

Health Equity in a Globalizing World

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At the beginning of the new millennium, there is much talk about "globalization"—of international finance and trade, of real-time information, of science and technology, of labor standards, and environmental safety. A common misperception is that globalization is simply the integration of the world economy as highlighted by the Asian financial crisis or the protests during the World Trade Organization conference in Seattle. Another misunderstanding is that globalization may be a variant or derivative of such longer term trends as internationalism, modernization, or interdependence (Schoettle and Grant 1998).

Accelerating since the 1980s, globalization is quantitatively and qualitatively different from the past. It involves the multidimensional integration of the world economy, politics, culture, and human affairs, and it is fundamentally changing world health dynamics. This is marked by unprecedented health risks, the emergence of new diseases, and new challenges to global health institutions. Examples of these globalizing health phenomena are fresh environmental health threats, new and re-emerging infectious agents, and changing modes in the production and distribution of drugs and other health technologies.

Facilitated by a scientific revolution in information and biological technology, globalization is generating global "connectivity"—a dramatic compression of time and distance worldwide. Advances in digital technology are moving communications toward an integration of the computer, Internet, telephone, and television. Breakthroughs in genome research are likely to alter

profoundly our capacity to control life and death. Some claim that the new information age will produce social changes as profound as the agricultural (10,000 years ago) and industrial (200 years ago) revolutions (Wriston 1992). The velocity of change is also very rapid. "Moore's law"—that digital capacity in computing power, speed, and miniaturization will double every 18 months—has held up well since it was formulated in 1965 (Lucky 1998). Virtual information and communications mean that geographic and physical boundaries—nation states, communities, and neighborhoods—are increasingly transcended. Faraway actions can affect ordinary people in distant places. The linkages between global and local are increasingly more direct and powerful.

In this chapter we do not argue whether globalization is intrinsically good or bad or whether we should nurture or impede it. Nor do we explicitly praise or criticize it. Rather, we accept that globalization is a reality, not a choice. Globalization is here and inescapable because it corresponds to the present phase of historical development and because it has the power to fulfill many human wants.

A more pertinent question concerns the direction of globalization. What type of globalization is good or bad for human health? Toward which ends should the power of globalization be directed? To address these questions, we begin by reviewing the health dimensions of globalization. We then consider growing concerns about the impact of globalization on inequities in health. Finally, we argue that globalization generates

new risks and offers unprecedented opportunities to meet the global equity agenda. How these opportunities are seized, we believe, is the premier global health challenge of our time.

Global Health Dynamics

Globalization in History

Health and disease have shaped human history, including trade, migration, and conflict (McNeill 1976). One of the most significant events in the globalization of disease dates back to 1492 with the discovery of the New World. European conquest forever altered the epidemiological pattern of disease in isolated populations of the Americas. Before Columbus landed, American populations had never encountered smallpox, measles, or yellow fever (just as syphilis was unknown in Eurasia and Africa) (Berlinguer 1992). The initial exposure was so devastating to nonimmunized populations that America's indigenous peoples experienced a virtual "health genocide." Massive declines of these immunologically unprepared populations followed the microbial assault, which was compounded by sociopolitical factors—war and conflict, slavery and enforced labor, disrupted food and nutrition, and psychological breakdown due to the loss of cultural identity, confidence, and security (Diamond 1999).

It took three centuries after global microbial unification in the sixteenth century for the world to recognize the mutualism of global health risks and interests. During the industrial revolution of the nineteenth century, governments recognized that free markets driving economic progress could not be all-embracing. Human health, safety, and dignity required social protection. By the end of the nineteenth century, the three preconditions for the control of infectious diseases were systematically put into place—knowledge of causation, development of effective preventive and curative tools, and mobilization of the requisite political will for social action.

In all three areas, international cooperation played a critical role. Smallpox immunization entered Europe from Turkey, where traditional female healers had developed the practice of transferring serum from healed smallpox blisters to induce attenuated disease and subsequent protection. The same empirical knowledge developed in Africa and was used by African Americans when smallpox struck North America in the eighteenth century. For generations Western physicians had rejected this alien advance until Edward Jenner reinvented it, improved it, and demonstrated its effective-

ness in European populations. A century ago many microbes were discovered (e.g., tuberculosis, plague, and *Vibrio cholerae*); their transmission became understood (John Snow identified contaminated water from the Broad Street pump as the cause of cholera even before the vibrio was discovered); and protective sera and vaccines were developed. These technical advances were accompanied by social legislation to regulate working hours, to prohibit the cruelest forms of child labor, and to protect pregnant women. Governments assumed formal responsibility for national health, and social insurance was introduced for collective health protection. The imperative of international cooperation was recognized and acted on, culminating in an International Sanitary conference, the original world health organization (Zacher 1999).

The historian Arnold Toynbee observed that "The 20th century shall be essentially recalled not so much as an epoch of political conflicts and technical inventions, but rather as the time when human society dared to think about health care of the whole human species as a practical objective within its reach" (Toynbee 1992).

Another Round?

Today, one century later, globalization is again fueling dynamics in the pattern of disease worldwide. The traditional typology of disease is tripartite—communicable diseases, noncommunicable diseases, and injury. A first generation of diseases is linked to poverty—common infections, malnutrition, and reproductive health hazards mostly affecting women and children. These predominantly communicable diseases are overwhelmingly concentrated among the poor in low-income countries. A second generation of primarily chronic and degenerative diseases—such as cardiovascular disease, cancer, stroke, and diabetes—predominate among the middle-aged and elderly in all countries. Susceptibility to these noncommunicable diseases is linked to changing environment, lifestyle, and health-related behavior. To these two groups of diseases may be added injuries, caused by both violence and accidents, which are also prevalent in both rich and poor countries.

This classification system appears to be breaking down in our globalizing world (Chen 1998). New health threats are being superimposed on traditional diseases, driven at least in part by the forces of globalization. Globalization, thus, is generating epidemiological diversity and complexity. Three examples, discussed below, are emerging infections, environmental hazards, and sociobehavioral pathologies.

Emerging Infections

Our complacency over the successful conquest of infectious diseases (except for common childhood infections among the poor in developing countries) has been rudely disturbed. Since the global spread of the human immunodeficiency virus (HIV) began in the early 1980s, more than 29 new bacteria or viruses have been identified, many capable of global spread. With more than 1 million travelers flying across national boundaries every day, many of these pathogens have the capacity to reach anywhere in the world within 24 hours (Lederberg 1997). Moreover, many infectious agents are not new but rather well-known pathogens rekindled by changing conditions.

Rapid urbanization with urban poverty and squalor, for example, created conditions conducive to recent epidemics of dengue fever in Jakarta, Indonesia, and Mexico City and a plague outbreak in Surat, India (Institute of Medicine 1997). Tuberculosis has seen a resurgence in part because of the acquired immunodeficiency syndrome (AIDS), which compromises the human immune system (Farmer 1999). The acceleration of international trade has precipitated new epidemics (cholera in Latin America), sparked local epidemics in previously protected populations (cyclospora in the United States, where one-third of fruits and vegetables are imported), and generated unprecedented health fears ("mad cow disease" or bovine spongiform encephalitis in Europe). At the same time, one of our most powerful defenses against infection, antibiotics, may be rendered impotent by the emergence of antibiotic resistance—for example, multidrug resistant tuberculosis or chloroquin-resistant malaria (Committee on International Science, Engineering, and Technology 1995).

Environmental Threats

Environmental health damage results from the pollution of air, water, and soil along with the depletion of nonrenewable natural resources. Traditional conceptions of environmental health are of two types—the challenges of providing clean water and sanitation still unavailable to the poor in low-income countries and a second generation of industrial exposures to chemical and other pollutants among high-risk individuals, families, and local communities. Superimposed on these hazards is another round of fresh environmental threats.

In a manner paralleling infectious diseases, many new environmental health hazards are associated with

globalization due to unhealthy production and consumption patterns in a globalizing economy. The negative health effects of ozone depletion, global warming, and the disposal of toxic wastes have transnational reach. No single community or nation can escape their health consequences fully. The air pollution in Southeast Asia in 1997, caused by the burning of Indonesian forests and exacerbated by El Niño, vividly demonstrates the regional implications of atmospheric change. The projected impact of global warming (coastal flooding, population displacement, and spread of disease vectors) underscores the permeability of national borders to the health implications of global climate change (McMichael and Haines 1997).

Sociobehavioral Pathologies

Sociobehavioral pathologies include mental illness, the abuse of addictive substances, the hazards of unsafe sexual behavior, and the toll of violence and injury. Mental illness accounted for 10% of the disability-adjusted life years (DALY) lost in the 1990 global burden of disease analysis and it is projected to increase to 15% by 2020 (Murray and Lopez 1996). This growing burden is magnified by the lack of public recognition linked to the marginal position of mental health in the hierarchy of medical care and continuing social stigmatization of those suffering from mental illness (Desjarlais et al. 1995). Furthermore, many believe that treatment for mental illness is a "luxury" the poor cannot afford when in fact depression, anxiety, and alcohol abuse are common among the poor (Patel et al. 1999). Linked to this ignorance is the inattention paid to the rapid sociocultural and demographic dynamics fueling the epidemic. Accelerated urbanization, being uprooted from traditional cultural socialization, joblessness, and homelessness are common social determinants underlying depression, substance abuse, and violence.

The dynamics of violence—which is the primary cause of death among adolescents and young people, especially men, in almost all countries—exemplifies the globalization of disease. Because of limited data and insufficient research, the taxonomy of violence has yet to be firmly established. Violence in our globalizing world can be "real" (with physical or mental damage) or "virtual" (with psychological and social damage through violent content in computers, television, and films). Violence can also be intentional or without malice of forethought. Industrial and road violence are customarily considered "accidental," but our standard ideas of negligence, imprudence, or lack of compliance with regu-

lations seem insufficient to account for clear epidemiological evidence of modifiable risk factors (such as poor road conditions, lack of seat belts, or car engines built to exceed reasonable speed limits). Intentional or willful violence may be perpetrated on the weak, against children, women, or the elderly. Recent studies underscore the global prevalence of gender-based violence, including sexual abuse and sexual harassment against women (World Health Organization 1997; Heise et al. 1994). In many statistical systems, intentional violence may also be disguised as "accidental," as suggested by the disproportionately high death rate due to "accidental fires" among recently married Indian women that many attribute to purposeful "bride burning" for dowry (Kumari 1989). Suicide or self-inflicted violence is a growing problem in many societies—among young Chinese women, Scandinavians especially during dark winters, and reportedly among Asians after the recent financial crisis (see chapter 7, on China).

Finally, there is organized violence in contrast to informal violence. Informal violence usually comes from individual acts, ranging from hooliganism, to petty crime, to the loss of behavioral control (e.g., road rage). Organized criminal violence, in contrast, is aimed at advancing illegal activities. Global connectivity is facilitating the spread of organized criminal activities worldwide. Government is the only institution to which citizens have ceded legitimacy in the use of violence for public safety. Among some nations, even legitimately organized violence by the state can be abusive, for example, among some military or oppressive rulers.

What Links Globalization and Health?

The examples cited earlier raise a fundamental question. What links a particular disease to globalization? As globalization itself is in its early stages, why would some diseases be included while others excluded? The answer necessarily must link specific diseases to core globalization processes (Chen et al. 1999). Three or more interactive linkages may be proposed.

First is the clear transmissibility of health determinants and risks. Enhanced international linkages in trade, migration, and information flows have accelerated the cross-border transmission of disease and the international transfer of behavioral and environmental health risks. Emerging infections are diseases of globalization because of accelerating world travel and trade and also changing microbial-host interactions—human penetration into virgin forests, intensive domestication of livestock, artificial change of cows from herbivores to carnivores, and the ecology of unprecedented urbanization due to migration. It is increasingly recog-

nized that violence, like infectious diseases, may be transmissible—not only through the illegal activities of international criminal organizations (and sometimes also the behavior of nation states) but also via material and cultural paths—by imitation, suggestion, and normative endorsement. Rapid social change can be psychologically destabilizing, expanding tensions that can produce ripples of violence among individuals, social groups, and whole nations. Competition between social groups for economic opportunity or environmental resources can escalate into intranational conflict. Wherever violence breaks out in the world—due to gender, ethnic group, race, religious beliefs, organized crime, political oppression—the challenge is the social response. Because violence has no vaccines or drugs (because violence is anthropogenic), counteracting it requires social and cultural "antibodies" that are constantly being shaped by globalization processes. Faced with violence, the attitudes of societies may be selective rejection or acceptance, depending on prejudice or bias. Modifying social attitudes is an essential precondition for a global approach to violence.

A second criterion is shared risks and consequences worldwide and over time. Intensified pressures on common-pool global resources of air and water have generated shared environmental threats. Environmental damage due to global warming, ozone depletion, chemical pollution, and the unsafe disposal of toxic wastes are examples. While local and regional contexts may shape the health dimension of environmental insults, many new threats are genuinely global in scale. In other words, no one can escape fully the risk or the consequences incurred. Although some environment and health linkages are scientifically uncertain, two considerations are in order. The first is practical. Even when damage is unpredictable, we may already have the knowledge of the potential health risks involved. Is it possible to avoid action when, even if there is uncertainty, much of the damage will undoubtedly become irreversible? The second consideration is ethical. Environmental damage often has an impact far away in distance and time from the originator. Under such circumstances, standard risk-benefit analyses are inoperable. The asymmetry is that the benefits accrue to some while risk or damage must be borne by others. Even the golden rule of ethics here seems insufficient. We may rather have to apply Hans Jonas' "responsibility principle" (1990: 12) involving both an ethics of proximity and an ethics of distance in which the frame of reference is the entire world space and the time is of future generations. Such an ethical underpinning can only operate across time on a global scale, requiring profound changes in governance and public policies.

A final dimension is health change associated with the technological and institutional transformations of globalization. The technological advances underpinning globalization are profoundly altering the landscape of global health. Some examples are the market-driven priorities of private pharmaceutical companies, the penetration of private markets into health services, the neglect of research and development against "orphan diseases" afflicting the poor, and iatrogenesis due to inappropriate application of new and often expensive health technologies. As globalization transcends national boundaries, the institutional performance of key actors like national governments and international agencies is also undergoing transformation. "Although responsibility for health remains primarily national, the determinants of health and means to fulfill that responsibility are increasingly global" (Jamison et al. 1998). The revitalization or stagnation of diverse health institutions, therefore, may be also considered linked to core globalization processes.

Looming Health Inequities

Will globalization improve or worsen world health equity? A lively debate is currently underway over the social impact of globalization. On the one hand are those who believe that globalization accelerates economic progress and expands personal liberties. A rising tide of wealth lifts all boats, leading to health advancement and equity. Indeed, despite marked disparities in life expectancy among countries (40 years in Sierra Leone vs. 80 years in Japan), national mortality trends in the past half century exhibit growing convergence. Lower income countries have achieved a faster pace of longevity gain than high-income countries, in part because of effective application of health technologies among the former and biological ceilings slowing the pace of gain among the latter. Why should the secular convergence of national mortality trends not continue during this era of globalization?

On the other hand, concerns about social inequity and human insecurity have been voiced in these times of rapid change. Left unattended, the forces of globalization could significantly worsen inequities in health. Continuing the analogy, a rising tide could lift big yachts, but capsize small dinghies. As health is knowledge based, the production, distribution, and utilization of knowledge can have significant distributive implications. Unconstrained or inadequately regulated private markets driven by commercial interests are not likely to be equity enhancing. As only small groups are able to capture the benefits of globalization, many

could be left behind, thereby worsening inequities in health. Some trends in the 1990s underscore these health equity concerns—the world's worst health indicators are in countries racked by conflict, mortality improvements have been reversed in regions affected by the AIDS pandemic, especially sub-Saharan Africa, and life expectancy has declined sharply in Russia during its massive political and economic transition.

Our understanding of inequities in health should be nuanced by understanding several distinctive types of inequities. First of all, there is international disparity—that is, between nation states. Within all countries, rich and poor alike, intranational disparities may also be found. Global disparity recognizes both international and intranational disparities. Truly global disparities consider the health of each person regardless of the health dynamics and population size of any particular country. Computation of global disparities would require comprehensive data on both international and intranational disparities with global estimates weighting the countries according to population size. Sen (1999) has also introduced the concept of inequalities and social justice between groups that are neither defined as individuals nor nation states but by social affinity, identity, and relationships. Moreover, added to these "horizontal disparities" are changing dynamics over time among all types of disparities. Widening or narrowing gaps over time may be as important as the absolute or relative differences at any single point of time.

As data are not available, we can only hypothesize the changing dynamics of these different types of health disparities among population groups and across time. One penetrating analysis proposed by Paul Streeten (1998) is that globalization is worsening inequity and social exclusion both within and across countries. Those with education, knowledge, capital, and enterprise in all countries have an opportunity to join the global mainstream, thereby reaping the benefits of globalization. Many if not most of the world's people in both rich and poor countries are left behind. The formation of a world elite is based on the development of cosmopolitan identity, associations, and affinity across national and cultural boundaries. To this transnational elite, Miami becomes the financial and cultural capital of Latin America just as Paris serves this role for the Francophone world. An outcome is that rather than investing in social cohesion within one's own community or nation state, an exclusionary process is set off, with the privileged becoming less responsive or obligated to the socially underprivileged within their own communities and countries. Equity and social cohesion, therefore, lie beyond weakened nation states, requiring global social action.

There are thus legitimate concerns over global inequities in health (Walt 1998). Although the evidence is not conclusive, some mechanisms for worsening of health equity may be hypothesized, as described below.

Economics and Trade

Wealth and income are among the most important social determinants of health. Not only does the relationship depend on the use of income to command a basket of material goods (food, clothing, housing, and so forth) necessary for good health but also income distribution itself may reflect an independent health effect (Wilkinson 1996; Kawachi et al. 1997). Early evidence suggests that economic globalization is worsening income distribution and income stability. Private markets may generate efficiency in resource allocation, but also skew wealth and income distribution and exacerbate fiscal instability and volatility. These inequitable effects seem to be relevant to both intranational as well as international disparities. Indeed, the recent Asian financial crisis has precipitated a historically unprecedented process of mass impoverishment, where tens of millions of Indonesian families were pushed below the poverty line. Other world regions, like sub-Saharan Africa, feel excluded from or exploited by these global processes, while still others, as in Eastern Europe, journey on a rocky road in attempts to join the global flows. Even in wealthy countries like the United Kingdom and the United States, empirical data confirm worsening income distribution (Whitehead and Diderichsen 1997).

These inequities are global in scope among and between northern and southern countries. The dynamics operate directly on many distributive dimensions beyond income. Two examples are the health conditions of low-paid workers and environmental health hazards. The World Trade Organization conference in Seattle encountered fierce protests over lax, nonexistent, or unenforceable labor standards in poor countries as low-wage industries increasingly shift from northern to southern countries. Child or forced labor, lack of minimum wage, and deplorable working conditions—all with health implications—are among the issues at stake. The distributive impact of globalization of labor may become more complicated as fears emerge that shifting production may drive wages upward in low-income countries and downward in high-income countries. Some argue that foreign investment in low-wage labor in low-income countries may have beneficial equity impact, by, for example, providing income-generating opportunities for women and thereby enhancing socioeconomic empowerment. There are few data to support this positive outcome. Similar divisiveness surrounds environmental hazards where

health-damaging production is shifted to countries with weak environmental standards. In addition to international equity concerns, most environmental hazards disproportionately affect the poor within countries—for example, toxic waste dumps near low-income neighborhoods.

Trade in addictive substances between northern and southern countries underscores the disconnection between health equity and international ground rules. Indisputable is the fact that consumption of heroin, cocaine, and tobacco is health damaging, especially among the young. The negative health impact is both direct as well as indirect (e.g., HIV transmitted through contaminated needles). So too are the many deleterious aspects of illegal drug movement—organized crime, recycling of profits into legal business, and the use of money to corrupt political processes. In terms of equity, it is important to recognize that the global movement of addictive substance is bidirectional: south to north for heroin and cocaine and north to south for tobacco. An objective assessment of policies by governments and agencies highlights inequitable policies in these international flows.

The United Nations has set up a special agency to control opium and cocaine grown in the south for export to the north. No such international agency exists for control of the reverse flow, mediated by multinational corporations, of tobacco from the north to the south. The World Health Organization (WHO) recently launched a global tobacco program that may over time help correct these imbalances. But WHO efforts to regulate world advertising and trade in cigarettes has run into charges of interference with free trade. Yet, it would be ludicrous to legitimize advertising for the reverse flow of addictive drug from the south into the north. These imbalances are generated in part by the self-interests of national powers. Even as the European Union announced a \$2 million fund in its fight against cancer, it simultaneously invested more than \$2 billion to subsidize tobacco production in Europe, much for export to other countries. Similarly, the United States donated tobacco seeds worth \$700 million to poor countries with a pledge to buy leaves for cigarette production under its foreign aid "Food for Peace" program (Berlinguer 1996: 18). At the same time, the U.S. government threatened trade sanctions against four Asian nations unwilling to give market access to cigarettes manufactured in the United States.

Private Markets in Health Services

Private markets, unconstrained and inadequately regulated, are perhaps the most powerful globalizing force driving inequities in health. Particularly disturbing is

the commercialization and commodification of health, for example, the sale of body parts, such as kidneys (sometimes even from live donors) (Berlinguer 1999). Penetration of private markets into health services comes at a time when the state is under attack as inefficient and misused through private "rent-seeking" behavior of politicians and civil servants. Downsizing government has been accomplished by restricting government budgets, resulting in cuts that are often disproportionately absorbed by the social sectors. Thus, the model of state responsibility for universal access (Health for All) in primary health care promulgated at Alma Ata in 1978 has been virtually abandoned. Equity-enhancing universal access to basic care has been replaced by so-called health sector reform, promulgated by budget-strapped governments under pressure from international financial institutions such as the World Bank and International Monetary Fund (Gershman and Irwin 2000).

Health sector reform as pursued by these institutions is rather narrowly conceived—priority-setting, privatization, and decentralization. Prioritization has mostly been supply driven rather than demand or consumer driven. Although necessary in any resource-constrained situation, priority-setting or rationing has focused on technologies against specific diseases. Affordable access to appropriate services and technologies tailored to diverse local circumstances has not been equally embraced by reform policies. Some have argued that a mixture of efficiency driven by the private sector and equity protected by the public sector can provide an acceptable blend (World Bank 1993). Yet there is little empirical evidence for such optimism. Indeed, early experiments on the imposition of user fees in public systems to enhance efficiency and cost recovery have neither realized the presumed benefit nor enhanced equity of access (Dahlgren 1994). Private payments for health care naturally place fiscal barriers on universal access by the poor (Stocker et al. 1999). Finally, administrative decentralization has been pursued in an effort to enhance client responsiveness, administrative efficiency, and improved service access. The danger is rapid decentralization of responsibility without the corresponding devolution of authority and requisite human, institutional, and financial resources needed to provide affordable, accessible, and equitable basic health services.

Harnessing Science and Technology

Imbedded in the scientific revolution of globalization are the seeds of health inequity. Because human health is knowledge based, the manner in which knowledge

is produced and harnessed to address health problems has powerful distributive effects. The main equity concern in relation to biomedical sciences is the tendency to ignore the diseases suffered by the majority of human beings and to concentrate instead on commercially profitable products. These types of knowledge are particularly evident for "orphan diseases" and the "digital divide," as outlined below.

As we move to decipher the human genome, the potential of biotechnology to transform health is increasingly appreciated. For some diseases, research breakthroughs could result in effective prevention or treatment—against diseases such as Alzheimer's or hypertension—based on an expanding pool of basic knowledge and the research and development capabilities of the pharmaceutical industry. For many diseases that afflict the poor, however, the priority assigned by large pharmaceutical companies not surprisingly is low. Called "market failures," comparatively neglected by the research and development efforts of private industry is the development of technologies against some of the major killers in low-income countries like malaria, tuberculosis, and HIV/AIDS (Pablos-Mendez et al. 1999). The inequity is compounded by the World Trade Organization trade-related intellectual property (TRIPs) agreement that permits patenting of genomic resources on a global basis. Many low-income countries fear loss of control over indigenous genetic materials through intellectual property regimes. Still poorly recognized are the equity implications of "iatrogenesis," illness or death due to abuse or misuse of health technologies. As scientific frontiers are advanced, the inequitable impact of biased or selective research and development by commercial enterprises is likely to exacerbate or even worsen health inequities.

A second source of inequity in the new sciences is the hypothesized growing digital divide in health. Information is recognized as a key component for generating healthful individual behavior as well as healthy cultural norms. The information revolution may empower many, but even more are excluded due to inaccessibility. Digital access depends on basic literacy, primary education, sufficient income to access digital systems, basic electronic infrastructure, and an enabling social environment. The lack of universal literacy and primary education around the world automatically translates into informational inequities. Inequitable information and knowledge access operates at all levels, with inequity compounded at each higher level. Informational exclusion at the individual level would be worsened if systems at the community or national levels are similarly deprived because both the demand for and delivery of information determine equitable access.

Toward a Democratization of Health

Simon Szreter (1997), a public health historian, analyzed health dynamics of the industrial revolution in Britain during the first half of the nineteenth century. He concluded that times of rapid economic change are not necessarily good for health, especially of the poor. There were first of all winners and losers in economic competition. Great disruptions of human ecology, socially and environmentally, occurred. Rapid change also triggered ideological ferment in the cultural negotiations over new values and norms. Many established institutions became obsolete, while new configurations emerged.

Are we entering another round of health change associated with social, economic, and technological transformation? The answer, we believe, is yes. Like a century ago, fresh social responses will be required, this time on a global scale. Several chapters in this book offer the theoretical rationale and practical suggestions for the advancement of more equitable health policies and programs. They involve developing shared equity goals and targets, tracking and monitoring progress, developing new analytical tools, and fashioning equity-enhancing social policies.

Yet for global health, the new millennium does not even begin on a level health playing field. Foege (1998) has characterized health progress in the twentieth century as "spectacular achievement, spectacular inequities." The forces of globalization left unattended could worsen these inequities in the social determinants of health, unequal access to health care, and the imbalanced deployment of health knowledge. As informed by history, the promotion of health equity will require public action on a global scale to articulate its value and to mobilize political commitment to its achievement (Yach and Bettcher 1998a,b). To be effective, the global social response must harness the power of globalization to flip, like the oriental martial art jujitsu, globalizing forces toward equitable outcomes. Because health advances in the twentieth century have been "knowledge based" and "socially driven," mobilization of social action for health equity should focus on the equity dimensions of new knowledge and technologies, new institutional arrangements, and new values and norms.

The more equitable production and dissemination of health knowledge first of all will depend on an educated and informed public. Achieving universal primary education so that all people are able to become agents of their own health is fundamental. So too will be the harnessing of new sciences to solve health problems not adequately addressed by market incentives. Public

investment will be required in research and development of new technologies especially against "orphan diseases" neglected by the commercial sector. Broad and effective utilization of new informational and communications technologies can help with the global dissemination of health information, including enhancing the transparency and connectivity of local, national, and global health institutions.

To drive forward social policies for global health equity, strong institutions at the community, national, and global levels are required. Manuel Castells (1998) has characterized our globalizing world as a "network society," where people with similar interests can be connected at the global level in real time to pursue shared interests. This connectivity can be employed to build alliances, coalitions, and partnerships among government, business, and civil society. Currently in vogue is the creation of "private-public partnerships," which seek to accomplish specific global health tasks. Recent examples are coordinated actions by diverse global actors networked together for tobacco control, access to essential drugs, research and development of vaccines against malaria and drugs for tuberculosis, and more equitable health policies.

Globalization, above all, requires a renewed focus on the role of global institutions (Bryant and Harrison 1996). The recent revitalization of the WHO offers new hope for global health governance, especially if it can move beyond its historical role as a monolithic world health operating agency. Rather, it must strengthen its recognized normative role for supporting equity-oriented health policies, operating as the "world conscience" of health (Godlee 1997; Lee 1998).

To assume this new role, the WHO must arrest the decline of financial support to U.N. agencies by member governments while it cooperates with, but does not become subservient to, the health activities of multilateral financial institutions. The WHO must cultivate an appropriate place for the consideration of health equity concerns within a range of other institutions, including the World Trade Organization and the International Labor Organization. In global health, we should not accept as a unique authority that of a few nations that claim it is their right to decide for the whole world; nor should we accept financial institutional claims that all human activities become subservient to monetary interests (Buse and Gwin 1998). Leadership by the WHO could help expand the socially shared space for the equity actions by many other actors from private business, academia, and nongovernmental civil society organizations (Evans et al. 2000).

With this positive outlook, we must pave the way toward a universal health democracy in which all people

are informed, their voices are heard, and they are able to participate in decisions affecting their own health. The democratization of health will require strong political will, for no longer is it acceptable in a modern age to tolerate unnecessary illness and death in a world with abundant knowledge and resources to prevent such suffering. Good health is the cornerstone of economic progress, a multiplier of a society's human resources, and, indeed, the primary objective of development. Ultimately, we must strengthen the moral or ethical basis of global health equity. Can we promote the emergence of a commonly shared global value for fairness in health?

Health is a basic human right, and, as such, equity in health should have pride of place. Human values such as universality, social solidarity, and social justice provide effective moral bases for global health equity. We must move toward the democratization of health built on both altruism and self-interest to empower global citizens with the basic health knowledge, the voice and participation in health decision making, and the norms and institutions that are able to advance the ideal and the praxis of the indivisibility of global health.

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