

## **Globalization and its Impact on the World Health Crises**

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### **Abstract**

Many who speak in favor of economic globalization claim that it has improved the health of the citizenry of the world. They cite the fact that people are living longer and that many infectious diseases are under control. Many important facts have been omitted in this account of economic progress. It fails to note that not all nation states are included in the movement towards globalization. Those that are included have made epidemiological transitions from infectious diseases caused by nature to industrial diseases (cardiovascular diseases and cancer) caused by the commercialization of the food industry. Those nation states that are not included in the globalization process encounter health crises that stem from poverty. This investigation of social change addresses the impact that globalization has on these nation states what are left out of the economic system. Ways of resolving the health problems cause by economic poverty are discussed and special focus is given to Public-Private Partnerships (PPP) on health.

There are many aspects to the processes of globalization and many scholars continue to write on different aspects of just what the diffusion of practices, values and technology entails (Albrow, 1997). The focus of this investigation, however, is on the nature of globalization within the contacts of world epidemics and other related health crises. Lee (2002) provides an interesting perspective on this process. He sees globalization in terms of spatial, temporal, and cognitive changes that impact on how people interact and live across nations. The older system of globalization was based on the concept of a regional state. Countries that were geographically connected to each other create economic treaties that benefit them and they function as a regional state. These economic interactions are fostered by social and historical traditions that allowed these nation states to function diplomatically with each other within a region. What has happened more recently within the globalization process is that nation states no longer need to be connected to each other by geographical contiguity. They are now united across time and space. Hence, the older concepts of crises were regional. They occurred during a certain period or chronology and by the time that a crisis surfaces, it has already been defined spatially (within the contexts of a region or country) and temporally (within a given time frame). What needs to be investigated within the globalization process is the cognitive changes that have taken place. Nation states, as noted earlier, no longer need to be situated next to each other within a region. They may function over a large network of states to form a network society. The unification of these states over time and space is accomplished by means of modern technology, in particular, the computer. What this means, in essence, is that health crises are no longer isolated geographically. Their emergence on the world scene is rapidly communicated by means of mediated technology to other world health

centers. How does one cope with the theoretical aspects of such global epidemics? When an outbreak occurs, for example, scientists in centers for disease control must quickly determine what the cause of this crisis is. They must determine the nature of the disease. They must ascertain what caused the crisis. What agent caused the outbreak?

There is another aspect of the study of the world health that merits investigation. What is the etiology of these damaging factors on world health? As noted by Harris and Seid, (2004) many of the factors that have led to a deteriorated global condition is due to philosophy behind globalization itself. This is the perspective taken in this essay. It is argued that globalization is an economic movement that favors the richer and powerful nations over those who are poor and lacking adequate capital or technology. Furthermore, when these poorer nations are given economic loans to improve their status as part of the new world economy, the money that could be used for health programs are used to pay off economic projects. The money is not spent on the eradication of disease. In addition, since the prevention of disease is a long range project and since it is not a short term money making venture, it is sacrificed for more lucrative short term projects. Who are these poorer nation states? They comprise over two thirds of the world population. Ways of resolving this problem of world health is discussed in this essay under the rubric of Public-Private Partnerships (PPP)

### **The Globalization of Disease**

Global epidemics are not new. The globalization of diseases began in the fifteenth century when the Europeans arrived in the Americas. These were people who were housed with their animals and as a consequence they developed immunities to these animals. When they entered the Americas, they brought many animal diseases with them and this led to the importation of measles, small pox, and yellow fever (Diamond, 1999). In addition to the diseases that were brought to the Americas from Europe, there are many that came from Asia to Europe and subsequently to the Americas. Among these are the plague, typhus, and influenza. The slave trade from Africa brought the hookworm, yaws, filariasis, leprosy, schistosomiasis, and malaria. What concerns the global medical community is the scenario that occurred in 1918 when an influenza pandemic emerged within a few months and left more than 20-100 million persons dead. A half-million of these deaths took place in the United States (Kolata, 1999). To put this into perspective, the aftermath of World War I left 9.2 million dead and the disasters of World War II lead 15.9 million dead. Consequently, the concerns of epidemiologists have to do with the recent resurgence of tuberculosis, diphtheria, malaria, yellow fever, and the plague.

During the past 20 years, 30 new disease-causing organisms have been identified. Among these are HIV, the Ebola virus, Hepatitis C, the hanta virus, and the Severe Acute Respiratory Syndrome (SARS). Over 11.7 million people have died from AIDS worldwide. This is more than the number of people killed during the First World War. In a very short period of time, SARS death rose to 700 world-wide before it was initially quarantined and curtailed. With the global impact of international travel, tourism, and the importation of foods from other countries, all countries are subject to such epidemics. There are no health sanctuaries (Brundtland, 2000.)

How does one cope with the theoretical aspects of such global epidemics? When an outbreak occurs, for example, scientists in centers for disease control must quickly determine what the cause of this crisis is. They must determine the nature of the disease. Is the cause of

this outbreak due to agents such as smallpox (*variola major*), anthrax (*Bacillus anthracis*), the plague (*Yersinia pestis*), botulism (*Clostridium botulinum*), tularemia (*Francisella tularensis*), a filovirus (Ebola hemorrhagic fever or Marburg hemorrhagic fever), or an arena virus (Lassa fever or Junin). These determinations are given the highest priority and must be identified early. These determinations are based on scientific knowledge and technological expertise. Hence, they are placed in category A within centers for disease control. The next belong to Category B and include Q fever (*Coxiella burnetii*), brucellosis, glanders (*Burkholderia mallei*), alpha viruses (encephalomyelitis), toxins (ricin toxin, epsilon toxin, or staphylococcus enterotoxin B). In this group are toxins that are water-borne such as salmonella, shigella dysenteriae, vibrio cholerae, and cryptosporidium parvum. Next on the list (Category C) are other viruses such as the Nipah virus, hanta virus, tick-borne viruses, and yellow-fever, and drug resistant tuberculosis. In addition to these, the Center for Disease Control (CDC) must look for chemical agents used by terrorists.

### **The Globalization and Health**

McMichael and Beaglehole (2000) have studied the primary health risks posed by globalization. They mention some factors that are can be readily documented in terms of cause and effect relationships and others that are more tangentially related. For example, there has been a rise in smoking-related diseases due to the globalization of the tobacco industry. There are 1.1 billion smokers in the world; the percentage in the United States constitutes a mere 4% of that market. Consequently, tobacco is the leading cause of preventable death in the world today. Four million people die from tobacco related disease every year and this number continues to rise. Such are the so-called benefits of free trade. The tobacco industry, it should be noted, is dominated by giant corporations. These corporations have used the tools of trade liberalization to expand their markets into new territories. This free trade benefits the CEO's and the shareholders of investors living in rich countries. People in poor countries spend their livelihood producing cash crops for tobacco industries rather than producing their own food. No other industry has benefited more from this liberalization of trade than the U.S.-based Philip Morris, the largest tobacco corporation in the world, a transnational tobacco corporation. There is currently a counter movement against the tobacco industry, the Framework Convention on Tobacco Control (FCTC). It has begun to orchestrate an international treaty on tobacco control. The FCTC is arguing on behalf of public health over trade (CorpWatch, 2002). The Philip Morris Company has rejected this established international trade principle. The David and Goliath battle constitutes the public hearings of the World Health Organization. Why is this a public health issue? Some of the answers are easy to discern. In addition to lung cancer, The Mayo Clinic College of Medicine (2005) reports that smoking causes 85% of chronic obstructive pulmonary disease (COPD) such as emphysema; and it causes 75% of oral cancers. In addition, it causes other related disease such as chronic bronchitis, and head and neck cancers (World Health Organization, 2003).

### **Poverty and Disease**

In addition to tobacco, McMichael and Beaglehole (2000) have explained how poverty plays a role in creating primary health risks posed by globalization. Globalization is an economic movement. It is more than a network society (Castells, 2000); it is a network society with economic agency. It is a tool of the power that is driven by transnational corporations. These include the continued discrepancy between the rich and the poor and this

is important because basic poverty is one of the conditions associated with poor health. The poor cannot afford medical care; they cannot afford hospitalization; they cannot afford medical insurance; they cannot afford prescription drugs. Two out of three deaths among children and young adults in Africa and Southeast Asia are due to just six diseases: tuberculosis, malaria, HIV/AIDS, measles, pneumonia and diarrheal disease. In combinations with complications of childbirth, these diseases kill 14 million people every year. The World Health Organization calls them “diseases of poverty” because they primarily affect the poor, and they worsen poverty’s toll. They note that all six diseases can be prevented or treated for a small amount of money. For instance, antibiotics to treat acute malaria cost just pennies, and a measles vaccine costs just 26 cents (Results, 2003).

It is estimated that 18 million people died in 2001 from communicable disease because of no money to buy medicine or because they lack medicines that are targeted for a particular disease. In a report from Doctors without Borders, it was noted that between 1972 and 1997, nearly 1,450 new drugs were commercialized. Most of these were developed to eradicate the diseases of the richer nations. Of these new drugs, only 13 responded to the communicable and tropical disease that the World Health Organization (WHO) deemed to be essential drugs. Two of these were updated versions of earlier pre-existing drugs; two of them came out of military research; five emerged from veterinary research; and one resulted from Chinese pharmacopoeias. This means that only three drugs were genuinely products of research and development (R&D). This lack of development by pharmaceutical companies on essential drugs led the WHO to change its policy towards eradicating these major diseases among poorer countries (Troullier, Battistella, Pinel, & Pecoul, 1999).

#### **Public-Private Partnership**

During the Forty Sixth World Health Assembly of WHO, the organization decided to find alternative approaches to working directly with pharmaceutical companies. They called for support from the private sector (such as the Bill and Melinda Gates Foundation that donated more than one billion dollars) and Non-Governmental Organizations (NGOs). Buse and Waxman (2001) noted that there were 82 organizations that met the call for Public-Private Partnerships (PPP). These were non-profit organizations that worked to integrate pharmaceutical companies, charitable foundations, national and international public institutions, NGOs, and members of civil society. The goal of this organization is to reduce health inequality, stimulate research in the less lucrative areas of the pharmaceutical market and facilitate access for vaccines and medicine for people without purchasing capacity. From these alliances there have been many new PPPs. The International AIDS Vaccine Initiative (IAVI), the Roll Back Malaria (RBM), and the Global Alliance for Vaccines and Immunization Act (GVI) are all successful PPPs. The problem with PPPs is that the approach is reductionistic. It seeks to cure a disease without considering the economic and ecological context of the individuals involved.

From a business perspective, corporate enterprises wanted to cure the disease before establishing plans for development in such high risk disease areas. They believe that once the disease is eradicated, market forces will be re-established. If malaria is eradicated in the Congo, for example, business ventures will return there. Anthropologists tested the hypothesis that malaria is a barrier to development. They found that even with the eradication of malaria, macro-parasites did far greater damage to local health and to local crops. They concluded that most of the problems in the region studied had to do with problems of land ownership. They

argued that it is economic development that normally leads to increases in health levels and the disappearance of infectious disease. Changes in the physical and social surroundings as well as preventative health policies did more to eradicate contagious diseases. Malnutrition makes the local populations susceptible to these diseases.

At another level, the problem is technological. Pharmaceutical companies have invested their money in the creation of drugs used for the treatment of disease. They are not prepared in dealing with the prevention of diseases (Schulz-Asche, 2000). How does this relate to the world health crisis? In 1990, UNICEF declared that 80% of the world's children were immunized against the six main childhood diseases (diphtheria, tetanus, whooping cough, polio, measles, and tuberculosis). One decade later, this rate dropped to 75% and in 19 African countries the drop went down to 50%. This led to a million additional deaths per year caused by diseases for which there were existing vaccines. There not enough drugs to take care of the infected population (Hardon, 2001). The reason for this lack of drugs is that the bulk of the research was committed to the development of new vaccines and this resulted in the downsizing of health services and the distribution of old vaccines. It should be noted that the downsizing of services was inconsistent. Developing countries with larger markets such as Brazil, Mexico or India are guaranteed adequate supplies of drugs because of their larger profit margins. Why have PPPs failed in these circumstances? They do not have access to local governments. They are controlled by the public sector. They cannot compete with official corporate entities with large budgets. They cannot convince these corporations to invest in preventative medicine. They cannot convince them to develop generic drugs in these countries.

The case of Brazil provides an interesting example of how local governments can increase the flow of generic drugs in their country. Brazil had an agreement with pharmaceutical companies, for example, that would allow them to sell their drugs in their country. Part of this agreement had to do with generic drugs. They were not supposed to produce their own generic drugs. Brazil broke its agreement with transnational pharmaceutical companies and began to produce its own generic drugs. Their local prices were significantly reduced and cost six times less. The cost for the treatment of diseases dropped by 73% (Vakhovskiy, 2001).

### **The Globalization of Food Production**

Another area in which primary health risks are associated with globalization can be found in the marketing of processed foods internationally (Lang 1999). For example, these include diseases of dietary excess as food production and food processing become intensified and as urban consumer preferences are shaped by marketing images of processed foods sweetened with corn syrup (Popkin & Nielson, 2003). The globalization of the food industry is big business. The problem with this shift is that it has also weakened its dependency on private farms and naturally produced farm goods. Food has shifted away from its focus on health care and moved towards satisfying consumer demands for unhealthy foods that are high in carbohydrates, sugar, and a host of food preservatives. This change in food manufacturing and production has been responsible for poorer health quality by setting international standards for processed foods that threaten primary health care (Josling, 1999).

### **Problems of Environmental Health**

Environmentalists have come under attack for stating the obvious. There is mounting evidence that the spread of production and consumption patterns by modern industrial nations embarked on monopoly capitalism is responsible for global conditions that are harmful to human health. These attacks have been met with misinformation, but they cannot be denied. Among these are the problem of global climate change, the depletion of the planets stratospheric ozone layer, the destruction of natural ecosystems, drying of productive lands (desertification), and a wide range of forms of chemical pollution ranging from smog to acid rain. One such example of these changes was cited by St. Clair and Busch (2003) who describe the Eskimos of the Baffin Islands of Northern Canada near the North Pole. These are tribal groups that make their living by hunting and gathering, but, due to environmental changes, they cannot return to their livelihood.

They cite the work of Mastny (2000) who has decried some of the problems that have occurred when the ancient hunting traditions of the Inuit clashed with the encroaching industrial societies of the South (Canada, the United States, and Russia). The changes took place in two major ways: contact with outsiders and changes in climate such as global warming. Her discussion begins with the elders of Pelly Bay, an Inuit community on Canada's Arctic coastline. They were working on being self-sufficient and were in the process of marketing their Kiviuq (mythical traveler) dolls when federal agents at the U.S. Border in Buffalo, New York confiscated them. The dolls were being shipped to a master puppeteer in the United States, but they ended up in the hands of the Fish and Wildlife Service. These items were barred from entry into the country because they violated the Marine Mammal Protection Act of 1972. The dolls were made of sealskin and whale bone, both considered to be illegal under the 1972 Act. These items were crucial for the economic survival of the Nunavut, a nation of 23,000 people. What is interesting about these Inuit is that they had experienced widespread cultural and political renewal and had a unique opportunity to create a self-sustaining economy. This group wanted to maintain its old ways. They were excellent hunters. However, they could not return to the past. Their lives changed when they encountered European and North American commercial whalers in the early 20<sup>th</sup> century. They were hired as skilled hunters and served as guides on trading expeditions. They even served as crew members on whaling vessels. They changed because their technology and social structure changed. In the early 1900s, for example, they encountered the devastating effects of influenza when the 200 Inupiat (the group near Beaufort Sea) were left with only 40 survivors. Their lives changed when they accepted the practices of the venturing capitalists who changed their economic system into a cash society. They changed when they adopted the whaling technology of these outsiders and began to use whaling guns to harpoon their food supply. They changed when they accepted the value systems of missionaries who wanted to convert them into a new system of spiritual beliefs. They changed when they gave up their igloos for fixed housing. They changed when they accepted the educational system of the outsiders. They changed when they started to use the languages of these venture capitalists in lieu of their own. They changed when they gave up their old use of medicines and replaced them with medical supplies. They changed when they replaced hunting with cannery work. They changed when they could no longer survive on their own as they did in the old days. Even though working on going back to the old days, their dreams were crushed. The problem is that they could never really go back to the old days (Mastny, 2000). Mastny continues her discussion of other groups living in the region of the Arctic Circle. She mentions how in some

tribes, the skin covered kayaks were replaced by motor boats and how the old stone-tipped harpoons were replaced by high-powered harpoon cannons. Even snow sleds were replaced by snow mobiles. Hunters now use telescopes, rifles, radio transmitters, small planes, and all forms of technology now available to them. Not only have the hunters changed, but also so have their families. Inuit families watch sport events on TV. Their children play video games. They use computers, invest in stocks, drive cars, and share in all of the amenities of industrial life. We are not trying to argue that they should not do these things. We are just reiterating the fact that their social organization has changed many times over. They can no longer be hunters in the way of the old days. International laws now dictate what they can hunt and when they can do it. What this investigation of the Eskimos demonstrates is that global climate change is real and its effects are global.

What does the depletion of the ozone layer mean for those who are exposed to the unprotected rays entering the earth through these large gaps in the stratosphere? One only needs to consider the situation in Australia where the Ultraviolet radiation (UVR) levels have increased significantly due to global warming. With this increase has come an increase in the rates of skin cancer. More than a million people will have skin cancer this year. The projected rate of increase in Europe and the United States is projected to have a 500% rise during the middle decades of this century. Those who are not impressed by these figures should consider other side effects of global warming. There is an estimated 24% increase in cereal grain yields as a result of global climate change. The Midwest of the United States is already encountering long periods of drought.

#### **Concluding Remarks**

Many who speak in favor of economic globalization claim that it has improved the health of the citizenry of the world. They cite the fact that people are living longer and that many infectious diseases are under control. Many important facts have been omitted in this account of economic progress. It fails to note that not all nation states are included in the movement towards globalization. Those that are included have made epidemiological transitions from infectious diseases caused by nature to industrial diseases (cardiovascular diseases and cancer) caused by the commercialization of the food industry. Those nation states that are not included in the globalization process encounter health crises that stem from poverty. Lack of good nutrition contributes greatly to the rise of infectious diseases.

One of the ways of resolving the health problems cause by economic poverty can be found in the creation of Public-Private Partnerships on health. These humanitarian efforts, however, are limited because they are not always recognized by local governments. They do not fit into the plans of the nation states of the poorer economies.

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