

The Impact of Globalization Determinants and the Health of the World's Population

Mario J. Azevedo and Barbara H. Johnson
*School of Health Sciences, Jackson State University, Jackson, Mississippi,
USA*

1. Introduction

Since the late 1970s, globalization has become a phenomenon that has elicited polarizing responses from scholars, politicians, activists, and the business community. Several scholars and activists, such as labor unions, see globalization as an anti-democratic movement that would weaken the nation-state in favor of the great powers. There is no doubt that globalization, no matter how it is defined, is here to stay, and is causing major changes on the globe. Given the rapid proliferation of advances in technology, communication, means of production, and transportation, globalization is a challenge to health and well-being worldwide.

On an international level, the average human lifespan is increasing primarily due to advances in medicine and technology. The trends are a reflection of increasing health care demands along with the technological advances needed to prevent, diagnose, and treat disease (IOM, 1997). Along with this increase in longevity comes the concern of finding commonalities in the treatment of health disparities for all people.

In a seminal work by Friedman (2005), it is posited that the connecting of knowledge into a global network will result in eradication of most of the healthcare translational barriers we face today. Since healthcare is a knowledge-driven profession, it is reasonable to presume that global healthcare will become more than just a buzzword.

This chapter looks at all aspects or components of globalization but focuses specifically on how the movement impacts the health of the people and the nations of the world. The authors propose to use the concept of health as a measuring stick of the claims made on behalf of globalization.

1.1 Evolving perspectives on the globalization of health and analytical framework

Although predicated on the premise that the global concept is new, it actually had its origins in the late 1800s. Religious foreign mission groups felt it was their spiritual calling to tend to the sick and afflicted in poor countries (Schroth & Khawaja, 2007). The religious work of missions was closely linked to medical work. These missionaries believed that the services they provided were designed to reduce human misery and suffering, thereby elevating the status of God in the minds of people. Mission hospitals and mission doctors served as important points of entry of Western medicine into other countries, and were the hub of medical knowledge and practice.

Private healthcare facilities were established as part of the charitable mission. Even now, medical mission groups, such as Doctors without Borders and Heal the Nations, provide

charitable medical care to the developing world. Subsequent innovations in healthcare have made it possible to bring patients from other countries into US hospitals for care that is not available in their home country. Specialists from US hospitals may also be utilized in countries that have no such physicians. For instance, Operation Smile, an international medical humanitarian organization, has a presence in over 50 countries (Magee, 2009). Their focus is surgical treatment of children with cleft lip and palate while providing the necessary medical training for local medical volunteers that will result in self-sufficiency for these communities. Often persons travel to the US to avoid delays in care due to long lines and waiting periods experienced in other countries that may have universal coverage.

Telemedicine is the exchanging of patient information through the Internet or cybertechnology. This ability allows healthcare professionals to communicate patient status regardless of distance (Goldbach & West, 2010). Telehealth and teleconferencing have been used extensively for consulting with other professionals as well as reaching patients who live in rural or remote areas.

The most popular direction globalization has taken is in the area of medical tourism. This aspect involves patients choosing to leave one country for another in order to seek quality specialized care or major surgery at a reduced cost (Keckley & Underwood, 2007; Goldbach & West, 2010). Countries such as India, Singapore, and Thailand provide care such as cardiac surgery, joint replacements, and reconstructive surgery at significant differences in cost. For instance, in India, a person can have cardiac surgery for approximately \$25,000 less than the cost in the US. Along with the medical care provided, these locations offer a vacation-like atmosphere. Another feature that encourages the use of medical tourism is the availability of medications and technologies that may be experimental in some countries but readily available in others. Because of the cost differential, some private insurers also offer incentives to utilize medical tourism as a means of accessing health care services.

Although medical tourism has led to knowledge development on a worldwide scale, concerns remain as to quality and liability. However, despite these concerns, entities such as medical tourism have the potential to increase awareness of illness and disease processes. This knowledge could be empowering to developing countries.

Since the early 1990s, over 48 million people have been displaced due to the environmental crisis and its health related impact (Toole, 1995). HIV rates are increasing both in the US and abroad, infecting nearly 25 million people. Other diseases such as tuberculosis and cholera have developed into drug-resistant strains proven difficult to treat, thus increasing the disease transmission rates. It is predicted that by 2020, heart disease will become the leading cause of disease an disability followed by depression and traffic accidents (Murray & Lopez, 1996).

Poverty has been found to be a leading predictor of health disparities. More than 25 percent of the world's population lives in poverty. This economic burden results in decreased access to necessary and affordable healthcare. Public and private healthcare expenditures worldwide equal about 8 percent of the world's economic output (World Bank, 1993).

1.2 Globalization defined

Using the IDRC (Labonte, 2011) definition, "globalization, defined at its simplest, describes the constellation of processes by which nations, business and people are becoming more connected and interdependent across the globe through increased economic integration and communication exchange, cultural diffusions (especially of Western culture) and travel." This involves breaking barriers on flow of capital, goods and services, expected to lead to equality and liberty, infusion of new ideas, technologies and global economic growth.

In their article, *Globalization and Health: A Framework for Analysis of Action*, Woodward et al. (2001) note that:

Economic globalization has been the fundamental force behind the overall process of globalization over the last two decades. It has been characterized both by a dramatic growth in the volume of cross-border flows and by major changes in their nature. International trade has grown at an accelerated pace—nearly 8.6 percent per year over the period 1990-1999—with the proportion accounted for by services increasing steadily, reaching nearly 19 percent in 1999. However, this transformation has largely by-passed low-income countries, most of which remain critically dependent on aid flows (Woodward et al., 2001).

It is important to note at the outset that a major question that scholars have been trying to answer is how to differentiate the terms “globalization” and “global health” while maintaining the interrelatedness, yet distinctness of the two concepts. In order not to confuse the reader, we plan to use this concept of globalization within the context of the meaning we ascribed to “health” and “global.” Health is defined here as the World Health Organization (WHO) has defined it, that is, “complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1948). We plan to use “global” as defined by Bozorgmehr (2010).

Bozorgmehr (2010) defines global health as “public health,” a distinct field, which focuses on people’s health rather than on individual health, thus distinguishing itself from medical science or from an individual socio-behavioral science. Global does not mean international, as international may connote what is happening between as little as two nations. It does not mean a health issue that is local and spreads to the rest of the world geographically and it does not mean that which is happening everywhere. Global in this context, according to Bozorgmehr, means that which is ‘supra-territorial’ in the sense that it is not limited by geographic space, country, countries, or region. Thus, “global” impacts the social determinants of health from a holistic perspective. While globalization becomes a reconfiguration of social space, the term ‘supra-territoriality’ describes this evolving shift (Bozorgmehr, 2010).

Labonte (2011) is quick to point to the danger of focusing on the global economy as a natural, logical system when it is actually an outcome of political and economic interaction. As a counterpoint, it is also not productive to balance either the political or economic components. To do so, would diminish the impact of either or both.

Rennen and Martens (2003) have suggested a definition of globalization that is perhaps more acceptable, as it conveys all these dynamic ingredients. They define “Contemporary globalization as intensification of cross-national cultural, economic, political, social and technological interactions that lead to the establishment of transnational structures and the global integration of cultural, economic, environmental, political, and social process of global, supranational, national, regional, and local levels” (Rennen & Martens, 2003).

2. The interface between globalization and the social determinants of health

The social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices (WHO, 2003) The issue of social determinants of

disease, and their interaction with health conditions is so significant that WHO established the Commission on Social Determinants of Health (CSDH), in 2005 “on the premise that action on SDH is the fairest and most effective way to improve health for all people and reduce inequities,” which are “systematically associated with social advantage and/or disadvantage” (Labonte & Schrecker, 2007).

As they give us their model on evaluating globalization impact on health, Huynen et al. (2005) focus on four determinants of health, namely, institutional, economic, socio-cultural, and environmental determinants. Each one of them interacts within itself and with one or more of the others determining to a major degree, beyond the impact of genetics, proximally and distally, the health outcomes of a nation or a people.

Institutional determinants consist of infrastructure, health policy, health-related policy, governance structure, political environment, system of law, regulation, all impacting on health services. The economic determinants, which are occupational structure, tax system, and markets, interact or determine the economic infrastructure, economic development and trade. The socio-cultural determinants include culture, such as religion, ideology, customs, population structure, size, and geographical distribution. In addition, knowledge, social organization, social security, insurance system, mobility communication, and social interactions, are socio-cultural determinants that have an impact on social environmental lifestyle. Finally, the environmental determinants refer to ecological setting, climate, ecosystem stability, goods and services, interacting with the physical environment such as food and water. All of these have an impact on social lifestyles and environmental conditions. These determinants are always present and may interact and necessarily impact population health and the services available and accessible for the maintenance of a sound public health system. Consequently, the establishment of a sound public health system entails constant surveillance of the determinants named above and their impact, as man tries to prolong life and improve its quality on earth.

2.1 Trans-disciplinary approaches to globalization and global health

Globality, therefore, “links people anywhere in the world but it does not follow that it connects people everywhere” (Bozorgmehr, 2010). Used this way, global health focuses on elements such as water, sanitation, environment, inequality, malnutrition, HIV, tuberculosis, malaria, mental illness, health policy, behavioral health, and maternal mortality, research, education, and practice, linked to the basic human health rights. As a trans-disciplinary field, global health brings to bear the perspectives from the natural and social sciences in order to explain and allow understanding of “the social relationships, biological processes and technologies that contribute to the improvement of health worldwide” (Bozorgmehr, 2010). Along with global health and the attempt to provide a framework for analysis, the determinants of health occupy a prominent role in any discussion. We proceed now to examine this issue as it relates to global public health.

Given that the nature of social determinants of health are many and consistently interact and impact health, no one discipline can unravel the total complexity of health and health care. As noted by Labonte and Schrecker:

Globalization comprises multiple, interacting policy dynamics or processes the effects of which may be difficult if not impossible to separate. Pathways from globalization to changes in social determinants of health are not always linear, do not operate in isolation from one another, and may involve multiple stages and feedback loops.

Similarities exist with the task of analyzing causal links between environmental changes and human health which are complex because often they are indirect, displaced in space and time, and dependent on a number of modifying forces" (Labonte & Schrecker, 2007).

It is reasonable to surmise that only a multi-disciplinary or trans-disciplinary approach to health and globalization can produce an objective body of knowledge.

According to Labonte & Schrecker (2007), it is necessary to utilize a trans-disciplinary approach which consists of quantitative and qualitative methodologies using varied units of analysis. One mistake common to many globalization approaches is to portray the economy as the primary or sole measuring stick of the process itself, while relegating the impact of globalization on health to a secondary role.

As one analyzes the impact of globalization on health, the UNDP (1998) and many globalization experts, such as Labonte & Torgerson (2005), warn the international community to keep in mind the following five principles. The first thing to consider is that the impact of globalization will be contingent upon the individual states' social and economic political traditions and "endowment." This aspect refers to a tradition of democracy, dictatorship, theocracy, patriarchy, or oligarchy, and impact of the level of development, the extent of the natural resources, and utilization of human capital.

Second, it is important to know which vehicles or processes are employed to foster and sustain globalization, which are usually "macroeconomic policies," encouraged and imposed primarily by the International Monetary Fund and the World Bank through the so-called Structural Adjustment Programs (SAPs) or Poverty Reduction Strategies. The World Trade Organization (WTO) has also presented insurmountable obstacles to the social programs of the developing world.

The third consideration is the status of vectors for globalization which are often a multiplicity of bilateral and multilateral agreements among the richer and the poorer nations, with the appearance that they are being signed to promote human rights, and protect the environment, and the rights of women and children. Even though desirable in specific cases, quite often the agreements are not properly enforceable. The fourth principle to hold in mind is "the ability of regional and local governments to have the national policies and resource allocations to provide equitable access to health promotion services, enhance generic community capacities, foster community engagement, or cope with the impact of increasing rapid urbanization" (Labonte, 2004).

3. The great debate: Globalization and global health

3.1 Unfavorable globalization perspectives

The flow of goods, capital, and services across borders now total \$1.5 trillion in currency transactions daily. This aspect makes it difficult for governments to control their exchange markets in an effort to stabilize currencies, manage their economies, and maintain fiscal autonomy (UNDP, 1999). There are binding rules and sanctions mainly emanating from the World Trade Organization established in 1994. As a result, globalization experts and others have noted that the imbalance between enforceable social and environmental obligations represents an area of implacable governance challenges that will continue to be for centuries the biggest governance challenge of the new millennium (Labonte, 1998; UNDP, 1998; Kickbush & Buse, 2001).

The size of transnational corporations, such as Mitsubishi in South Africa and Poland in 1997, quite often larger than the nations in which they operate, as measured through their gross domestic product (GDP), is choking many developing countries. One reason for this is that the CEOs of transnational business enterprises can dictate the terms of trade, influence policy, and stifle governments' ability to tax them, resulting in no discernible benefits for the population. Thus, "the ability of transnational corporations to organize production across borders, sometimes by using multiple tiers of sub-contractors, is an important contributor both to the emergence of genuinely global labor markets " (World Bank, 1995) and to "tax competing jurisdictions." Invariably, countries integrate into globalization by committing themselves to lower taxation and liberalization of imports and exports. However, the more powerful countries often find ways to refuse to accept or enforce the regulations, and proceed, for example, to subsidize their own agricultural enterprises.

Woodward et al. (2001) note that flows, even though they increased over the years, in 2000, remained 16 percent below their levels in 1991 and the total net of official development finance (including non-concessional loans, they add), declined further from "a peak of \$60.9 billion in 1991 to an estimated \$38.6 billion in 2000, an overall decline of 37 percent." In addition, critics point out that globalization has brought about socio-economic, environmental and health conditions that allow the easy spread of epidemics, which, in turn, directly or indirectly, have led to world economic "stagnation" and regional conflict. Hertz (2001), a critic of globalization, wrote:

In the Third World we see a race at the bottom: Multinationals pitting developing countries against each other to provide the most advantageous conditions for investment, with no regulation, no red tape, no unions, a blind eye turned to environmental degradation. It's good for profit, but bad for workers and local communities... Globalization may deliver liberty, but not fraternity or equality.

Woodward et al. (2001) stress the importance of appropriate representation by the developing countries and vulnerable populations as part of the international decision making that is vital to achieving globalization from a health perspective. Even though this approach seems more normative than evidence-based practice, it provides an excellent common-sense framework that very few individuals can argue against.

3.2 The pro globalization argument

The defenders of globalization argue that knowledge and technology through trade and investment help wipe out epidemics through more advanced surveillance systems, treatment and more effective prevention. In fact, the rapid and advance diffusion of information communication technologies (ICTs) is "frequently cited as an overwhelming positive aspect of contemporary globalization" (Chinkin, 2000; Harcourt, 2000). ICTs "enable more rapid scientific discovery, create virtual communities of support, increase knowledge of human rights, strengthen diasporic communities and create an international advocacy movement pushing to create new global governance structures to balance the predominance of market-driven initiatives" (Labonte et al., 2004).

On the spread of diseases, such as malaria from mosquitoes found on transcontinental planes, HIV/AIDS, tuberculosis, mad cow disease, and severe acute respiratory syndrome (SARS), through rapid movement of people from one part of the globe to another, the defenders of globalization note that the phenomenon of the last two decades "can improve access to the medicines, medical information, and training that can help treat or cure these

diseases" (Levin Institute, 2011a). However, others argue that under the agreements of the World Organization for Animal Health, it is easier to stop the spread of certain diseases on the planet. The detractors of this argument note that often because of the costs involved, there is no consistent enforcement of the agreements across continents and among countries. The other major argument in favor of globalization is that it spurs economic growth through foreign investment, liberalization, and competition, both of which contribute to higher incomes, reduction of poverty, and better health care, leading to desirable change in the determinants of health (Levin Institute, 2011b).

4. The true face of globalization and its impact on global health

The globalization processes may have positive and negative health consequences on the population they are supposedly intended to help. These include increasing health care and education access, legislation designed to protect human and labor rights, restriction on exposure to hazardous drugs and products, such as tobacco, environmental waste, and environmental protection.

In fact, there has been evidence that globalization has resulted in higher tobacco consumption, notably in poorer countries (WHO, 2001) and higher alcoholic consumption, particularly among the young (Kuo et al., 2003). Normally, poorer countries have been able to provide services, such as education, health, and sanitation, through taxation and domestic subsidies. However, liberalization has meant the elimination or reduction of tariffs which, ultimately, are designed as a mechanism to reduce poverty and assist the poor. Experts point out that what has happened is that "global and regional trade agreements... are increasingly circumscribing the social and environmental regulatory options of national governments" (Labonte et al., 2004).

4.1 Commercialization of commodities

Liberalization may, indeed, result in price increase or price reduction, lower wages, or risks to the farmers. Lower prices may mean that the farmer will have to work more hours to be self-sustaining. Studies in Rwanda, Zambia, Kenya, Malawi, Sierra Leone, the Gambia, the Philippines, Guatemala, Papua New Guinea, and India found that globalization had mixed results, as a great effort was mounted to move from subsistence agriculture to agricultural commercialization. Even though, in some countries, the health results were promising, in others, such as Zambia that tried to move from subsistence corn production to commercialized corn output, the health conditions deteriorated more for children from commercialized than from subsistence households. These findings stress the need for gender analysis when the impact of globalization on household health is considered. What similar studies have done, says one commentator, is to make the point that "sweeping claims about globalization's benefits can safely be disregarded unless the claims clearly identify the relevant processes, and describe the pathways through which these processes are believed to affect the outcome of interest, health and health care."

Free trade as a part of globalization, even though it may have contributed to the provision of food to many countries, has also led to food insecurity in many, leading the International Covenant on Economic, Social and Cultural Rights to declare in 1966 that food security was a right of all peoples, which the World Food Summit endorsed that same year. Obviously, the protection of our ecosystem is paramount in the preservation and improvement of public health. Ecosystems provide us with the basic human needs like food, clean air, clean

water, and clean soils and prevent the spread of diseases through biological control. Finally, ecosystems provide us with medical and genetic resources, which are necessary to prevent or cure diseases. However, profitability goals often take precedence over ecosystem concerns.

4.2 Globalization and economic consequences

The impact of globalization on social services and employment has been detrimental to health and access to quality health care for most people of the world. Once a government eliminates tariffs, export taxes, and agricultural and industrial subsidies, as the World Trade Organization has mandated, supported by such major loan corporations and institutions as the World Bank, the International Monetary Fund, and the Paris Club, it also reduces its revenue. The resulting unemployment in "micro-enterprises," especially in the "informal sector," has increased exponentially during the last 20 years in developing countries. For example, in Latin America, unemployment increased by 50 percent during the 1990s, and, in Sub-Saharan Africa, North Africa, and Asia, by 74 percent, 43 percent, and 62 percent, respectively, even though overall GDP social services budgets remained the same (World Bank, 1995). In many cases, there may be a temporary economic growth but, almost always, economic sustainability is not maintained without further assistance through grants and loans by wealthier and technologically more advanced institutions and nations, continuing to maintain a state of dependence on donors.

Zambia is a good example of where liberalization policies led to unemployment and further poverty, as a result of the World Bank and International Monetary Fund loans during the 1980s, which encouraged this country to open its borders to cheap textile imports (Azevedo, 2003). Unable to compete, Zambia lost 30,000 jobs and 132 of 140 textile mills, resulting in a "40 percent loss of manufacturing jobs within eight years" (IDRC-CRDI, 2011: 5). This and the introduction of user-fees for school led to an increase in dropouts and illiteracy rates. The government was forced to eliminate the newly-imposed school fees and health care co-payments and to re-introduce subsidies to agriculture and domestic industries.

Similar tragic examples happened in Kerala, India, which had a reasonable population health care, despite the country's low income. Domestic products gave preference to imported luxury goods. As a consequence, the local entrepreneurship was severely weakened, resulting in higher unemployment and a lowered tax base for the government for social programs, such as health care. Liberalization of coconut and rubber products, as dictated by the WTO, led to a drop in prices. Experts predicted that Kerala would also abandon its food subsidy, which would have tragic consequences for the nutrition of its people. The same consequences were observed in Mexico, Uruguay, Zimbabwe, Kenya, Cuba, Costa Rica, and the Philippines, where a noticeable decline in income and an increase in the rate of poverty and poor health, especially among the rural populations occurred, all seen by the World Bank and the International Monetary Fund, until a few years ago, as collateral damage for the greater good (UNDP, 1999).

Unfortunately, globalization has also fueled the external debt of many of the developing countries, decreasing, amidst rampant corruption and mismanagement, their ability to serve their own citizens. In 2009, for example, Africa's external debt, notwithstanding the new terms of "forgiveness," was \$300 billion, representing 16 percent of its export earnings. Asia's huge external debt represented close to 15 percent of its GDP, even though such countries as South Korea are able to absorb the debt burden. While South Korea's external

debt in 2010 was \$401 billion, representing 42.8 percent of its GDP, Brazil, in Latin America, was struggling with an external debt of about \$211.4 billion in the mid-2000s (WHO, 2011). Several studies have also shown that liberalization has led to pollution and ecological damage, resource depletion, climate change, and increased fossil fuel emissions, due to required spending cuts, as illustrated by the Brazilian crisis of 1998. On a loan from the World Bank, Brazil had to cut its budget, including two-thirds of its environmental spending, which led to a collapse of a mapping project of its Amazon rainforest as a preliminary step to save its forests (Labonte & Torgerson, 2003). Even though globalization can be beneficial under the right domestic policy circumstances and can be beneficial to health and health care, "Liberalization in capital accounts, which is urged to promote foreign direct investment (FDI), generally wreaks havoc for the poor in poorer nations" (Labonte & Torgerson, 2003). The case of Nigeria, with the Exxon Oil Company, has become a classical example of how the environment can be destroyed and people's lives made worse along the pipeline and the oil extraction and transportation sites.

Berhman et al. (2000) studied the impact of globalization in 18 countries of Latin America between 1980 and 1998. They found imbalances in the distribution of incomes. Inequality increased in 13 cases out of the 18 countries. There was constant inequity in six countries. The worse impact came from international finance liberalization followed by domestic financial liberalization, and tax reform, while trade liberalization had no visible impact on inequalities. Interestingly, outsourcing, a major point of political contention this decade, was found to "weaken collective bargaining, minimum wages and safety at work" (WHO, 2001). One can counter-respond by noting that during the economic growth of the 1980s in Asia, for example, per capita incomes declined, and so it was in almost 70 countries that decade worldwide. As other studies have demonstrated, there is no definitive proof that globalization improved the world's overall economic growth. Cornia (2001) notes that the rate of per capita gross national product (GNP) growth decreased from 2.6 percent during 1960-1979 to 1.0 percent during the period between 1980 and 1998. During the 1990s, worldwide, the world economic growth was lower than that of the 1980s, declining by 1.0 percent, manifested into a slowdown in virtually all developing countries, most of which had accepted liberalization and economic globalization (Cornia, 2001).

Poverty in rural areas is not reduced when economic activity is concentrated in small urban sectors (Behrman et al., 2000). Sharp rises in inequality can also increase poverty, even though per capita income might grow. When inequality or disparities increase, overall growth is reduced, thus stagnating and frustrating the effort to reduce poverty for the majority of the people. Globalization, through an increase in women's labor force, is said to have had a negative impact on children's health. For example, it is noted that in East and Southeast Asia, up to 80 percent of the workforce in export-processing zones is female. In Bangladesh, garment factories rose from two in 1978 to 2,400 in 1995, when they employed 1.2 million workers, of whom 90 percent were women below the age of 25 years. The health consequence was that there was no equivalent adequate growth in childcare facilities or institutions, which resulted in increased children's injuries and malnutrition, notwithstanding the growth in household family income.

4.3 Globalization, inequalities, and inequities

When inequality or disparities increase, overall economic growth is reduced, thus stagnating and frustrating the effort to reduce poverty for the majority of the populace. Research has also shown that low growth leads to a rise in inequalities, as happened during

the 1990s. In that decade, health care suffered from de-regulation and globalization in many countries, especially in Africa and the former Soviet Union, where “total stagnation followed or resulted in sharp regression in health.”

Child mortality, a key indicator of overall health in developing countries, decreased slower in 1960-1998 than in previous years, despite many low-cost public health programs (Bach, 2007). Vaccination coverage increased from 25 percent to 70 percent in 1980 and at the end of the 1990s, due to improvements in the spread of knowledge about health, nutrition, and hygiene among parents. UNICEF noted a few years ago that, in countries that one could characterize as in transition in Europe, infant mortality rates were higher in 1994 than in 1990, while in Sub-Saharan Africa, in 1997, the mortality rate for children 5 years of age was higher than in 1990 (Bach, 2007).

Globalization has resulted in higher inequalities, both within and among nations. It is not clear, however, whether this alone has contributed to health deterioration or the prevailing health disparities (Labonte et al., 2004). Furthermore, in so far as poverty is concerned, which is usually higher in countries with high income disparities, “the greater the inequality, the harder it becomes for the economic growth presumed to follow trade liberalization actually to lift people out poverty.”

Increased inequalities lead to less social cohesion, conflict, support for strong redistributive income, health and education policies, and lead to increased mortality rates due to homicide and suicide (Deaton, 2004). It has also become clearer that integration into the international economy or economic globalization usually does not result in people’s ability to pay for the services they require but to an increase in payments to receive such services, thus negating any beneficial income that results in reduced poverty or poverty alleviation, noted by the International Monetary Fund and the World Bank as one of the ultimate aims of the Structural Adjustment Programs. Income growth and dispersal, says Cornia, “economic stability, the availability of health and other social services, and stress often dictate the degree of the international specialization of the economy, the availability and distribution of assets, its human capital and infrastructure, and the quality of its domestic policies” (Cornia, 2001).

5. Globalization and health outcomes

5.1 Illness and disease management

Huynen et al. (2005) note that governance for health purposes is done through policy pronouncements and enactments, but that, “globalization, has eroded the policy making authority of governments” and relegated it to partnerships between the state and private companies and to the International Monetary Fund and the World Bank, but, especially now, to the World Trade Organization, the reason why health and social services have declined in many of the developing countries. As a result of privatization and the “law of the market,” we have reached a point where the primary issues focus on determining “whose health is most profitable.” A study of private for-profit and of not-for-profit dialysis in the United States found that hemodialysis care in not-for-profit centers presented lower risks of death following treatment. In some cases, the provision of water was being privatized (Pang & Guindon, 2004), which results in worse conditions for the poor.

A reduction in governmental spending has also been linked to deterioration of key indicators of child health, namely, infant mortality, child survival after birth, malnutrition, educational status, and access to such social determinants of health as food and social

programs in countries such as Chile, Ghana, Peru, Zimbabwe, Philippines, South Korea, and Sri Lanka. In addition, the relationship between education and health must be seen as important. Studies have shown that adding a mother's education by one year to her life cuts childhood mortality by 8 percent--so vital are certain social services that the major corporations urge developing countries to stop subsidizing. Furthermore, data from over 100 countries collected during the 1960s and 1970s revealed that increasing adult literacy would increase life expectancy at birth by about 20 years, and reduce infant mortality by about 100-130 deaths per thousand live births (Pannenberg, 1995).

On the publicized Mexican and Thai financial crisis, World Bank studies showed a decline in income and job security. One consequence of this crisis was the forcing of children to drop out of school and engage in prostitution, which led to increased sexually transmitted diseases and infections, and employment of minors in hazardous factory conditions. Other sequelae included "acute malnutrition, severe brain damage, mental disorders, stress, increased overall domestic violence and a heightened death rate from cardiovascular disease." In fact, in some Eastern European countries, life expectancy fell by 2 to 6.6 years during 1989-1999 (World Bank, 1995).

Some noted scholars studying the harm caused directly or indirectly by globalization point to the fact that the rapid spread of HIV during the 1980s was in part fueled by the globalization efforts of the period. In other words, globalization was the precursor of the epidemic (Kunitz, 2007). AIDS, says Kunitz, "is a product of contemporary globalization because it erupted simultaneously with, and was exacerbated by, the economic crisis that engulfed many poor countries, especially in Africa, in the 1980s. That crisis had measurable demographic effects beyond those attributed to HIV and AIDS, and though they were not AIDS-related, they prepared fertile ground in which disease could take root" (Kunitz, 2007).

Okasha wrote convincingly that:

The global village allegedly created by globalization is not global after all. If we assume that 100 people are living on earth, 57 of them are Asians, 21 are Europeans, 8 are Africans, 6 are Americans; 48 are men and 52 are women; 30 are white and 70 are non-white; 30 are Christians and 70 are non-Christians. On the other hand, six people own 59 percent of the community wealth and they are all North Americans. Eighty live in poverty, 70 cannot read, 50 die in famine, 1 has a higher education and 1 has a computer. It is obvious that power and resources do not seem to follow the majority/minority pattern of the world population, i.e., globalization has failed until now to democratically represent the world it has claimed to globalize (Okasha, 2005).

It is important to note that the world is becoming more obese, and the proliferation of fast food restaurants is responsible for part of the problem. The World Health Organization (WHO) estimates that, by 2020, non-communicable diseases such as cancers, diabetes, obesity and cardiovascular diseases will represent two-thirds of the deaths on the globe, up from the present 40 percent (Pang and Guindon, 2004). Virtually un-regulated food imports have also been a cause for concern, as many agricultural products coming from developing countries in Latin America and Asia have caused severe salmonella and E. coli poisoning that at times has killed several Americans, while making others sick at other times. A key factor "has been the unprecedented increase in the global food trade, and its domination by large transnational companies that have developed global brand names and aggressive marketing strategies adopted to local situations," as are the Coca Cola, Pepsi, and Nestle brands in China [and McDonalds] (Pang and Guindon, 2004).

5.2 Cultural impact

In fact, globalization, as it has been implemented to this very day, highlights several crises of different natures (Okasha, 2005). As noted by Okasha:

A leadership crisis exists where wealth is allowed to be concentrated in fewer and fewer hands so that the world's three richest individuals have assets exceeding the gross domestic product of the poorest 48 countries. A domestic crisis is apparent because 1.3 billion people live on incomes of less than \$1/day. An economic failure is seen in that 1.5 billion people have no access to clean water and 1 billion live in miserably substandard housing. There is also a spiritual crisis in which many people are so poor that they can only see God in the form of bread. Finally, a moral crisis is evident in which 40 thousand children die each day from malnutrition and disease.

6. Globalization and the intellectual impact

It must also be noted that the impact of trade-related aspects of intellectual property rights (TRIPs) imposed by the 1994 World Trade Agreement prevents easier access of the poor and under-represented populations to essential drugs due to high prices and legal and illegal restrictions. In general, the guidelines protect the rights of pharmaceutical companies for 20 years, while the latter can also restrict affordability and availability of generic drugs through subtle ways. In May 1999, the World Health Organization was asked by the World Health Assembly to monitor the health effects of international trade agreements. It is interesting that, while the large countries of Latin America and Asia have been able to exert pressure on the international pharmaceutical industry for it to produce several drugs locally, the African continent has succeeded only in forcing them to undertake local production that consists of "simple packaging or reformulation of products" (Van Der Velden, 1995: 318).

Last but not least, partly due to undemocratic politics, insecurity, and the impact of globalization, many countries, such as South Africa and India, are experiencing extensive "brain drain" of thousands of doctors and medical personnel every year. These health care professionals, lured by the lifestyle of the developed world, especially Great Britain, Canada, and the US, leave their country to practice or live abroad.

7. Globalization and an equitable world

As noted at the beginning of this chapter, globalization is here to stay even if it benefits just one set of nations of the world. However, that does not mean that it is fair, justifiable, and that its course cannot be altered. One thing remains clear: Most citizens of this world realize the injustices and are asking the major powers and corporations that benefit from the system to ensure that the planet is the ultimate winner, bringing an end or reduction to inequities or disparities, especially in health, the theme of this chapter, and provide the means, the knowledge, and the empowerment they need politically, economically, and environmentally to live better lives. This chapter has argued, and many others have done, that one of the most potent sticks through which to measure the objectives and the success of the phenomenon we have come to call globalization is the extent to which health and health care systems function for the extension of life expectancy and access to quality health care services.

One can argue that, in the final analysis, globalization and its acclaimed successes are interdependent on people's health. Health concerns and priorities dominate our lives and without it, life is almost meaningless, as it is for many who carry the burden of disease,

especially when this condition can be easily alleviated, as is the case with many infectious and communicable diseases in the developing world. According to Okasha (2005):

The process [of globalization] has clearly both negative and positive results and is likely to create both losers and winners. Globalization has promised to grant the world instant communication, fast and efficient means of travel, a widened access to technology, cross-border cultural interaction and globalized approaches to environmental issues. However, it also entails deregulation of commerce and the creation of supernational political and economic bodies. As a result, the gap is widening between societies that "enjoy knowledge, technology and the ability to control events and others which are still backward, ignorant, frustrated, helpless and unable to follow progress and self-actualization" (Okasha, 2005).

7.1 The public response

It is encouraging, however, that the unfairness of the system has not gone unnoticed. Labonte & Torgerson (2003) remind us that the WTO has actually been under fire from social and human rights activists, the United Nations, civil society, and non-governmental organizations (NGOs), and even from the European countries themselves, which created it at the Uruguay Round of Talks on the General Agreement on Tariffs and Trade (GATT). The WTO's "level playing field," with different rules and treatment, "is pushing many of these countries into deeper health-compromising poverty. Its negotiations to open public services to trade will hasten their privatization, with loss of access for the poor." In other words, the health needs for most inhabitants of this planet appear gloomy for the foreseeable future.

7.2 Looking toward solutions

What is the solution? The intent of our chapter was not to give solutions to the problems of globalization but to provide an overview of what the phenomenon and its system have done to the health of many people of the world, currently reflected in the existing health disparities or inequities that have prevented them from enjoying access to quality health "care, life saving knowledge, reasonable income, clean air, clean water, sanitation, land, and gainful employment." In order to reap the benefits of globalization, say many experts, "we need novel approaches to international cooperation that place national self-interest in the context of global mutual interest to promote international cooperation and goodwill" (Frenk and Gomez-Dantes, 2000; Pang & Guindon, 2004).

8. Conclusion

For scholars and students interested in globalization and health, the preceding discussion pointed out the areas that need more research to make health care more affordable, open the eyes of world leaders to the misery their people live in every day, and put in place policies that are both enlightening and empowering. First, the study has made it clear that there is a need for a trans-disciplinary approach to the study of globalization and its impact on health, given that both globalization and health affect all aspects of people's lives and development programs. It is clear, therefore, that no one discipline alone can adequately deal with the complexity of globalization.

Second, our study demonstrates, we think, that those engaged in shaping people's lives through globalization must know that, while they attempt to make their own lives better,

health and people's decent living standards must be one of their priorities, if not the priority. In addition, we maintain that globalizing leaders must understand that the planet resources are finite, that they exist for the benefit of all mankind, and that they should not, therefore, be used solely as the privilege of the wealthy few, the powerful, and the unscrupulous, always keeping in mind that prolonging people's lives on earth, in a dignified way, is a noble goal, expected of those who are the stewards of our fate. Issues of inequities or disparities, impact of household income on the family and health outcomes, self-sustainability in a globalizing world, socio-environmental impact on life expectancy, child mortality, the role of globalization and violence in the developing world, drug use and alcohol consumption and globalization, technology and impact in rural areas must be of constant concern for those in leadership position.. For example, how wise is it for a man in the village to own an expensive cell phone, paying a monthly bill, but struggling to have one decent meal a day?

Third, we might say that, even though we cannot move the clock of globalization back, we can correct its course. In terms of development and health, each country's internal conditions and resources ought to be dealt with as unique cases using inclusive and fair multilateral regulatory agreements that respect each nation's both its geographic and its social space. Cornia is clear in telling the readers that:

Premature, rapid and unconditional globalization in these countries could be expected to immediately generate considerable costs in efficiency and social affairs that would worsen growth performance and health outcomes and erode the necessary political support for opening up to the world economy. Particularly for these countries, a gradual and selective integration into the world economy, linked to the removal of the major asymmetries of global markets and to the creation of new democratic institutions of global governance is highly preferable to instant globalization (Cornia, 2001).

Finally, family household income and distribution for social programs such as health and education are determined by globalization activities and regulations. Studies have shown that, under poverty conditions, when women control the household income, children's health is better or remains acceptable. Even if globalization provides a higher income to women, the studies claim, it means that they have less time to spend with their children and family. It is also important to know that a single determinant affects many others, while all health is affected by environmental "pathways" related to such elements as water, land, forests, biodiversity loss, pollution, and "the loss of ecosystem services such as the sequestration of carbon by forests."

If globalization is properly managed, it can advance the state of the health system and people's health but only if the domestic markets are competitive, regulatory institutions strong, asset concentration moderate, access to public health widespread, if social safety nets are in place, and rules of access to global markets are non-exclusionary. Only then, "can globalization reduce opportunistic behavior, operate economies of scale, reward efforts and entrepreneurship, improve employment opportunities, raise earnings, and reduce the price of consumer goods." Regrettably, none of these indicators have been common in most of the developing countries that joined the globalization wave, at least none in Africa, Latin America, and most of Asia. In fact, studies conducted during the 1950s through the 1990s have resulted in disturbing findings on the impact of globalization, especially in the developing world. For example, while inequalities are said to have increased in 48 out of 73 countries, income concentration has remained in 16 of them, including Bangladesh and India. Inequality was universal in countries of the former Soviet Union, almost universal in

Latin America, and common in member countries of the Organization for Economic CO-Operation and Development (OECD), and in Asia, South-East Asia, and East Asia (WHO, 2011).

Labonte & Torgerson (2003) recommend several prescriptions designed to alleviate the disease burden that has been exacerbated by the process of globalization, and they include:

- Instituting special and differential trade agreement exemptions for developing countries until domestic development can sustain globalizing requirements
- Banning patenting of life forms, exempt patent protection legislation for poor countries indefinitely
- Reversing the burden of proof in health and environmental protection cases argued under GATT Article XX (b) and under SPS
- Imposing fines tied to gross domestic product rather than trade sanctions as penalties, "since trade sanctions invariably hurt poor countries more than wealthy ones"
- Instituting a "Tobin tax" on currency exchange
- Relaxing liberalization requirements in agriculture, and
- Negotiating "an overarching and enforceable rule in all trade agreements to the effect that, when there is any conflict, multilateral environmental agreements and human rights agreements (including the right to health) shall trump trade agreements."

One cannot overemphasize the responsibility of any government, and more so in the developing world, to slow the nefarious tide of globalization. It is obvious to any observer that not a private company, corporation, or insurance scheme organization can affect the health of a people and their healthcare system nationally and internationally. If one is in agreement with the United Nations that health care is a right of every human being rather than a privilege of a few and that epidemiological occurrences that affect a community rather than isolated individuals are turning into global rather than local problems, "only an organization such as the state can muster the resources" that can ensure and monitor fairness and equity in the provision of healthcare services, mobilize the international community for assistance, provide most of the needed resources, and set the research agenda for the study of the ecosystem and its impact on people's health, while enlisting private health care enterprises and NGOs to assist in the process (Azevedo, 2003). Thus, allowing private corporations, loan institutions such as the IMF and the World Bank, and financial underwriters and Western nations' accountants to issue a series of ultimatums to leaders of the developing world requesting that they "roll-back tax-supported state services and mandated benefits—in effect to disband public service, deregulate labor, and lower their tax bills" (Azevedo, 2003), before they would invest their financial resources, is insensitive and ought to be resisted at all cost.

The preceding discussion has centered on how directly and indirectly globalization, through its liberalization, de-regulation, and unhindered across-the-border flow of financial capital and goods, can impact adversely the social determinants of the disease burden, especially in developing countries that have no political and international power or clout to fight the mega-corporations, the superpowers, and the will to resist the cultural baggage and its influence on malnutrition, drug use, alcoholism, sex and violence, and the lure of its lifestyle and sedentary habits, which are now clearly recognized as leading to such ill health as obesity, diabetes, several types of cancers, and cardiovascular disease.

In other words, the claim that globalization has brought the people of the planet closer, embracing the same human values and aspirations, "with the traditional boundaries separating individuals and societies gradually and increasingly" receding, has not been

realized. The differences between and among societies have tended to increase over the past decades despite improvement in communication and transportation, technology, and efforts at creating global guidelines of conduct politically, economically, and scientifically. Mental illnesses, for example, a part of public health, have increased rather than decreased over the past two decades, "...and poverty and mental disorders feed into each other, one leading to another in a vicious circle that has to be broken by either the eradication of poverty or adequate intervention with patients with mental disorders or preferably both."

In sum, while globalization has meant ill health and other risks, it also constitutes an opportunity for human kind to work together and assist those who cannot help themselves to lead productive and meaningful lives. Two well known critics of globalization remind their readers that "globalization is an ideology that suggests distribution through market is the best way. The challenge is to find arrangements whereby the production and distribution of international goods such as primary health care and public health provision may be managed within a multilateral system" (Barnet and Whiteside, 2002).

Despite the increasing concerns related to the globalization of health, there remains a divergent path between the global health issues and current systems to address the incongruence. The achievement of globalization" must be recognized as more an ideal attainment. The political will toward this goal must be tackled by broad alliances of health workers and those who serve the public good. As noted earlier, globalization has been viewed as an anti-democratic movement that would weaken the nation-state in favor of the great powers. Multinational corporations intent on seizing hegemonic control over the world both economically and culturally have aggravated the disparities between rich and poor. The so-called pro-globalization camp views the expanding phenomenon as spurring global competition that benefits all consumers and provides opportunities for states to work together and generate goods that will reduce hunger and poverty and create greater international cooperation. The facts analyzed in this chapter appear to dispute the claim.

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To better understand the contemporary world, the world of innovation and technology, science should try to synthesize and assimilate social science in the development of our civilization. Does the new era require new knowledge? Does the age of globalization demand new education, new human attitudes? This book tries to clarify these questions. The book *New Knowledge in a New Era of Globalization* consists of 16 chapters divided into three sections: Globalization and Education; Globalization and Human Being; Globalization and Space. The Authors of respective chapters represent a great diversity of disciplines and methodological approaches as well as a variety of academic culture. This book is a valuable contribution and it will certainly be appreciated by a global community of scholars.

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Phone: +86-21-62489820
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