Chapter 17

Global Issues and Health Interactions
Reflexions from the South

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INTRODUCTION

This chapter draws attention to a range of global issues that interact, and aims to provoke thought and research on their impact on health. Initially, it deals with communication, economic issues and physician migration. Then it summarizes a wide field of mechanisms by which global forces affect health, indirectly or directly. Within this classification there has to be some overlap—for example the HIV virus causing AIDS would appear to be a direct health effect, but a shift in lifestyles that has seen an increase in the number of individuals’ sexual partners—a shift that perhaps reflects a breakdown of family and religious value systems—may be the more fundamental, but indirect, cause. The view is primarily from the standpoint of developing countries, the “South,” and does not eschew controversy.

COMMUNICATION

Health Effects of Communication Technology

New communications technologies have improved the speed with which the benefits or adverse effects of any new health intervention are scrutinized and spread. Difficulties in identifying infection in a poorly equipped remote centre,
or performing operations in a small district hospital, and so on, are mitigated by
active on-line communication. These communications remain expensive, but they
are cheaper than transporting patients. The best-known example of the value of
central laboratories in monitoring outbreaks of infections is the Centres for Disease
Control in Atlanta, Georgia, USA.

Today in society there are new vectors that convey pathogenic influences to
the mind and the body, turning them into pathological behaviour and disease,
without the need for insect vectors. These are the electronic media (radio, tele-
vision, the Internet) and printed matter, linked to peer pressures across nations.
Subtle and sophisticated methods of communication with high-pressure presenta-
tion and advertising techniques are available, aiming to force compliant behaviour
by readers and viewers, whether they are the general public, children, or potential
consumers. The potential dangers of the so-called new non-communicable diseases
(and of others such as diabetes, malignancy, accidental and non-accidental trauma,
and family dissolution) are now recognized, as is the effect of lifestyle on them.
However, the urgency that needs to pervade this subject is still missing. Even the
name dulls, and perhaps the word non-communicable should be consigned to
history or be entirely discarded. The term neo-communicable disease (NCD) is
proposed for these conditions: this should, if only subconsciously, instil a sense of
urgency.

Crime, violence, and untrammelled sexual promiscuity seem to be wholly
acceptable in the media. All produce problems, and only now is television
generally monitored. The Internet is still almost completely uncontrolled—
and assertions about the need to protect freedom of speech are used to jus-
tify the unlimited propagation of the most sexually provocative and violent
material.

However HIV may have started, its subsequent spread in humans demon-
strates the consequences of an alteration in the norms of behavior. Heterosexual
spread is aggravated by practices that are at variance with a holistic concept of the
unitary family. In addition to technical methods of control and cure, what is more
difficult to decide is whether there are relevant moral and religious arguments.
The economics of the sex industry will not permit control. Human rights workers
face roadblocks when they seek to inquire into the trafficking of females as sex
workers and of children for war and pornography. A new dimension is the effect
of web-based sexual material.

Information technology could be used better; it has yet to be exploited by
the medical fraternity as a health promoting platform for marketing of prevent-
tive diets and lifestyles with the same skill, effort, and money that more harmful
marketing readily achieves. It should be recognised that the psychology is impor-
tant here: The opportunity to cure is more exciting than to prevent; at a global
level, there is no money in prevention. Information technology could undoubtedly
also be better exploited for surveillance against new and unknown diseases—for instance, in looking at changes in genes, enzymes, cell proteins, and so on.

A specific way in which the technology is actually being used, albeit inadequately—is for modelling the consequences of various health related scenarios as a diagnostic and therapeutic tool in community health, but more importantly as a method of monitoring and forecasting major health problems in terms of global perspectives and data. The capabilities of computers would be especially valuable when inter-sectoral issues need to be investigated, which is mandatory in such studies of global health.

**Inappropriate Foods and Their Global ‘Marketing’**

Obesity is now a major problem in the United States and Britain and is increasingly so in the rest of the developed world—especially amongst children. The marketing pressures about behaviour and food that encourage this trend are now spreading to the Third World. Diabetes is now a major health problem in Asia and Africa, providing an environment for infections of skin and internal organs that have serious consequences. Levels of exercise are decreasing, and the populations and countries do not have the financial resources to prevent or manage infections effectively. Cardiovascular disease and alcohol and cirrhosis are increasing problems—with alcohol, Hepatitis B, and liver cancer being a terrible triad. These are becoming global now, with lifestyles and sexual norms changing. The poor have a triple burden of disease.

The pressures of the global-village mechanisms in food production can create other possible problems, again linked to production and marketing. Possible problems yet to be assessed include: irradiated foods; genetically modified foods (GM); the effects of processing in producing carcinogens in food; animal feeding habits like those which led to bovine spongiform encephalopathy and now the human form of that disease; packing and processing of food; and chemical post-harvest preservation.

**Physical Movement**

The speed of international travel and the amount of exchange of commodities mean that microorganisms can be transported into new environments in which there is almost no background resistance. Rats and mice move. Humans move. Quarantine measures are now relaxed. SARS-like outbreaks can occur in the most unexpected places.
ECONOMIC ISSUES

Poverty

Poverty is now recognized not only as a disease in itself, but also as an important cause of disease. It should be noted that the common index based on per capita income alone may not be an adequate measure of poverty in a rural area where much food is grown and living expenses are low, whether in a unitary or in an extended family. But exactly the same cash income may be inadequate if even one member of the family is in an urban area, or if the family is split up. Nevertheless, it would appear that the gap between rich and poor, in all countries, is increasing. The diseases of poverty, and diseases consequent upon poverty, are among the biggest challenges facing the international community in this new millennium.

Urbanization may increase poverty and decrease health. The importance of subsidies and of encouragement to maintain the strength of the farming community and the prospects for its young in the same profession must be recognized. Although GM foods may or may not have direct health effects, the transnational marketing of these would be harmful if farming in a country is adversely affected, leading to urbanization, breakdown of families, more cost to the government in developing cities, crime, lack of family support systems for the elderly, and so on. Unplanned urban growth is now globally epidemic. The breakdown of rural agriculture and an unwillingness to develop a strategy for industries in rural areas contribute to this problem. Independence of rural communities is also seriously at risk in this era of cheap mass production and interdependence. In this sense, multisectoral interdependence is a global threat to health.

Food Security; Subsidies

The drive towards opening markets often serves good purposes. But globalization and World Trade Organization policies that allow food subsidies and import protection selectively in rich countries and try to forbid them in poor countries undermine food security. (The subsidy issue is currently relevant to the WTO, China, India, Brazil, USA, and EEC.) Sometimes food produced in the developed world is cheaper than food produced in the developing world, as farmers in developing countries faced with the loss of subsidies for fertiliser often price themselves out of the market (and also may incur such losses that they give up farming). Youth, who no longer wish to look after farms, become unemployed and move into towns. This can cause even more problems by undermining farming and fishing and increasing urbanisation in the developing world. Indirect effects then result from increasing urban and rural poverty. These increase disease (because of bad housing, inadequate water supply, and poor sanitation). So both food production and the economy of the country suffer disastrous consequences. A self-sustaining
way of life seems to become eroded, and pockets of poverty increase. Naturally, higher productivity in developed countries is to be welcomed and emulated, but protectionism is not welcome. Other global phenomena indirectly affecting health include the development of crop predator agrochemical resistance—as this spreads across countries, international co-ordination for its control is needed.

**Cost Recovery Policies**

Some macroeconomic trends leading to international policies about cost recovery have distinctly negative effects, and result in ineffective and impractical policies. They cut off access to health care (and education) for the poor—as can be seen in parts of sub-Saharan Africa. They may also increase poverty and, therefore, indirectly negatively affect health. So the new poverty that accompanies some of the current economic policies constitutes a disappointing new threat, even though the basic policies set out originally to reduce poverty. Income disparities, as well as disparities in nutrition and education, are increasing in many countries. Poverty and unfulfilled aspirations are causes of violence. Awareness and action are needed to control this new threat; it will not disappear as part of globalisation may indeed become worse.

**Funding for Health**

There are huge national variations in spending on health. The low figure in Sri Lanka (of around $23 USD/capita/annum) for example, is minute compared to the 14+% of GDP the US spends on health—and the US still leaves a significant proportion of its population relatively underserved.

**Corruption and Bad Governance**

These remain major problems, particularly in poorer countries; it is suspected that the resources shamelessly diverted from the public sector, and especially from the budget for health and education, are a high percentage of GDP. Macro-corruption in international contracts and aid arrangements would likely be made worse by collusion and encouragement from sources in the North to the South—the poor suffer, and disease and bad treatment are the consequences. Poorer nations spend even less, and the gap is widening.

**Economic Sanctions**

The use of sanctions by the “morally correct,” rich, and powerful nations, against those regarded as “evil,” has the most devastating health effects on the innocent in a country. This has been so for a long time in Cuba, and to some extent
in South Africa, and, in the relatively short term, in Iraq. To expect the “dictators” or leaders to succumb on the grounds of the suffering of the innocent is naïve! Those who impose the sanctions take a position on the moral high ground—but do they not subvert sanctions if it is convenient?

**Physician Migration**

Physician migration from the developing to developed areas of the world, or even within a country, occurs for financial, social, and job satisfaction reasons. This poses a real health threat. Donor developing nations experience difficulties and inequities in their health services, financial loss for the country occurs, and a loss of educated families, potential employers, and role models. The human resource for medical education is diminished. The critical mass for research and development becomes difficult to maintain. These disadvantages are not adequately compensated by increasing contacts, introduction of new ideas, or financial inflow to the donor country. Often the pull from the developed world is increased because it does not produce enough physicians of its own. The credibility of international health and educational organisations is affected because they may be thought to be trying to train more economically in the ‘South’ a product for the ‘North.’ Amelioration of this situation needs economic development and imaginative schemes in the donor countries and, ideally, ethical attitudes from recipient governments. At the very least, adequate compensation should be made to the donor country of the amount per capita that it would have cost the recipient country to produce the same product.

**DIRECT EFFECTS ON HEALTH**

There are many “non-medical” matters which are global, and which affect health for many reasons. Value systems are propagated by the media, travel can transport germs, marketing forces determine the spread of certain types of vehicles, and skewed distribution of resources at international and national levels to combat these problems compounds them. The rapid spread of information and knowledge can help to control and treat some diseases. Anti-smoking pressure genuinely applied to consumers and producers of tobacco (this has not happened yet) would for example, help maintain good health and save many lives and resources.

**Tobacco and Alcohol**

Supposedly harmless substances like tobacco and alcohol have produced enormous problems with neoplasia, cardiovascular, liver and pancreatic disease, and social disruption. The courts, for instance in the United States, have accepted
many times that tobacco is addictive and harmful but the export of that same commodity to gullible consumers is allowed; the drug regulatory authority of the exporting country would be very unlikely to allow so freely the import from elsewhere of something condemned at home as roundly as tobacco. Powerful tobacco lobbies argue that “the rights of consumers” allow the export. The increase in tobacco consumption in the developing world, instigated in part by vigorous advertising and export from developed countries or their outsourced subsidiaries, will lead to huge increases in malignancies and cardiovascular disease as the twenty-first century unfolds. Alcohol abuse is similarly an increasing problem and, again, global marketing and peer pressures hinder preventive measures.

Non-accidental Injury

War, domestic, and other acts of violence are aggravated by poverty and have a direct health effect. The psychological effects on victims and family members such as children may be more severe than any direct physical injury. Affecting economic progress at national or homestead level may well amplify the immediate consequences of these factors.

Accident and Injury

Road traffic accidents are a huge and rapidly increasing problem in the Third World. The development of roads, good driving habits, law enforcement, and vehicle maintenance are inadequate. Home and work place accidents and falls (off, e.g., trees and buildings) are also an important problem.

Bacteria and Viruses

The continuing emergence of resistant organisms (bacteria, e.g., tuberculosis), new mutant bacteria and viruses, and the uncontrollable Ebola and HIV, cause huge problems. Bacteria are becoming ‘cleverer’ in using DNA transfer to develop resistance. The increasing sophistication of medicine also tends to disregard simple yet proven measures like washing hands between patients. The globalisation of the use of antibiotic prophylaxis may detract from the strict criteria of elegant surgery. With the increased use of animal products and xenotransplantation, it will be vital to guard also against new zoonoses.

The pharmaceutical industry is a great help in researching new drugs—but, regrettably, it tries to promote reliance on the ‘latest wonder’ drug. The political will not to release stocks of poliomyelitis and smallpox vaccines has to be nurtured, because if it collapses, there will be global epidemics.
Parasitic Diseases

Malaria (and other third world parasites) remains an enormous problem—the vector and parasite are clever, and the amount of money going into research may be less simply because the populations affected are not in the North. But bold global initiatives aimed at the elimination of filariasis are under way.

Environmental Toxins and Chemical Imbalances

With the increased use of pesticides and other agrochemicals and radiation, the sub-lethal exposure to agents that can damage DNA and cell function is increasing. The main effects, perhaps, remain to be seen, but they may be most evident in young persons showing tumours or infertility or impaired resistance to infection.

Drug Addiction

Drug addiction has both direct health effects and also a less direct one—AIDS and hepatitis B are spread by some methods of drug use. Additionally, the increase in violence associated with financing drugs is a cause of ill health, and the poverty that follows often addictions is the most potent and indirect factor causing ill health for families. The global nature of this terrible scourge is the kernel of the problem, because the client demand is from richer countries as well as poor, and the links between arms cartels, terrorism, money laundering, banking secrecy, and drugs constitute a tangled web which most can barely discern, let alone unravel.

Dumping Wastes and Foods

Problems occur as a result of the careless disposal and dumping of sewage, toxic industrial waste (radioactive and non radioactive), and food unfit for human consumption—Sometimes the problems originate with developing country partners of economic North multinationals. Industrial accidents, as in Bhopal, have a similar genesis. Diseases follow direct consumption of, say, the water from a poisoned river, or an animal drinks and stores the poison, humans eat the animal and fall ill (e.g., as with fish). Regulatory mechanisms either do not exist or are bought out by the money that is to be gained by noncompliance. Double standards abound; for example, after the dangers of aniline dyes and antioxidants (in the rubber industry) were recognised, these industries moved to less developed environments.
Industrial Safety

This is becoming increasingly an issue where the fear is that the developing country subsidiary of a developed country’s company may take a variety of short cuts as local legislation may not exist or may be easily manipulated. The adverse health consequence of the use of child labour is a variant of this. The adverse health consequences of stopping child labour on apparently “humanitarian” grounds, when the real issue is the fear that a lower price will outbid the richer country product is a sad example of deception.

Mobile Phones and Other Radiation

The mobile phone industry is now huge and global, and possible but as yet unidentified hazards from electromagnetic radiation of various kinds are emerging. Research in the use of mobile telephones may indicate some dangers to the brain. Other forms of radiation, for instance, from certain (older) computer screens, may also be hazardous.

Indirect Effects on Health

As stated, not all causes of ill health are due to direct medical effects. Indirect effects can equally be fundamental.

The Family

In all the major religions there are definitions of what is thought to constitute a stable family. All health indices are badly affected where there is no stable family structure, and particularly where the mother is not available. Family economy first, and then nutrition, education, and health are affected. The resistance to physical disease and to emotional and psychological disease resulting from peer pressure and media pressure are reduced. Value systems break down and violence is more likely.

In addition to joint and nuclear heterosexual families and single-parent families, there exist single-sex, multi-person families in which children are a commodity, for the gratification of various urges and rights of the family. This might be regarded as a form of child abuse. Abuse of a female spouse is also a problem—and there is global devaluation of women, often justified on false cultural grounds.

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to emotional and psychological disease due to peer pressure and media pressure, are reduced. Value systems break down and violence is more likely. Child abuse of every kind becomes more common.

War and Violence

War and violence affect health by infrastructure destruction, displacement of persons, stultifying mental energy, breaking down discipline, retardation of economic development, and increasing poverty.

The dichotomy between the pronouncements of the evils of violence, and the marketing of it by the media, are real. The gun culture in the United States, and poorer countries like Sri Lanka, have had terrorist desertions from armed forces, and young children have grown used to guns. These generate problems that have global dimensions because of the effects of information moving from country to country. The arms industry is huge, rich, and powerful, and can be accused of affecting national policy, encouraging the distortion of intelligence, and promoting war and violence.

Here is where WHO’s principle should lead: “Health as a bridge to peace.”

The Pharmaceutical and Instrument Industries

The drug and instrumentation industries provide an invaluable service, for instance, biotechnology is of great global benefit. However, multinational companies want monopolies both in their base country and internationally. Openings provided by import liberalization result in the undermining of local industry. Companies with a monopoly can also control pricing and supply, irrespective of the direct or indirect health effects of such policies. These practices produce problems at a global level; however, industry in the developing world is just starting to compete more effectively. The outcome of the debates about retroviral drugs in South Africa and Brazil is a good example of the global arguments and how they can sometimes benefit the poor. But industry may also do harm, for example, by promoting disposable equipment—rather than making good reusable equipment—despite the risk that poor countries reuse what should have been discarded, with all attendant risks, because the alternative is too expensive.

The Environment

Global warming, rainfall and sea level changes, loss of forest and then water supply (which affects farming) are huge issues. Fossil fuel consumption produces greenhouse gases, and even worse, the destruction of forests provides some of the fuel. These are causes of ill health and poverty because they affect sources of income. The loss of forest cover and changes in rainfall and desertification
are also alarming as they cause population shifts and displacement—with, again, poverty and disease. Recent difficulties in persuading the richer nations to cut back illustrate the real magnitude of the problem—if the Third World populations were to consume quarter the amount of fossil fuel used by the North, the world would vanish.

The terminator gene of Monsanto in wheat—now fortunately abandoned—could have been a harbinger of a global food war using gene technology. But the threat of a global health situation as a result of a GM or other strategic type substance being released as a military threat remains. There is, so far, no treaty to ban this.

Demographic Transitions

Reductions in mortality both in lower age groups and in the 50-plus group mean that more elderly but fewer economically active people generate the wealth to help the state. There are more nuclear families, also, because families are spreading themselves between town and rural areas. These changes mean greater costs for care. The world also faces the burdens of infectious, degenerative, and so-called lifestyle diseases.

CONCLUSIONS

Recognition of and response to global issues require enormous local, national, and international political will. Constructive action is even more challenging. It is disappointing that as the world advances, the forces of progress may do more harm than good; the ‘Might is Right’ philosophy undermines what should be a ‘Right is Might’ view—‘Might’ being negative political, military, or economic. However, if the concept of health as a positive value is to have an impact, linked to a sustainable and improving situation for all, the macro forces that are outside the control of individuals need articulation.

Therefore, new perspectives are needed:

From governments and international bodies: to bring order and civility to the behaviour of the rich and powerful.
From the health sector: to re-order disease groupings and give a sense of urgency about the double burden of disease. The term neocommunicable should be adopted.
For any sector of a country to function well, health is a prerequisite—and a basic right. It must be recognised that mismanagement and inadequacy in any one segment of society or in national and international structures has wider adverse effects on health.
Finally, a level of vigilance, conscience, and intellectual honesty is needed: to recognise the global and interrelated nature of many forces and the necessary political will to identify and act upon what may be the real ‘rate limiting steps' as applied to health improvement.

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