and answers on health and human rights*. Geneva, 2002b (Health and Human Rights Publication Series Issue No. 1).

national or social origin, property, birth, physical or mental disability, health status (including HIV/AIDS), sexual orientation, civil, political, social or other status, which has the intention or effect of nullifying or impairing the equal enjoyment or exercise of the right to health."[243] The concept of non-discrimination in conjunction with other human rights, such as the right to information and privacy, should guide the interaction of individuals with the health system.

The inclusive nature of the right to health reinforces this notion. This means that the right to health encompasses the right to health services and the right to the underlying determinants of health, such as education and food. Since States are responsible for the progressive realization of human rights, including the right to health, governments must put in place policies and plans that will lead to the availability of accessible health care and realization of the other human rights as efficiently as possible. This includes regulating the actions of non-state actors to ensure the right to health is realized.

By understanding the human rights dimension of their everyday work, health professionals may contribute to the enjoyment of the highest attainable standard of health by all.

4. How can health professionals and the health system address poverty concerns in health?

5. Facilitator's notes

4. How can health professionals and the health system address poverty concerns in health?

How to do a poverty analysis of health

Assessing poverty

The first step in a poverty analysis of health is to identify the poor at the national level and within provinces, districts and communities. There are a number of methods available to measure the prevalence and distribution of poverty within a country or a specific sub-population. The choice of method depends primarily on the definition of poverty under consideration, such as income poverty or multidimensional poverty, and the availability of appropriate, good quality data sources.

A good starting point is to gather current measures of national-level poverty generated by National Statistical Agencies, various government agencies, nongovernmental organizations (NGOs), and international organizations such as the World Bank. It is useful to consider the distribution of poverty and variations in the depth of poverty between areas and groups over time. This may reveal important poverty trends. For example, in many countries, poverty is more pervasive in rural areas, in remote areas and among ethnic minorities. Such an analysis will reveal the most disadvantaged groups, such as those with the highest incidence of poverty.

A poverty profile may likewise be constructed by outlining and analysing the social, economic and demographic characteristics of the poor. The differences between the poor and non-poor in terms of locality, occupation, level of education, nutritional status and housing may be also assessed. In particular, this should include an analysis of the characteristics of the poorest groups.

When analysing national-level poverty, it is important to determine the definition of poverty and corresponding poverty line used and source of data. In most cases, such estimates will be derived from multi-indicator household-based surveys conducted by national statistical agencies, often in cooperation with international organizations. While such household-based surveys provide a wealth of information, they have a number of limitations as well. Briefly, many surveys may miss slums, the homeless, orphans and mental institutions, which are typically populated by poor individuals.[244] A number of additional challenges are outlined in Box 10.

These measurement challenges, among others, have led to the development of non-monetary proxies for household welfare, such as an **asset index**.[245] An asset index is built from a number of weighted variables that are generally easier to measure than income and consumption. These variables commonly include household durables, such as bicycles, refrigerator, fan, and animals, and household characteristics, type of roofing and flooring, drinking water source and type of sanitation.[246] Poverty-focused analyses of Demographic and Health Surveys (DHS) employ an asset index. This is because the DHSs do not include information on income or expenditure, but do have a range of questions on ownership of assets and dwelling characteristics, such as type of roof, type of toilet, and access to basic services, such as clean water. As with income and expenditure data, asset indices have a number of strengths and weaknesses. Notably, since an asset index is an imperfect predictor of income and consumption, it may be more useful in producing welfare or wealth rankings of the population.[247]

Information gathered through **participatory methods** can complement poverty estimates and trends derived from national household-based surveys Participatory Poverty Assessments (PPAs) emphasise a contextual view of the multidimensional aspects of poverty. PPAs use a number of participatory methods that work in partnership with communities. Drawing on local knowledge and experience, communities create their own understanding of poverty. The process of defining poverty is further enriched by giving voice to the various perspectives within communities, such as those of men and women, who may experience poverty differently.[248]

PPAs use a number of techniques, outlined in briefly in Table 8. A common characteristic of participatory methods is that the results are often qualitative in nature, although quantitative measures may also be used, and have a small sample size. While participatory methods may not

Box 10: Poverty measurement challenges

Income vs. consumption: A number of challenges are associated with measuring income and consumption. To begin with, income data may be underreported by respondents and is notably difficult to measure in rural or non-monetized communities, where a value must be imputed for home production or payments-in-kind. In turn, respondents may not remember accurately their consumption in the preceding weeks (this is referred to as recall error). Notably, income and consumption data are not perfectly aligned, as income may be modified through savings and investments. This allows households to smooth their consumption over a given period of time. Wealth differs from both income and consumption as it includes the total value of a household's assets and liabilities at any point in time.

Individual vs. household: The most frequently used measures of poverty assess the number of people living in households, whose resources are less than a common poverty line. Measuring the number of people living in poor households fails to account for intra-household distribution. Disaggregating income poverty data to the level of the individual or measuring individual-level indicators, such as education or health outcomes, captures the differing levels of deprivation between women and men and young and old within households. As well, large households tend to experience economies of scale. In other words, a household of four people requires fewer resources than do four separate individuals, to enjoy the same level of well-being. This is especially true if some of the household members are children.

Snapshot vs. timeline: Most measures of poverty, such as household-based surveys and poverty assessments, describe poverty at a particular point in time. Yet, much attention is being given to the dynamic nature of poverty, as households and individuals are forced into and escape from poverty over time. For example, external shocks, such as droughts and illness may cause this continuing movement around the poverty line. Panel surveys, which track individuals and households over longer periods of time, provide data on movement in and out of poverty. This method also distinguishes those individuals, households and groups that experience transitory poverty from those who experience chronic poverty.

Actual vs. potential poverty: Measuring the number of individuals and households below the poverty line fails to account for the individuals and households that subsist just above the poverty threshold. Although these individuals or households may have sufficient income, they may be highly vulnerable to external shocks, such as ill-health and natural disasters. The various coping mechanisms employed to offset such shocks depend on access to assets and social networks. Poor individuals and households may be forced into poverty by external shocks or the long-term implications of various coping mechanisms.

Sources: Maxwell S. *The meaning and measurement of poverty*. [Overseas Development Institute Poverty Briefing Paper]. London, Overseas Development Institute, 1999; and Lindelow M., Yazbeck A. *Measuring socioeconomic status: reaching the poor* [PowerPoint presentation]. World Bank, Washington D. C. 2004.

lend themselves to statistical analysis, there are other means of ensuring the reliability of the results. These methods include various sampling techniques and crosschecking information with community members to ensure the validity of the data, for example.[249] The main arguments against participatory assessments are the heavy demand on participants' time and that expectations for future development programmes may be raised among community members.

A number of countries have conducted national PPAs to inform the process of developing Poverty Reduction Strategy Papers (PRSPs). A list of PPAs by country and a number of sources for more information on participatory methods are included in Section 6 of this module.

National-level poverty analysis of health

A clear understanding of the distribution of poverty, nationally and within provinces, districts and communities, and particularly the identification of the poorest and most disadvantaged groups, is the foundation for a poverty analysis of health. Identifying poor and marginalized groups

Table 8: Participatory Poverty Assessment: selected tools

Method	Description	Issues that may be examined
Wealth or well-being ranking	This method determines the relative wealth of each community member, which is usually less sensitive than requesting participants to reveal their wealth in absolute figures. Dividing groups by sex may also reveal how men and women view poverty and wealth (differently). This technique may also discover reasons for relative wealth or poverty among community members. The first step is to discuss the community's criteria or characteristics of poverty, wealth and well-being. Once criteria are agreed upon, participants are asked to rank households from wealthiest to poorest. Alternatively, they may define categories based on their understanding of wealth and poverty. Households may than be assigned to categories, which may be less sensitive than ranking.	• Perception and indicators of wealth, well-being and poverty • Assets of urban households
Preference/ problem ranking	This exercise ranks or scores participants' preferences or problems, based on given criteria. Items may be ordered into a hierarchy revealing the effectiveness of government services, for example. Similarly, health problems may be ranked in order of importance. A more systematic method of ranking involves ranking two items, preferences or problems at a time. The item that is ranked above the other items most often tops the final ranking. Gender-based differences in preferences and perceptions of problems may be highlighted.	• Survival strategies in times of crisis • Perception of consumption level of food, clothing and well-being
Semi-structured interviewing	A process of interviewing that is not based on a formal questionnaire, but rather follows a flexible checklist or guide of issues. The interview may be conducted one-on-one, with key informants or with a larger group. While following the guide of issues, the interview remains largely unstructured, thus allowing participants to introduce their own ideas and raise relevant issues. Issues related to poverty and health, including local perceptions of poverty, perceived health needs, quality and availability of service delivery, for example, may be discussed.	• Vulnerability, powerlessness, differences in perception by gender • Access/ use of services, perception of services and change • Survival strategies in times of crisis • Local self-help institutions and support and community safety nets for the poor • Responsibilities and obligations within households
Participatory mapping/ modelling	Participants produce a visual image of their community, which includes physical characteristics and socioeconomic conditions. This process reveals the general perception participants have of their community (regardless of literacy level). Individual or group maps (such as those drawn by women only) can highlight different perspectives within the community.	• Perception of consumption level of food, clothing and well-being
Seasonal analysis	A visual representation of seasonal patterns in the lives of participants, including differences between those of men and women.	• Seasonal stress, food security, health, income, expenditures, occupation

Continued on next page

Table 8 (continued)

Daily activity chart	Similar to a seasonal analysis, a daily activity chart is a graphical representation of how participants spend their day. The chart may be used to compare how different groups (such as men and women) spend their day and when is the busiest time of day.	• Time use and sequencing of tasks for different groups • Distribution of tasks by gender
Trend diagram	This is an illustrative representation of long-term trends, such as changes in village life.	• Perceptions of change over time in welfare terms, terms of trade, access to income and employment • Access/ use of services, perception of services and change

Sources: Feuerstein M.T., *Poverty and health: reaping a richer harvest*. London, Macmillan Education Ltd, 1997; Narayan D., *et al. Voices of the poor: can anyone hear us?* New York, Oxford University Press, 2000; Wilde V., Vainio-Mattila A. *Gender analysis and forestry*. Rome, Food and Agriculture Organization, 1995; Norton A. *A rough guide to PPAs. Participatory Poverty Assessment: an introduction to theory and practice*. London, Overseas Development Institute, 2001; and Rietbergen-McCracken J., Narayan D. *Participatory tools and techniques: a resource kit for participation and social assessment*. Washington D.C., Social Policy and Resettlement Division, Environmental Department, The World Bank, 1997.

will help ensure the effectiveness of targeted health programmes and other poverty reduction interventions. As when estimating poverty, an initial starting point is to identify national health trends using quantitative data from household-based surveys and statistics generated by the health system. Here, whenever possible, national data should be disaggregated by socioeconomic status, sex, urban-rural location, by region or province, level of educational attainment, occupation, or other indicators of disadvantage identified in a poverty analysis. Otherwise, disaggregated health data may be compared with poverty data. For example, morbidity and mortality data may be mapped across provinces and districts. This map can then be contrasted with a similar mapping of poverty data to identify patterns and trends. In other words, instead of creating new information systems, existing data sources can be used more extensively and in more creative ways to undertake a poverty analysis of health.[250]

A comprehensive poverty analysis of health should supplement an analysis of morbidity and mortality data with an examination of the differences in access to and quality of health services received by the poor and non-poor, the allocation of government health financing and human resources, the absolute and relative cost of seeking treatment borne by poor and non-poor individuals and households, and the impoverishing effect of ill-health on the poor.

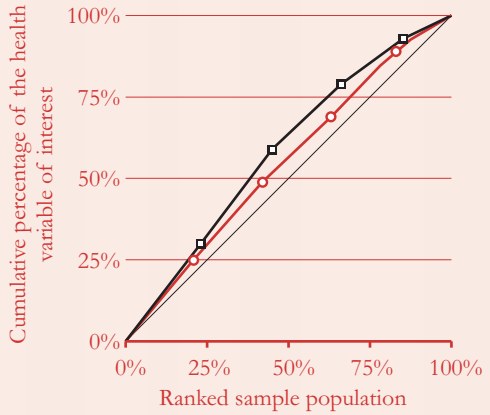
To begin with, the determinants of health may be analysed by examining access to water and sanitation, level of education or literacy and food security by socioeconomic status, income quintile, or other indicators of social disadvantage outlined above. Government agencies, such as ministries of agriculture and education, and NGOs may have detailed data on health-related issues that lie beyond the health sector.

National level morbidity and mortality data should be assessed to identify differences in the prevalence and incidence of morbidity and mortality among various groups. This will reveal gaps in the health status of poor and non-poor sub-populations and highlight inequalities in the distribution of the burden of disease across the country. Data on health conditions that are closely associated with poverty, for example, malnutrition, diarrhoea, child and maternal mortality, or TB, should be the focus of this analysis. As discussed above, data may be disaggregated and analysed by socioeconomic status (income quintile, for example), urban/rural, regional/ provincial boundaries, educational level, occupation, sex, and ethnicity. Other methods may be employed to analyse the distribution of morbidity and mortality among groups, such as mapping health indicators and socioeconomic disparities across regions, provinces and districts to identify variations in morbidity and mortality between

Box 11: Concentration index

A concentration index may be used to measure the degree of inequality in a target health variable, for example, child mortality or benefits from spending on health. The first step is to construct a concentration curve. This is done by plotting the cumulative percentage of the sample population ranked by living standards or well-being (starting from poorest to richest) along the x-axis. On the y-axis, the cumulative percentage of the health variable of interest corresponding to cumulative percentage of the distribution of living standard or well-being variable is graphed. The concentration index is then calculated as twice the area between the line of equality (45 degree angle) and the concentration curve (the thick black or red line). The concentration index is zero if there is no income inequality, i.e., if the concentration curve runs along the line of equality. Since the thick black line lies everywhere above the red line the health variable represented by the thick black line is more concentrated among the poor (the red curve is said to dominate the thick black). The ranking between concentration curves is more ambiguous when the lines cross (non-dominance). Convention dictates that when the concentration curve lies above the line of equality, the concentration index takes a negative value. Conversely, the concentration index is positive if the concentration curve lies below the line of equality. A negative concentration index thus indicates that the health variable of interest is disproportionately distributed or concentrated among the poor.

Figure 19: A hypothetical concentration curve



Sources: Adapted from Wagstaff A., Yazbeck A. *Measuring inequalities in health. Reaching the poor* [PowerPoint presentation]. Washington D.C., World Bank, 2004; and World Bank. *Quantitative techniques for health equity analysis* (Technical Note #7).

areas and groups. Once inequalities in health have been identified, it may be interesting to determine to what extent various factors contribute to the inequalities in health. This may be done through methods such as regression analysis.[251]

Access

A number of methods can help determine variations in access to health care experienced by different sub-populations. One is to analyse geographical differences in the distribution of infrastructure and human resources, between poor and non-poor areas and communities, as follows:

- Map the distribution of human resources (number health workers per population) by region, province or district.
- Assess the proportion of people living beyond a reasonable distance from basic services, say 5-10 km.
- Map the availability of essential drugs and equipment by region, province or district.

Assessing the pattern of use of health services by poor and non-poor groups may also help determine discrepancies between the disease burden and pattern of utilization and differences in levels of use between poor and non-poor groups, and thereby their access to health services. This may be done as follows:

- Measure the proportion of poor and non-poor groups receiving continuous quality care, such as the drop-out rate for immunization between DTP1 and DTP3.
- Measure the number of service units received by the poor, for example, immunization visits, vitamin A supplements, full treatment of TB.
- Measure non-facility delivery, per capita outpatient attendance, percentage of sick/injured individuals seeking a qualified provider by socioeconomic status, geographical location, level of education, or other indicator of social exclusion.

Another determinant of access is the quality of services at health facilities, as this may vary between poor and non-poor areas and communities. Quality may be measured as follows:

- Assess the waiting time and time spent by health providers with patients per region, province or community.
- Assess the use of private services by the poor.
- Assess the timing and continuity of diagnostics by analysing immunization and antenatal care (ANC) patterns among the poorest.

An important element of access is the proportion of government funding allocated towards interventions and level of services provision that is beneficial to the poor. This may be examined as follows:

- Measure the level and proportion of public funding (national and sub-national) allocated to interventions targeting conditions disproportionately affecting the poor, such as communicable diseases.
- Measure the level and proportion of public funding allocated to primary health care diseases.
- Measure the level and proportion of public spending on health per capita in poorer (for example, rural) versus richer (for example, urban) areas.
- Conduct a benefit-incidence analysis to assess how well government spending on health reaches the poor (for details, see Box 12).

The affordability of services for the poor and non-poor may be estimated by measuring the cost of a specific bundle of services, as a proportion of household disposable income. The economic impact of ill-health on poor populations may be further elucidated by examining household expenditure (direct out-of-pocket payments and indirect payments and opportunity costs) on private and public health care by socioeconomic group. This will reveal the absolute level and proportion of income spent on seeking health care. Notably, a finding that the poor spend less on health care than do the non-poor may suggest the absence of health facilities and unmet need rather than progressive spending on health.[252] Another means of examining the impact of ill-health on the poor is to estimate the change in the poverty head-count or change in the poverty-gap induced by health service payments.

Box 12: Benefit incidence analysis

Benefit incidence analysis measures which groups benefit from government expenditure or how these benefits are distributed across groups in society. This analysis aims to assess how effectively government health resources reach the poor. A benefit incidence analysis is constructed by marrying data from household based-surveys-socioeconomic status and use of different types of government services-with information from government statistics and financial records, such as types and levels of government services and the unit cost of providing them. The groups may similarly be defined by geographic location, sex, age, or socioeconomic status. Public expenditure on health may also be disaggregated by type of service, such as inpatient vs. outpatient care, or type of facilities. Please see Section 6 for more information.

Table 9: Distribution of benefits from government expenditures on antenatal care and attended deliveries in Viet Nam (millions of VND), 1996

Facility type	Poorest 20%	Richest 20%	Poor-rich ratio
Central hospital	116	437	1:3.8
Provincial hospital	91	562	1:6.2
District hospital	80	216	1:2.7
Polyclinic	78	40	1.6:1
Commune health centre	360	338	1.1:1
Total benefit	**726**	**1,593**	**1:2.2**

Sources: Yazbeck A. *Benefit incidence analysis. Reaching the poor* [PowerPoint presentation]. Washington D.C., World Bank, 2004b; Gwatkin D. *Free government health services: are they the best way to reach the poor?* Washington D.C., World Bank, 2003; and Pearson M. *Benefit incidence analysis: how can it contribute to our understanding of health system performance?* London, DFID Health Systems Resource Centre, 2002.

Sources of data

As with poverty analysis, using participatory methods may contribute greatly to analysis of the relationship between poverty and health. Participatory assessments explore how the poor

understand and assess their own health and causes of ill-health. Such methods also offer insights into reasons for non-utilization and low demand for services, such as low quality of services, high costs or lack of information, and whether health services meet the needs of the poor. Such infor-

Table 10: World Bank summary of useful studies for analysis of poverty and health

Health outcomes and poverty	Analysis of equity of outcomes	• Analysis of mortality, nutritional status and fertility rates, incidence of diseases by income, region, residence	• DHS • multi-indicator surveys
	Analysis of underlying determinants of health outcomes.	• Access to water, basic education, sanitation, food security	• Living Standards Measurement Survey (LSMS) • Living Conditions Household Survey (LCHS) • Consumption Surveys (CS)
Private expenditure on poverty	Analysis of impact of health expenditures on income and purchase of essential services	• % of income spent on health • Per capita expenditure on health • Expenditure per source of care • Expenditures per income group	• LSMS • LCHS • CS • Health seeking behaviour survey
Health outputs and poverty	Analysis of equity of health outputs	• Utilization of essential health services (EPI, ANC, assisted delivery)	• DHS • multi-indicator surveys
	Analysis of determinants of health outputs	• Physical access, availability of essential consumables, financial access, quality	• EPI surveys • Health services mapping • Health surveys with reasons for non-utilization
Public expenditures and poverty	Analysis of allocative efficiency and equity of public expenditure review (PER)	• % of GDP/public budget allocated to health • % health budget allocated to primary care, communicable diseases • Per capita expenditures per region, per income groups	• PER • Benefit incidence studies
Service delivery strategies and poverty	Analysis of strategies to respond to health problems of the poor	• Strategies to address communicable disease (malaria, TB, HIV, leprosy, etc.) • Strategies to address U5MR and MMR • Strategies to minimize impoverishing aspects of health expenditure • Strategies to ensure participation of the poor in design, planning and management of health services	• Review of current health strategies including health sector reform

Source: Soucat A., Yazbeck A. *Rapid guidelines for integrating health, nutrition and population issues in Interim Poverty Reduction Strategy Papers of low-income countries.* Washington D.C., World Bank, 2000.

mation may be gleaned from national PPAs and may also be included in PRSPs.

Much poverty and health data are currently available from national statistical agencies, ministries of health and international organizations (see the Section 6 for more information). However, a number of challenges with data collection and analysis should be noted. Generally, there may be deficiencies, under-registration or misclassification in basic health statistics and cause of death data.[253] Data collection systems within ministries of health may not be set-up to disaggregate and analyse data by socioeconomic status, level of education, occupation, or even sex. When such information is collected, it may not be usefully analysed and used to inform policy and project development. For example, a global review of PRSPs conducted by WHO found that poverty-focused health policy was rarely informed by rigorous analysis of poverty data.[254] A survey fielded to ministries of health in the Region likewise reveals their generally weak capacity to address poverty and gender issues.[255]

Community-level poverty analysis of health

At the community-level, health professionals should be aware of the socioeconomic status or ranking of provinces or districts where they work. Areas with a high poverty ranking, or those with a high concentration of ethnic minorities or other marginalized groups, may experience higher levels morbidity and mortality from health conditions associated with poverty and such marginalization. Within districts and communities as well, it is important for health professionals to be attentive to the distribution of poverty. This information may then be used to assess any discernable patterns in local health seeking: in other words, to determine which groups seek care in the private and public sectors, and which groups do or do not complete treatment. This information may than be combined with health records to better guide health interventions.

A more formal community-level poverty analysis of health may be conducted using PPA. PPA techniques may be adapted to assess a community's perceptions and rankings of their health needs, health-seeking behaviour, reasons for under-utilization of health services and quality of care they receive. Exit surveys can also help ascertain the perceived and actual quality of health services.

How to respond

Health professionals may follow two main strategies to improve the health of the poor, outlined below. These are not mutually exclusive. Rather, following them simultaneously might better ensure the most positive outcomes.

Put health on the poverty agenda

Improving health outcomes among the poor is increasingly understood to be an effective strategy for poverty reduction. This notion is reflected in the MDGs, PRSPs and various global health initiatives. For example, the MDGs, which aim to tackle all aspects of poverty, give prominence to health: three of the eight goals, eight of the 18 targets spread over six

Table 11: Selected national health account indicators, selected countries in the Region, 2000

	Total expenditure on health as % of GDP	General government expenditure on health as % of total general government expenditure
Cambodia	8.1	20.5
China	5.3	11.0
Cook Islands	4.7	9.2
Fiji	3.9	7.5
Kiribati	8.1	13.2
Lao PDR	3.4	5.0
Malaysia	2.5	5.8
Mongolia	6.6	14.0
New Zealand	8.0	14.5
Papua New Guinea	4.1	12.9
Philippines	3.4	6.7
Republic of Korea	6.0	11.2
Singapore	3.5	6.7
Vanuatu	3.9	9.4
Viet Nam	5.2	6.5

Source: World Health Organization. *The World health report 2002: reducing risk, promoting healthy life*. Geneva, 2002c.

goals, and 18 of the 48 indicators are related to health outcomes. Likewise, the CMH outlines the critical links between poverty and health. Health policymakers need to build on this momentum and promote health as central to development.

Based on this understanding, health professionals may effectively advocate for increased resource flows to the health sector and a more equitable and rational allocation of resources within the health sector. Table 11 presents an overview of total expenditure on health and general government expenditure on health as a percentage of total general government expenditure in 2000 for selected countries in the Region.

The CMH explains that additional resources for health should be invested in essential interventions that already exist to address the disease burden among the poor and in strengthening health delivery systems to improve access for the poor to these interventions. The CMH estimates that such investments would save an estimated eight million lives each year globally by 2010 and the associated economic benefit will reach US$360 billion per year.[256] The CMH recommends that additional domestic resources for health should be targeted to the poor or allocated to community-based health insurance schemes, while international donors should support the expanded coverage of essential health interventions and research and development, among other health interventions with global public health benefits. Acknowledging the various constraints faced by countries, the CMH recommends that each country develop a strategy for scaling-up health interventions rooted in an assessment of its current epidemiological situation, health status and poverty determinants.[257] It provides broad estimates of health spending that are adequate to provide an essential package of health interventions for all (see Box 13).

Various international initiatives also aim to increase resource availability for health. Increased funding for the health sector is anticipated from debt relief granted under the PRSP process. The GFATM has increased funding for the control of HIV/AIDS, TB and malaria.

At the country-level, more efficient and equitable allocation of financial and human resources within the health sector can enhance the pro-poor impact of increased resources for health. PRSPs, for example, aim to both increase the level of public spending allocated to the health sector, and the efficiency and responsiveness of health programming (see Box 14). The EQUITAP project,[258] implemented in coordination with WHO, aims to

Box 13: How much health spending is adequate?

The CMH has estimated that the cost of scaling-up essential health interventions needed to eliminate much of the avoidable mortality in low-income countries would be US$34 per person per year in low-income countries in 2007 and US$38 per person per year in 2015. Assuming that scaling-up takes time, these estimates are based on the full economic cost of increasing the coverage of essential health interventions from 2002 to 2015.

Acknowledging that financing costs will vary across countries, the CMH explains that, on average, these estimates are the minimum per capita sum required to introduce essential health interventions. Although these are seen to be low-end estimates (bypassing other key areas of health care), they are viewed as what is needed for a "decisive drop in avoidable deaths". Furthermore, the CMH notes that these estimates are in line with IMF suggestions that to meet the MDGs, low-income countries must dedicate 12% of GNP to health.

However, given that current spending on health is low in most countries (around US$21 per person in the low-income countries and $13 per person in least developed countries) and their capacity to generate resources through general taxation is limited, the CMH explains that donor assistance is needed to close the funding gap in low-income countries. Briefly, the CMH estimates that around US$22 billion per year in 2007 is required to bridge the funding gap at country level for least-developed and low and middle-income countries. This would then increase to US$1 billion in 2015.

Source: World Health Organization. *Macroeconomics and health: investing in health for economic development*. [Report of the Commission on Macroeconomics and Health], Geneva, 2001a.

Box 14: Do PRSPs lead to increased funding for the health sector?

Countries wishing to access concessional loans through the Poverty Reduction Growth Facility (PRGF) or wishing to benefit from debt relief under the Highly-Indebted Poor Countries (HIPC) initiative are required to develop a PRSP. Estimates from the IMF suggest that health spending as a proportion of GNP per capita is expected to rise in PRGF-supported programmes, but only slightly, from 1.8% of GNP in 1999 to 2.1% in 2000-2001. While a recent desk review of 21 final PRSPs undertaken by WHO was unable to substantiate these figures, as information on health budget as a percent of GNP was not included in most PRSPs, the review concludes that PRSPs will not result in large increases in resources available for health. Furthermore, it highlights IMF estimates suggesting that the levels of health funding advocated by the CMH are unlikely to be met through the PRSP process.

Source: Gupta S. In: World Health Organization. *PRSPs: their significance for health: second synthesis report.* Geneva, 2004.

incorporate an equity analysis in national health accounts (NHA) in selected countries and territories in Asia and the Pacific. More accurate information on equity in health financing and delivery of health care services can assist countries prioritise resource allocation toward interventions that disproportionately benefit the poor and develop strategies for scaling-up health interventions, as recommended by the CMH.

While increased resources will allow the health sector to more effectively tackle the burden of disease among the poor, efforts are likewise required to address the multiple determinants of ill-health that lie beyond the health sector. In other words, a broad cross-sectoral strategy is needed to reduce the high risk of ill-health faced by the poor. The capacity of ministries of health should thus be strengthened to effectively collaborate on cross-sectoral interventions to reduce inequalities in income, educational attainment, nutritional status, access to water and sanitation, the availability of safe and adequate housing, agricultural policy and social protection for vulnerable populations, among others. WHO explains that ministries of health should "maximise the health benefits of policy for labour, trade, agriculture, macro-credit, environment and other aspects of development."[259] In particular, pro-poor economic growth, which reduces inequalities and absolute poverty, and investments in education, which are associated with improved health outcomes, are needed. Coordinated efforts that tackle the determinants of health, thereby reducing the various aspects of poverty, will ease the burden on the health sector.[260] PRSPs and other multisectoral planning instruments offer an opportunity to increase policy coherence and joint planning to address the determinants of health both within and beyond the health sector.[261]

Put poverty on the health agenda

Health sector goals and policies typically aim to maximise health gains among the population as a whole. As such, indicators are often expressed as societal averages (see Box 15).[262] However, improving the health of the poor requires that health sector goals and policies should clearly articulate a concern for poor and marginalized groups. This may be expressed, for example, in terms of reducing inequalities or improving health outcomes, reducing the burden of morbidity, improving access to health services, and limiting the impoverishing effects of ill-health among the poor. Clearly identifying intended beneficiaries through a poverty analysis at the national and sub-national level will ensure that the poor benefit appropriately from such goals and policies. These clearly defined objectives and intended beneficiaries may then be used to guide all stages of policy and project design, implementation and monitoring, including health reform, thereby ensuring that health sector actions are pro-poor.[263]

Improving the accessibility of health services for the poor is an important means of addressing inequalities in health. In other words, for poor and marginalized households and communities to benefit equitably from increased resources for health and pro-poor health goals and policy, priority must be given to health interventions that

Box 15: Will the MDGs in health be achieved without reaching the poor?

The overarching theme of the MDGs is poverty reduction. However, there are important variations in the extent to which targets and indicators focus the benefits from progress towards each goal among poor populations. For example, the first goal, to eradicate extreme poverty and hunger, is accompanied by two indicators:

- Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.
- Halve, between 1990 and 2015, the proportion of people who suffer from hunger.
- Any progress towards meeting these targets inherently improves the condition of the poor.

The three specific health goals and accompanying indicators are:

- Goal 4: Reduce child mortality.
  - Reduce by two thirds, between 1990 and 2015, the under-five mortality rate.
- Goal 5: Improve maternal health.
  - Reduce by three-quarters, between 1990-2015, the maternal mortality ratio.
- Goal 6: Combating HIV/AIDS, malaria and other major diseases.
  - Have halted by 2015, and begun to reverse the spread of HIV/AIDS.
  - Have halted by 2015, and begun to reverse the incidence of malaria and other major diseases.

Since these goals are expressed in terms of societal averages, it is unclear to what extent they will improve the health of the poor. Rather, experience suggests that efforts towards meeting these goals may benefit the non-poor at the expense of the poor. As Gwatkin demonstrates, gains by the poor therefore depend primarily on the strategies employed to meet the goals. Specific interventions targeting the poor are required to ensure they benefit disproportionately from efforts aimed at meeting these goals.

Source: Gwatkin D. *Who would gain most from efforts to reach the Millennium Development Goals for health? An inquiry into the possibility of progress that fails to reach the poor.* Health, Nutrition and Population Discussion Paper. Washington, D.C., World Bank, 2002.

reach the poor. The following section presents information in innovative strategies health professionals are employing to improve the accessibility of health care for the poor. These interventions are still in their early stages and have not yet been rigorously evaluated or standardized. However, they suggest some ways forward. Each strategy must be refined based on further analysis and country-specific situations. Nor is this an exhaustive list of strategies, as the evidence base for pro-poor strategies needs to be augmented through more systematic operational research. These strategies are general approaches. More detailed information on pro-poor health interventions designed to address specific diseases and conditions associated with poverty are outlined in other modules of this Sourcebook.

Prioritize underserved areas in resource allocation

Generally, health resources are concentrated in urban areas leaving many rural and remote regions underserved. As a result, the quality of health services in remote or peripheral areas often suffers from a number of constraints, as discussed previously. This pattern typically disadvantages the poor, who often reside in rural and remote areas. In Cambodia, for example, 90% of the poor live in rural areas, where the average income is less than one-third of that in urban areas.[264] Gradually investing additional resources in underserved areas will improve the coverage and quality of health care services in these areas.

One mechanism to facilitate a reallocation of resources from richer to poorer areas is through a population- or needs-based formula. This formula allocates public sector health resources to regions or provinces based on need. A crude formula may use per capita income, while a more refined formula may take into account a number of factors such as: level of socioeconomic development, health status of the population, distance to health facilities and level of existing health infrastructure, for example.[265]

Another means of expanding service delivery into underserved areas is through partnerships with

NGOs and private providers. NGOs can effectively expand service provision in underserved areas, as NGOs are generally accessible to the poor and are often found in rural and remote areas.[266] Cambodia, for example, has successfully employed a strategy of contracting NGOs to provide health services in several districts. This arrangement has increased the accessibility of health services, often to the benefit of the poor.[267] Similarly, in areas where the poor consult private practitioners, financial or other incentives may encourage private practitioners to provide the poor with higher quality affordable services.

Invest in primary health services

Although the poor typically benefit less from public spending on health than do the non-poor, evidence suggests that the poor may accrue greater benefit from public spending on primary health care than they do from total public health spending.[268] Preliminary data from Viet Nam suggests that in the previous 12 months, 11.5% of all households and 18.5% of the poorest 20% of households surveyed had accessed Commune Health Centres.[269] Similarly, UNDP reports that a more equitable distribution of public funding for primary health care is strongly reflected in health outcomes. In countries where the poorest 20% benefit from more than 25% of public spending on primary health care, the U5MR is less than 70 per 1,000. The U5MR increases to above 140 per 1,000 in countries where the poorest 20% of the population receive less than 15%.[270] Prioritising primary health care in resource allocation can thus be pro-poor.

However, in settings where the overall distribution of public health spending is skewed towards hospital-based curative care in urban centres, leaving primary health care systematically underfunded, primary health care may not be pro-poor. This typically results in poor coverage and low quality of primary health services in rural and other marginalized areas. In other words, while the poor may enjoy greater access to primary health care services, they may not benefit equitably. Allocating health sector resources away from tertiary care towards primary health care can result in improved coverage and quality of health services and greater access for the poor.

Redistribute health personnel equitably

Human resources challenges for health include shortages in overall supply of health personnel required, a mismatch between the training received and skills required to meet the needs of the community and geographical imbalance in their distribution.[271] Low salaries, limited benefits, poor working conditions, ranging from a shortage of supplies and essential medicines to working in conflict zones, and inadequate personnel management compound the problems.[272] Many of these factors also contribute to a situation where health personnel are themselves poor, resulting in demoralization of health staff and possibly substandard services.[273] Similarly, health personnel often lack the awareness, knowledge and skills to adequately respond to the needs of poor and marginalized households and communities. These problems often work to the disadvantage of the poor.

A number of strategies may be employed to ensure a more efficient and equitable use of available health personnel. Various financial and non-financial incentives, such as adequate pay, improved working conditions and decent accommodation, can help in redistributing personnel to rural, remote and underserved areas. Working in underserved areas may also be mandated as a prerequisite for advanced training or promotion in the public sector.

Training community-level health workers (*barangay* health workers in the Philippines, for example), nurse practitioners, nurse-midwives and other mid-level health providers to carry out the full range of preventive and curative services may effectively increase service provision in underserved areas while avoiding the higher financial costs and recruitment and retention challenges of an all-physician workforce. With appropriate training and support, mid-level and nurse practitioners have historically played an important role in meeting the health needs of people living in the Pacific Islands, in particular, those in rural, remote and isolated areas.[274]

Enhancing access to appropriate training and continuous education can similarly ensure that health service providers have the necessary knowledge, awareness and skills to meet the needs of the communities they serve, in particular poor and marginalized groups. Training, opportunities for advancement, improved compensation packages and working conditions will also improve productivity and motivation among providers.

Reduce the out-of-pocket costs of health care for the poor

To supplement declining public sector funding for health, a number of countries in the Region have adopted a system of payments for health services at time of use, or user fees. However, studies show that user fees, except when very low, discourage the poor from seeking care.[275] This is because direct out-of-pocket payments restrict access to all but those who can afford it. While there is some evidence that suggests poor individuals and households will continue to seek care in primary health services if user fees result in better quality services, the resources generated by the majority of user fee schemes are, however, insufficient to improve the quality of services.[276]

One means of reducing the impact of user fees on the poor is through a system of exemptions or graduated fees. Exemptions authorise non-payment of fees for specific patients, based on personal characteristics or by virtue of belonging to a marginalized group. The most direct way to identify the poor is through a means test, that is, a direct assessment of an individual or household's capacity to pay. Experience shows that a means test is best administered by a third party, other than the health centre staff, such as a local government official with first hand knowledge of the community. It should be performed in a non-stigmatising manner and remain valid for a period of time.[277] However, such efforts remain difficult and expensive and are open to abuse.[278] Lower or graduated user fees may be charged for the same services when offered in locations or by service providers frequented almost exclusively by the poor, such as in slum or rural areas. However, even the lowest fees may discourage the poor from accessing services.

Increasingly, concern over inequalities in health is focusing on the impoverishing effects health expenditure have on the poor. Protecting the poor from catastrophic health care costs requires that payments for services be separated from utilization.[279] This is achieved through pre-payment mechanisms, such as general taxation or social insurance, that spread the cost of seeking care in accordance with ability to pay.[280] In other words, the rich subsidize the utilization of the health system by the poor and the healthy subsidize the sick. Yet, funding health care through general taxation may not be a viable option in many countries because of their generally low tax base. Similarly, a large proportion of the population in developing countries is often employed outside of the formal sector, which can make social insurance difficult to administer.[281]

One mechanism that has achieved some success in developing countries is community health insurance, which spreads the financial burden of ill-health among households and over predictable periods over time. Among the most successful examples of community-based health insurance are examples from Indonesia and Thailand (see Box 16).[282] However, a review of over 80 community-based health insurance schemes worldwide found that they tend to miss the very poor, who subsist day-to-day, because payments are required up-front.[283]

The protection offered to the poor by pre-payment mechanisms may be further enhanced through a concerted effort to reduce unofficial or under-the-table fees sometimes charged by health service providers, which may have a particularly adverse effect on the poor.

Prioritise investments in diseases and health conditions associated with poverty

Since evidence shows that the poor suffer a disproportionate burden of communicable diseases, malnutrition, infant and child mortality and maternal mortality, health programmes targeting such conditions are seen to constitute pro-poor health interventions. This notion is reflected in numerous global health initiatives that target poverty-related diseases, such as Roll Back Malaria (RBM), Expanded Programme on

Box 16: Experience with health insurance in Indonesia and Thailand

Launched in the 1970s, Indonesia's community-based health funds, the *Dana Sehat*, covered 12 million people by 1994 or almost 13% of villages. *Dana Sehat* is largely funded through prepayments from members, which are often supplemented by funds from government and community agriculture cooperatives. Although supported by the government, a key aspect of *Dana Sehat* is that community participation is systematically emphasised. The community itself, with supervision and guidance from the government, undertakes a self-assessment, chooses a community-wide health care benefit package (balancing needs with ability and willingness to pay), commits as a community to implement the package, and runs the health funds.

Thailand's Low Income Card (LIC) scheme was initiated in 1975 to protect the poor against the impoverishing effects of user fees. Since 1993, individuals with monthly income of less than 2,000 baht and households with combined monthly income of less than 2,888 baht are eligible beneficiaries. LIC is expected to benefit the near poor as well since the low-income cut-off point exceeds the national poverty line. During the 1990s, a number of other groups were deemed eligible, including the elderly, children below 12, veterans, the handicapped, and village and religious leaders.

The authority for identifying beneficiaries has shifted from directors of public hospitals to the community level, primarily village and *Tambon* (sub-district) leaders. Efforts have since been made to enhance community participation in the screening process. In particular, health workers have been included in the screening procedures, in response to concerns that committee members from beyond the health sector are ill informed about LIC procedures and eligibility criteria.

Qualifying beneficiaries are issued a card that is valid for three years, which may be used to seek care in one or two designated health facilities (except in the case of an emergency, when care may be sought in any public health facility). LIC requires that beneficiaries seek care in the *Tambon* health centres initially: subsequent referrals by health staff are provided free. The government reimburses the cost of the services and fees waived for LIC beneficiaries to the facility.

LIC was estimated to cover 17.6 million (approximately 29% of the population) by 1998. Among these, an estimated 5.8 million were from low income households. While differing degrees of targeting and leakage are suggested by various studies, LIC has been estimated to cover as much as 80% of the target population and was found to be valued by beneficiaries.

Sources: Hsiao W., Liu Y. In: Evans T., *et al.* eds. *Challenging inequities in health: from ethics to action*. New York, Oxford University Press, 2001; and Bitrán R., Giedion U. *Waivers and exemptions for health services in developing countries.* Social Protection Discussion Paper Series. Washington D.C., Social Protection Unit, Human Development Network, World Bank, 2003.

Immunization (EPI), Global Alliance for Vaccines and Immunization (GAVI), Stop TB and GFATM. Although there is a clear understanding of the disease burden among the global poor, care should be taken to determine the national and community-level burden of disease among the poor, using national-level health data and PPA methods, respectively.

Target services to the poor

While the strategies discussed above aim to improve the efficiency and equity of the health care system, they may not always effectively reach poor individuals and households. For example, health interventions targeting diseases and conditions associated with poverty may also benefit the non-poor victims of these diseases, at least initially. Targeting poor individuals or groups and tailoring services to meet the needs of the poor will improve the accessibility of health services for the poor. Targeting may be done directly, for example, based on a means test, or indirectly, through broad characteristics, such as location or membership in a vulnerable group, such as ethnic minorities, landless farm labourers or displaced persons. People living in rural and remote areas, for example, are often

Box 17: Is the Global Fund pro-poor?

The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) has focused its funding assistance on poor countries and poor and vulnerable populations within countries. The eligibility criteria for GFATM funding prioritises countries classified as low-income economies by the World Bank. Countries classified as lower-middle income economies must demonstrate that their proposal for GFATM funding includes a focus on poor and vulnerable populations, among other requirements. Upper-middle income countries are eligible for funding only if they face a very high current disease burden and they must, among other requirements, focus on poor and vulnerable population. High-income countries are not eligible for funding.

Among criteria considered during proposal review, priority is given to groups and communities that are most affected and/or at risk from the three diseases (including strengthened participation) and addressing human rights and gender equality issues. Addressing gender equity issues may include identifying and proposing strategies to overcome gender-based inequities in access to health, while a focus on human rights may involve tackling the stigma and discrimination experienced by many people infected with HIV/AIDS, especially among women, children and other vulnerable groups.

Importantly, infection, morbidity and mortality data provided within the proposal should be disaggregated, when possible, by age, gender, population group and geographic location.

Source: Global Fund to Fight AIDS, Tuberculosis and Malaria. *Guidelines for proposals.* Fourth call for proposals. Geneva, 2004a.

predominantly poor. Expanding the network of health facilities and service providers in rural and remote areas is thus to their benefit. Likewise, setting up health facilities in urban poor areas will increase the accessibility of health care services for the urban poor. Other strategies to improve the physical accessibility of health services include regular outreach services and clinics, which effectively bring health services closer to the poor. Such interventions may include providing outreach services in remote areas or mountainous areas or tailoring service delivery to reach underserved populations, such as the urban poor, migrants and landless labourers.

Improve information and communication to stimulate demand

IEC strategies may effectively be employed to increase knowledge and awareness among the poor and other socially excluded groups. Enhanced awareness and understanding of health problems and where and when to seek preventive and curative services can lead to greater demand for health services.

However, IEC strategies and messages may not reach the poor because of their generally low levels of education and literacy. Moreover, poor and marginalized households and communities may not have access to means of communication such as television. Low coverage of mass media, including print materials, newspapers and magazines was found in the mountainous and upland areas of Viet Nam, for example.[284] Numerous factors, including distance, cultural and linguistic barriers, may prevent IEC messages from reaching marginalized communities, such as ethnic minorities. Among ethnic minorities in Viet Nam, for example, the relatively low status of women compared to men prevents them from establishing a broad network of contacts. Instead, they often rely on relatives for information.[285]

Concerted efforts are thus required to ensure that IEC strategies and messages are tailored to ensure accessibility for the poor, such as through illustrated messages for individuals with low literacy levels. When targeting minority groups, culturally appropriate messages delivered in local languages are required. Gender-related barriers to access may also be tackled through IEC campaigns, ensuring that the message and medium are accessible to women, in particular. Outreach strategies may likewise be undertaken by health staff or community-based health workers

to increase knowledge and awareness among various hard-to-reach groups. Involving the community, poor individuals and women, in particular, in the design and implementation of information campaigns will ensure that local knowledge, priorities and needs are understood and subsequently addressed.

Box 18: How health professionals can advance a poverty-focused agenda

At all levels of the health sector, health professionals can advance a poverty-focused agenda by:

- promoting policies and plans that are poverty and gender sensitive
- collaborating with health-related sectors
- collaborating with poverty and gender oriented NGOs
- sensitising the private sector towards poverty and gender
- promoting policies and plans for increased financial resources to the health sector
- incorporating poverty and gender indicators into monitoring systems and databases

Source: Feuerstein M.T. *Poverty and health: reaping a richer harvest.* London, Macmillan Education Ltd., 1997.

Improve health system responsiveness

In many areas, the actual or perceived low quality of services may deter poor people from seeking care in public health clinics. Prioritising health initiatives that target these communities should thus be complemented by efforts to enhance the responsiveness of the health system. This may include improving staff attitudes, their communication skills and the general quality of services provided, decreasing waiting times and ensuring confidentiality, to name a few. In particular, efforts should be made to increase the awareness, sensitivity and skills of health service providers in dealing with poor and marginalized communities, to ensure that all clients are treated with dignity and respect.

Meeting the increased demand for health services stimulated by IEC strategies with improved system responsiveness and quality service delivery can optimize the impact of such strategies. This may be further enhanced by disseminating information on quality improvements and ensuring transparency by posting the costs of various health services at health facilities.

In monitoring and evaluation, disaggregate the collection and analysis of information

Despite the growing recognition of ongoing and often increasing health inequities both in developing and developed countries, health information systems (HIS) have, to date, been weak in yielding information needed to assess and address health inequities. The challenge is to determine the information needs for addressing health inequities; to shape health information systems to meet those needs; to promote sensitization to equity issues; and to develop the skills required to use information for effective planning and policy-making.[286]

In addition to increasing the availability of various data sources, improvements need to be made in the equity-relevant information included. An important constraint in tackling health inequalities is the continued lack of disaggregated data at the national and sub-national levels. Disaggregated data are required to assess the extent of health inequalities, monitor changes over time and identify priority areas and interventions to benefit the poor.

To assess health equity adequately, equity indicators must be constructed. This requires a health measure (or measure of determinant of health) and an equity stratifier (such as a measure of socioeconomic position, sex, age, ethnicity/race, and/or geographical position), as well as the ability to disaggregate information according to these stratifiers. This can be accomplished either by ensuring that appropriate equity stratifiers and health measures are available in each data source, or by creating mechanisms to link records between data sources. For example, effective linkages can be created by including a unique identifier or geographical code in a variety of data sources. The Health Metrics Network has begun work on constructing equity indicators and creating

mechanisms to link records between data sources.[287]

Thus, data collected routinely within the health system should be disaggregated and analysed by socioeconomic status, gender, urban-rural location, region or province, level of educational attainment, occupation, or other indicators of disadvantage identified through a poverty analysis. As discussed previously, quantitative data may be supplemented with qualitative data to assess the unmet need, perceived quality of servers, and various financial and non-financial barriers the poor may face when accessing health care.

Although the strategies outlined previously are, by design, expected to equitably benefit the poor, all pro-poor interventions must be monitored to ensure that they achieve their aim. To this end, disaggregated data should be collected and analysed to assess the extent to which the poor benefit these health interventions.

5. Facilitator's notes

5. Facilitator's notes

These training materials are designed for facilitators to begin working with learners in the health field on the concept of poverty, build their awareness of their own perceptions and those of the people and institutions around them, and to understand how poverty affects health.

Target audience

The module is part of a series for learners in the health field. Ideally, the group should have no more than 20 to 24 learners, as the activities are highly participatory and not suitable for large groups. It can be adapted for health workers in the field by changing some of the methodologies.

Role of facilitator

As the facilitator, you are responsible for setting the tone for the course. This will include making sure that participants understand the expected learning outcomes, providing clear instructions for the activities and keeping to the time schedule. You are also responsible for summing up and synthesizing the discussions at the end of the day or the end of a complex session.

You should be aware of the group dynamics and make sure that no one feels left out or discriminated against and that all have the opportunity to speak and participate equally. While no one should be forced to speak if he or she is uncomfortable, you can use techniques such as pairs and small group activities to encourage interaction and balanced participation. You can also use questions to draw out quieter members of the group. It is important to make everyone feel valued and that his/her experiences are important. You can also state the principles of participatory training, which include equal participation, and tell participants that men usually dominate groups, so you would like to encourage more balanced participation.

If someone is dominating the conversation, you can use a "talking stick" or "conch shell" or other object, which is passed around the room to those who wish to speak. Only the person holding the object is allowed to speak. You can also introduce a rule that no one is allowed to speak twice before everyone has spoken once or divide people into small groups with the quiet ones in one group and the louder ones in another.

As the facilitator, you can adapt the course format to best suit your group. For example, if the participants already have an understanding of poverty, you can skip some of the introductory exercises. If there seems to be a lack of trust, you can use more of the introductory and energizer activities to bring people together. In addition, some exercises may be more suited to some groups than others or specific questions may need to be changed to reflect the participants' backgrounds.

Methodologies[288]

This module is designed for adults, which means it is participatory and involves the learner in the programme taking advantage of her or his experience and knowledge. Studies have shown that adults learn best by being active participants in the learning process as they rely heavily on their own experiences to aid them in determining what information and skills are relevant to their work.

Multiple methods are suggested for different activities, both to vary the course format and to give participants a variety of ways to acquire the knowledge and skills. As the facilitator, you may, of course, adapt the methods to suit your group as you see fit. If you would like to use this module in the field, you may wish to avoid lectures altogether, for example, in favour of more participatory question and answer or large group discussion sessions.

Pairs. Participants group themselves into pairs for activities or discussions. Usually the time given for the activity is short (3 to 5 minutes). If used more than once, ask the participants to switch partners to give them a chance to get to know more people in the group. Working in pairs helps participants get to know each other better and feel more comfortable in the course, which is important as some discussions may become controversial. It also allows participants time to discuss individually specific points or questions raised by the facilitator. The outcomes of the pair discussions can then be shared with the larger group in a

plenary session. Working in pairs often takes longer than anticipated, so be aware that it may cause difficulties with timing.

Small group work. In this case, participants are divided into small groups of five to seven people. This size is small enough for everyone to take part but large enough to offer a variety of opinions and backgrounds. It is important to have enough space in the room for the groups to talk without disturbing each other; if there is not enough space, using additional rooms if available would help. Give the participants the topic and materials needed for the small group project, tell them how much time they have to complete their work and ask them to appoint someone as a note-taker to report back to the larger group. It is helpful to let the groups know how much time they have left at appropriate intervals (at the halfway point and shortly before the end at a minimum). When the time is up, ask the note-takers from each group to present the main points to the rest of the class. Each presentation should be brief (5 minutes or less). When each presenter finishes, ask other members of the group if they have anything they would like to add. Questions should be noted and saved for the end.

Buzz groups. Buzz groups are informal groups that can be set up spontaneously to quickly discuss more challenging issues or questions. Like Pairs, Buzz groups can break up a lecture period, re-energize the group and allow more time for individual comments. They should be kept brief (no more than 5 minutes), and if possible, the questions should be prepared ahead of time and written on a flipchart for easy consultation.

Brief lectures. Lectures are the most passive form of learning and should be brief and used sparingly. However, they are useful for delivering information in a short amount of time and can be used to break up other course methods. Ideally, they should be followed by exercises to ensure that participants absorb the information. Encouraging participation during the lecture through questions or buzz groups is also useful to be sure people understand the material. Another technique to highlight the main points of the lecture is to write them on flipcharts, which you can display as you speak.

Brainstorming. With this method, the facilitator poses a question and asks everyone to call out his/her answers and ideas spontaneously. No censoring should take place, either by the participants or by the facilitator. Write all responses onto the flipcharts as they are called out even if they are repeats. The main point is to elicit as many ideas as possible in a short time frame. It encourages participation from everyone and welcomes all points of view. When the time is up, the ideas can be prioritized or grouped under topic headings when appropriate.

Questions. Building in time for questions and discussions, especially at the end of sessions or during a plenary, gives participants the opportunity to clear up any confusion and get further information on any aspect of the topic. There will be people who ask questions simply to hear themselves speak, but you must be firm in asking people to keep their comments brief, particularly if the questions are irrelevant. One way to deal with excessive or irrelevant questions without making people feel they are being ignored is to establish a 'Parking Lot'. This is a flipchart where you list any topics or questions that cannot be answered immediately due to time or other limitations. Tell participants about the 'Parking Lot' at the beginning of the course and have it available and visible at all times. Some topics that are "parked" may be addressed later in the discussions or may cease to be important. Others can be addressed when time is available or participants show repeated interest in the issues.

Icebreakers and energizers[289]

Icebreakers can be used to help participants get to know each other and relax at the beginning of the course. Energizers can be used at any time and are short activities that are useful for re-energizing a group on a hot afternoon or to break up a long session. These can be used at the facilitator's discretion. Samples are listed below.

Icebreakers

Greeting. Explain or ask how people in different countries greet each other. Then ask participants

to pick a pre-prepared slip from a hat or basket, on each of which will be written one of the following:

- Place both hands together and bow (India)
- Kiss on both cheeks (France)
- Rub noses (Iceland)
- Hug warmly (Russia)
- Slap on each hand and bump each hip (some parts of Southern Africa)

Ask the participants to move around the room greeting each other in the way indicated on their slip.

Wallpaper. Ask participants to draw a picture of themselves doing something they enjoy doing. After 10 or 15 minutes, ask each one to show and explain their picture. Afterwards each person signs their picture and puts it up on the wall. As some people feel very anxious about drawing, only do this with a group of people who will be able to do it without anxiety.

Who am I? Write the names of famous people or roles onto squares of paper. Without letting the participant see the paper, pin or tape a square onto the back of each participant. When each person has a square attached, ask everyone to walk around the room asking questions with yes or no answers to try to guess what is written on their back, such as 'Am I a woman? Am I young? Do I live in Asia? Do I sing?' Participants can only ask one question of each person they meet. After 10 to 15 minutes, ask them to come together and say who they think they are. Examples of names/roles could be the following. Be sure to include female and male examples of both wherever possible:

- Famous singer/actor
- Well-known author
- Mother
- Father
- Basket weaver
- Rice planter
- Construction worker, etc.

Beautiful Bee. 'I'm Bee and I'm beautiful'…. Each person says their name and a positive word to describe themselves (no negative words allowed) and goes on to introduce the preceding members of the group: 'I'm Lynne and I'm lovely…this is Sue and she's super…William and he's wonderful…Cathy and she's courageous'. A variation on this is for people to say their name and one thing about themselves (not necessarily starting with the same letter): I'm Cathy. I have three children'. In the same way they introduce the preceding members: 'I am Thandi and I like working in groups. This is Cathy. She has three children.' And so on.

What I like to do. This is useful near the beginning to help get to know each other in a fun way. Each person briefly shows in mime something that they like to do. The second person does the previous person's action and then their own. The third person does the first, second and third actions, until the last person does the actions for the whole group. This can be made more fun by also including a sound (not words) to go with the mime.

Energizers

Stand in a circle. Each person takes a turn to make a sound and gesture to show how he or she is feeling. This is a good one to do at the start of a day for people to express their feelings.

Untangling. Ask the group to stand in a circle and close their eyes, until you tell them to open them again. Move slowly towards each other stretching out your hands until each person is holding someone else's hand in each of their hands. Check to make sure that everyone is holding only one hand in each hand. Then ask everyone to open their eyes. You will find the group in a tangled knot. Holding hands, with eyes open, try and untangle yourselves until you are standing in a circle holding hands again.

All change. Arrange the chairs or mats so there is enough room for everyone except one person to sit down. The person without a seat calls out to all people who have a certain characteristic, e.g. 'everyone wearing blue' or 'people with an E in their name'. Those people stand up and run around to find another seat. The person who is the caller also tries to find a seat. One person will not be able to sit, and she or he will go to the centre and become the caller. If the person calls, 'all change', then everyone has to stand up and run to another seat.

This game can be used just to get people moving, but it can also be used to build awareness and provide information on a topic. You could ask for people who are parents, grandparents, daughters, brothers, heads of household, etc.

Be aware that with this game there may be certain topics that people do not feel comfortable sharing in public. Also be aware that some people may not be able to run. In this case, it might be best to choose another energizer.

Word and deed. The first person in the circle does one action, while describing another. For example, she says 'I'm cooking' while pretending to type. The second person then acts out the thing the first person says she was doing while saying she's doing something else: 'I'm scratching my nose' while pretending to cook. This then continues around the circle. It can be hilarious, but it is not for people who want to remain dignified at all costs.

Tropical rainforest. With the group standing in a circle, the facilitator starts rubbing her hands together. The next person copies, then the next, continuing around the circle. When the movement gets back to the facilitator, she changes to snapping her fingers, and one-by-one everyone copies her. Then she starts slapping her hands on her thighs. Next she stamps her feet. Then she begins the whole process again in reverse until everyone is silent again. It sounds like a rainstorm in a forest, starting quietly, building up and then gradually dying away again. It is important that each person copies the actions of the person to the right of them, not the facilitator. It is also important that the facilitator waits until everyone is doing the action before changing to the next one.

Materials

Flipcharts. Flipcharts are large sheets of paper, usually bound together at the top and placed on a stand. These allow plenty of space to write and can be seen at the back of the room. Flipcharts should be prepared ahead of time with key points for a brief lecture, questions for buzz groups or pairs, etc. Having extra flipcharts available that can be used for brainstorming, parking lots, plenary reports, and other additional points is useful.

Markers. Make sure you have plenty of dark coloured markers available, so they can be seen from the back and replaced quickly if they dry up.

Flipchart stands. It is important to have something to hold the flipcharts upright at a height that can be seen by everyone and easily reached for writing.

Masking tape. Select a tape that does not leave marks on the wall. It will be used for taping up important flipchart pages for future reference, such as questions for a small group session, the parking lot or course rules.

Handouts. Included in the course are handouts for the participants that should be photocopied and given out as indicated in the notes. These include substantive material on the topic, case studies, resources and exercises.

Suggested evaluation format

Please rate the following components from 1 to 5, with 1 representing the lowest level of satisfaction and 5 representing the highest. Please circle your answer.

1. How well do you feel you learned the concepts covered in this session?
   1 2 3 4 5

2. How useful were the tools presented?
   1 2 3 4 5

3. How useful were the group exercises?
   1 2 3 4 5

4. How successful were the methodologies used to explain the concepts?
   1 2 3 4 5

5. How well did the facilitator handle the subject?
   1 2 3 4 5

6. How was the length of the workshop?
   Too long Too short Just right

Please answer the following questions:

7. Which sections were most useful?

8. Are there some sections you would eliminate?

9. Are there some sections that need to be improved? What recommendations do you have for this?

10. Do you think that the poverty approach is appropriate for your specific work?

11. Do you foresee limitations or great difficulties in including it in your work?

12. What strategy and what concrete activities do you suggest for achieving the inclusion of a poverty approach in your daily work?

13. How could the World Health Organization support you in including a poverty approach?

14. Would you recommend this course to a colleague? Why? Why not?

15. Any additional comments.

Expected learning outcomes

Upon completion of this module, participants will be able to:

1. Understand the meaning of poverty, its consequences and multiple dimensions; and identify a variety of measures and indicators of poverty, including methods of determining the prevalence of poverty and inequality within a community.
2. Explain WHAT the interrelationships between poverty and health are.
3. Discuss WHY it is important for health professionals to address issues of poverty, from efficiency, equity and human rights perspectives.
4. Discuss HOW health professionals and the health care system as a whole can address issues of poverty, with a special focus on low-income women and those from other marginalized or vulnerable groups.
5. Demonstrate familiarity with some tools, resources and references available to support health professionals to integrate a poverty focus into their work.

Lesson plans

Lesson plan 1

Expected learning outcomes:

- To understand poverty and what it means to be poor.
- To understand the key factors contributing to poverty.

Time required: 1.5 hour

Preparation:

1. A short story or review of statistical data to begin the session.
2. Resource table containing samples of national, regional or global poverty statistics and indicators.
3. 3 x 5 pieces of coloured paper.

Learning activities:

1. Briefly introduce the session by showing a drawing, slide or other visual illustration of poverty.
2. Tell participants that poverty will be explored from a multidimensional standpoint, encompassing different deprivations, rather than being focused solely on low income.
3. Ask participants to write a definition of poverty by completing the following sentence:
   " A person suffers from poverty if he or she ***lacks these essential items or lacks access to:***
   _____, _____,
   _____, _____,
   _____, _____,
   _____, _____.
4. After participants have completed their definitions of poverty (allow about 10 minutes for this task), ask each person to write each listed item on a piece of coloured paper and to share their answer with the person sitting next to them.
5. Ask each participant pair to share their

definitions with the larger group. Have each pair come to the front of the room after presenting their definitions and tape their responses on coloured paper to a large piece of newsprint or whiteboard, clustering their answers into similar categories, creating a concept map or diagram of poverty.

6. Based on the definitions provided and the concept map, discuss poverty from a multidimensional standpoint (referring to the appropriate pages of the module), inclusive of lack of opportunities, access or rights to:
   - economic opportunities/employment;
   - education and lack of skills;
   - health and well-being;
   - adequate and safe water and/or food;
   - lack of access to services;
   - lack of resources;
   - lack of voice, decision-making power;
   - insecurity; and
   - marginalization/social isolation/ remoteness.

7. Supplement the above list through discussion to introduce terms that were missed or to augment any categories that are underrepresented.
8. Explain that a multidimensional understanding of poverty has been validated by the poor, who define their situation in terms of lack of basic needs, but also, insecurity, lack of and inaccessibility of services, ill-health and powerlessness.
9. Summarize by asking participants to comment on what "poverty" means in the context of their own country, province or community.

Lesson plan 2

Expected learning outcomes:

- To understand how poverty determines the risk or prevalence of poor health across the lifespan.
- To identify some common poverty-associated health risks and underlying determinants of health status and health outcomes.

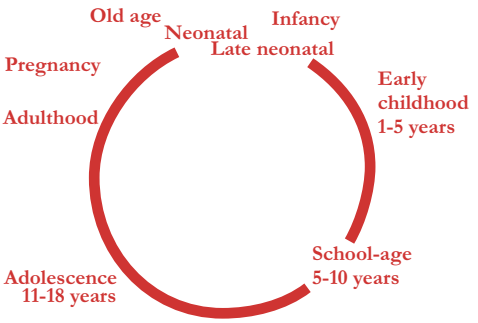
Time required: 2 hours

Preparation:

1. Resource table containing samples of national, regional and global health statistics and accompanying socioeconomic data.
2. Whiteboard or blackboard.
3. 3 x 5 pieces of coloured paper

Learning activities:

1. Draw a human life cycle circle like the face of a clock on the board. Label the different stages: conception/pregnancy, infancy, early child, school-age, and adolescence, etc., as below.



2. Explain that there are different causes of morbidity and mortality at different life cycle stages and that the poor tend to die earlier and have higher levels of morbidity than the non-poor. During this session, we will explore the causes of morbidity and mortality as well as the health determinants, from a poverty perspective.
3. Divide participants into five groups, assigning each group one of the life cycle stages (conception/pregnancy, infancy, early childhood, school-age and adolescence; and adulthood).
4. Ask each group to complete their relevant life cycle section of the following table, from the context of their own country, listing common poverty-related causes of morbidity and mortality in each life cycle stage.

Life cycle stage	Common poverty-related causes of morbidity and mortality	
	Men	Women
Conception/pregnancy		
Infancy		
Early childhood		
School-Age		
Adolescence		
Adulthood		
Old age		

5. Next ask each group to consider what factors, risks or determinants affecting the listed health outcomes are more common among the poor, listing these in the appropriate life-cycle stage in column three. Refer to the appropriate pages of the module, taking into account the earlier discussion concerning the multidimensional nature of poverty.
6. Ask each group to present their life cycle section of the table, focusing on those diseases and causes of mortality associated with poverty as well as health determinants causing inequitable health outcomes. Follow this with a discussion of how poor health may cause or lead to greater poverty referring to the appropriate pages in the module.

Lesson plan 3

Expected learning outcomes:

- The importance of addressing poverty and health, from a standpoint of human rights.

Time required: 1.5 hours

Preparation:

- Provide a case study on HIV/AIDS and human rights for discussion by learners. Alternatively, the case study may be developed into a role-playing exercise.
- The case study may be supplemented with local examples of human rights issues.

Case study: HIV/AIDS and human rights

On his way home, Freddy, a young boy of about 14, meets his friends who are playing soccer. When they ask him to join their game, he explains that he must go directly home because his mother is sick and needs his help at home. As Freddy walks away, his friends begin to whisper that they have heard from their parents that his mother is HIV positive. One friend exclaims that he will no longer allow Freddy to play with them because this may infect them with HIV. Another states that Freddy and his mother should be forced to leave the community to ensure that they are not infected. Hearing this, Rebecca explains to the group of friends the ways in which HIV/AIDS is and is not transmitted. Reassured, the group goes to Freddy's house to offer their support.

Arriving at Freddy's house, his friends find Miriam, Freddy's mother, sitting in a chair crying. Freddy is also visibly upset. Miriam explains to Freddy's friends that earlier in the day, she had gone to the local health centre because she was feeling sick. When she arrived, none of the health staff paid any attention to her. She sat in the health centre as the health staff went about their business without offering her any assistance. After waiting for several hours, she went up and asked the doctor for assistance. He explained to Miriam that they could not do anything for her and asked her to please leave. She left the health centre without receiving treatment.

Unable to comprehend why the local doctor would speak to Miriam in this manner, Freddy's friend, Alisha, discusses what happened to Miriam with her father over dinner that evening. Alisha's father is in charge of the local health care centre, where Miriam had sought care. Understanding that the health centre has a responsibility to treat everyone who seeks care equally, Alisha's father promises to speak with the doctor in charge to ensure that such an incident is not repeated.

Source: Adapted from World Health Organization, Joint United Nations Programme on HIV/AIDS, Office of the United Nations High Commissioner on Human Rights, 2003.

Learning activities:

- Divide learners into small groups and ask them to discuss the case study with a view to identifying relevant human rights and human rights violations. For example, the right to information, non-discrimination, right to health, etc. Ask learners to consider also how gender, ethnicity and location may impact on the realization of human rights.
- Ask each sub-group to share their assessment of the case study from a human rights standpoint with the larger group. Participants' own views and experiences in relation to human rights may be considered.
- Discuss the importance of human rights for health, health services and health care providers.

Lesson plan 4

Participatory poverty assessment through wealth ranking and mapping.

Expected learning outcomes:

- Be able to demonstrate how to use a wealth ranking to determine the relative wealth of households in a community setting .
- Be able to discuss the results of the poverty assessment, in terms of health, health care and community development implications.

Time required: 1 day

Preparation:

- Compile national or provincial level data on poverty and inequality.
- Make contact with stakeholders or leaders from a low-income community or neighbourhood and seek their consent to participate in a community-based poverty assessment. Contact and secure the participation of the local health service provider.
- Identify participants from the community or neighbourhood and whether the wealth ranking will be informed through a community discussion or interview with key-informants, such as the community leader, health care providers, etc. Women or other disempowered groups may be subdivided into separate groups to determine gender-based differences in perceptions of wealth.
- Cards to write the name of community members or stones or other materials to represent households if many community members are illiterate.

Learning activities:

- Introduce methods for analysing poverty and/or inequality using national or provincial level data, with reference to the appropriate pages of the module.
- In the community, learners introduce the exercise to community members or key informants by discussing local terms for poverty and wealth and encourage participants to offer other terms they use to describe poverty and wealth and how they define these terms. Remind the participants that the exercise aims to identify the relative rather than absolute wealth of households.
- Allow the participants to define the number of categories for the ranking exercise, such as rich and poor or non-poor, poor and very poor, for example. Ask participants to describe the characteristics of each wealth category to determine their criteria per category, i.e. do the households own land, how many children, sources of income, access to health care, etc. The table below provides an example of possible characteristics.

Categories	Poor	Non-poor
Land		
Source of income		
Number of children		
Children educated or attending school		
Television		

- Write the names of households on the cards and ask participants to rank the cards according to wealth categories. Or, place stones or other material representing each household in piles if many community members are illiterate.
- Ask the participants to create a geographical map of the households either on paper or on the ground. Include roads, water sources, productive assets, service providers, etc. in the map. Discuss any patterns and trends that may be revealed in the map, such as clustering of poor or non-poor households. Discuss what may be the cause of such patterns, whether they are equitable or not and what are possible causes of any inequality identified.
- Referring to the map, discuss health-seeking behaviour among poor and non-poor households and possible barriers to health seeking experienced by the poor.
- Reconvene and ask learners to consider the implications of the wealth ranking for health and health services, such as why this is important for health service providers and strategies health service providers may use to reach the most vulnerable members of society.

Lesson plan 5

Expected learning outcomes:

- To discuss interventions by health professionals that would address the key determinants of health and to protect and improve the health of the poor.

Time required: 2 hours.

Preparation:

1. Use the wealth ranking from Lesson Plan 4 as the basis for designing interventions by health professionals.
2. Resource table with national, provincial and local (if available) statistical and socioeconomic data.

Activities

1. Explain that cross-sectoral strategic approaches are needed to address the key determinants of health and barriers to achieving better health outcomes among the poor. Although this exercise focuses on health interventions, other sectoral strategies and interventions should always be considered, including those in:
   - agriculture;
   - industry/ trade and labour;
   - housing;
   - finance and planning;
   - education;
   - governance and politics;
   - sociocultural, religious; and
   - social welfare.

2. Divide participants into groups of 5-7 persons per group. Ask each group to consider policy options, programme planning measures and/or direct interventions to address the key determinants of health and to improve the health of the poor, using the case study or community assessment as the basis for their recommendations. Optionally, the following questions can be written on newsprint to guide the group exercise:
   - Who pays for health care and who should pay for it?
   - How is a good balance between health promotion, prevention and curative care achieved?
   - Does the health of the community depend on more than medical or health services? If so, what other aspects of community health and well-being require attention?
   - What can be done to encourage community responsibility for health?
   - How can trained health personnel be more equitably distributed to rural, remote or neglected areas?
   - What kind of health workers are needed to bring basic preventive health education and services to every village?
   - How can we make sure that health workers are committed to serving the needs of the most vulnerable population groups?

3. Reconvene the larger group and ask each sub-group to present a list of at least three recommendations and why or how they might work.
4. Summarize the session, noting the need to complement health sector interventions by addressing issues surrounding income, education, nutrition, water and sanitation, and safe and adequate housing. Also discuss placing poverty on the health agenda by designing pro-poor health interventions and services.

6. Tools, resources and references

6. Tools, resources and references

Resources

Health

For more information on various health topics, please see:

- World Health Organization (http://www.who.int, accessed 23 September, 2005).
- World Health Organization Regional Office for the Western Pacific (http://www.wpro.who.int, accessed 23 September, 2005).
- A detailed discussion of the stages of the lifecycle is found in the World Bank PRSP Sourcebook. This includes a discussion of the determinants of health, morbidity and mortality at each stage over the lifecycle and corresponding health interventions (http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPRS/0,,contentMDK:20175742~pagePK:210058~piPK:210062~theSitePK:384201,00.html, accessed 23 September, 2005).
- World Bank's Reaching the Poor Programme (http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTPAH/0,,contentMDK:20216896~menuPK:460206~pagePK:148956~piPK:216618~theSitePK:400476,00.html, accessed 23 September, 2005).
- Paper abstracts and presentations from the Reaching the Poor Conference (http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTPAH/0,,contentMDK:20216906~menuPK:460207~pagePK:148956~piPK:216618~theSitePK:400476,00.html) are available at: http://info.worldbank.org/etools/docs/library/114527/RTPmaterials/index.htm, accessed 23 September, 2005).
- Safe Motherhood: http://www.safemotherhood.org/, accessed 23 September, 2005).
- ID21, a database of international development research, has a section on health-related research: http://www.id21.org/health/index.html, accessed 23 September, 2005).
- DFID Health Systems Resource Centre (http://www.dfidhealthrc.org/, accessed 23 September, 2005).
- Development Gateway - Population and Reproductive Health (http://topics.developmentgateway.org/population, accessed 23 September, 2005).

Poverty resources and data sources

National Data Sources:

- National poverty data may be obtained from national statistical agencies. For a list of national statistical agencies and links to them, please see: http://unstats.un.org/unsd/methods/inter-natlinks/sd_natstat.htm, accessed 23 September, 2005.

National level data sources may include:

- National census data.
- National vital registration systems.
- National random-sample household based surveys (conducted by various government agencies).
- Poverty rankings of provinces and districts, developed by several countries, including Cambodia, China, the Lao People's Democratic Republic, the Philippines and Viet Nam.
- PRSP data and monitoring process. Countries in the Western Pacific Region that have developed a PRSP are: Cambodia; the Lao People's Democratic Republic; Mongolia; and Viet Nam. PRSPs are available at: http://www.worldbank.org/poverty/strategies/index.htm, accessed 23 September, 2005.

- Poverty data for Viet Nam, including participatory approaches may be found at the website of the Comprehensive Poverty Reduction and Growth Strategy (Viet Nam's PRSP): http://www.cprgs.org/home/index.jsp, accessed 23 September, 2005.
- Other sources may include: sector-specific data from other government agencies, such as ministries of agriculture, social welfare, education, and housing; and NGOs and universities, including small area studies.

International Data Sources:

- Poverty estimates using US$ per day are available on the World Bank website (http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPAME/0,,contentMDK:20205999~menuPK:435882~pagePK:148956~piPK:216618~theSitePK:384263,00.html, accessed 23 September, 2005).
- The UNDP website (http://www.undp.org, accessed 23 September, 2005) and Human Development Reports website (http://hdr.undp.org/reports/, accessed 23 September, 2005) contain a ranking of countries by Human Development Index (HDI). UNDP also maintains extensive information on the indicators that comprise the HDI and the Millennium Development Goals (http://hdr.undp.org/statistics/data/mdg.cfm, accessed 23 September, 2005).
- Information on the Millennium Development Goals is also available at: http://www.developmentgoals.org/, accessed 23 September, 2005.
- Health-facility based surveys.
- National health accounts (efficiency/equity of health spending).

Table 12: National level surveys supported by international organizations

Country	Demographic and Health Survey	Living Standard Measurement Surveys	UNICEF Multi-indicator Survey	World Health Survey
Cambodia	✓			
China		✓		✓
Malaysia				✓
Lao PDR			✓	✓
Mongolia			✓	
Papua New Guinea		✓		
Philippines	✓		✓	✓
Viet Nam	✓	✓	✓	✓

- Demographic and Health Surveys (DHS): http://www.measuredhs.com/, accessed 23 September, 2005.
- Country Health Reports (Rounds I and II) developed by the World Bank, using DHS data (http://www.worldbank.org/poverty/health/data/index.htm, accessed 23 September, 2005).
- World Bank's Living Standards Measurements Surveys (LSMS): http://www.worldbank.org/lsms/, accessed 23 September, 2005).
- World Health Survey (http://www3.who.int/whs/, accessed 23 September, 2005).
- The UNICEF Multiple Indicator Cluster Survey is available at: http://www.childinfo.org/MICS2/MICSDataSet.htm, accessed 23 September, 2005 (please follow the directions included in the website on how to obtain access to the data sets).
- The United Nations Statistics Division: http://unstats.un.org/unsd/, accessed 23 September, 2005.

Other sources of information:

- International Network of field sites with continuous Demographic Evaluation of Populations and their Health in developing countries (INDEPTH): http://www.indepth-network.org/, accessed 23 September, 2005. INDEPTH is a network of longitudinal vital and health statistics surveillance sites in nations without vital registration systems. Currently, sites in Papua New Guinea and Viet Nam are members of INDEPTH.
- The Equity Gauge (http://www.gega.org.za/, accessed 23 September, 2005) tracking gaps in health status at national or sub-national levels; centred around a component which is about measuring and monitoring a set of agreed upon indicators; with sites presently in China and the Philippines.
- *Data: Types and Sources*, Abdo Yazbeck, from World Bank's Reaching the Poor Conference (http://info.worldbank.org/etools/docs/library/114527/RTPmaterials/Workshoppapers/Reaching%20the%20Poor--Data%20PPT.ppt, accessed 23 September, 2005).

Tools for measuring and analysing poverty and health

Measuring poverty:

- DFID Health Systems Resource Centre: Measuring health and poverty: a review of approaches to identifying the poor, by J. Falkingham and C. Namazie (http://www.dfidhealthrc.org/shared/publications/Issues_papers/Measuring_healthpoverty.pdf, accessed 23 September, 2005).
- *Data: Types and Sources*, Abdo Yazbeck, Magnus Lindelow, from World Bank's Reaching the Poor Conference (http://info.worldbank.org/etools/docs/library/114527/RTPmaterials/Workshoppapers/Reaching%20the%20poor%20-%20lindelow.ppt, accessed 23 September, 2005).

Participatory Poverty Assessment:

Countries that have undertaken a Participatory Poverty Assessment (PPA):

- Cambodia (http://www.adb.org/Documents/Books/Participatory_Poverty/default.asp, accessed 23 September, 2005).
- Lao People's Democratic Republic (http://www.adb.org/Documents/Periodicals/ADB_Review/2002/vol34_2/loud_and_clear.as, accessed 23 September, 2005).
- Mongolia (http://www.adb.org/Documents/TARs/MON/tar-mon-38053.pdf, accessed 23 September, 2005).

For more information on PPA and PRA please see:

- Chronic Poverty Research Centre Toolbox (http://idpm.man.ac.uk/cprc/CPToolbox/Participatory.htm, accessed 23 September, 2005).
- The World Bank Participation Source Book (http://www.worldbank.org/wbi/sourcebook/sbhome.htm, accessed 23 September, 2005).
- Norton A. *A rough guide to PPAs. Participatory Poverty Assessment: An introduction to theory and practice.* London, Overseas Development Institute, 2001 (http://www.odi.org.uk/pppg/publications/books/ppa.html, accessed 23 September, 2005).
- Menu of participatory research field tools and techniques, from IISD Participatory research for sustainable livelihoods: A guide for field projects on adaptive strategies (http://www.iisd.org/casl/CASLGuide/MethodsMenu.htm, accessed 23 September, 2005).

Poverty Analysis in Health:

- Soucat A., Yazbeck A. *Rapid guidelines for integrating health, nutrition and population issues in interim Poverty Reduction Strategy Papers of low-income countries.* World Bank, 2000

(http://siteresources.worldbank.org/INTPRS1/Resources/Related-Toolkits/hnpguide.pdf, accessed 23 September, 2005).
- World Bank PRSP Sourcebook (http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPRS/0,,contentMDK:20175742~pagePK:210058~piPK:210062~theSitePK:384201,00.html, accessed 23 September, 2005).
- DFID Health Systems Resource Centre: For tools for collecting data on health and socioeconomic status and possible data sources.
- *Assessing the health of the poor: towards a pro-poor measurement strategy*, by I. Diamond, Z. Matthews, R. Stephenson (http://www.dfidhealthrc.org/shared/publications/Issues_papers/Assessing_health_of_the_poor.pdf, accessed 23 September, 2005).

More information on regressions:
- See the World Bank's Quantitative Techniques for Health Equity Analysis (http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTPAH/0,,contentMDK:20216933~menuPK:460204~pagePK:148956~piPK:216618~theSitePK:400476,00.html, accessed 23 September, 2005) Technical Note #14 and #15: (Note #14 is not presently available online) Note #15 available at: http://siteresources.worldbank.org/INTPAH/Resources/Publications/Quantitative-Techniques/health_eq_tn15.pdf, accessed 23 September, 2005.
- *Measuring inequalities in health*, Adam Wagstaff, Abdo Yazbeck, from World Bank's Reaching the Poor Conference (http://info.worldbank.org/etools/docs/library/114527/RTPmaterials/Workshoppapers/adam%20for%20workshop%20session2.ppt, accessed 23 September, 2005).

Concentration curve and index:
- See the World Bank's Quantitative Techniques for Health Equity Analysis - Technical Note #6 (http://siteresources.worldbank.org/INTPAH/Resources/Publications/Quantitative-Techniques/health_eq_tn06.pdf, accessed 23 September, 2005).
- See the World Bank's Quantitative Techniques for Health Equity Analysis - Technical Note #7 (http://www1.worldbank.org/prem/poverty/health/wbact/health_eq_tn07.pdf, accessed 11 January, 2006).

Benefit incidence analysis:
- See the World Bank's Quantitative Techniques for Health Equity Analysis - Technical Note #12 (http://www.worldbank.org/poverty/health/wbact/health_eq_tn12.pdf, accessed 23 September, 2005).
- Introduction to incidence analysis, World Bank's Reaching the Poor programme website (http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTPAH/0,,contentMDK:20216912~menuPK:460206~pagePK:148956~piPK:216618~theSitePK:400476,00.html, accessed 23 September, 2005).
- *Benefit incidence analysis*, Abdo Yazbeck, from World Bank's Reaching the Poor Conference (http://info.worldbank.org/etools/docs/library/114527/RTPmaterials/Workshoppapers/Reaching%20the%20Poor--BIA.ppt, accessed 23 September, 2005).
- Evans *et al* [290] outline the following steps for constructing a benefit incidence analysis:
- Step 1: Estimate the unit cost or unit subsidy (in current expenditures) of providing a service [use expenditure studies or public budgets and service statistics].
- Step 2: Impute the unit subsidy to households or individuals who are identified as users of the services [use household survey data on utilization, with income measures].
- Step 3: Aggregate individuals (or households) into subgroups of the population to compare distribution of subsidy among groups (income, gender, etc.).

Health as a human right

Health is recognized as a fundamental human right in the WHO constitution, which states that: "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."

Article 25 (1) of the Universal Declaration of Human Rights laid the foundation for the right to health. The Declaration proclaims: "everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing, and medical care and the necessary social services…"

International Human Rights Instruments that address health and health-related issues include:

- The 1966 International Convention on Economic, Social and Cultural Rights, article 12, which provides the cornerstone protection of the right to health in international law.
- The 1979 Convention on Elimination of All Forms of Discrimination Against Women, article 11 (1) f, 12 and 14 provides provisions for the protection for women's health.
- The 1989 Convention on the Rights of the Child, article 24, elaborates on the child's right to health, and articles 3 (3), 17, 23, 25, 28 and 32, which contain protection for especially vulnerable children.
- The 1963 International Convention on the Elimination of All Forms of Racial Discrimination, article 5 (e) (iv), provides ethnic and racial groups "the right to public health (and) medical care."

Health and human rights have been likewise addressed in the outcome of a series of global conferences held by the United Nations, including:

- 1993 World Conference on Human Rights in Vienna the Vienna Declaration and Programme of Action provides a framework to operationalise the global declaration of women's rights as human rights.
- 1994 International Conference on Population and Development in Cairo.
- 1995 World Summit for Social Development in Copenhagen.
- 1995 Fourth World Conference on Women in Beijing.
- 1991 adopted by the United Nations General Assembly: Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care.
- 1997 adopted by the UNESCO General Conference: Universal Declaration on the Human
- Genome and Human Rights.

Source: World Health Organization. *25 questions and answers on health and human rights.* Geneva, 2002b (Health and Human Rights Publication Series Issue No. 1).

Millennium Development Goals

A framework of 8 goals, 18 targets and 48 indicators to measure progress towards the Millennium Development goals was adopted by a consensus of experts from the United Nations Secretariat and IMF, OECD and the World Bank. Each indicator below is linked to millennium data series as well as to background series related to the target in question. (Agencies with responsibility for the various indicators are indicated in parentheses after each indicator.)

Continued on next page

Millennium Development Goals (continued)

Goal 1. Eradicate extreme poverty and hunger

Target 1. Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

Indicators

1. Proportion of population below $1 (1993 PPP) per day (World Bank)[a]
2. Poverty gap ratio [incidence x depth of poverty] (World Bank)
3. Share of poorest quintile in national consumption (World Bank)

Target 2. Halve, between 1990 and 2015, the proportion of people who suffer from hunger

Indicators

4. Prevalence of underweight children under five years of age (UNICEF-WHO)
5. Proportion of population below minimum level of dietary energy consumption (FAO)

Goal 2. Achieve universal primary education

Target 3. Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

Indicators

6. Net enrolment ratio in primary education (UNESCO)
7. Proportion of pupils starting grade 1 who reach grade 5 (UNESCO)[b]
8. Literacy rate of 15-24 year-olds (UNESCO)

Goal 3. Promote gender equality and empower women

Target 4. Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

Indicators

9. Ratio of girls to boys in primary, secondary and tertiary education (UNESCO)
10. Ratio of literate women to men, 15-24 years old (UNESCO)
11. Share of women in wage employment in the non-agricultural sector (ILO)
12. Proportion of seats held by women in national parliament (IPU)

Goal 4. Reduce child mortality

Target 5. Reduce by two thirds, between 1990 and 2015, the under-five mortality rate

Indicators

13. Under-five mortality rate (UNICEF-WHO)
14. Infant mortality rate (UNICEF-WHO)
15. Proportion of 1 year-old children immunized against measles (UNICEF-WHO)

Goal 5. Improve maternal health

Target 6. Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

Indicators

16. Maternal mortality ratio (UNICEF-WHO)

Continued on next page

Millennium Development Goals (continued)

17. Proportion of births attended by skilled health personnel (UNICEF-WHO)

Goal 6. Combat HIV/AIDS, malaria and other diseases

Target 7. Have halted by 2015 and begun to reverse the spread of HIV/AIDS

Indicators

18. HIV prevalence among pregnant women aged 15-24 years (UNAIDS-WHO-UNICEF)

19. Condom use rate of the contraceptive prevalence rate (UN Population Division)[c]

19a. Condom use at last high-risk sex (UNICEF-WHO)

19b. Percentage of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS (UNICEF-WHO)[d]

19c. Contraceptive prevalence rate (UN Population Division)

20. Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years (UNICEF-UNAIDS-WHO)

Target 8. Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

Indicators

21. Prevalence and death rates associated with malaria (WHO)

22. Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures (UNICEF-WHO)[e]

23. Prevalence and death rates associated with tuberculosis (WHO)

24. Proportion of tuberculosis cases detected and cured under DOTS (internationally recommended TB control strategy) (WHO)

Goal 7. Ensure environmental sustainability

Target 9. Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Indicators

25. Proportion of land area covered by forest (FAO)

26. Ratio of area protected to maintain biological diversity to surface area (UNEP-WCMC)

27. Energy use (kg oil equivalent) per $1,000 GDP (PPP) (IEA, World Bank)

28. Carbon dioxide emissions per capita (UNFCCC, UNSD) and consumption of ozone-depleting CFCs (ODP tons) (UNEP-Ozone Secretariat)

29. Proportion of population using solid fuels (WHO)

Target 10. Halve, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation

Indicators

30. Proportion of population with sustainable access to an improved water source, urban and rural (UNICEF-WHO)

31. Proportion of population with access to improved sanitation, urban and rural (UNICEF-WHO)

Target 11. By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

Continued on next page

Millennium Development Goals (continued)

Indicators

32. Proportion of households with access to secure tenure (UN-HABITAT)

Goal 8. Develop a global partnership for development

Indicators for targets 12-15 are given below in a combined list.

Target 12. Develop further an open, rule-based, predictable, non-discriminatory trading and financial system. Includes a commitment to good governance, development and poverty reduction - both nationally and internationally

Target 13. Address the special needs of the least developed countries.
Includes: tariff and quota-free access for least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction

Target 14. Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)

Target 15. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries (LLDCs) and small island developing States (SIDS)

Indicators

Official development assistance (ODA)

33. Net ODA, total and to LDCs, as percentage of OECD/Development Assistance Committee (DAC) donors' gross national income (GNI)(OECD)
34. Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) (OECD)
35. Proportion of bilateral ODA of OECD/DAC donors that is untied (OECD
36. ODA received in landlocked developing countries as a proportion of their GNIs (OECD)
37. ODA received in small island developing States as proportion of their GNIs (OECD)

Market access

38. Proportion of total developed country imports (by value and excluding arms) from developing countries and from LDCs, admitted free of duty (UNCTAD, WTO, WB)
39. Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries (UNCTAD, WTO, WB)
40. Agricultural support estimate for OECD countries as percentage of their GDP (OECD)
41. Proportion of ODA provided to help build trade capacity (OECD, WTO)

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Millennium Development Goals (continued)

Debt sustainability

42. Total number of countries that have reached their Heavily Indebted Poor Countries Initiative (HIPC) decision points and number that have reached their HIPC completion points (cumulative) (IMF - World Bank)

43. Debt relief committed under HIPC initiative (IMF-World Bank)

44. Debt service as a percentage of exports of goods and services (IMF-World Bank)

Target 16. In cooperation with developing countries, develop and implement strategies for decent and productive work for youth

Indicators

45. Unemployment rate of young people aged 15-24 years, each sex and total (ILO)[f]

Target 17. In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

Indicators

46. Proportion of population with access to affordable essential drugs on a sustainable basis (WHO)

Target 18. In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

Indicators

47. Telephone lines and cellular subscribers per 100 population (ITU)

48. Personal computers in use per 100 population and Internet users per 100 population (ITU)

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[a] For monitoring country poverty trends, indicators based on national poverty lines should be used, where available.

[b] An alternative indicator under development is "primary completion rate."

[c] Among contraceptive methods, only condoms are effective in preventing HIV transmission. Since the condom use rate is only measured amongst women in union, it is supplemented by an indicator on condom use in high-risk situations (indicator 19a) and an indicator on HIV/AIDS knowledge (indicator 19b). Indicator 19c (contraceptive prevalence rate) is also useful in tracking progress in other health, gender and poverty goals.

[d] This indicator is defined as the percentage of population aged 15-24 who correctly identify the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), who reject the two most common local misconceptions about HIV transmission, and who know that a healthy-looking person can transmit HIV. However, since there are currently not a sufficient number of surveys to be able to calculate the indicator as defined above, UNICEF, in collaboration with UNAIDS and WHO, produced two proxy indicators that represent two components of the actual indicator. They are the following: (a) percentage of women and men 15-24 who know that a person can protect herself from HIV infection by "consistent use of condom"; (b) percentage of women and men 15-24 who know a healthy-looking person can transmit HIV.

[e] Prevention to be measured by the percentage of children under 5 sleeping under insecticide-treated bednets; treatment to be measured by percentage of children under 5 who are appropriately treated.

[f] An improved measure of the target for future years is under development by the International Labour Organization (ILO).

Source: United Nations Department of Economic and Social Affairs. *Millennium Development Goal indicators database*. New York, 2005 (http://unstats.un.org/unsd/mi/mi_goals.asp, accessed 11 January, 2005).

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ENDNOTES

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3 Asian Development Bank 1999.
4 World Health Organization 2003.
5 World Health Organization 2000a.
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7 Asian Development Bank (http://www.adb.org/Documents/Policies/Health/health302.asp, accessed 25 September, 2005).
8 Gwatkin D. 1996 in Department for International Development 2000.
9 Department for International Development 2000.
10 From 19702000, the U5MR decreased by 70% in high-income countries. In contrast, the overall decrease in U5MR in low income countries was only 40%. Victora *et al.* 2003 in Carr D. 2004.
11 Economic and Social Commission for Asia and the Pacific and United Nations Development Programme 2003.
12 One dollar a day is measured in US dollars. Economic and Social Commission for Asia and the Pacific and United Nations Development Programme 2003.
13 World Health Organization 2001a.
14 Falkingham and Namazie 2002.
15 Narayan D. *et al.* 2000.
16 Falkingham and Namazie. *Op cit.* Ref 14..
17 Maxwell S. 1999.
18 Hume *et al.* 2001 and World Bank 2001.
19 United Nations Development Programme; Lightfoot and Ryan 2001.
20 Please see the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States for more information on Least Developed Countries: http://www.un.org/special-rep/ohrlls/ldc/default.htm, accessed 25 September, 2005).
21 Structural deprivation is rooted in the lack or unequal distribution of production factors, such as land, labour and finance, bad governance and low levels of participation by the population, especially the poor, and inequalities in access to development opportunities, including access to social services, economic opportunities, and infrastructure. Copenhagen Summit for Development in Wheeler M., Florisse S. 2003 (unpublished).
22 Please see the section on *Composite Measures* p. 17 for a discussion of the Human Development Index.
23 United Nations Development Programme 2003.
24 United Nations Country Team Viet Nam 2003a.
25 United Nations Development Programme 2001.
26 United Nations Development Programme. *Op cit.* Ref 23.
27 Government of Mongolia and United Nations Development Programme 2003 and Walford 2000.
28 United Nations Development Programme. *Op cit.* Ref 2.
29 Lampietti and Stalker 2000.
30 International Labour Organization 1996.
31 Lampietti and Stalker 2000; Asian Development Bank. *Op cit.* Ref 3.
32 Asian Development Bank. *Op cit.* Ref 3.
33 Organisation for Economic Cooperation and Development 2001.
34 World Bank 2003b. To calculate absolute poverty in a country, the dollar-a-day measure is converted to local currency using the purchasing power parity (PPP) exchange rate. PPP is a rate of conversion that reflects how much a local currency will buy within a country and not how much foreign currency it will buy on the international exchange market.
35 World Bank 2001.
36 *Ibid.*
37 Economic and Social Commission for Asia and the Pacific and United Nations Development Programme. 2003.
38 Falkingham and Namazie. *Op cit.* Ref 14.
39 ABS 1998a and OECD 2002 in Australian Institute of Health and Welfare 2003. Australian Institute of Health and Welfare explains that equivalence scales (estimated by the OECD) are sets of ratios that show the relative income levels required for households of different size and composition to maintain a similar standard of living.
40 Falkingham and Namazie. *Op cit.* Ref 14.
41 McKay 2002.
42 Milanovic 2002, in United Nations Development Programme 2003.
43 Ministry of Planning Kingdom of Cambodia 2001. This does not correspond directly with the Gini Coefficient reported in Table 5, which was sourced from the Asian Development Bank. This may be because it is derived from more recent data or employs a different methodology.
44 United Nations Development Programme. *Op cit.* Ref 23.
45 Maxwell. *Op cit.* Ref 17.
46 Narayan . *Op cit.* Ref 15.
47 In the Millennium Poll, a global survey commissioned for the Millennium Summit of the

United Nations, good health was identified as the number one desire of men and women around the world. United Nations 2000 in WHO 2001a.

[48] Claeson *et al.* 2000.

[49] Word Health Organization. *Op cit.* Ref 5.

[50] World Health Organization 2003a.

[51] Wagstaff *et al.* 2003.

[52] *Ibid.*

[53] The marginal effect of female income was found to be almost 20 times as large for child survival, 8 times as large for weight-for-height measure and about four-times as large for height-for-age. World Bank 2001 in World Bank 2003c. A study in Brazil found that demand for calories and protein was up to 10 times more responsive to women's than men's income. Thomas 1997 in Filmer 2003a.

[54] Beegle, Frankenberg and Thomas 2001 in Wagstaff *et al.* 2003.

[55] Victora *et al.* 2003 and Asian Development Bank 1999.

[56] Asian Development Bank 2000 in United Nations Development Program 2001.

[57] Save the Children 2001 in UNICEF 2003.

[58] World Bank 2001 in World Bank 2003c.

[59] Herz *et al.* 1991 in UNICEF 2003.

[60] Gains in women's education accounted for 43% of the total, followed by food availability, the government's commitment to health at local and national levels, and women's relative status. Smith and Haddad 2000 in World Bank 2003c.

[61] World Bank 2002 in UNICEF 2003.

[62] World Health Organization. *Op cit.* Ref 5.

[63] World Health Organization 2002.

[64] *Ibid.*

[65] A central, dung-fired stove.

[66] Government of Mongolia 2003.

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[68] World Health Organization. *Op cit.* Ref 63 and Ezzati A. *et al.* 2002.

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[72] Esrey 1996 in Filmer D. Determinants of Health and Education Outcomes [background notes for World Development Report 2004: Making Services Work for Poor People]. Washington D.C., World Bank, 2003a.

[73] See Osmani and Sen 2003 for an overview of gender inequality and malnutrition in South Asia.

[74] United Nations Administrative Committee on Coordination Sub-Committee on Nutrition 2000.

[75] World Health Organization. *Op cit.* Ref 63.

[76] Gillespie 1997 in United Nations Administrative Committee on Coordination Sub-Committee on Nutrition 2000.

[77] United Nations Administrative Committee. *Op cit.* Ref 73.

[78] Rice *et al.* 2000.

[79] World Health Organization. *Op cit.* Ref 63.

[80] Osmani and Sen. *Op cit.* Ref 72.

[81] World Health Organization. *Op cit.* Ref 63.

[82] Rice *et al*, in Ezzati *et al.*, eds. [in press], cited in Black Morris and Bryce 2003.

[83] Rice *et al*, in Ezzati *et al.*, eds. (in press), cited in Black Morris and Bryce 2003.

[84] *Ibid.*

[85] Carr 2004.

[86] Ministry of Planning, Kingdom of Cambodia 2001.

[87] UNICEF. *Op cit.* Ref 69.

[88] United Nations. *Op cit.* Ref 24.

[89] National Institute of Statistics, Directorate General for Health [Cambodia], and ORC Macro 2001.

[90] Mongolia is politically divided into eighteen municipalities called *aimags*. Each *aimag* is sub-divided into four or five *soums* and each *soum* into three *bags*.

[91] World Health Organization. *Op cit.* Ref 63.

[92] World Health Organization Regional Office for the Western Pacific 2002. Cambodia, China, the Lao People's Democratic Republic, Mongolia, Papua New Guinea, the Philippines and Viet Nam together account for 94% of TB prevalence in the Region. Five of these seven high burden countries are low-income economies, with a GNI per capita of US $ 735 or less. The remaining two, China and the Philippines, are lower middle-income countries.

[93] World Bank 1996 in Asian Development Bank 1999.

[94] Asian Development Bank. *Op cit.* ref 3.

[95] Government of Mongolia. *Op cit.* Ref 66.

[96] Tupasi *et al.* 2000.

[97] Thorson 2003.

[98] For example, please see Wilkinson *et al.* 2000 and Dallman 1987.

[99] World Health Organization Regional Office for the Western Pacific. *Op cit.* Ref 6.

[100] Global Fund to Fight AIDS, Tuberculosis and Malaria 2004b.

[101] Bloom, River Path Associates and Sevilla 2001.

[102] World Health Organization Regional Office for the Western Pacific. *Op cit.* Ref 6.

[103] World Health Organization. *Op cit.* Ref 66.

[104] World Health Organization. *Op cit.* Ref 5.

[105] Bloom, River Path Associates and Seveiila 2002.

[106] Hanenberg and Rojanapithayakorn, 1998 in Bloom,

River Path Associates and Sevilla 2002.

[107] World Health Organization Regional Office for the Western Pacific 2000.

[108] *Ibid.*

[109] This is particularly true for the two leading cancers, lung cancer and liver cancer, which are highly associated with smoking and hepatitis B infection. World Health Organization Regional Office for the Western Pacific. *Op cit.* Ref 106.

[110] World Health Organization. *Op cit* Ref 50.

[111] Patel and Kleinman 2003.

[112] Malnutrition was defined as a Body Mass Index (BMI) score less than 18.5, based on weight in kilograms divided by height in metres squared. Carr 2004.

[113] National Institute of Statistics. *Op cit.* Ref 88.

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[117] Soucat 2002.

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[119] Gwatkin 2003.

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[122] McCombie 1996 in Worrall, Basu and Hanson 2003.

[123] Kemp *et al.* 2001 [unpublished], in Nhlema *et al.* 2003.

[124] *Ibid.*

[125] Souza *et al.* 2000, in Nhelma *et al.* 2003.

[126] Thorson, Hoa, Long, 2000 and Thorson *et al.* 2003. The prevalence of long-term cough was found to be 1% in men and 2% in women.

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[129] United Nation 1996 in Asian Development Bank 2003b.

[130] Bryce *et al.* 2003.

[131] Jones *et al.* 2003.

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[133] Victora *et al.* 2003.

[134] United Nations. *Op cit.* Ref 24.

[135] Carr. *Op cit.* Ref 84.

[136] UNICEF. *Op cit.* Ref 69.

[137] Gwatkin *et al.* 2000a.

[138] United Nations Development Programme. *Op cit.* Ref 25.

[139] Lao People's Democratic Republic 2003.

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[141] Government of Mongolia and United Nations Development Programme. *Op cit.* Ref.71.

[142] Government of Mongolia. *Op cit.* Ref 66.

[143] World Bank 2003a.

[144] World Health Organization 2000 in Wagstaff 2002.

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[146] United Nations Country Team Viet Nam 2003b.

[147] Liu, Rao and Hsiao 2003.

[148] World Bank 2003.

[149] United Nations Country Team Viet Nam. *Op cit.* Ref 145.

[150] The Lao People's Democratic Republic. *Op cit.* Ref 138.

[151] Average non-food expenditure includes expenditure on health. World Bank 1999 in Alleyne and Cohen 2002.

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[153] Lui Y. *et al.* in Evans *et al.* eds. 2001.

[154] Oxfam 2000.

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[161] Portero, Rubio and Pasicatan 2002.

[162] Auer *et al.* 2000.

[163] Naranbat 2003 [unpublished].

[164] National Institute of Statistics. *Op cit.* Ref 88.

[165] Gwatin *et al.* *Op cit.* Ref. 119.

[166] Wagstaff suggests that quality of care may be broadly defined as including services and amenities, as well as technical quality. Wagstaff 2002.

[167] Ministry of Planning. *Op cit.* Ref 85.

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[169] Government of Mongolia and United Nations Development Programme. *Op cit.* Ref.71.

[170] Organization for Economic Cooperation and Development and World Health Organization 2003.

[171] World Health Organization and World Bank 2001.

[172] OECD. *Op cit.* Ref 168.

[173] Ministry of Planning. *Op cit.* Ref 85.

[174] World Bank. *Op cit.* Ref 147.

[175] Government of Mongolia and United Nations

Development Programme. *Op cit.* Ref.71.

[176] Department for International Development 2000.

[177] World Health Organization Regional Office of the Western Pacific. *Op cit.* Ref 6.

[178] *Ibid.*

[179] World Health Organization. *Op cit.* Ref 50.

[180] World Health Organization. *Op cit.* Ref 5.

[181] Gwatkin and Guillot disaggregate all causes of deaths worldwide into three categories: group I contains communicable, maternal, perinatal and nutritional); group II (non-communicable) and group III (accidents and injuries).

[182] Gwatkin and Guillot 2000.

[183] World Health Organization. *Op cit.* Ref 50.

[184] *Ibid.*

[185] Economic and Social Commission for Asia and the Pacific and United Nations Development Programme 2003.

[186] Department for International Development 2001.

[187] Black, Morris and Bryce 2003.

[188] UNICEF 2003 and Economic and Social Commission for Asia and the Pacific and United Nations Development Programme 2003.

[189] Department for International Development 2000.

[190] World Health Organization. *Op cit.* Ref 50.

[191] World Bank. *Op cit.* Ref 142.

[192] World Health Organization 2002d.

[193] Gwatkin 1996 in Department for International Development 2001.

[194] National Statistical Office of Mongolia and United Nations Population Fund 1999.

[195] National Institute of Statistics. *Op cit.* Ref 88.

[196] Whang 2003 in World Health Organization 2003a.

[197] United Nations. *Op cit.* Ref 24.

[198] United Nations Development Programme 2001. The IMR in rural and urban areas currently stands at 87 and 42 per 100 live births, respectively, and the U5MR in rural and urban areas is 114 and 49 per 100 live births.

[199] Asian Development Bank in United Nations Development Programme 2001.

[200] World Health Organization. *Op cit.* Ref 4.

[201] Asian Development Bank 2003a.

[202] *Country health information profile, Lao PDR*, World Health Organization Regional Office for the Western Pacific (http://www.wpro.who.int/NR/rdonlyres/A0C4A089-E3F3-433C-A00F-6A5436193239/0/lao_hdb.pdf, accessed 8 September 2005); *Country health information profile, Cambodia*, World Health Organization Regional Office for the Western Pacific (http://www.wpro.who.int/NR/rdonlyres/BEC5B3CF-3299-4E4F-B55B-E4F9BF296F56/0/cam_hdb.pdf, accessed 8 September 2005).

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[209] World Health Organization. *Op cit.* Ref 50.

[210] Heise, Ellsberg and Gottemoeller. 1999.

[211] Gwatkin and Guillot. *Op cit.* Ref 180.

[212] World Bank 1994.

[213] *Ibid.*

[214] World Health Organization 2000.

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[216] The MMR in Zhejiang was 23.74 per 100,000 and in Qinghai it was 215.37 per 100,000. Huang and Liu 1995 in Liu Y. *et al.* in: Evans T. *et al.* eds. 2001.

[217] UNICEF 2003 in Economic and Social Commission for Asia and the Pacific and United Nations Development Programme 2003.

[218] UNDP. *Op cit.* Ref 25.

[219] Government of Mongolia. *Op cit.* Ref 66.

[220] Narayan. *Op cit.* Ref 15.

[221] World Bank 1993 and 1995 in Alleyne and Cohen 2002.

[222] Soucat and Yazbeck 2000.

[223] Government of Mongolia. *Op cit.* Ref 66.

[224] Liu, Rao and Hsiao. *Op cit.* Ref. 147.

[225] Wagstaff and van Doorslaer 2001 in Wagstaff 2002.

[226] Liu, Rao and Hsiao. *Op cit.* Ref. 147.

[227] UNAIDS 1999 in World Health Organization 2000.

[228] Garcia-Moreno 1999.

[229] Alleyne and Cohen 2002 note that Haas and Brownlie (2001) provide an excellent review.

[230] Li *et al.* 1994 in Alleyne and Cohen 2002 and Edgerton *et al.* 1979 in Alleyne and Cohen 2002.

[231] Basta *et al.* 1979 in Alleyne and Cohen 2002.

[232] Asian Development Bank. *Op cit.* Ref 3.

[233] Filmer 2003. A study in the Philippines found that a one-standard-deviation increase in early-age child health increased subsequent test scores by a third of a standard deviation. Glewwe and King 2001 in: Filmer 2003.

[234] Balasz *et al.* 1986 in Alleyne and Cohen 2002; Pollitt 1997 and 2001 in Alleyne and Cohen 2002.

[235] World Health Organization 2001a.

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[239] WHO 1999 in Alleyne and Cohen 2002.
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[241] Evans *et al.* 2001.
[242] World Health Organization 2002b.
[243] General comment on the right to the highest attainable standard of health, article 12 ICESCR in WHO 2002b.
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[245] *Ibid.*
[246] Lindelow and Yazbeck 2004.
[247] *Ibid.*
[248] Norton 2001; Rietbergen-McCracken and Narayan 1997.
[249] Rietbergen-McCracken and Narayan 1997.
[250] Braveman 2003.
[251] Wagstaff 2004a.
[252] Soucat and Yazbeck. *Op cit.* Ref. 219.
[253] Lipson in World Health Organization 2000.
[254] Wheeler and Florisse 2003 (unpublished).
[255] World Health Organization Regional Office for the Western Pacific 2005.
[256] World Health Organization 2003b.
[257] *Ibid.*
[258] EQUITAP is funded by the European Union and the Rockefeller Foundation. Initiated in April 2001, the project is implemented by the Asia Pacific National Health Accounts Network (a network of experts from the Asia Pacific Region), and aims to develop NHAs in a standard manner, estimate equity of financing and delivery of service in the participating countries, and examine the impact of policy change on equity. Participating countries are Bangladesh, China, Indonesia, Japan, Kyrgyzstan, Mongolia, Nepal, the Republic of Korea, Taiwan (China), and Thailand.
[259] World Health Organization 1999.
[260] Lipson in Wheeler and Florisse 2003 (unpublished).
[261] However, a review of PRSPs undertaken by the World Health Organization found that although the value of a cross-sectoral approach to health is often recognised in the health section of PRSPs, there is little evidence that this concern is translated into strategy. World Health Organization 2004.
[262] Wheeler and Florisse. *Op cit.* Ref. 252.
[263] WHO workshop on evidence for health policy.
[264] Walford 2000a.
[265] Wheeler and Florisse. *Op cit.* Ref. 252.
[266] *Ibid.*
[267] World Bank. *Op cit.* Ref 142.
[268] United Nations Development Programme. *Op cit.* Ref 23.
[269] Ministry of Health Viet Nam 2003 in United Nations Country Team Viet Nam 2003a.
[270] United Nations Development Programme 2003.
[271] Egger, Lipson and Adams 2000.
[272] *Ibid.*
[273] Organization for Economic Co-operation and Development and World Health Organization 2003.
[274] World Health Organization Regional Office for the Western Pacific 2001.
[275] Stierle *et al.* in Lipson and Florisse in Wheeler and Florisse 2003 (unpublished).
[276] Livack and Bodart 1993 found that in a province of Cameroon, when user fees lead to improvements in service provision and the availability of drugs, utilization by the poor increases. Binam, J., Onana, Y., Nkelzok, V. (http://www.gdnet.org/pdf2/gdn_library/awards_medals/2004/r_m/investment/community_prepayment.pdf, accessed 10 January 2006). Thomason *et al.* 1994 found that revenue generated through user fees was insufficient to improve the quality of services in Papua New Guinea.
[277] Wheeler and Florisse 2003. *Op cit.* Ref. 252.
[278] *Ibid.*
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[282] Hsiao and Liu in Evans T. *et al.* eds. 2001.
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[284] UNICEF Viet Nam 2003.
[285] *Ibid.*
[286] World Health Organization. *Integrating equity into health information systems.* Health Metrics Network, Geneva, May 2005.
[287] *Ibid.*
[288] This section is adapted from the Workshop on *Gender, Health and Development Facilitator's Guide*, Pan American Health Organization and World Health Organization, 1997.
[289] This section is adapted from *The Oxfam Gender Training Manual* by Williams, Seed and Mwau, Oxfam U.K 1994.
[290] Evans *et al. Op cit.* Ref. 241.

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