The Growing Impact of Globalization for Health and Public Health Practice

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Abstract

In recent decades, public health policy and practice have been increasingly challenged by globalization, even as global financing for health has increased dramatically. This article discusses globalization and its health challenges from a vantage of political science, emphasizing increased global flows (of pathogens, information, trade, finance, and people) as driving, and driven by, global market integration. This integration requires a shift in public health thinking from a singular focus on international health (the higher disease burden in poor countries) to a more nuanced analysis of global health (in which health risks in both poor and rich countries are seen as having inherently global causes and consequences). Several globalization-related pathways to health exist, two key ones of which are described: globalized diseases and economic vulnerabilities. The article concludes with a call for national governments, especially those of wealthier nations, to take greater account of global health and its social determinants in all their foreign policies.

INTRODUCTION: FROM INTERNATIONAL HEALTH TO GLOBAL PUBLIC HEALTH

Consuela has just lost her job in a Mexican factory where she assembled 120 computer CPUs each hour for a contract manufacturer. She and her coworkers were actually employed by an agency offering "just-in-time" workers. Her job was stressful and unhealthy, but the income was important to her family. When the 2008 global financial crisis spilled over into the real economy, she was dismissed with a severance that was scarcely one-tenth of the legal minimum. Her husband, one of the millions of undocumented workers in the United States and Canada, is afraid of losing his weekday job in agriculture and his weekend job as a gardener, as rising unemployment rates fuel antimigrant sentiments. With no access to medical care, he is concerned that his worsening lung infection could be tuberculosis, but he is afraid to mention this even to his friends. He and Consuela still text-message each other every day, but if his remittances continue to drop they will no longer be able to afford even basic mobile telephone service. Consuela has no way to pay the out-of-pocket costs for her three children's health care and schooling; partly because of the continuing fiscal policy constraints associated with a costly bailout of Mexican banks in the 1990s, Mexico's efforts to extend social insurance across the nation have yet to reach her. She will also have to move soon. The building in which she has a small apartment has been sold, and the entire block will be torn down and redeveloped for tourist condominiums and townhouses for the growing numbers of (primarily American and Canadian) retirees seeking an affordable place in the sun.

Consuela's story is a stylized but evidence-based (71, 97, 117) account that weaves together many of the ways in which contemporary globalization is affecting public health (see sidebar, Global Flows). In keeping with dominant trends in the emerging field of critical globalization studies (6), our emphasis in this article is on globalization as "[a] pattern of transnational economic integration animated by the ideal of creating self-regulating global markets for goods, services, capital, technology, and skills" (45). This definition does not assume away such phenomena as the increased speed with which information about new treatments, technologies, and strategies for public health can be diffused or the opportunities for political participation and social inclusion that are potentially offered by new forms of electronic communication. However, in contrast to simply descriptive accounts, we consider the economics of globalization to be its driving force. The globalization of culture, for example, is inseparable from the emergence of a network of transnational mass media corporations that dominate distribution and content provision through the allied sports, cultural, and consumer product industries. Relatedly, global promotion of brands such as Coca-Cola and McDonald's is both a cultural phenomenon and an economic one, driven by the opportunity to expand profits and markets even as it contributes to the "global production of diet" (25), increasing obesity and its health consequences in much of the developing world. The Framework Convention on Tobacco Control, as a contrasting example, saw state and nonstate actors negotiate the first international public health law, albeit one without enforcement measures, which aims to reduce the harms associated with a toxic product whose production and marketing are global in scale and scope (80). Economic interests in the global tobacco trade chipped away at its provisions, and the proliferation of bilateral investment treaties (which allow companies, including tobacco multinationals, to sue governments for infringements of the "intellectual property rights" of their logos through cigarette plain-packaging or warning-label requirements) could put a chill in governments' compliance with its protocols (8, 99).

The approach taken to situate public health policy and practice[1] in their worldwide

[1]It is useful to distinguish between public health practice (typically, the activities of public sector practitioners in the field) and policy (the legislation, regulations and direction

context has historically shifted between two conceptual positions: international and global (14). The first was driven by the concern of wealthier nations with disease risks in poorer countries. Its origins extend back to medieval efforts to halt the spread of infection that accompanied the movement of goods and people. In the context of an earlier wave of globalization in the mid- to late-nineteenth century, many colonial governments and corporate philanthropies began to fund basic public health measures in developing countries as a way to counteract the spread of infectious disease (13). Motivations were complex, embracing political and economic interests, reducing cross-border contagion or risks to colonizer-country nationals working abroad, and faith-based ideals of charity or missionary-led conversion. Similar interests underpin, at least in part, the contemporary rise of health in foreign policy discourse, but with a shift in nomenclature to "global health." Koplan and colleagues (72) trace global health's "fashionable" status to a fusion of international health's disciplinary base in tropical medicine with public health's roots in population-wide intervention and social reform. However, contemporary concern with global health also has strong connections with social movements concerned primarily with the effects of market-driven (neoliberal) global economic policies, notably those associated with extended intellectual property rights (and their negative impact on access to essential medicines), increased commercialization/cost-recovery in health care systems (promoted by the World Bank and the International Monetary Fund in the wake of structural adjustment programs of the late 1980s and early 1990s), and increased pressures for trade openness (which can reduce the policy space and capacity for public health reforms, affecting low-income countries in particular).

Regardless of origins, two axioms distinguish global health as a conceptual basis for research, policy, and practice from its international predecessor: recognition of global

from superiors that define the universe of actions available to practitioners). Public health policy in the context of this chapter also, however, includes a variety of activities outside the health sector, for instance including choices related to trade, investment, and migration.

Global flows:
Globalization is associated with a number of flows that have direct and indirect effects on health.

Increased pathogen flows:
Whether it is the risk of drug-resistant tuberculosis or pandemic influenza, the movement of people means the transport of pathogens. SARS was a wake-up call to a somnambulant public health community and the spark for new International Health Regulations and multilateral health collaborations. Global trade, another ancient vector of disease, poses other health risks, from the spread of pests to that of pestilence: It was a freighter's dumping of infected bilge waters that caused the Latin American cholera pandemic of the 1990s (73).

Increased information flows:
Advances in computing and telecommunications have shaped modern globalization, increasing the spread of health knowledge and technological innovation, the reach of multinational firms, and the rise of contesting social movements. But despite the global spread of interconnectivity, access to the information superhighway remains highly skewed. Most people in high-income countries are connected, but scarcely 1 in 100 Africans are (119), where the costs of broadband access (adjusted for per-capita income) can be 170 times greater than in the United States (128).

Increased trade flows:
The accelerated flow of traded goods and services enabled by economic integration has created new sources of wealth and health for some. But patterns of production and exchange, along with labor market changes, have left many vulnerable to employment insecurity, insufficient health and safety protections, and environmental degradation. In addition, the energy requirements of global production chains, and the fossil fuels used in transportation, are now among the fastest-growing sectoral contributors to climate change emissions (84).

Increased financial flows:
Foreign direct investment (FDI) and the more recent rise of outsourced contract production have reorganized production across national borders, in the process creating a genuinely global labor market that increases economic inequality and the insecurity of many workers. FDI flows have now been dwarfed by short-term financial flows, with far-reaching consequences not only for health but for the power to implement policies that protect and enhance health.

Increased people flows:
Migration, long a defining feature of globalization and the pursuit of greater opportunity, is driven increasingly by economic and environmental necessity (121). Rich-country borders remain open to the best and the brightest but are revolving doors for workers with limited credentials, especially in the wake of the 2008 global recession.

economic interconnectedness as both cause and consequence of the distribution of international disease burdens, and a parallel recognition that many of the pressing health issues facing nations are now inherently transnational if not global, not only because of cross-border disease threats, but also because conditions of life and work that increase vulnerability to disease and affect access to preventive and treatment services are inseparable from global distributions of power, wealth, and resources (78). A further dimension is added by the expansion of research on social determinants of health (SDH), much of which was consolidated in 2008 by a World Health Organization commission on the topic (30; see also the article by Marmot & Friel in this volume (50)]. The insight that people's health is affected by their conditions of life and work is hardly new; public health activism around these conditions has a long if episodic history dating back at least to the Industrial Revolution. However, expansion of the evidence base means that public health policy and practice must now respond to the multiple channels of influence that connect global forces and processes to health by way of the SDH (15, 76). We return to this point later in the article.

GLOBALIZATION'S NEW CHALLENGES TO PUBLIC HEALTH

Although many SDH exist, in the global context "the most devastating problems that plague the daily lives of billions of people . . . emerge from a single, fundamental source: the consequences of poverty and inequality" (96, p. 12). Over the long term and with considerable variation at any given income level, richer societies are healthier (35, 126), whereas poverty, however defined, remains one of the most important contributing conditions to ill health. Thus, if globalization could be shown to be reliable and effective in increasing growth rates and reducing poverty, setting aside for the moment the health-negative environmental impacts of such growth, then measures to promote globalization, such as trade liberalization, should be embraced for their health benefits (47). The evidence that globalization contributes either to economic growth or to poverty reduction, however, is at best equivocal, depending *inter alia* on how one assesses the extent to which national economies have been integrated into the global marketplace, how poverty is defined, and how many uncertainties about data quality one is willing to live with or overlook (68). Even globalization's enthusiasts concede that there may be substantial numbers of losers within national economies, notably as a consequence of changes in labor markets.

In the past quarter-century of rapid economic integration, although the size of the global work force doubled as India, China, and the transition economies opened their borders to trade and investment, progress toward poverty reduction in low- and middle-income countries was modest. According to World Bank analyses, between 1981 and 2005 the number of people living in extreme poverty declined by 505 million (24). This decline is accounted for entirely by economic growth in China, where half of the poverty reduction occurred before that country embraced domestic or global market reforms (23). Excluding China, extreme poverty increased by 123 mil-

lion between 1981 and 2005, with decreases in poverty in some countries offset by greater increases in others. Nor did economic growth necessarily lift people very far: The number of people living on incomes below a less extreme definition of poverty rose by 402 million—745 million excluding China—over the same period to 3.2 billion, or roughly half the world's population (see **Figures 1** and **2**). As one senior World Bank development economist concluded, "it is hard to maintain the view that expanding external trade is . . . a powerful force for poverty reduction in developing countries" (101). It is also worth noting that poverty-reducing growth in China—and in some other countries such as Vietnam—coincided with the rapid marketization of health care provision, leading to dramatic declines in access and affordability (41, 107, 115, 123), and much of the progress in development and poverty reduction that occurred over the period in question may have been undone by the recession that began in 2008 as a direct consequence of the interconnectedness of global financial markets.

Economic growth and poverty reduction are not the whole global health story. The global diffusion of new health knowledge and technologies may have done more to improve health status in developing countries in the last half of the past century than did economic growth per se (37). Many of these innovations originated in wealthy countries, and "in this sense, the first world has been responsible for producing the global public goods of medical and health-related research and development from which everyone has benefited, in poor and now-rich countries alike" (36, p. 99). This transfer of knowledge is now compromised by the extension of intellectual property rights held mostly by firms based in high-income countries. Newly available employment opportunities for women in export-oriented industries provide opportunities for them to earn income outside patriarchal social structures and are another claimed, if indirect, health benefit of globalization. But employment conditions in such industries are often so directly destructive of health, partly because of retailers' relentless pressure to cut costs and deliver new products quickly (2, 3, 5), that—in the case of Bangladeshi garment factories, for instance—"it would not be possible to undertake such work for an extended period of time" (67).

An innovative econometric exercise carried out as background research for the Commission on Social Determinants of Health, using data from 136 countries, helps in assessing the overall impact of globalization. Cornia and colleagues (32) described five main influences on mortality: material deprivation, psychological stress, unhealthy lifestyles, inequality and lack of social cohesion, and technical (i.e., medical) progress. They then identified a range of variables that affect these influences, classifying the variables as (*a*) related to policy choices made in the context of globalization (e.g., income inequality, immunization rates); (*b*) endogenous, and therefore unrelated to globalization for purposes of the analysis (medical progress); or (*c*) describable as "shocks" (e.g., wars and natural disasters, HIV/AIDS). The final stage of analysis was a simulation that compared trends in life expectancy at birth (LEB) over the period 1980–2000 with those that would be predicted based on a counterfactual in which trends in all the relevant variables remained at the 1980 value or continued the trend they followed over the pre-1980 period. Thus, investigators assumed in the counterfactual (for instance) not only that income distribution within countries, one of the globalization-related variables, did not change over the period 1980–2000, but also that no progress occurred in medical technology and that HIV incidence remained at its 1980 level.

The results of this simulation indicated that, on a worldwide basis, over the period 1980–2000 globalization canceled out most of the progress toward better health (as measured by LEB) that occurred as a consequence of diffusion of medical progress, and the effects of shocks (wars, natural disasters, and AIDS) combined with globalization to result in a

slight worldwide decline in LEB as compared with the counterfactual. The most conspicuous declines in life expectancy occurred in the transition economies, where globalization accounted for essentially the entire decline, and sub-Saharan Africa, where globalization contributed almost as much as the AIDS epidemic to a decline of nearly nine years in LEB relative to the counterfactual. Although cautious about inferring causation, the authors conclude that "the negative association found between liberalization-globalization policies, poor economic performance and unsatisfactory health trends . . . seems to be robust" (32, p. 58). Even when health gains were achieved, they were often less substantial than they would have been under an alternative set of economic and political conditions in which the gains from growth were distributed more widely.

KEY PUBLIC HEALTH CONCERNS ARISING FROM GLOBALIZATION

The above is a broad- brush overview. We focus now on two key public health concerns: globalized diseases, which reflect public health's historical legacy but with a global dimension, and economic vulnerabilities, associated with three decades of global market integration.

Globalized Diseases

Communicable diseases persist despite the optimistic belief that they could be conquered in even the poorest countries by a combination of antimicrobial agents, vaccines, and good sanitary practices (11). Indeed, not only have new infectious diseases emerged (e.g., HIV/AIDS, Ebola, SARS) but familiar ones have returned (e.g., tuberculosis, cholera), in each case with the burden falling almost entirely on poor countries (51, 66, 79, 87). These trends can be partly attributed to the false assumptions by the international public health community that microbes were stationary agents and that diseases could be sequestered within a specified geographical boundary (52, 87). The forces of globalization have illuminated how misplaced these assumptions were, as we are increasingly "dealing with global rather than local or national epidemiology" (59, p. 1747).

The increase in human mobility has accelerated the speed and distance at which microbes are able to travel, while urbanization—which in some contexts is accelerated by globalization's effects on rural livelihoods—has facilitated the spread of infectious diseases. Historically, infectious diseases such as the plague, smallpox, and cholera have spread owing to human migrations associated with trade, military campaigns, and religious pilgrimages (22, 28, 29). With modern transportation, pathogens can spread faster and in a less uniform pattern. One simulation assessed what would happen if the 1968–1969 Hong Kong influenza strain returned with air travel volumes at 2000 levels (56). The authors found that the pandemic would spread quicker and have a wider reach, with cumulative reported cases being 188% greater. Travel and migration are not the only global factors influencing infectious diseases. Major international public goods for health, notably communicable disease control (including vaccination) and control of antibiotic resistance but also disease surveillance, are conspicuously undersupplied by today's economic institutions (7), reflecting the "dramatic decay in local and global public health capacity" identified by a United Nations panel (106). And increasing evidence indicates that climate change is playing a role in the spread of infectious diseases: Rising temperatures will increase transmission rates of vector- and rodent-borne diseases, including malaria, dengue fever, and schistosomiasis (22, 29, 31, 33).

Increased research and policy attention is being paid to the globalization of infectious diseases, including development of increasingly sophisticated tools to model their spread (28). Meanwhile, chronic noncommunicable diseases (NCDs) such as cancer, cardiovascular disease, and diabetes have been steadily growing in prevalence and now account for the

largest proportion of the global burden of disease (132), even outpacing infectious diseases in all developing countries except for those in sub-Saharan Africa. To this "double burden of disease" must be added the rising incidence of injuries, not only road traffic accidents but also work-related injuries and illnesses (see sidebar, Globalization and Death on the Job), crime, and the health damage and social and economic dislocation that occur in zones of war and intrastate conflict (81, 113). Recent literature (16, 83) now refers to triple burdens of disease because of distinctive challenges presented by rapid increases in injuries, or even quadruple burdens, because of the special challenge presented by HIV both for health systems and for social policy (see **Figure 3**, color insert, for the South African case).

Public health policy and practice at the international level have been slow to respond to NCDs, and the emphasis continues to be placed on communicable disease control. Glasgow (53) has identified two main reasons for this trend. First, although the incidence of communicable diseases has captured the attention of political scientists in general and international relations experts in particular, NCDs have little role in either high or low politics (see **Table 1**). The "securitization" of HIV/AIDS (92, 93) is especially notable; concerns include the disproportionate prevalence of HIV among security forces, the potential role of peacekeepers as a vector of HIV transmission, the economic strain and the social fragmentation of the disease on countries, and its potential use as a weapon of war via rape (43, 94). Second, the rise in NCDs in low- and middle-income countries is partly attributable to global trade and investment policies and practices that are globalizing Western lifestyles, including increased consumption of unhealthy products. For example, the nutrition transition in low- and middle-income countries—the shift toward a high-energy diet (containing animal protein, saturated fats, sugars, and highly

GLOBALIZATION AND DEATH ON THE JOB

The Triangle Shirtwaist Factory fire in the United States in 1911, in which 148 workers died, led to a public outcry and eventually to improved safety standards; similar fires occur with some frequency today in Bangladeshi garment factories (17). When the tankers and freighters that are indispensable elements of the global reorganization of production have reached the end of their useful lives, they are no longer dismantled in high-income countries, and instead broken up by casual workers in Bangladesh who are routinely exposed to carcinogenic substances and the risks of explosion (18). During the early stages of its extraordinarily rapid (if authoritarian) industrialization, South Korea had "a higher industrial accident rate than any other industrialized or rapidly industrializing country" (86); today, that dubious honor is held by China (82). However, for many low- and middle-income countries serious data limitations exist with respect to the full extent of work-related injury and illness (60).

Table 1 Key reasons that infectious disease is privileged over chronic disease in politics. Adapted from Reference 53

	Infectious disease	Noncommunicable disease
Compatibility with existing security frameworks	Strong	Weak
Ability to create disruptive effects that lead to a threat to the state (e.g., generalized epidemic, high mortality, undermining of the national economy)	Strong	Weak
Causal agents can be identified, targeted, and contained or killed	Generally the microbe can be identified and can therefore be targeted for containment, treatment, or eradication	Generally the result of multiple determinants leading to difficulties in prevention, containment, or treatment
Immediacy of threat	Immediate	May be deferred

processed food) and higher levels of inactivity—is occurring much faster and at earlier stages of development than it did in high-income countries (100). Although urbanization is part of the explanation, increasing evidence connects the speed of the nutrition transition with the global reach of transnational food corporations—facilitated by liberalized trade and investment regimes—into both processing, marketing, and retailing (25, 55, 61, 62, 75). Increased trade in tobacco and alcohol products is associated with higher levels of consumption and health-related problems (57, 116), at the same time that trade and investment treaties appear to be eroding the policy space for governments to intervene through restrictions on advertising, points of sale, taxation, and other measures now widely accepted in domestic public health practice as essential tools in health promotion.

Economic Vulnerabilities

One of globalization's most substantial impacts on population health arises from its tendency to increase economic inequality, insecurity, and vulnerability (12, 114). This process operates through at least four distinct but closely interconnected dynamics.

First, production has been reorganized across multiple national borders through foreign direct investment and outsourcing to independent contractors. This process was facilitated both by technology-driven reductions in transportation and communication costs and by the lowering of institutional barriers to trade and investment, in the form of both the World Trade Organization (WTO) regime and a proliferation of bilateral and regional treaties. A genuinely global labor market has gradually begun to emerge (104, 127), although it involves mainly the mobility of capital across national borders in search of lower wages and more flexible working arrangements rather than the mobility of workers themselves. An important element of this process has been the integration of India, China, and the transition economies of the former Soviet bloc into the global marketplace, roughly doubling the number of workers competing for jobs as diverse as electronics assembly and computer technical support, which are increasingly independent of location, and according to some observers providing worldwide downward pressure on wages (49, 125). The tendency of globalization to increase economic inequality by way of its effects on labor markets is now conceded even by the World Bank (129), which is generally a reliable cheerleader; it arises not only from downward pressure on the wages of those whose skills are in abundant supply, but also from the extent to which those with internationally marketable credentials or skills that are valuable to corporate employers can increasingly command incomes defined by the global marketplace rather than national labor market conditions. Shifts in the share of national income accruing to capital rather than labor, which have been quite pronounced in some countries (65, 125), magnify this effect.

Second, domestic and international deregulation of financial markets has increased the volume of short-term financial flows and the speed with which investors can move money into—and out of—national economies. Whereas the total value of foreign direct investment (to acquire shares in existing companies or build new facilities) in 2008 was $1.7 trillion, the daily value of foreign exchange transactions on the world's financial markets was estimated at $3.2 trillion in 2007, the most recent year for which figures are available at this writing (105). The effect, again, is to increase economic insecurity. Rapid disinvestment as hot money flows out of a country can reduce the value of national currencies by 50% or more and drive millions of people into poverty and economic insecurity; such crises occurred in Mexico in 1994–1995, several South Asian countries in 1997–1998, and Argentina in 2001 (105). Often, inequality is further increased by the ability of the wealthy to shift their assets abroad in anticipation of a crisis; insecurity is compounded by the public spending cuts necessary

to restore the confidence of financial markets and by the tendency of employment to recover more slowly than gross domestic product in the aftermath of financial crises (122). The actual or anticipated reaction of financial markets can limit the social policy options available to national governments, enabling the world's wealthy to impose "implicit conditionalities" (58). For example, concern about redistributive policies that might be adopted by Brazil's Workers' Party (PT), which by 1999 appeared likely to win the 2002 election, led major U.S. financial institutions to warn clients against investing in Brazil. Responding to a process of disinvestment that drove the value of Brazil's currency down by more than 60% relative to the U.S. dollar between January 1999 and July 2002, the PT "chose to suffer low growth, high unemployment and flat levels of social expenditure rather than risk retribution from the global financial actors who constitute 'the markets'," in the words of noted development scholar Peter Evans (44). The financial crisis that began in 2008 emphasized the vulnerabilities associated with global financial volatility and showed that they are not restricted to others, at least in a geographic sense, but rather penetrate the economies of the world's richest countries.

Third, the combined pressures of reorganized production and deregulated finance create credibility for the claim that neoliberal or "market fundamentalist" (109) principles for the organization of economic and social policy are justified on pragmatic grounds: They appear to be the only ones that work (48). Especially in high-income countries, it can be difficult to assess the extent to which the appeal to global constraints functions as a rhetorical device to further domestic class interests. Some of the most destructive policies in terms of increasing economic inequality and insecurity cannot plausibly be attributed to globalization, but rather reflect a shift in domestic values. The U.S. welfare "reforms" enacted in 1996, which had the effect if not the intent of exacerbating the social consequences of deindustrialization, dramatically expanding the low-wage labor force and increasing its vulnerability to exploitation by removing an already flimsy social safety net, are one case in point (124, pp. 41–109). However, one may consider the diffusion of neoliberal policy wisdom incubated, in part, in the United States, and then actively promoted by the governments of G7 countries through such institutions as the World Bank and the International Monetary Fund as itself an element of globalization because of the reach of those institutions (see e.g., 9). For purposes of public health policy and practice, then, it is sufficient to recognize that globalization routinely contributes to increases in economic inequality, that global influences may (now) constrain the range of feasible policy responses, and that powerful domestic interests are likely to appeal to the imperatives of competing in the global marketplace as they oppose the redistributive policies that are central to public health responses to globalization.

Finally, there is migration. Although capital can move across borders with minimal restrictions in search of more flexible labor market regimes or lower-cost contract producers, the mobility of workers across borders is drastically stratified, depending on the relative scarcity or abundance of their credentials, and their global marketability. Of special concern for public health practice is the situation of expanding populations of workers who may be driven from their countries or regions of origin either by changing labor market conditions that are directly traceable to globalization (as in the case of Mexican or Central American migrants in the United States) or for other reasons, at least superficially unrelated to globalization, such as intensified ethnic or religious conflict in their home countries. Cross-border labor flows have become especially important to meeting "global" families' health and welfare needs (4), with recorded remittances to developing countries reaching $200 billion in 2006, more than twice the amount of official development assistance (130). Anticipated declines in remittances were regarded as among the major

Table 2 Key health issues (postmigration) of vulnerable migrants living in host countries (typically in high-income countries). Sources: 10, 19, 21, 39, 40, 54, 69, 91, 108, 110, 112, 120, 134

Category	Definition	Key health issues
Asylum seekers/ refugees	A refugee is a person living outside of his or her country of nationality or habitual residence has a well-founded fear of persecution because of his or her race, religion, nationality, membership in a particular social group, or political opinion and is unable to return for fear of persecution. An asylum seeker is a person who is seeking protection as a refugee claimant.	Because asylum seekers and refugees tend to come from impoverished, often conflict-ridden areas, they may come with prior untreated conditions, including infectious and parasitic diseases (e.g., tuberculosis, Hepatitis A and Hepatitis B, HIV/AIDS, benign tertian malaria). These populations are also likely to experience psychological distress because of suffering traumatic events (e.g., torture) and are at risk for posttraumatic stress disorder (PTSD), depression, anxiety, and other mental health disorders. Stress induced by the migration, isolation, poor social support, and racism in their host country may exacerbate their distress and has been linked to type-2 diabetes. Women are particularly vulnerable because of their limited education and history of gender-based violence.
Trafficked persons	Any person who is recruited, transported, or harbored by means of any form of coercion, abduction, fraud or deception for the purpose of exploitation. There are two main categories: (*a*) forced labor and (*b*) sex trafficking. Women, adolescent girls, and children are the primary victims.	Trafficked persons (especially women) may be exposed to a range of physical, psychological, and sexual abuse. They are often confined and isolated from others and face hazards related to forced labor. Trafficked victims tend to face multiple health problems, including HIV and other sexually transmitted diseases, physical injuries, fatigue, psychological problems, including PTSD, depression, memory loss, and inadequate access to health care.
Undocumented migrants	Persons migrating without necessary documents or permits, usually for employment as laborers. This condition may arise because of entering a country illegally or by entering a country legally and not respecting the permitted time and limits of their visas.	Undocumented migrants tend to be economic migrants from poor countries. They tend to live in poor environments and work in hazardous jobs with unsafe conditions and are generally underpaid (less than minimum wage) without social benefits. Owing to their limited income and their fear of detection by authorities, undocumented migrants are likely to delay or to not seek health care when faced with an illness.

economic impacts of the recession that began in 2008 (20, 131).

The main postmigration health issues for these vulnerable groups of migrants are detailed in **Table 2**. Regardless of the nature of the factors driving emigration, such workers—among whom women are disproportionately represented—routinely occupy subaltern positions in global "survival circuits" (103). The precariousness of the employment status of unauthorized Mexican and Central American workers in the United States, for example, is both ensured and compounded by their lack of access to legal protection; lack of access to health care magnifies this vulnerability. Although most research has addressed the health of migrants living in wealthier host countries, other effects can also heighten the vulnerability of communities of departing migrants. This includes the migration of health professionals (26, 133) and broader social effects (see sidebar, Social and Health Effects of Migration on Departure Countries: The Case of Nopal Verde).

GLOBALIZATION'S CHALLENGES FOR PUBLIC HEALTH RESEARCH, POLICY, AND PRACTICE

The 2008 report of the WHO Commission on Social Determinants of Health consolidated

an impressive body of research that demonstrated the importance of upstream influences on health, notably those related to economic deprivation and gender inequality. However, it is fair to say that public health research, policy, and practice, at least in the Anglo-American world, have been slow to respond to this evidence; most attention still focuses on notions of individual responsibility and lifestyle change. This pattern is gradually changing, as evident, for example, in the increased attention being paid to the limited availability of a healthy diet in many low-income urban neighborhoods; however, a behavioral emphasis remains. Addressing the public health challenges presented by globalization will require a consistent willingness to consider influences on public health that operate at the levels of social structure and social stratification (compare Reference 95).

British journalist Nick Cohen described an important consequence of globalization when he commented that "the gulf between the poor and the rich world doesn't run between countries but within them" (27, p. 293). In the United States, a study that compared health status with demographic characteristics at the county level found that the life expectancy of African Americans in high-risk urban counties is almost nine years shorter than that of the mostly white residents of Middle America (89, 90); "tens of millions of Americans are experiencing levels of health that are more typical of middle-income or low-income developing countries" (90, p. 9). This study was completed before the effects of the financial crisis of 2008, as a result of which millions more Americans lost their health insurance; by 2009 more than one million schoolchildren were homeless or at imminent risk of homelessness, and one in four children lived in a household that was receiving federally funded food vouchers, or "food stamps" (38, 42). In many countries regardless of their income levels, austerity programs that will be demanded (by domestic constituencies or global financial markets) to reduce the deficits that have resulted from revenue losses from the financial crisis, and the costs of bailouts and stimulus packages to offset its effects, may have long-term consequences not only for population health, but also for the perceived feasibility of meaningful policy initiatives.

This example suggests the difficulty that public health policy and practice face in coming to grips with large-scale socioeconomic trends of the kind generated and influenced by globalization. Generically, to counteract the tendency of the global marketplace to magnify economic inequalities that threaten health,

SOCIAL AND HEALTH EFFECTS OF MIGRATION ON DEPARTURE COUNTRIES: THE CASE OF NOPAL VERDE

Nopal Verde[2] is a town in the northern desert of Mexico, known for its "contagion," a term given for the out-migration that began in the early 1990s and intensified in 1995 following the agricultural crisis. Although there has been some out-migration in this town since before the Mexican revolution (1917–1919), the rate of migration to the United States has risen so high that the town now lacks any solid productive base, surviving only on remittances. This has had a number of consequences on the community. Those who continue to live year-round in the town tend to be older and the least capable of engaging in agriculture and other labor. The health clinic is unable to adequately monitor the population, which is constantly shifting. This fact creates logistical problems: For example, the nurse-practitioner has difficulties deciding how much vaccine she should order each year to immunize the children. There is insufficient critical mass to have a real community; family and friends feel abandoned, whereas children are left with no one to play with. Young people have also lost any ambition for college or technical training because they are all anxious to get to *al otro lado* (the other side). These changing attitudes have been referred to by Mexican education experts as *descolarización* or deschooling. The average number of years spent in school has been declining; as Esteban, a university student (who was the only one of his cohort from high school to stay and continue with his education), stated, his friends view education as a "ticket to nowhere" (63).

[2]Nopal verde is a fictitious name for a real town.

states must be able to mobilize substantial resources for directly and indirectly redistributive purposes and to regulate the behavior of powerful economic actors such as transnational corporations (34). In many cases, relevant policy instruments are administratively outside the control of professionals or agencies with primary responsibility for public health, creating a need for intersectoral action that will, first of all, require convincing agencies of government without a health-related mandate to take seriously the health consequences of policy in such areas as labor markets and taxation. This is more than a matter of finding convincing evidence, which itself requires reflection on what standard of proof is necessary or appropriate. In some cases, those agencies may have created the problems they are now being asked to help solve, for example, by deregulating labor markets or weakening social protection.

Issues of scale are likely to compound the difficulties. A municipal public health department may be well aware that it is arithmetically impossible to eat a healthy diet while paying market rent on the income available through public assistance, even though neither it nor any other agency at the municipal government can do much to improve the availability of affordable housing or to increase income support levels (118). In many low- and middle-income countries, health and access to health care have been adversely affected by macroeconomic orthodoxy demanded by the World Bank and the International Monetary Fund, effectively shifting the locus of policy-making outside a country's borders altogether. Arguably, the operation of international financial markets creates a similar constraint, leading one of the most accomplished observers of such markets to warn that "those societies most in need of egalitarian redistribution may have, in terms of external financial market pressures, the most difficulty achieving it" (88, p. 90). Against this background, special difficulties for public health responses to globalization at the national level are presented by the process that international relations scholar Richard Falk has described as "the social disempowerment of the state [that] follows from the impact of neoliberal ideas, reinforced by arguments about competitiveness in more closely linked regional and world markets" (46, p. 23).

CONCLUSION: GLOBAL HEALTH DIPLOMACY AND THE GRAND CHALLENGE OF HEALTHIER FOREIGN POLICY COHERENCE

> [T]o protect the health of its population, harness the benefits of globalisation, and make the most of its contribution to health and development across the world, [we need] to have a clear, coherent and co-ordinated approach to the many issues that influence global health. (64).

Public health activism in the nineteenth century mobilized around the health consequences of hazards, inequities, and exploitations that were the collateral damage, if not the intended logic, of European industrialization. This activism quickly internationalized, but remained focused on the policies and politics of the (then still fairly new) Westphalian-modeled nation states. Such health activism within national borders is as much needed today as it was a century and a half ago; but as we have argued in this article, globalization processes have now rendered health an inherently global concern.

This concern has been met, in part, by the increasing prominence of health in foreign policy discourse. In 2007, the foreign ministers of seven countries (Norway, France, Brazil, Indonesia, Senegal, South Africa, and Thailand) issued the *Oslo Declaration* identifying global health as "a pressing foreign policy issue of our time" (85). Several other countries before, or since, have issued unilateral statements on global health policy; the idea that governments should consider health seriously within their foreign policy became an official United Nations General Assembly Resolution in late 2008, and health system strengthening became at least temporarily a major element

of the G8 policy agenda (102). Such developments formalize a trend that has seen a dramatic rise in global financing for health accompanied by a proliferation of global health initiatives (such as the Global Fund), financing schemes (UNITAID, the airline tax that finances antiretroviral drugs for poor countries), and new private players, notably the Gates Foundation (98). There is even a new movement combining academia and bureaucracy under the rubric of global health diplomacy, a term used to describe the processes by which government, multilateral, and civil society actors attempt to position health higher in foreign policy negotiations and to create new forms of global governance for health.

If health has become inherently global, so, too, must the efforts of public health advocates and policy-makers. The challenge is one of creating greater foreign policy coherence around the pathways that affect global health equity and resolving intractable conflicts between the priorities implied by a focus on health equity and the traditional preoccupations of foreign policy (and the economic interests of national and global elites). As far back as the 1969 Pearson Commission, which launched the concept of an obligation to provide development assistance, a Commission staff member warned that "it is futile . . . to nullify the effects of increased aid by inconsiderate trade policies" [Pearson et al. (1969), as cited in 70]. That caution has not been well heeded. Development assistance, including that for health, still tends to be driven more by the strategic and economic interests of donors than by the health needs of those facing the greatest burden of disease (98, 111). Although jurisprudence from WTO dispute resolution panels is slowly allowing more exceptions for health, most high-income governments continue to pursue extended intellectual property rights, reductions in developing-country tariffs, liberalized trade in services, open competition on government contracts, and bilateral investment treaties (which allow corporations to sue non-compliant governments directly), all of which have been shown to affect health negatively (74, 77). A recent review of global health policy initiatives by different governments shows mixed results at best, with national security (border protection against disease) and economic security (partly through trade) dominating other arguments for why health should have greater weight in foreign policy negotiations. **Table 3** summarizes some of these arguments and what they imply for the new public health role of global health diplomacy.

Notwithstanding the default to a high politics of national and economic security in most (though not all) nations' foreign policy decisions, there remains some cause for optimism that global health will retain its prominence in foreign policy. Spain's presidency of the European Union in the first half of 2010 focused on issues of global health equity, coherence, and knowledge; post-2008, the director-general of the World Health Organization frequently emphasized the health risks of unregulated global financial markets; and the transition from the G8 to the G20, although still fraught with issues of economic elitism in global governance, incorporates some countries with strong histories of rights-based approaches to health. Global health may be well-positioned to influence how globalization re-emerges from its present economic crisis; but how well it accomplishes this will be determined in part by the capacities and skills of global public health diplomats and by which of the policy arguments they choose to emphasize. The challenges acquire urgency if the financial crisis of 2008 represents not an isolated perturbation but rather a manifestation of a "triple crisis" (1) that involves at least partly interconnected patterns of economic volatility, food price increases, and fossil-fuel dependency/climate change. If this analysis is correct, then research and policy alike will rapidly need to explore the relevant interconnections, their implications for public health, and their origins in national and global power structures.

Table 3 Key arguments for health in foreign policy by different policy frames (based on research by Labonté and colleagues)

Policy frame	Arguments for	Cautions against	Bottom line
Security			
National security: reduces trans-border risks to national citizens. Economic security: promotes the interests of one's national economy and its private-sector actors. Human security: improves the development capabilities of all persons irrespective of country.	Unchecked disease can lead to economic decline, failed states, and domestic/regional conflict, posing national security risks and economic costs (or loss of future gain) with knock-on health effects in countries not directly affected by the disease. National health security (particularly prevention of pandemics) requires global health security, which, in turn, is only as strong as its weakest link. The implication is a national self-interest to strengthen weak links.	National or economic security interests could be at the expense of human security outcomes for persons in other countries.	Human security offers a more equity-oriented and less self-interested or utilitarian argument for global health security.
Development			
Health has long been an important component of aid. Evidence shows that improvements in health and human security (and in other social determinants of health such as education, sanitation, and gender empowerment) are associated with economic growth.	Health spending is an investment and not simply a cost. Health development assistance can improve receiving countries' economic performance, creating trade-related economic benefits to donor countries. The Millennium Development Goals constitute a global compact among the world's nations to lessen poverty and health-related barriers to development.	Development assistance remains episodic and driven more by donor interests than by recipient needs. Health development assistance often focuses more on specific diseases than on public health interventions. Results-based aid could weaken support for development projects on the social determinants of health that may take years to show improvements.	The Millennium Development Goals render health development assistance an obligation and not charity. A clear distinction should be made between what is the objective of aid (heath and human development) and what is one of many possible tools for its accomplishment (economic growth).
Global public goods			
Peace, prevention of pandemics, financial stability, human rights, free access to knowledge, and a stable climate all have characteristics of global (trans-border) public goods that are undersupplied by markets and which require public provision.	Public health interventions are important in reducing the burden of communicable disease and thus constitute a form of global public good. The prevention of pandemic influenza demands international cooperation. Global efforts to reduce the health harms associated with trade in unhealthy products can be pursued through global health conventions (global public goods) such as the Framework Convention on Tobacco Control.	Funding for public health goods lags behind funding for specific disease interventions. International cooperation on pandemic control rests on mutual benefits, which the use of intellectual property rights (IPRs) can prevent. Global health conventions remain soft law and may still be challenged through enforceable trade and investment treaties.	The concept is well understood by economists, and so may have influence with finance or treasury, but is less well understood by other branches of government or by the popular media.

Table 3 (*Continued*)

Policy frame	Arguments for	Cautions against	Bottom line
Trade			
A rules-based global trading system is another global public good, but the definition and enforcement of those rules has been dependent largely on countries' economic and political power. This asymmetry has tended to negate or worsen global health equity outcomes potentially achievable through trade-related growth and development.	The relationship between trade openness, growth, and health is not automatic and depends on the careful sequencing of commitments and the retained policy space of governments to ensure that development proceeds in an equitable fashion.	Present trade negotiations can reduce developing-country policy space required to ensure equitable and healthy forms of growth. Tariff (border tax) reductions in developing countries have led to net losses in funding for national public health goods. Increased imports of health-damaging products (e.g., tobacco, alcohol, unhealthy foods) are associated with increased health harms. Efforts to control such trade may conflict with trade treaty obligations.	Subject all trade treaties to health equity impact assessments. Create trade dispute resolution mechanisms that allow exceptions to trade rules to fulfill countries' development goals and human rights treaty obligations.
Human rights			
Human rights treaties have primacy over other international treaties when conflicts arise.	Health is considered a basic right because it is foundational to the enjoyment of most other human rights. States parties are obliged to ensure that their foreign policies, other international treaties into which they enter or negotiate, and nonstate actors within their jurisdiction operating nationally or internationally do not infringe on their own ability, or that of other states, to meet their obligations under human rights treaties.	There is a lack of clarity in how to balance individual rights if they may imperil collective rights. There is no internationally enforceable mechanism for violations of human rights.	Human rights impact analyses of all such foreign policies and international treaty negotiations.
Ethical/moral reasoning			
States, the institutions they create, and the persons who function within them are moral actors.	The moral axiom of human dignity not only requires respect for the autonomy of the individual, but also extends to the provision of resources for the capabilities people require to live valued lives. As moral actors, better off states, and those governing them or upholding the global economic institutions that may be shown to sustain inequalities, have obligations for rectification and for change in how such institutions and their policies function.	Moral arguments may hold little sway in the *realpolitik* of national and economic security, without engagement with arguments from other policy frames. Care must be taken to avoid overgeneralization (assuming universal consensus on a moral principle) and cultural relativism (assuming that historic practice in a given context is a sufficient moral base for its continued acceptance).	Ensure that a moral argument for a foreign policy is present, logically sound, and ethically defensible.

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LITERATURE CITED

1. Addison T, Arndt C, Tarp F. 2010. *The triple crisis and the global aid architecture*. Work. Pap. 2010/01, World Inst. Dev. Econ. Res., Helsinki
2. Alam K, Hearson M. 2006. *Fashion Victims: The True Cost of Cheap Clothes at Primark, Asda and Tesco*. London: War on Want: Fighting Global Poverty
3. Alam K, Klier S, McRae S. 2008. *Fashion Victims II: How UK Clothing Retailers Are Keeping Workers in Poverty*. London: War on Want
4. Amuedo-Dorantes C, Sainz T, Pozo S. 2007. *Remittances and healthcare expenditure patterns of populations in origin communities: evidence from Mexico*. Work. paper 25. Integr. Trade Hemispheric Issues Div., Inter-Am. Dev. Bank, Buenos Aires
5. Appelbaum R, Lichtenstein N. 2006. A new world of retail supremacy: supply chains and workers' chains in the age of Wal-Mart. *Int. Labor Working-Class Hist.* 70:106–25
6. Appelbaum R, Robinson W, eds. 2005. *Critical Globalization Studies*. London: Routledge
7. Arhin-Tenkorang D, Conceição P. 2003. Beyond communicable disease control: health in the age of globalization. In *Providing Global Public Goods: Managing Globalization*, ed. I Kaul, P Conceição, K LeGoulven, RU Mendoza, pp. 484–515. New York: Oxford Univ. Press for the U. N. Dev. Progr.
8. Assunta M, Chapman S. 2006. Health treaty dilution: a case study of Japan's influence on the language of the WHO framework convention on tobacco control. *J. Epidemiol. Community Health* 60:751–56
9. Babb S. 2002. *Managing Mexico: Economists from Nationalism to Neoliberalism*. Princeton, NJ: Princeton Univ. Press
10. Berk M, Schur C. 2001. The effect of fear on access to care among undocumented Latino immigrants. *J. Immigrant Health* 3:151–56
11. Binder S, Levitt AM, Sacks JJ, Hughes JM. 1999. Emerging infectious diseases: public health issues for the 21st century. *Science* 284:1311–13
12. Birdsall N. 2006. *The World Is Not Flat: Inequality and Injustice in Our Global Economy*, WIDER Annu. Lect. 9. Helsinki: World Inst. Dev. Econ. Res.
13. Birn A-E. 1996. Public health or public menace? The Rockefeller Foundation and public health in Mexico, 1920–1950. *Voluntas: Int. J. Volunt. Nonprofit Organ.* 7:35–56
14. Birn A-E. 2009. The stages of international (global) health: histories of success or successes of history? *Global Public Health* 4:50–68
15. Birn A-E, Pillay L, Holtz TH. 2009. *Textbook of International Health*. Oxford: Oxford Univ. Press
16. Bradshaw D, Groenewald P, Laubscher R, Nannan N, Nojilana R, et al. 2003. *Initial Burden of Disease Estimates for South Africa, 2000*. Cape Town: S. Afr. Med. Res. Counc.
17. Brooks E. 2007. *Unraveling the Garment Industry: Transnational Organizing and Women's Work*. Minneapolis: Univ. Minn. Press
18. Buerk R. 2006. *Breaking Ships: How Supertankers and Cargo Ships Are Dismantled on the Beaches of Bangladesh*. New York: Chamberlain
19. Burnett A, Peel M. 2001. Asylum seekers and refugees in Britain: health needs of asylum seekers and refugees. *BMJ* 322:544–47
20. Cali M, Massa I, te Velde DW. 2008. *The Global Financial Crisis: Financial Flows to Developing Countries Set to Fall by One Quarter*. London: Overseas Dev. Inst.
21. Carballo M, Nerukar A. 2001. Migration, refugees, and health risks. *Emerg. Infect. Dis.* 7:556–60
22. Chang CF. 2002. Disease and its impact on politics, diplomacy, and the military: the case of smallpox and the manchus (1613–1795). *J. Hist. Med. Allied Sci.* 57:177–97
23. Chen S, Ravallion M. 2004. How have the world's poorest fared since the early 1980s? *World Bank Res. Obs.* 19:141–69

24. Chen S, Ravallion M. 2008. *The developing world is poorer than we thought, but no less successful in the fight against poverty*. Work. Pap. 4703, World Bank, Washington, DC
25. Chopra M, Darnton-Hill I. 2004. Tobacco and obesity epidemics: not so different after all? *BMJ* 328:1558–60
26. Clemens M. 2007. *Do visas kill? Health effects of African health professional emigration*. Work. Pap. 114, Cent. Glob. Dev., Washington, DC
27. Cohen N. 2009. *Waiting for the Etonians: Reports from the Sickbed of Liberal England*. London: Fourth Estate
28. Colizza V, Vespignani A. 2010. The flu fighters. *Phys. World* 23:26–30
29. Colwell RR. 1996. Global climate and infectious disease: the cholera paradigm. *Science* 274:2025–31
30. Comm. Social Determ. Health. 2008. *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health*. Geneva: World Health Organ.
31. Confalonieri U, Menne B, Akhtar R, Ebi KL, Hauengue M, et al. 2007. Human health. In *Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. ML Parry, OF Canziani, JP Palutikof, PJ van der Linden, CE Hanson, pp. 391–431. Cambridge, UK: Cambridge Univ. Press
32. Cornia GA, Rosignoli S, Tiberti L. 2009. An empirical investigation of the relation between globalization and health. See Ref. 76, pp. 34–62
33. Costello A, Abbas M, Allen A, Ball S, Bell S, et al. 2009. Managing the health effects of climate change. *Lancet* 373:1693–733
34. Deacon B, Ilva M, Koivusalo M, Ollila E, Stubbs P. 2005. *Copenhagen Social Summit Ten Years On: The Need for Effective Social Policies Nationally, Regionally and Globally*. GASPP Policy Brief 6. Helsinki: Globalism and Social Policy Program, STAKES
35. Deaton A. 2003. Health, inequality, and economic development. *J. Econ. Lit.* 41:113–58
36. Deaton A. 2004. Health in an age of globalization. *Brookings Trade Forum* 2004:83–130
37. Deaton A. 2006. *Global Patterns of Income and Health: Facts, Interpretations, and Policies*. WIDER Annu. Lect. 10. Helsinki: World Inst. Dev. Econ. Res.
38. DeParle J, Gebeloff R. 2009. Across U.S., food stamp use soars and stigma fades. *New York Times* Nov. 29:A1
39. Derose KP, Escarce JJ, Lurie N. 2007. Immigrants and health care: sources of vulnerability. *Health Aff.* 26:1258–68
40. Di Tommaso ML, Shima I, Strom S, Bettio F. 2009. As bad as it gets: well-being deprivation of sexually exploited trafficked women. *Eur. J. Polit. Econ.* 25:143–62
41. Dummer TJB, Cook IG. 2008. Health in China and India: a cross-country comparison in a context of rapid globalisation. *Soc. Sci. Med.* 67:590–605
42. Eckholm E. 2009. Surge in homeless children strains school districts. *New York Times* Sept. 6:A1
43. Elbe S. 2002. HIV/AIDS and the changing landscape of war in Africa. *Int. Secur.* 27:159–77
44. Evans P. 2005. Neoliberalism as a political opportunity: constraint and innovation in contemporary development strategy. In *Putting Development First: The Importance of Policy Space in the WTO and IFIs*, ed. K Gallagher, pp. 195–215. London: Zed Books
45. Eyoh D, Sandbrook R. 2003. Pragmatic neo-liberalism and just development in Africa. In *States, Markets, and Just Growth: Development in the Twenty-First Century*, ed. A Kohli, C Moon, G Sørensen, pp. 227–57. Tokyo: U. N. Univ. Press
46. Falk RA. 2000. *Human Rights Horizons: The Pursuit of Justice in a Globalizing World*. New York/London: Routledge
47. Feachem RGA. 2001. Globalisation is good for your health, mostly. *BMJ* 323:504–6
48. Fourcade-Gourinchas M, Babb SL. 2002. The rebirth of the liberal creed: paths to neoliberalism in four countries. *Am. J. Sociol.* 108:533–79
49. Freeman RB. 2007. The challenge of the growing globalization of labor markets to economic and social policy. In *Global Capitalism Unbound: Winners and Losers from Offshore Outsourcing*, ed. E Paus, pp. 23–40. Houndmills, UK: Palgrave MacMillan
50. Friel S, Marmot M. 2011. Social determinants of health and health inequities go global. *Annu. Rev. Public Health* 32:225–36

51. Garrett L. 1994. *The Coming Plague: Newly Emerging Diseases in a World Out of Balance*. New York: Penguin
52. Garrett L. 1996. The return of infectious disease. *Foreign Aff.* 75:66–79
53. Glasgow SM. 2005. *The private life of public health: managing chronic disease in an era of neoliberal governmentality*. PhD diss. Univ. Maryland
54. Gorst-Unsworth C, Goldenberg C. 1998. Psychological sequelae of torture and organised violence suffered by refugees from Iraq. *Br. J. Psychiatry* 172:90–94
55. Gould E, Schacter N. 2002. Trade liberalization and its impacts on alcohol policy. *SAIS Rev.* 22:119–39
56. Grais RF, Hugh Ellis J, Glass GE. 2003. Assessing the impact of airline travel on the geographic spread of pandemic influenza. *Eur. J. Epidemiol.* 18:1065–72
57. Grieshaber-Otto J, Sinclair S, Schater N. 2000. Impacts of international trade, services and investment treaties on alcohol regulation. *Addiction* 95:491–504
58. Griffith-Jones S, Stallings B. 1995. New global financial trends: implications for development. In *Global Change, Regional Response: The New International Context of Development*, ed. B Stallings, pp. 143–73. Cambridge, UK: Cambridge Univ. Press
59. Gushulak BD, MacPherson DW. 2004. Globalization of infectious diseases: the impact of migration. *Clin. Infect. Dis.* 38:1742–48
60. Hämäläinen P, Leena Saarela K, Takala J. 2009. Global trend according to estimated number of occupational accidents and fatal work-related diseases at region and country level. *J. Saf. Res.* 40:125–39
61. Hawkes C. 2005. The role of foreign direct investment in the nutrition transition. *Public Health Nutr.* 8:357–65
62. Hawkes C, Chopra M, Friel S. 2009. Globalization, trade, and the nutrition transition. See Ref. 76, pp. 235–62
63. Hellman JA. 2008. *The World of Mexican Migrants: The Rock and the Hard Place*. New York: New Press
64. HM Gov. 2008. Health is global: a UK government strategy. *Rep. 2008–13*, Dep. Health, London
65. Int. Monet. Fund. 2007. *Spillovers and Cycles in the Global Economy: World Economic Outlook*. Washington, DC: IMF
66. Jones KE, Patel NG, Levy MA, Storeygard A, Balk D, et al. 2008. Global trends in emerging infectious diseases. *Nature* 451:990–93
67. Kabeer N, Mahmud S. 2004. Rags, riches and women workers: export-oriented garment manufacturing in Bangladesh. In *Chains of Fortune: Linking Women Producers and Workers with Global Markets*, ed. M Carr, pp. 133–64. London: Commonw. Secr.
68. Kawachi I, Wamala S. 2007. Poverty and inequality in a globalizing world. In *Globalisation and Health*, ed. I Kawachi, S Wamala, pp. 122–37. Oxford: Oxford Univ. Press
69. Keyes E. 2000. Mental health status in refugees: an integrative review of current research. *Issues Ment. Health Nurs.* 21:397–410
70. Kilburn PM. 1969. *International Bank Notes*. Washington, DC: World Bank **http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTARCHIVES/0,,contentMDK:20121526~pagePK:36726~piPK:36092~theSitePK:29506,00.html**
71. King G, Gakidou E, Imai K, Lakin J, Moore RT, et al. 2009. Public policy for the poor? A randomised assessment of the Mexican universal health insurance program. *Lancet* 373:1447–54
72. Koplan JP, Bond TC, Merson MH, Reddy KS, Rodriguez MH, et al. 2009. Towards a common definition of global health. *Lancet* 373:1993–95
73. Kumate J, Sepúlveda J, Gutiérrez G. 2010. Cholera epidemiology in Latin America and perspectives for eradication. *Bull. Inst. Pasteur* 96:217–26
74. Labonté R, Blouin C, Forman L. 2010. Trade, growth and population health: an introductory review. *Transdiscipl. Stud. Popul. Health Ser.* 2:1–94. **http://www.iph.uottawa.ca/eng/transdis/files/trade-health.pdf**
75. Labonté R, Mohindra K, Lencucha R. 2009. *Trade and Chronic Disease*. Ottawa, Can.: Inst. Popul. Health, Univ. Ott.
76. Labonté R, Schrecker T, Packer C, Runnels V. 2009. *Globalization and Health: Pathways, Evidence and Policy*. New York: Routledge

77. Labonté R, Schrecker T, Sanders D. 2008. Trade policy and health equity: Can they avoid a collision? In *Trade and Health: Seeking Common Ground*, ed. C Blouin, N Drager, J Heymann, pp. 226–62. Montréal: McGill-Queen's Univ. Press
78. Labonté R, Spiegel J. 2003. Setting global health research priorities. *BMJ* 326:722–23
79. Lee K, Dodgson R. 2000. Globalization and cholera: implications for global governance. *Glob. Gov.* 6:213–36
80. Lencucha R, Labonte R, Rouse MJ. 2010. Beyond idealism and realism: Canadian NGO/government relations during the negotiation of the FCTC. *J. Public Health Pol.* 31:74–87
81. Levy BS, Sidel VW. 1997. *War and Public Health*. New York: Oxford Univ. Press
82. Liu T, Zhong M, Xing J. 2005. Industrial accidents: challenges for China's economic and social development. *Saf. Sci.* 43:503–22
83. Lozano R, Zurita B, Franco F, Ramirez T, Hernandez P, Torres J. 2001. Mexico: marginality, need, and resource allocation at the county level. In *Challenging Inequities in Health: From Ethics to Action*, ed. M Whitehead, T Evans, F Diderichsen, A Bhuiya, M Wirth, pp. 276–95. New York: Oxford Univ. Press
84. Metz B, Davidson O, Bosch P, Dave R, eds. 2007. *Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007*. Cambridge/New York: Cambridge Univ. Press
85. Minist. Foreign Aff. Brazil, France, Indonesia, Norway, Senegal, et al. 2007. Oslo Ministerial Declaration—global health: a pressing foreign policy issue of our time. *Lancet* 369:1373–78
86. Minns J. 2006. *The Politics of Developmentalism: The Midas States of Mexico, South Korea and Taiwan*. Houndmills, UK: Palgrave Macmillan
87. Morse SS. 1995. Factors in the emergence of infectious diseases. *Emerg. Infect. Dis.* 1:7–15
88. Mosley L. 2006. Constraints, opportunities, and information: financial market-government relations around the world. In *Globalization and Egalitarian Redistribution*, ed. P Bardhan, S Bowles, M Wallerstein, pp. 87–119. New York/Princeton, NJ: Russell Sage Found./Princeton Univ. Press
89. Murray CJL, Kulkarni S, Ezzati M. 2005. Eight Americas: new perspectives on U.S. health disparities. *Am. J. Prev. Med.* 29:4–10
90. Murray CJL, Kulkarni SC, Michaud C, Tomijima N, Bulzacchelli MT, et al. 2006. Eight Americas: investigating mortality disparities across races, counties, and race-counties in the United States. *PLoS Med.* 3:e260
91. Off. U. N. High Comm. Hum. Rights. 2000. *Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention Against Transnational Organized Crime*. UN Doc A/45/49/Vol. 1. Geneva: United Nations
92. O'Manique C. 2004. *Neoliberalism and AIDS Crisis in Sub-Saharan Africa: Globalization's Pandemic*. Houndmills, UK: Palgrave Macmillan
93. O'Manique C. 2005. The "securitisation" of HIV/AIDS in Sub-Saharan Africa: a critical feminist lens. *Policy Soc.* 24:24–47
94. Ostergard RL. 2002. Politics in the hot zone: AIDS and national security in Africa. *Third World Q.* 23:333–50
95. Östlin P, Schrecker T, Sadana R, Bonnefoy J, Gilson L, et al. 2009. *Priorities for Research on Equity and Health: Implications for Global and National Priority Setting and the Role of WHO to Take the Health Equity Research Agenda Forward*. Geneva: World Health Organ.
96. Paluzzi JE, Farmer PE. 2005. The wrong question. *Development* 48:12–18
97. Paterson K. 2010. *Temping down labor rights: the manpowerization of Mexico*. Corporate Watch. **http://www.corpwatch.org/article.php?id=15496**
98. People's Health Mov., Medact, Glob. Equity Gauge Alliance. 2008. *Global Health Watch 2: An Alternative World Health Report*. London: Zed Books
99. Peterson LE. 2010. *Philip Morris files first-known investment treaty claim against tobacco regulations*. **http://www.iareporter.com/articles/20100303**
100. Popkin BM. 2009. Global changes in diet and activity patterns as drivers of the nutrition transition. In *Emerging Societies—Coexistence of Childhood Malnutrition and Obesity*, ed. SC Calhan, AM Prentice, CS Yagnik, pp. 1–14. Basel, Switz.: Karger

101. Ravallion M. 2006. Looking beyond averages in the trade and poverty debate. *World Dev.* 34:1374–92
102. Reich MR, Takemi K. 2009. G8 and strengthening of health systems: follow-up to the Toyako summit. *Lancet* 373:508–15
103. Sassen S. 2002. Global cities and survival circuits. In *Global Woman: Nannies, Maids, and Sex Workers in the Economy*, ed. B Ehrenreich, A Hochschild, pp. 254–74. New York: Metropolitan
104. Schrecker T. 2009. Labor markets, equity, and social determinants of health. See Ref. 76, pp. 81–104
105. Schrecker T. 2009. The power of money: global financial markets, national politics, and social determinants of health. In *Global Health Governance: Crisis, Institutions and Political Economy*, ed. OD Williams, A Kay, pp. 160–81. Houndmills, UK: Palgrave Macmillan
106. Secretary-General's High-level Panel on Threats Challenges and Change. 2004. *A More Secure World: Our Shared Responsibility*. New York: United Nations
107. Sepehri A, Chernomas R, Akram-Lodhi A. 2003. If they get sick, they are in trouble: health care restructuring, user charges, and equity. *Int. J. Health Serv.* 33:137–61
108. Silverman JG, Decker MR, Gupta J, Maheshwari A, Willis BM, Raj A. 2007. HIV prevalence and predictors of infection in sex-trafficked Nepalese girls and women. *JAMA* 298:536–42
109. Somers M. 2008. *Genealogies of Citizenship: Markets, Statelessness, and the Right to Have Rights*. Cambridge: Cambridge Univ. Press
110. Spitzer DL. 2007. The impact of policy on Somali refugees in Canada. *Refuge* 23:42–49
111. Sridhar D. 2010. Seven challenges in international development assistance for health and ways forward. *J. Law Med. Ethics.* Fall:2–12
112. Stewart DE, Gajic-Veljanoski O. 2005. Trafficking in women: the Canadian perspective. *CMAJ* 173:25–26
113. Stewart F. 2003. Conflict and the millennium development goals. *J. Hum. Dev. Cap.* 4:325–51
114. Sutcliffe B. 2005. *A Converging or Diverging World?* ST/ESA/2005/DWP/2. New York: U. N. Dep. Econ. Soc. Aff.
115. Tang S, Meng Q, Chen L, Bekedam H, Evans T, Whitehead M. 2008. Tackling the challenges to health equity in China. *Lancet* 372:1493–501
116. Taylor A, Chaloupka FJ, Guindon E, Corbett M. 2000. The impact of trade liberalization on tobacco consumption. In *Tobacco Control in Developing Countries*, ed. P Jha, F Chaloupka, pp. 343–64. Oxford: Oxford Univ. Press
117. Teichman J. 2008. Redistributive conflict and social policy in Latin America. *World Dev.* 36:446–60
118. [Toronto] Med. Off. Health. 2009. *Nutritious Food Basket in Toronto*. Toronto: Dep. Public Health
119. U. N. Dev. Progr. 2006. *Human Development Report 2006: Beyond Scarcity—Power, Poverty and the Global Water Crisis*. New York: Palgrave Macmillan
120. U. N. High Comm. Refugees. 2001. Most frequently asked questions about the Refugee Convention. *Refugees* 2:16–17
121. Unruh J, Krol M, Kliot N, eds. 2004. *Environmental Change and its Implications for Population Migration: Advances in Global Change Research*. Dordrecht: Kluwer Acad.
122. van der Hoeven R, Lübker M. 2006. *Financial openness and employment: the need for coherent international and national policies*. Work. Pap. 75, Policy Integr. Dep., Int. Labor Off., Geneva
123. van Doorslaer E, O'Donnell O, Rannan-Eliya RP, Somanathan A, Adhikari SR, et al. 2006. Effect of payments for health care on poverty estimates in 11 countries in Asia: an analysis of household survey data. *Lancet* 368:1357–64
124. Wacquant L. 2009. *Punishing the Poor: The Neoliberal Government of Social Insecurity*. Durham, NC: Duke Univ. Press
125. Woodall P. The new titans: a survey of the world economy. *Economist* 380:Sept. 16
126. World Bank. 1993. *World Development Report 1993: Investing in Health*. New York: Oxford Univ. Press
127. World Bank. 1995. *World Development Report 1995: Workers in an Integrating World*. New York: Oxford Univ. Press
128. World Bank. 2005. *World Development Indicators 2005*. Washington, DC: World Bank
129. World Bank. 2007. *Global Economic Prospects 2007: Managing the Next Wave of Globalization*. Washington, DC: World Bank

130. World Bank. 2008. *World Development Report 2009: Reshaping Economic Geography*. Washington, DC: World Bank
131. World Bank Staff. 2009. *Swimming against the tide: how developing countries are coping with the global crisis*. Backgr. Pap. G20 Financ. Minist. Cent. Bank Gov. Meet., World Bank, Washington, DC
132. World Health Organ. 2002. *The World Health Report 2002: Reducing Risks, Promoting Healthy Life*. Geneva: WHO
133. World Health Organ. 2006. *The World Health Report 2006: Working Together for Health*. Geneva: WHO
134. Zimmerman C, Yun K, Shvab I, Watts C, Trappolin L, et al. 2003. *The Health Risks and Consequences of Trafficking in Women and Adolescents: Findings from a European Study*. London: London Sch. Hyg. Trop. Med.

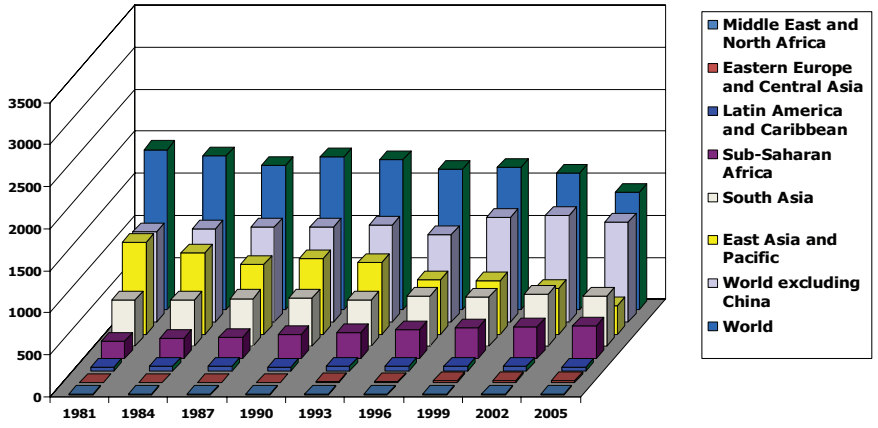

Figure 1

Global poverty: World Bank $1.25/day poverty line. Source: Data from Reference 24. Note that East Asia and Pacific includes China; South Asia includes India.

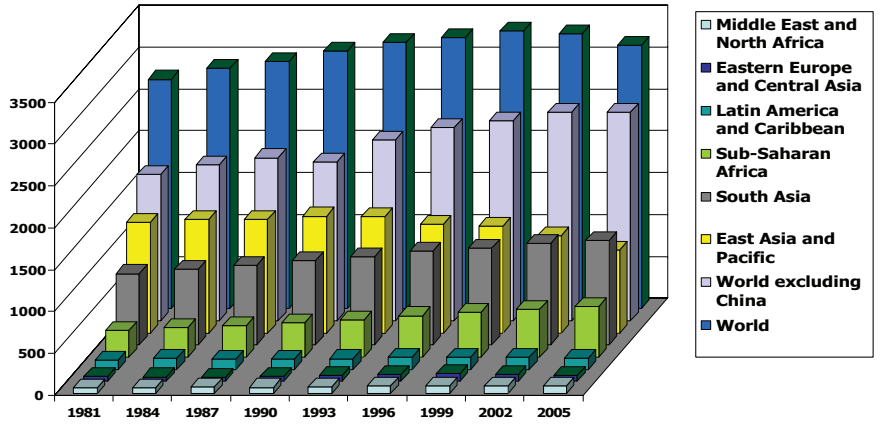

Figure 2

Global poverty: World Bank $2.50/day poverty line. Source: Data from Reference 24. Note that East Asia and Pacific includes China; South Asia includes India.

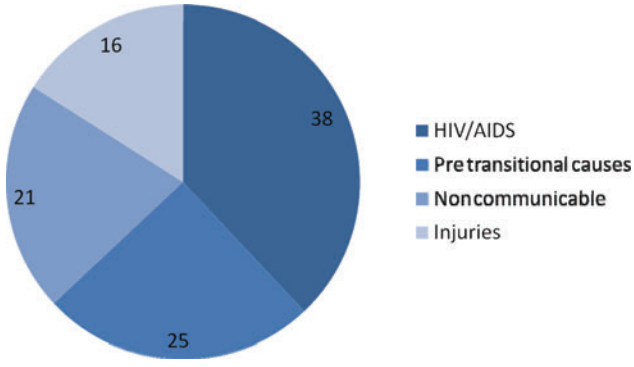

Figure 3

Quadruple burden of disease in South Africa: percentage of overall years of life lost, 2000. Source: (16). "Pre-transitional causes" of death include communicable diseases, maternal and perinatal conditions, and nutritional deficiencies.