



SECTION I

Principles of Global Community Health



CHAPTER 1

Meaning and Definitions of Community Health

LEARNING OBJECTIVES

By the end of the chapter, learners will be able to

- elaborate on the concepts of health, community health, and community health care;
- identify determinants of community health at different levels—personal, familial, societal, global;
- elaborate on determinants of community health for a specific community;
- recognize values related to community health, such as equity and social justice;
- identify indicators of community health and sources of information.

CHAPTER OUTLINE

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KEY TERMS

community

community health

community health

measurements

community healthcare practice

determinants of community health

health

INTRODUCTION

Community health encompasses the health of groups within a certain place and extends beyond the aggregate of the individuals' health. Conceptualizing community health implies recognizing what is meant by community, health, and the relationships among them. The attempts to develop an agreed-upon definition of community and health have been elusive, and to date there is no universal or accepted definition of either term. Similarly,

community health is more understood than defined, but this understanding may vary according to context, place, or culture. Moreover, it may vary according to its given purpose and who does the defining (individuals, institutions, organizations, etc.).

In the framework of health and health care, a definition of community has implications for both the community members and the care providers. For the members themselves, especially with regard to health care, the definition of community may determine whether they have access to care or, for example, whether they are included in community health programs. In parallel, providers need to understand the community for which they are responsible for the delivery of care, for examining its quality, and to whom the development and evaluation of prevention, promo-

tion, treatment, and rehabilitative activities are geared. For both the healthcare providers and the community members, the identification of or with a community may be necessary to facilitate the establishment of internal and external collaborations and networks, as well as the involvement of the population in its own care.

In this chapter we will present definitions and concepts pertaining to community health and its determinants, indicators of community health, sources of information, and data gathering. The authors expect that this discussion will stimulate additional thinking about community health and the different factors that affect the health of the community, not only generally but more particularly within specific communities with which the learner may be involved.

Box 1-1 Case study: Community health and community health determinants

The populations of Alabama, Louisiana, and Mississippi are predominantly African American, and these states have poverty rates of 20%, 22%, and 23%, respectively. These areas are characterized by unmet needs in healthcare services. The uninsured populations in about 2005 were high: 22% in Louisiana, 19% in Mississippi, and 15% in Alabama.

On August 29, 2005, Hurricane Katrina made landfall on the US Gulf Coast. New Orleans was significantly affected. Approximately 1.1 million individuals in the city were forced to leave their homes. Hurricane Katrina caused massive intrastate displacement and migration to 27 states. The capacity of healthcare and other services in the city were severely affected, as were services in the areas to which people were displaced because of the influx of large numbers of persons.

Emergency and trauma care capacities were severely compromised or destroyed. Primary care providers who served populations with very low socioeconomic status (SES) in the directly affected areas were nearly eliminated. The National Association of Community Health Centers estimated that more than 100 healthcare centers were affected by Hurricane Katrina, and at least seven centers and affiliated sites were completely destroyed. In addition, the capacity of hospitals to deliver inpatient, outpatient, and emergency services was compromised at a time when the need for the services greatly increased. The damage was not limited to healthcare facilities; patients also lost access to routine medications, diabetic supplies, medical equipment, etc.

The public infrastructure, including electric power, communication networks, roads, and water treatment plants, was severely damaged. As a result of the flooding and damage to drinking water and sanitation systems, new public health threats developed after the hurricane. Public health efforts to prevent the spread of communicable diseases, such as HIV, were put on hold. Psychological stress and trauma related to the destruction, loss of jobs, loss of homes, separation of families, and death had an impact on the mental health of community members. Those who previously suffered from mental illnesses requiring medication lost access to their prescriptions. Elderly and disabled individuals, whether displaced by the hurricane or not, lost their homes, family, and community support, and the need for nursing home care greatly increased.

Sources: Centers for Disease Control and Prevention. Surveillance for illness and injury after Hurricane Katrina—three counties, Mississippi, September 5–October 11, 2005. *MMWR Weekly*. 2006;55(09):231–234. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5509a2.htm>. Accessed April 15, 2009.

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DEFINITIONS

Defining *community* and *health* is a challenging task. Scholars are not in consensus regarding the definition of the terms or the main components of the definitions. Moreover, although conceptual definitions are offered, translating them into operational terms tends to be difficult. The following sections present concepts that are inherent to community health.

Family

A family is defined as two or more people who are related by emotional ties, marriage, blood, or adoption. Marriage, however, is a dynamic process that has cultural, spiritual, and social definitions of gender roles, the presence or absence of children (biological, adopted, or foster), and common-law relations. As divorced and single parenthood rates increase, it becomes increasingly challenging to define a family unit.^{a,1,2}

Regarding family health and health care, families are the most important and complex units for the communication, reception, and transmission of health information.³ Families are also determinants of their own health because shared behaviors and practices act synergistically in the unit. Family resources (economic, social, knowledge, skills) and health behavior history are of importance in determining the pathways of each member's own health practices. Family dynamics also can determine, positively or negatively, the events leading to the occurrence of disease and its transmission and severity. Families can also be defined as a setting for health promotion.⁴ It is through the family life cycle that continuity of care can be applied—from family formation, to birth until adulthood, and until death.

Community

According to Etzioni, communities have two characteristics: (1) affect-laden relationships among a group of individuals that reinforce one another, and (2) a commitment to shared values, norms, and meanings, as well as shared history and identity.⁵ Brown defines community primarily in relation to environmental health and justice. He emphasizes that place, in an ecological sense, has a greater influence on health issues than individual characteristics.⁶

There is growing evidence in the literature about the influence of the community context on health and disease. The measurement of such contextual characteristics has been proposed, including 12 dimensions to define a community contextual profile: economics, employment, education, politics,

environment, housing, medicine, government, public health, psychology, behavior, and transportation.⁷ A qualitative study that examined community participation in vaccine trials for people living with AIDS⁸ identified different dimensions of community: (1) a sense of place (defined by geography or where people gather); (2) sharing common interests, perspectives, and values; (3) joint action and a sense of coherence and identity; (4) social ties; and (5) diversity (the social complexity of a given community).

Although not all population groups have the characteristics proposed by Etzioni, they might nevertheless be the target for the provision of care by a certain provider or providers. Certain groups may have some of the previously mentioned characteristics, which might facilitate the organization of care.

Geographic Definition and Its Alternatives

Communities are often defined in geographic terms. This often provides a clear boundary and description. From healthcare providers' viewpoint, the geographic definition of community may have different meanings and encompass various levels when referring to a neighborhood, county, district, or state, with all of them demarcated by geographic boundaries. A neighborhood may provide a sense of community to its members and close proximity to a healthcare service (both in geographic terms and in a feeling of intimacy and belonging). This proximity facilitates access to care, outreach activities, and knowledge and understanding of community networks and organizations. A larger geographic division can be considered by decision makers for policy purposes in the development and provision of community-based programs.

Even within a geographic area or transcending the geographic boundaries, other shared characteristics can be found. These include belonging to a racial, ethnic, or religious group or possessing other features, such as being homeless or having a disease (e.g., diabetes, HIV). Additionally, within those boundaries a school or group of schools would be the defined community for school healthcare services, or employees of a company or factory might be the community for a certain service. Thus, members of a certain geographic community may belong to other communities, such as schools or ethnic or religious groups.

In urban populations, identifying well-defined geographic communities is becoming increasingly complex. A healthcare service provider may face difficulties in defining a specific population as the community under its care. People living in the same geographic area might go to different providers within or outside those boundaries. Conversely, a service may take care of people who come from different locations. Thus, an alternative identification should be considered in terms of the geographic definition of the community.

^aThe US Census Bureau defines a family as "two people or more (one of whom is the householder) related by birth, marriage or adoption residing together." The American Academy of Family Physicians defines it as a group of individuals with legal, genetic, or emotional relationships.

Modern technology may help in developing this alternative definition, which might have some elements of the geographic boundaries but does not always coincide with a statistical area or a county and may even transcend states. Geographic information systems (GIS) can help locate the users of a healthcare practice according to their addresses.⁹

The implications of clearly defining a community in relation to health and health care cannot be overemphasized. For service providers, it will identify the target population for action. For community members, it will identify the availability and access to services. This applies to not only curative care (which can be limited to people who are insured in a certain plan), but also to prevention and promotion activities. Health departments or other healthcare organizations provide services and programs encompassing larger populations that may include several communities. A clearly defined community allows the healthcare services, community organizations, and community leaders and members to recognize and assess their resources, establish networks, identify health needs, determine priorities, and implement programs.

Virtual Communities The advances in communication technology and the penetration of the Internet¹⁰ have enabled the building of virtual communities and opened a new venue for communication, especially about health-related matters.¹¹ Popular social networking sites that allow new acquaintances to be made or old ones to be maintained virtually, such as Facebook or MySpace, may constitute new ways in which health-related matters are shared. Also, support groups for specific conditions or special interest groups offer new venues for sharing and disseminating knowledge about new developments in health care. This might be particularly important for people who are confined to their homes because of health conditions or limited mobility.

Concerns may arise regarding these virtual communities because of possible divisions among different groups of the population, given the differential access to information technology or the reading abilities of the audience.¹² Moreover, the abundance of information and its sources, which includes unsubstantiated facts and opinions, may pose problems of reliability and accuracy that the audience cannot always discriminate.

Because of the anonymity usually involved in these communities, virtual communications can also have a negative health impact, such as in the case of cyber bullying, which has been shown to affect the mental health and well-being of youngsters.^{13,14}

Health

The World Health Organization (WHO) adopted a definition of health in June 1946 at the International Health Conference

in New York, and it was entered into use in April 1948. WHO defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”¹⁵ The definition offers a good conceptual framework, although operationally it is difficult to appraise. The definition has been criticized over the years, but it is nevertheless widely used and has not been amended since its inception. Today there is no universally accepted definition.

In 1976, Ivan Illich, a philosopher and Catholic priest of Austrian origin, published *Limits to Medicine: Medical Nemesis, the Expropriation of Health*.¹⁶ He forcefully argued against medical care as a commodity and overmedicalization, especially in the case of life events such as birth and death. He proposed a more dynamic view of health, referring to the ability to adapt to changing environments and to the different stages of the life course.

In his 1974 report, Marc Lalonde, then the Minister of Health and Welfare of Canada, did not define the concept of health, but he proposed the *health field* concept.^{b,17} The Lalonde report is credited with setting off some new initiatives regarding the health of populations,¹⁸ including the WHO’s 1978 Health for All initiative in the International Conference on Primary Health Care in Alma-Ata, Kazakhstan (a former Soviet republic).¹⁹ The goals of the Health for All initiative were scheduled to be achieved by 2000. The 22-year time frame was too short to achieve all that was set forth, especially without radical changes in the determinants of health and the organization of healthcare services. However, Health for All acknowledged great inequalities in health between and within countries and created targets for the most important aspects of health. In the Declaration of Alma-Ata, health is considered to be “a fundamental human right and the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector.”

In the European Region of the WHO, the targets were redefined for the 21st century as Health 21.^{c,20} Efforts to achieve the Health for All goals were continued, and in 1986, in the first International Conference on Health Promotion in Ottawa,

^bIt encompassed (1) the environment—both physical and social, or all that is external to the human body; (2) human biology—all aspects of physical and mental health as the result of its organic makeup; (3) lifestyle—the aggregation of personal decisions; and (4) the healthcare organization—the type and relationship with the service provision.

^cThe targets addressed outcomes through the life course, such as specific conditions (communicable and noncommunicable diseases, injury, and violence), the determinants of health, and the settings for healthcare and healthcare services organizations. There was specific reference to an integrated healthcare sector that offers accessible and quality care through family and community-oriented primary health care.

Ontario, a charter for action was created.²¹ The Ottawa Charter, although it did not provide a new definition of health, described health as “a positive concept emphasizing social and personal resources, as well as physical capacities.” It introduced the prerequisites for health as the basic elements of peace, shelter, education, food, income, a stable ecosystem, sustainable resources, and the values of social justice and equity.

In addition to the health goals developed by the WHO and their redefinition in Health 21, the Millennium Development Goals (MDGs) are a new endeavor led by the United Nations to be achieved by 2015.²² The MDGs are drawn from the Millennium Declaration that was adopted by 189 nations and signed by 147 heads of state and governments during the United Nations Millennium Summit in September 2000. Three of the goals (goals 4, 5, and 6) were specifically related to health; four goals referred to the MDGs’ determinants and their need to be achieved if changes in health are to be expected (goals 1, 2, 3, and 7). The eighth goal expects the global community to act together for development.^d

In the United States, Healthy People 2010 delineates the health objectives for the nation.²³ The two main goals of Healthy People 2010 are (1) to increase quality and years of healthy life and (2) eliminate health disparities. The goals focus on 28 health areas, and 10 leading indicators were selected to measure the nation’s health. They were selected on the basis of their importance in public health, their ability to promote action, and the availability of data to measure progress.^e

Health As a Dynamic State Through the Life Course

Health is a dynamic state—a continuum between health and disease—and there are not clear cut-off points determining the limit between one and the other. Health through the life course is another continuum of importance. Typically, each life stage has its own particular health and disease characteristics. For example, infectious diseases and injuries are prevalent during childhood; risk behaviors, such as substance abuse, are developed during adolescence; and chronic conditions, such as cardiovascular diseases and cancer, are more prevalent during adulthood.

^dThe MDGs are (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equality and empower women; (4) reduce child mortality; (5) improve maternal health; (6) combat HIV/AIDS, malaria, and other diseases; (7) ensure environmental stability; and (8) develop a global partnership for development.

^eFive of the indicators refer to healthy lifestyle—physical activity, overweight and obesity, tobacco use, substance abuse, and responsible sexual behavior. Three of the indicators refer to priority health issues—mental health, violence and injuries, and immunization for preventable diseases. One indicator relates to healthcare access, and lastly, one indicator refers to environmental quality.

However, the origins of these adult diseases are determined earlier in life. There are some conditions that appear in childhood and have long-term consequences. For example, rheumatic heart disease starts as a streptococcal infection that, if left untreated, will damage the heart in the long term. Health-compromising behaviors in adolescence, such as poor eating habits and dieting, lack of physical activity, and smoking, have long-term effects if they are not modified. Today we know about the fetal origins of adult diseases. An unfavorable environment in utero has long-term consequences. The nutritional, hormonal, and metabolic environment in utero programs the physiology and pathology of the offspring.²⁴ Thus, low birth weight was found to be associated with coronary heart disease, diabetes, and hypertension in later life.

The knowledge about health through the life course has been facilitated by cohort studies, such as the UK National Survey of Health and Development (NSHD) study.^{f,25} These studies have emphasized the effects of social factors and inequalities through the life course, such as the effects of consistent lifetime exposure to poor socioeconomic conditions on low cognitive ability in childhood and higher adult mortality; the association of poor maternal care with higher risk of maternal postpartum depression; and the association of poor maternal care and parental divorce with a child’s poorer cognitive development and faster decline in mental concentration in midlife.

COMMUNITY HEALTH AND ITS DETERMINANTS

Community health, like individual health, encompasses a continuum from well-being to disease. There is not a universally accepted definition of community health. Frequently, community health is equated with care in the community or community-based care but community health goes beyond the location of health care. In any community context, and for any working definition of community, the health of its individuals will contribute to the collective expression of health. This collective expression of health can be of a physical nature, as well as a mental and social one.

Moreover, community health is an expression of its varied determinants. These determinants act at different levels, from the personal to the familial to the physical and the socio-cultural environment levels. Beyond these levels, the influence of global processes is increasingly felt not only at the national level, but it also permeates to the community level.

^fThis study was based on 16,500 births in England, Wales, and Scotland that took place during one week in March 1946. The follow-up included a sample of 5362 participants that were examined 21 times; the most recent was when the sample participants were 51 years old.

Thus, community health is influenced by determinants acting and interacting at different levels and degrees of complexity, from the molecular level to intricate organizational social and service structures. Health and health-related services, while not always determining the state of health of the community, contribute to its expression.

Box 1-2 Community health

Community health is the collective expression of the health of individuals and groups in a defined community. It is determined by the interaction of personal and family characteristics, the social, cultural, and physical environments, as well as health services and the influence of societal, political, and globalization factors.

Determinants are those factors that act together in complex webs of causation and interactions to affect the health of the community. Figure 1-1 describes determinants of community health according to different levels of influence. More distal as a health determinant is the global level, although the increasing understanding of how it affects health makes it a crucial level to deal with. The relationships between the different levels may vary in different populations and communities. Complex webs of causation and interactions between the levels and community health may be elaborated accordingly. Their understanding is needed for improving community health and its health care.

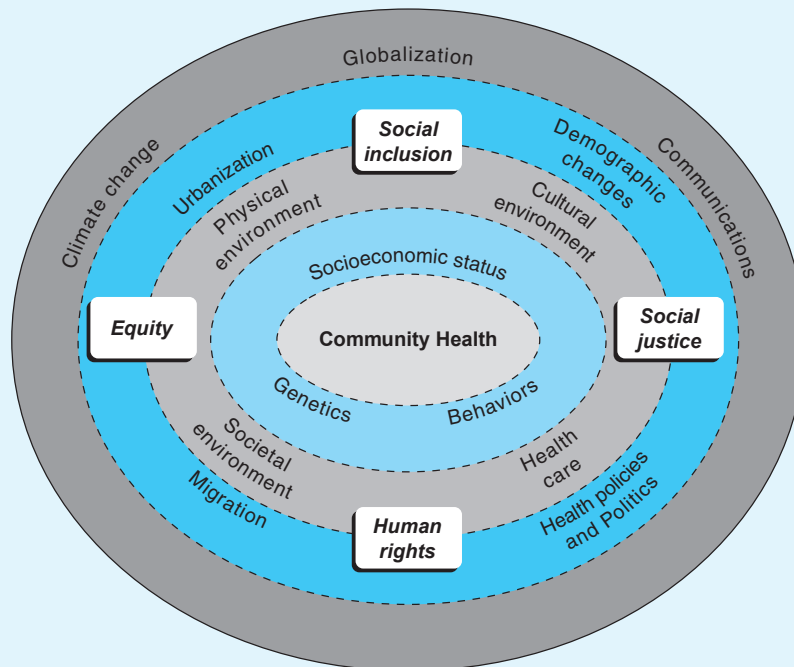
Personal and Family Level

This is the micro level, in which the socio-demographic, biological, and behavioral characteristics are expressed.

Socioeconomic Status

An individual's socioeconomic status has been demonstrated to affect morbidity and mortality. Although there is no agreed-upon

FIGURE 1-1 Determinants of Community Health.



Source: Data from: Commission on Social Determinants of Health. *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health*. Geneva, Switzerland: World Health Organization; 2008. http://www.who.int/social_determinants/thecommission/finalreport/en/index.html. Accessed February 2009; Dahlgren G, Whitehead, M. *Policies and strategies to promote social equity in health*. Stockholm: Institute of Futures Studies; 1991; Institute of Medicine. *The Future of the Public's Health in the 21st Century*. The National Academy Press. Washington DC, 46–95; 2003.

measure, education, employment or occupation, and income have been used separately or in conjunction in different populations and in different countries to assess socioeconomic status.

Lower socioeconomic status, measured by mothers' education, has been found to be associated with poor health status, disease, and delayed child development in different populations in different countries. Low education was found to be associated with increased cesarean section rates,²⁶ fetal and infant mortality,²⁷ cerebral palsy independent of perinatal complications,²⁸ and delayed child development.²⁹ School dropouts have consequently higher rates of smoking and drug use than those who complete school.³⁰ During the 1990s in the Russian Federation, a country in economic transition, life expectancy decreased markedly, particularly among men and women with low education, and it increased among those with university education, resulting in an increased mortality gap between those groups.³¹

The association between long-term lower social status and poor health has been demonstrated in different populations. The report of musculoskeletal pain among 45 year olds who were followed since birth in the NSHD study was higher among those with lower social status in childhood and adulthood than among those with higher social status.³² The metabolic syndrome among 60- to 79-year-old men in the United Kingdom was found to be associated with childhood and adult social class, the latter acting mainly through its association with poor health behaviors.³³ Mortality rates have been found to be inversely associated with different measures of SES in Canada³⁴ and Sweden for overall and cause-specific rates,³⁵ and several studies of cancer survival in different sites showed persistent socioeconomic gaps.³⁶ In the United States, an inverse association was found between a measure of lifetime social position (participants and their parents) and body mass index (BMI).³⁷

Genetic Endowment

The expression of health is partially due to the genetic endowment people bring with them, which constitutes their genotype. The physical expression constitutes their phenotype. Although there is a gene–environment interaction, the actual proportions may differ for different conditions, which would determine the probability that a certain health condition will actually manifest.

With the completion of the Human Genome Project (HGP) in 2003,³⁸ the sequencing of the human genome was achieved, and a map of human genetic variation was produced.⁸

By 2008, the HGP contributed to the development of about 1500 new genetic tests, mainly for common diseases, thus contributing further to the possibility not only of early diagnosis, but also to understanding and identifying susceptibility to drug treatment (pharmacogenomics). However, not all the genetic tests are readily applicable, and specific criteria have been suggested to determine their suitability in clinical practice.^{h,39}

There is concern that genetic test information might be misused by insurance companies or employers. For the former, there is a risk that test results will prompt denying eligibility or increasing premiums for a certain plan or requesting that a person undergo a certain genetic test. For employers, the risk is that genetic information may preclude hiring a person or cause the layoff of a worker. These concerns prompted the passing of a federal law in the United States, the Genetic Information Nondiscrimination Act (GINA).⁴⁰ The new possibilities that the HGP offers for genetic screening have generated debate about its use in health care. Translational research that will apply the new genetic discoveries into medical practice is not occurring at the same pace as the discoveries are occurring.^{41,42} The community appears to be an appropriate setting for carrying out the translational research, and practice-based research has been suggested³⁹ through existing networks where this rigorous research can be applied.⁴³ The dissemination of the tests may bring some potential for inequities in the population if they are not offered and financed for the total population. Moreover, tailored individual care, with screening for diseases that may not develop or prenatal testing for the delivery of perfect babies, may pose not only clinical dilemmas but also ethical dilemmas at the individual and professional levels.

Health Behaviors

Individual and community health is impacted by human behavior. Health behaviors are defined as those that are practiced by people to maintain and improve their health or prevent diseases. Conversely, behaviors can also be negative and have harmful health effects. The health behaviors of individuals together form part of collective health behavior, and as such they affect the health of communities. When these behaviors are consistently performed over a period of time, they

⁸The HGP is a joint endeavor of the US Department of Energy and National Institutes of Health, the Wellcome Trust of the United Kingdom, and other countries such as Japan, France, Germany, and China.

^hThe criteria determine (1) the evaluation focus (the definition of the disorder, test clinical scenario, or intended use); (2) analytic validity (whether it measures what it is supposed to measure—reliability and robustness); (3) clinical validity (whether it measures the disease it is supposed to measure); (4) clinical utility (whether it improves outcome, feasibility of implementation, costs, and safety); and (5) ethical, legal, and social issues (confidentiality, discrimination, privacy, and access).

become a lifestyle. The determinants of health behaviors are complex and are associated with biological, social, economic, and cultural factors.

For some societies, the decrease in the prevalence of diseases caused by poor environmental conditions has highlighted the importance of behaviors as determinants of health status. For societies in which sanitation and poor water supply are still the determinants of diseases, mostly of an infectious nature, positive health behaviors in the absence of appropriate changes in environmental conditions are not enough to curb the prevalence of those diseases.

Smoking and poor nutritional and sedentary habits have been implicated in the development of chronic diseases, such as cardiovascular conditions and cancer.^{44–47} Sexual behaviors, such as multiple sex partners and limited use of contraception, have been related to sexually transmitted diseases (STDs) and teenage pregnancy.^{48,49} Some of these behaviors can be considered risk factors if they have a causal relationship with a specific outcome (smoking and lung cancer, for example), or they can be considered risk markers if the association is not causal.

Risk factors for cardiovascular diseases were first identified by the Framingham Heart Study, which began in 1949.⁵⁰ This study found high blood pressure, hypercholesterolemia, obesity, sedentary habits, and smoking to be associated with the prevalence and incidence of cardiovascular diseases. These risk factors are associated with poor health behaviors in addition to the biological component.

Other types of health behaviors, such as the use of protective gear (seat belts, car seats, and bicycle or motorcycle helmets), are associated with a decrease in injury incidents in case of an accident.⁵¹ The use of healthcare services can be considered a health-related behavior, which is influenced not only by personal factors, but also by the availability and accessibility of the services (location, hours of functioning, insurance, cost, and transportation). Other behaviors might be more influenced by social and cultural norms of the community, such as family formation and rearing practices.

Often health behaviors have a long-term health effect or will be manifested later in life or may affect the offspring. This is specifically relevant for pregnant women or mothers. For example, breastfeeding is associated with lower cholesterol in adulthood,⁵² and smoking during pregnancy is one of the main factors associated with lower birth weight.⁵³

Health behaviors are amenable to change. Several behavioral change theories have been developed and implemented in community interventions. Examples of these are the Health Belief Model, Social Cognitive Theory, Theory of Reasoned Action, and the Transtheoretical Model (see Chapter 2).

Community Level

In this level of community health determinants, the societal, cultural and physical environments are discussed. Health care, including promotion, prevention, treatment, and rehabilitation, is also considered among these determinants.

Societal Environment

The community societal environment, as perceived by its members—their sense of belonging and ownership, as well as the social networks, norms of reciprocity, and trustworthiness that form their social capitalⁱ—may have repercussions on individual health.⁵⁴ This is in addition to the influences of individual and family characteristics and behaviors.^{55–60} The community's social capital makes it possible for the community's members and organizations to address the issues affecting their health and cope with health emergencies and crises.

Current evidence suggests that not only is individual socioeconomic status a determinant of health, but the contextual measure of poverty (i.e., the neighborhood's poverty level) is also a health determinant. In the manifestation of obesity in New York City, for example, it was found that there were strong inverse associations between education and BMI in both sexes, as well as between income and BMI among women in richer neighborhoods versus women in lower-income neighborhoods.⁶¹

Poverty is affecting large segments of the global population. According to the World Bank, in 2005,⁶² 1.2 billion people were living on US\$1.25 to US\$2.00 per day, double the number of people in 1981, and it estimates that the number will remain at around 1 billion until 2015. These income levels persist in some regions of the world, such as sub-Saharan Africa, where 380 million people live on less than US\$1.25 per day. In the United States, poverty is defined according to a family's threshold, which takes into account the family size and composition.^{j,63} In 2007, 12.5% of the global population (37.3 million individuals) was living below the poverty line, and children younger than age 18 years represented 35.7% of them (13.3 million individuals). Poverty overwhelmingly affects minorities. The implication is that minority groups do not have

ⁱAccording to the World Bank, social capital are norms and networks that enable collective action and shape society's interactions. The dimensions of social capital include groups and networks, trust and solidarity, collective action and cooperation, social cohesion and inclusion, and information and communication. The World Bank emphasizes economics and development. Although both are related to health, social capital can impact health directly. (<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTTOSIALCAPITAL/0,,contentMDK:20642703~menuPK:401023~pagePK:148956~piPK:216618~theSitePK:401015,00.html>)

^jThe threshold for a family of three, including a child younger than 18 years of age, is a yearly income of \$16,689.

equal opportunities to maintain a healthy lifestyle or access medical care. A study in the United Kingdom that assessed the minimum income for healthy living reported that (despite the difficulties in calculations) those earning minimum wages would have greater difficulties than others in maintaining a healthy lifestyle.⁶⁴

The income differences and the distribution of poverty in society are manifestations of equity and social justice or the lack thereof. Equity and social justice denote fairness. Equity has been conceptualized as the absence of socially unjust or unfair health disparities.⁶⁵ An operational definition remains elusive because of the different contexts in which equity can be explained, such as via social, political, or cultural spheres. A definition of equity in health has been proposed that alludes to the absence of disparities in health and its determinants, which are systematically associated with social advantage or disadvantage. The definition suggests an “equal opportunity to be healthy for all population groups.”⁶⁶ In most circumstances these opportunities are not always present.

The WHO Commission on Social Determinants of Health stated, “Inequities in health, avoidable health inequalities, arise because of the circumstances in which people grow, live, work, and age, and the systems put in place to deal with illness. The conditions in which people live and die are, in turn, shaped by political, social, and economic forces.”⁶⁷ The commission advises the WHO, governments, organizations, and civil society to act on the social determinants of health to achieve health equity.^k

Notably, the terminology addressing differences in a population’s health or health services is not uniform. In the United States the terms *inequalities* or *inequities* are seldom used; instead, the term *disparities* is preferred. Disparities can be considered as a chain of events manifested by “differences in environment, access to, utilization of, and quality of care, health status or a particular health outcome that needs scrutiny.”⁶⁸ The Institute of Medicine (IOM) describes disparities as “racial or ethnic differences in the quality of health care that are not due to access-related factors or clinical needs, preferences and appropriateness of intervention.”⁶⁹ Healthy People 2010 defines disparities as “the differences that occur by gender, race or ethnicity, education or income, disability and geographical location.”²³ The first two definitions include health care, but the third does not.

^kThe commission defines three principles of action: (1) improve daily living conditions; (2) tackle the inequitable distribution of power, money, and resources; and (3) measure and understand the problem and assess the impact of action.

Although health diversity between population groups is expected because of different biological or environmental characteristics, it is the underlying social injustice of these differences and the access to health care that are of concern. An example of these disparities is the incidence of infectious diseases, such as cysticercosis, leptospirosis, and Chagas disease, among the poor populations in the Mississippi Delta and other deprived areas in the South that are unheard of in other US regions.⁷⁰

With regards to maternal and child health, a review of health indicators revealed that among US women aged 18–45 years, 75% (and 65% of pregnant women) eat less than the recommended five servings of fruit and vegetables per day, 14% reported poor mental health, 47% were overweight, 39% were frequent drinkers, 16% did not have health insurance, 30% did not have a dental visit in the past year, and 61% had low or very low social capital. These indicators are lower among women of color and of low socioeconomic status.⁷¹ A 10-year stroke risk among 45 year olds was shown to be higher in blacks than whites in the United States,⁷² and a decrease in diabetes mortality from 1989 to 2005 favored those with higher education and whites, widening the diabetes mortality gap with regard to education and race or ethnic group.⁷³

Culture and Acculturation

The United Nations Educational, Scientific and Cultural Organization (UNESCO) Universal Declaration on Cultural Diversity of 2001, which was approved by 190 member states, defines culture as “the set of distinctive spiritual, material, intellectual and emotional features of society or a social group. It encompasses in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs.”⁷⁴ These features are the ones that shape how people behave in general and, more specifically, in relation to health. They influence peoples’ understanding of their environment and how they act in and manage their daily lives, including family formation, rearing children, lifestyles, health practices, ill-health manifestations, coping with disease, and healthcare-seeking behavior.

Because cultural characteristics are not static and people move from place to place, adaptations to the new contexts and locations occur, especially with regards to health. The process of acculturation, or cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture or a merging of cultures as a result of prolonged contact, has been shown to influence health status and behaviors and the use of healthcare services.¹

¹Acculturation is measured by the time a person lives in a country other than his or her own, the language used inside or outside the home, the proportion of friends from one’s own culture, or pride in ethnic identity when among others.

Acculturation has been found to affect drinking or alcohol dependence in the United States among Hispanic adolescents⁷⁵ and Hispanics aged 18 years and older but not among all Hispanic nationalities.⁷⁶ Levels of physical inactivity were shown to be higher among immigrant Hispanic children in the United States than among natives, but the differences decreased with acculturation.⁷⁷ Higher acculturation was shown to be associated with depression during pregnancy among Latina women.⁷⁸ Among Vietnamese families in the United States, children whose parents used authoritarian parenting styles, as in Vietnam, showed higher rates of low self-esteem and depression than others.⁷⁹ Spanish-speaking Hispanics reported worse health status and access to health care and receiving less preventive care than English-speaking Hispanics.⁸⁰ However, higher levels of acculturation had a positive effect on the use of screening tests by Latina women in New York.⁸¹ Practices such as female genital mutilation, which are prevalent in some African countries, are continued after moving to industrialized countries,^{82,83} mostly among those with less integration into the local culture.⁸⁴

Physical Environment

Poor water quality, sanitation, waste disposal, and hygienic conditions, as well as indoor pollution (due to combustion from biomass fuels and coal used for cooking and heating), outdoor air pollution (due to traffic and industrial activity), and chemical hazards (such as lead in paint, mercury in fish, smoking, and pesticides) all affect the health of individuals and cause premature mortality.⁸⁵ According to the WHO, environmental risk factors cause 85 of the 102 major diseases and injuries, and about 24% of the total global burden of disease and 23% of all deaths can be attributed to environmental exposure. The impact of environmental risks is higher for children than adults, due to their physical and behavioral characteristics and special vulnerability, contributing to 34% of the disease burden and 36% of overall mortality among 0 to 14 year olds.⁸⁶ The diseases that are considered to have the largest environmental contribution are diarrhea, respiratory infections, and injuries.

Health Care

The health care of a community includes functions of promotion, prevention, early diagnosis, treatment, and rehabilitation. These functions can mostly be provided at the first level of care.^m Secondary and tertiary levels of care are mostly in-

dividual and disease oriented. The distinctions among the levels of care become obscured when specialists, such as internists, pediatricians, or obstetricians, provide primary care or when highly specialized professionals, such as cardiologists or neurologists, care for the chronically ill. Moreover, hospitals occasionally take responsibility for the health of communities and extend their services outside the hospital walls.

The IOM defines primary care as “the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.”⁸⁷ At a meeting of experts in 2002, the WHO defined primary care as “a span or an assembly of first-contact health care services directly accessible to the public.”⁸⁸

Starfield regards primary care as the foundation of a healthcare system and defines it as the point of entrance to the system. It is characterized by provision of care to a defined population; delivering long-term, person-focused, and comprehensive services to assure continuity of care and coordination with other services; and being accessible.^{89,90}

Primary health care was defined at the 1978 WHO meeting in Alma-Ata¹⁹ as “the essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford. It forms an integral part both of the country’s health system of which it is the nucleus and of the overall social and economic development of the community.”

Within the various definitions of primary care, some common elements can be identified—first contact, practiced in the context of family and community; accessibility; coordination; continuity; accountability; and comprehensiveness. Although there are common characteristics between primary care and primary health care (accessibility, family and community centered), the main distinction and emphasis for the latter is a holistic view of health and community participation and its relation to social and economic development of the community.

Following the conference on primary health care at Alma-Ata, primary care or primary health care did not have the repercussions or the development that were expected. Fragmentation of services and inequity continue to be a reality in most countries, and in some cases, primary care is considered to be a service that provides poor care to poor people.⁹¹ Hospitals and hospital care consume most of the resources of a healthcare system, mostly because of the increasing development and cost of medical technologies and the cost of pharmaceutical products and administration. Primary health care receives the least amount of resources, but it is where most of the problems present and are solved.

^mThis first level of care is denominated primary care. Secondary care is provided by community hospitals or by specialists in community clinics, and tertiary care is provided in hospitals that have highly specialized care and diagnostic technologies (oncology, neurosurgery, trauma, burn unit, plastic surgery, etc.).

The renewal of primary care was first proclaimed in the American Region of the WHO in 2007 by the Pan American Health Organization (PAHO).⁹² This renewal was further promoted when primary health care was highlighted as the central theme of the 2008 World Health Report.⁹³ The report proposed four types of reforms: (1) universal coverage, which will foster equity in health and social justice; (2) services that will be reorganized to answer the needs and expectations of the population; (3) healthy public policies that will integrate public health and primary care; and (4) leadership that will be more participative and will pursue the involvement of the relevant stakeholders in health care.

Societal Level

At this level, policies and politics influence community health and may collide with communities' priorities; populations movements, including migration and urbanization, an increasing phenomenon by which people look for better life opportunities, have an influence in their own health and that of the absorbing community; demographic changes in developed, transitional and developing countries also imply an epidemiological transition, changing the burden of disease in different populations

Policies and Politics

Health promotion and prevention activities can be determined by government policies. Politics have an impact on health policies and affect the continuum of health and disease. For example, policies related to the use of guns, smoking in public places, the use of drugs and needle exchanges, sexuality, reproductive health, and family formation might be determined by the ideological background or philosophical approach of those who are in charge or in positions of power. These factors may also influence the allocation of resources to certain organizations or programs, as well as the regulation of institutions and the availability of medicines and services. Areas of research, and their financing, that will affect the individual's and community's health might be influenced by the same factors.

In the beginning of the 21st century, the government of South Africa, a country with a severe AIDS epidemic that affected nearly 20% of the adult population in 2005, maintained that the disease was not caused by the human immunodeficiency virus (HIV), and consequently antiretroviral (ARV) drugs were of no use. It was maintained that poverty, bad nourishment, and general ill health were the causes of the disease. From 2000 to 2005, this caused an estimated loss of 330,000 lives, and 35,000 babies were born with HIV because of a lack of mother-to-child transmission prophylaxis.⁹⁴ Since then the situation has improved, and also the government has changed, but the major impact of the government policies is irreversible.

The consideration of health and health care as either a right or a commodity will shape the coverage and affordability of care for community members, as well as the set of health-related regulations and recommendations that are decided at local or national levels or by an insurance agency or healthcare organization. Considering health to be a human right means that there is a need to respect (assure that no policy, program, or action will violate that right and that healthcare services will be equitable), protect (regulate the healthcare industry, including the private sector, pharmaceutical companies, and national and multinational enterprises), and fulfill that right (put into practice health and health-related policies to assure human rights promotion and protection, with special focus on vulnerable populations).⁹⁵

The increasing influence of multinational companies and supranational funds are also shaping the health agenda of governments, but in the words of Garret, "most funds come with strings attached and must be spent according to donors' priorities, politics, and values."⁹⁶ In other words, they do not always consider the local needs and priorities.

The influence of politics on health was acknowledged by Virchow, a German cellular pathologist born in 1821. In addition to being a pioneer in his field, he expanded his activities to public health. Studying an epidemic of typhus in Silesia, he concluded that the epidemic was essentially a social and political phenomenon associated with famine due to crop failure that affected the poor and uneducated. The elimination of social inequality would therefore be associated with the prevention of the condition. He asserted that "medicine is a social science, and politics nothing but medicine at a larger scale."⁹⁷

Population Movements

Population movements, such as migration and urbanization, are increasing across the globe. Migration, whether within or among countries, affects physical and mental health and has an impact on the environment. Furthermore, internal displacement due to war or natural disasters affects the social and economic fabric of a community, the family structure, and individuals' physical and mental health. The migration of rural community members looking for better opportunities in the city is another increasingly common phenomenon.

In 2005, 49% of the world population (3.15 billion individuals) lived in cities, compared to 29% of the population in the mid-20th century. The United Nations predicts that by 2030, 60% of the global population (4.91 billion individuals) will live in urban areas. Also in 2005, the proportion of urban dwellers in developed regions of the world accounted for 74% of the population; in less-developed regions, urban dwellers accounted for 43% of the population. New York–Newark was third among the 20 megacities in the world, after Tokyo and Mexico City, with 18.7 million inhabitants.⁹⁸

The mostly unplanned movement of the population causes the sprawling of settlements around cities, which do not have the appropriate infrastructure, such as water, sewage systems, appropriate healthcare facilities, and other services. Crowded and insufficient housing facilitates the spread of communicable diseases, increased injuries, violence, and poor health habits.^{99,100} Also, the physical and mental health of educated migrants is affected, especially if their employment circumstances do not match their education and skills.¹⁰¹

Demographic Transition

In developed countries, decreasing or stable death rates are coupled with decreasing fertility and birth rates.¹⁰² In some of these countries, like Spain, the mortality rate (10/1000 population) is equal to the birth rate. In 2008, Russia, a country in transition, experienced an increasing mortality rate (16/1000 population) that was higher than the birth rate in the same year (11/1000 population). These trends are associated with an aging populationⁿ and the consequent increase in the burden of chronic diseases. Most developing countries present high birth rates (for example, 38/1000 in Kenya and 26/1000 in El Salvador) and low mortality rates (10/1000 in Kenya and 6/1000 in El Salvador); these countries, in epidemiological transition, are enduring a double burden of disease which combines communicable and noncommunicable conditions.¹⁰³

The WHO's 2008 report on the burden of disease shows that the top 10 causes of death worldwide include four noncommunicable diseases (ischemic heart disease; cerebrovascular disease; chronic obstructive pulmonary disease [COPD]; and trachea, bronchus, and lung cancers).¹⁰⁴ These four conditions rank among the top five causes of death in high-income and middle-income countries. In low-income countries,^o two of these conditions share those rankings, but the rest are lower respiratory infections (first), diarrheal diseases (third), and HIV/AIDS (fourth). The leading disease burden as measured by disability-adjusted life years (DALYs) for low-income countries is lower respiratory infections, and ischemic heart disease ranks ninth. Unipolar depression disorders, followed by ischemic heart disease, are the leading disease burdens in middle- and high-income countries. Although these rankings attest to global changes, they are also reflected at the community level. Healthcare service organizations need to have the workforce, expertise, and resources to care for a changing population and a changing pattern in disease burden.

ⁿAn increase in the number and proportion of elderly persons in the population.
^oLow-income countries include the categories of low income (US\$825 or less), low-middle income (US\$826–3255), upper-middle income (US\$3256–10,065), and high income (US\$10,066 or more), according to 2004 gross national income (GNI) per capita.

Global Level

At this level, climate change creates environmental changes, and consequently affects health directly or indirectly; globalization, which is blurring borders not only economically but health-wise as well; communications and the new information technologies that are transforming health interventions and personal contacts.

Climate Change

Climate changes are associated with some of the basic elements to sustain life—food, air, and water. Climate changes are occurring across the globe, most likely because of human activity. The use of fossil fuel and changes in land use and agriculture (mainly through deforestation) have increased the emission of CO₂ methane and nitrous oxide.¹⁰⁵ These greenhouse gases remain in the atmosphere for extensive periods of time and help trap heat near the Earth's surface. Different scenarios project that for the next two decades, there will be a warming of 0.2°C per decade, which is twice as large as the previous century.¹⁰⁵

Food security is threatened by climate change, especially in the least developed regions of the world. Air quality is expected to change, with consequential effects in lung diseases, such as asthma. Floods and the contamination of water are associated with infectious diseases. Climate change has been associated with vector- and rodentborne and other infectious diseases, as well as water- and foodborne diseases.^{106,107}

Changing patterns of rainfall and temperature bring draught, storms, heat and cold waves, the raising of sea levels, floods, and melting of snow and ice, and they have an affect on physical and mental health. The heat wave that affected Europe in 2003 was associated with excess mortality of approximately 60% in France,¹⁰⁸ 40% in Portugal,¹⁰⁹ and 17% in England and Wales.^{110,111} The health systems in those countries were ill prepared for such an event. International organizations have suggested adaptation and mitigation strategies to deal with global warming.^{p,105,107,112}

Globalization

Globalization^{q,113} influences all spheres of life. Although globalization is not a new phenomenon, its impact is becoming more apparent and recognized, especially with respect to

^pAdaptation has been defined as “adjustment in natural or human systems in response to climate changes, which can be initiated either by individuals or organizations in the population (autonomous), or implemented by governments (planned).” Mitigation is “an intervention aimed at reducing the severity of climate change by controlling emissions of greenhouse gases and/or enhancing carbon sinks.”

^qGlobalization is the development of an increasingly integrated global economy marked especially by free trade, free flow of capital, and the tapping of cheaper foreign labor markets.

health, and it compounds the conceptualization of community health. Globalization influences the transference of risks, for example, tobacco and illicit drugs and the spread of new diseases and epidemics throughout the world, such as AIDS, severe acute respiratory syndrome (SARS), and swine flu. Multidrug-resistant and extensively-drug-resistant tuberculosis is a threat for the control of the disease in some countries.¹¹⁴ Travel and migration have the potential for spreading this condition.

Globalization has also been implicated in the obesity epidemic through the diffusion of mass media networks that propagate and promote the use of consumer products, food, and beverage brands that have a powerful influence on eating behaviors across different countries and cultures.^{115,116} The financial crisis affecting the Organisation for Economic Co-operation and Development (OECD) countries at the end of the first decade of the 21st century had repercussions on developing countries and countries in transition. Economic recession^f has implications for the physical and mental health of populations, especially vulnerable people, both on a country and global level. Health care is also impacted by financial crises, and during these times an adjustment of the provision of healthcare services is needed, although governments do not always prioritize healthcare budgets. The WHO suggests that crises can stimulate healthcare services reform, emphasizing primary health care with the aim of universal coverage, and address the social and economic determinants of health.¹¹⁷

Communications

Communications, whether at the individual or community level, have an influence on health. The first contact that an individual may have regarding a health problem or a health behavior might be with family members. Communication with physicians or nurses through face-to-face contacts or group discussions may influence compliance with treatment, following advice, or acquiring skills for self-management of a disease.

At the community level, communication takes a different form. The use of mass media and information technologies are shaping health and health care. Mass media has been shown to influence body image, sexual behaviors, violence, and substance abuse among teenagers.¹¹⁸ The obesity epidemic is linked to TV advertisement.¹¹⁹ New technologies like text messaging are being used for health interventions on varied topics, such as sexual health,¹²⁰ smoking cessation,¹²¹ and diabetes management.¹²² The new technologies appear to have promising results.¹²³

According to Internet World Stats,¹²⁴ in 2008 the Internet was being used by increasing numbers of people across the

globe. The use of the Internet ranges from 73.1% in North America to 5.6% in Africa. The use of the Internet for health purposes in seven European countries who participated in the WHO/European eHealth Consumer Trends Survey was 52.2% in 2007.^{125,126} Most Internet users reportedly used it for health information (52%) and whether to see a doctor (46%).¹²⁷

The widespread use of the Internet for health and healthcare purposes has led to a new term: eHealth. A review of the literature revealed 51 different definitions of the term.¹²⁸ The varied definitions had some common themes; although all of them included the word *health*, it was most commonly used for healthcare services delivery or their outcomes in terms of efficiency, suggesting that the term is more commonly used for service than for health status.

The wide use of the media and new information technologies for health matters has raised some questions regarding the accuracy and understanding of the information obtained. Issues of media literacy¹²⁹ and media health literacy^{s,130} are of concern.

There is also the potential for a digital divide to occur. This can be intergenerational because youngsters may be more savvy in the new technologies than their parents and educators. Most importantly this divide might be due to unequal access to the new forms of health and medical information, which may increase disparities among community and population groups.

COMMUNITY HEALTHCARE PRACTICE

Community health care is population based and deals with the natural history of a disease, from its origins to its manifestation to its outcome. It integrates preventive and health promotion activities in conjunction with the care of the sick and their rehabilitation. The two main approaches of delivering community health care are community-oriented primary care and community-oriented public health.

Community-Oriented Primary Care

Community-oriented primary care (COPC) was defined by Kark in 1983 as “a way of practicing medicine and nursing, or of providing primary care, which is focused on care of the individual who is well or sick, or at risk for illness or disease, while also focusing on promoting the health of the community as a whole or any of its subgroups.”¹³¹ COPC is based on the following principles: (1) responsibility for a defined population;

^sMedia literacy is the critical understanding of the nature and techniques of mass media and its impact. Media health literacy is the ability to identify, recognize, and analyze health-related content in the media and its influence on health behavior.

^fAn economic recession is two successive quarters of negative growth in gross domestic product.

(2) care based on identified health needs; (3) prioritization; (4) intervention covering the natural history of a disease, involving prevention, promotion, treatment, and rehabilitation; and (5) community involvement. COPC is presented in Chapters 3 and 4.

Community-Oriented Public Health

Community-oriented public health (COPH) blends population health principles in the context of the community's health. It deals with the identification and analysis of health and its determinants in a specific community or communities, followed by different interventions that are needed to promote and maintain this state of health. Usually, COPH programs are the domain of public health authorities, health maintenance organizations, or other community institutions that act either together or in their own spheres of action. COPH is presented in Chapter 5.

MEASUREMENT OF COMMUNITY HEALTH

Although health is a positive attribute, its measurement often encompasses morbidity and mortality. Additionally, health is expressed by measures of health behaviors and well-being.

Health Indicators

Health indicators are measurements that reflect a community's state of health. Indicators such as infant mortality and maternal mortality reflect not only the health status of a specific group, but also of the total population. Health indicators draw attention to overall socioeconomic conditions and the community's quality of and access to medical care.

Health indicators have been used to measure targets that a country or region strives to achieve, such as targets for Healthy People 2010²³ or the Millennium Development Goals.²² For example, Healthy People 2010 was set up to measure changes in immunization coverage (the proportion of children aged 19–35 months who received all recommended vaccines, the proportion of noninstitutionalized adults aged 65 years and older who received an influenza vaccine in the past 12 months, and the proportion of those adults who ever received a pneumococcal vaccine). The Millennium target number four on reducing child mortality was set up to reduce by two-thirds, between 1990 and 2015, the under-five, and infant mortality rates, and also the proportion of children aged 12–23 months who received at least one dose of measles vaccine. These health indicators are the benchmarks by which it is possible to monitor a program's progress in attaining its targets and achieving its target deadlines.

Health indicators are also the way in which the health status of communities and populations or their subgroups are compared with one another, and they are used for international comparisons. For example, the infant mortality (IM) rate in Washington, DC for the years 2003 to 2005 was 12.2/1000 live births, the highest in the country and nearly two times the average infant mortality rate in the United States (6.83/1000 live births).¹³² The rates for African Americans were 15.83/1000 live births in Washington, DC (3.5 times higher than for whites) and 13.33/1000 live births in the United States (2.3 times higher than for whites). The US IM rate ranks 29th in the world (Singapore is the lowest with an IM of 2/1000 live births).¹³³ The IM rate target specified by Healthy People 2010 was 4.5/1000 live births by 2010.²³

The expressions of these community health measurements require a clear definition of the community. This will provide the numerical value for the denominator information for the measurement of rates. The numerator is provided by the number of cases of the specific health issue being measured.

GATHERING INFORMATION ABOUT COMMUNITY HEALTH

As summarized in Table 1-1, the measurement of a community's state of health requires some questions to be answered by those who request the measurements and those who will gather or use the information.

More and more communities are taking center stage in defining their needs and aspirations regarding health, education, the environment, and general development. However, there are those who are dispossessed and communities whose members lack the basic elements to sustain a dignified life, such as education, food, shelter, and health. As one of the basic rights of individuals, health evolves beyond individuals and individual rights to encompass the community and its rights.

SUMMARY

Community health may be considered the collective expression of the health of individuals and groups within a community, which is affected by personal, familial, and community characteristics and societal and global influences. Equity and social justice are values inherent to community health and health care. Community health care is provided by different levels of the healthcare system, mostly primary health care, which is the level where most problems can be resolved. Community health can be measured and expressed through health indicators.

TABLE 1-1 Questions Regarding the Measurement of Community Health

| | |
|--|--|
| Which community is being studied? | The identification of the population or community under study is essential for the definition and calculation of denominators and numerators. The population can vary in size and level of organization, from members enlisted in a certain health or medical practices to a neighborhood, county, state, or a country as a whole. The population can further be defined according to age groups throughout the life course, such as infants and children, adolescents, or the elderly, or the definition can be gender specific. Additionally, the population can be defined by ethnic or racial groups, or it can address the health of migrants. |
| What information needs to be gathered? | The information to be gathered needs to be carefully determined. Because health and disease issues and their determinants may be extremely variable in different populations and involve varied types of problems, following a process of consultation and prioritization regarding the information to be collected is critical. A general survey of the health status of a certain community might be considered, but it needs to be done in accordance with the specific place and based on knowledge of the community. Gathering information about issues that are not relevant for the specific place consumes usually scarce resources, and the information may not be pertinent to later analysis. |
| Are methods and instruments appropriate for the community? | When designing the data collection methods, consideration should be given not only to a sound methodology, but also to the appropriateness of the instruments in terms of language (which language is spoken by the community and which local words are used for different ailments), literacy level, and sensitivity to social norms and cultural issues. The community's clear understanding of what is asked and why, as well as respect for its social and cultural values, are essential for building trust and fostering future cooperation and partnership. |
| Is there available information, or does new data need to be collected? | Efforts should be made to identify available sources of information regarding the specific community. Local or national agencies, such as departments of health, national centers for health statistics, universities, and non-governmental organizations, may gather information that could be suitable for the needs of a specific community. The appropriateness of this information should be analyzed regarding timeliness (when the data was collected), whether it is targeted (it covers the population of interest), whether the definitions used are the ones that are relevant for the community, and whether pertinent determinants are included. |
| Are data valid and reliable? | The validity (to what extent it measures what it intended to measure) and reliability (to what extent the information is reproducible) of the data should be analyzed when using already collected information and when planning a study of the community. |
| For what purpose is this information gathered? | Data are collected for various purposes. They might be collected to identify the needs of a community or of populations that are at risk or in need of special care. Perhaps the data were collected as a baseline for program implementation and evaluation or to assess whether national targets (like Healthy People 2010) or global targets (like Millennium Development Goals) were achieved. Identifying needs and special populations in need of care is a community diagnosis. Similar to individual medical care, it is imperative that the diagnosis be followed by an appropriate intervention that supports promotion of health and addresses the treatment or rehabilitation needs of the community. |
| Who are the stakeholders? | The stakeholders involved in data gathering might be the community itself or its representatives, community organizations, government organizations, or academic institutions. Issues of partnership, ownership, and the uses of the information have to be clarified and agreed upon from the planning phase. |
| What are the available resources? | Resources—financial, personnel, infrastructure, and time—have to be carefully planned and organized beforehand so tasks can be completed on time. |
| Were ethical considerations taken into account? | The gathering of personal and private information is secured by ethical considerations. Informed consent is required for the disclosure of information by institutions, the linkage of records, or the provision of personal information. Informed consent covers topics such as a description of the survey content, what will be done with the information, the right to refuse to participate without jeopardizing medical care, and the right to receive referral information. Internal and external review boards are institutions that examine these issues and provide approval or reject applications for data gathering. |



Discussion Questions

- Why is it important to define a community in the framework of community health and community health care?
- Can there be a universal definition of health? Why?
- Are all determinants relevant in different communities in different places?
- Are there universal determinants of community health? What are they?
- Can there be a universal definition of community health? Why?
- Which health determinants did you identify in the case study in Box 1-1?

Review Questions

- How is community defined for the purpose of assessing the community's health and health care?
- What is health?
- What is community health?
- What are the levels of determinants of community health?
- What are community health indicators?
- What are the questions to be asked when measuring community health?

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