KERTAS SAINTIFIK

GLOBALISATION AND PUBLIC HEALTH: ECONOMIC ASPECTS

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ABSTRACT

Globalisation is affecting all aspects of human society. There is increasing economic integration of the countries of the world through trade and investment flows. There is also the spread of socio-cultural influences through education, the mass media and population movements. Globalisation is also affecting healthcare institutions as well as the health of the public. This paper, will discuss certain economic effects of globalisation that impact upon the health of the public. These include the following: population movements, the pharmaceutical industry, foreign investment in healthcare services, the international drug trade (legal drugs such as tobacco as well as illegal drugs), cross-border pollution and the "export of hazard", the mass media and its effect on health-related behaviour, worldwide weather changes, "structural adjustment programmes" (SAPs) implemented in response to economic crises, and the impact of multilateral organizations on national health policy.

INTRODUCTION

There are many definitions of the term "globalisation". To some, it means increasing economic integration of the countries of the world through international trade, multinational corporations that operate worldwide, international banking, currency trading and speculation, and so on. To others, it also includes sociocultural integration such as the spread of "Western" concepts and lifestyles to the rest of the world. This paper will focus on the economic aspects of globalisation that impact upon the health of the public.

POPULATION MOVEMENTS AND PUBLIC HEALTH

Labour flows are an important aspect of globalisation. National borders are increasingly "porous" and many governments (especially those of richer nations) are having tremendous problems dealing with illegal immigration. The main reason why people attempt to enter another country illegally is usually an economic one: to get "better paying" jobs in the country of destination or to escape unemployment or underemployment at home. Even if the jobs they obtain as illegal immigrants are lowly paid vis-à-vis local wages, the illegal immigrants strive to get these jobs because the wages often seem attractive because of exchange rate differentials. For example, lowly paid Malaysian jobs are attractive to illegal immigrants from Bangladesh, Indonesia, Myanmar and so on because the meager wages they earn can be converted into sizable amounts of Bangladeshi thaka, Indonesian rupiah or Myanmar kyat at home.

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Illegal immigrants often come from much poorer nations with low living standards and poor health status. Thus, illegal immigrants who enter Malaysia may act as vectors for communicable diseases and re-introduce diseases which have largely disappeared or are under control such as leprosy, filariasis, diphtheria and so on (Low et al. 1996). Illegal immigrants often sneak into another country with the help of human smugglers. The smuggling of human beings is reportedly highly lucrative and can involve international criminal gangs. These criminal gangs often smuggle their human cargo under hazardous conditions. For example, if the route of illegal entry is by sea, attempted entry is done at night and on flimsy boats overloaded with illegal immigrants. These boats may sink and result in large numbers of deaths through drowning. Cargo containers have also been used in the smuggling of illegal immigrants into the United States and Western Europe (Online NewsHour 2000a). Illegal immigrants may be ill-treated and abused by the human smugglers during passage or by immigration and law enforcement officials of the country of destination if they are arrested upon or after arrival.

Foreign workers (especially illegal ones) often live in substandard housing with poor water supply and sanitation, e.g., Indonesian construction workers in Malaysia often live in shacks at construction sites. These sites may be strewn with rubbish or with pools of water that can serve as breeding grounds for vectors of disease such as flies and mosquitoes. The foreign workers are often exposed to dangerous working conditions also. They may also experience prejudice, discrimination or even xenophobic violence from the locals (Jones 2000).

Large numbers of young, male foreign workers may give rise to social problems such as an

increase in prostitution. Sometimes, female illegal immigrants are tricked or forced into prostitution. Rates of sexually-transmitted diseases may increase accordingly. For example, it has been found that in sub-Saharan Africa, the spread of the HIV virus is facilitated by the large numbers of male migrant mine workers. The migrant workers become infected with the virus at the place of work when they visit prostitutes. They then spread the HIV virus to their wives and girlfriends when they return home on short visits to their villages or to their home countries (Estebanez 2001).

Another form of population movement is mass tourism. Mass tourism can also spread disease, e.g., tourists who visit other countries on "sex tours" can become infected with a sexually-transmitted disease in the foreign country and return home with the disease. There is also "ecotourism" whereby tourists enter wilderness areas for recreational purposes. These tourists may become infected with a disease-causing pathogen while in the wilderness and show signs of infection only after returning home (speedy means of transport such as jet aircraft often mean that the tourist is home before the incubation period is over) (Basch 1990; Houston 2000).

Besides migration of unskilled labour (legal or illegal), there is also migration of skilled labour. The latter consists mostly of highly educated and highly skilled professionals who move to another country to work legally, e.g., migration of doctors from lower income countries to higher income countries. Again, these skilled workers migrate mostly because of economic or professional reasons, i.e., to earn more or because of greater educational and occupational opportunities overseas. This type of migration leads to the "Brain Drain" problem of many developing nations. Their best brains migrate overseas and are thus lost to the country of origin. The pattern of migration can be from a low income country to a middle income country, from a low income country to a high income country, or from a middle income country to a high income country. Middle income countries such as Malaysia may lose some of their skilled workers such as doctors and biomedical researchers to high income countries such as Singapore, Australia, New Zealand, Britain, Canada or the USA. (Bundred & Levitt 2000).

THE PHARMACEUTICAL INDUSTRY

Modern medicine relies heavily on antibiotics and drugs in the battle against disease. Hence the need for public health authorities to pay attention to the latest developments in the pharmaceutical industry. Pharmaceutical companies are involved in research and development, testing, production and marketing of drugs, medical instruments and supplies.

Multinational pharmaceutical corporations from the developed nations have been heavily criticized in recent years for the following:

1. High prices of proprietary "branded" drugs, e.g., the high prices of the "cocktail" of drugs used in the treatment of HIV infection (Griffin 1991)
2. Differential pricing of the same proprietary drug in different countries, e.g., Americans were shocked to discover that the prices of some branded drugs are significantly lower just across the border in Canada (Online NewsHour 2000b)
3. Focusing on the development of drugs for "trivial" medical conditions that afflict the populace of rich countries (such as Viagra for erectile dysfunction) while paying insufficient attention to the development of drugs for diseases that continue to kill millions of people in poor countries such as malaria, trypanosomiasis and so on. The following quotation is a very effective criticism of multinational pharmaceutical corporations in my opinion:

   > *Only 1 percent of all new medicines brought to market by multinational pharmaceutical companies between 1975 and 1997 were designed specifically to treat tropical diseases plaguing the Third World. In numbers, that means thirteen out of 1,223 medications. Only four of those thirteen resulted from research by the industry that was designed specifically to combat tropical ailments. The others, according to a study by the French group Doctors Without Borders, were either updated versions of existing drugs, products of military research, accidental discoveries made during veterinary research or, in one case, a medical breakthrough in China. (Silverstein 1999)*

4. Pharmaceutical companies in the United States have also been criticized for making millions of dollars in profits by using the fruits of research funded by the National Institutes of Health and other agencies of the United States government. The argument here is that taxpayer money is being used to fund the initial development of new drugs which are then sold at high prices to the public by the pharmaceutical companies as proprietary drugs (Greider 2000).
5. Continued mergers of already large pharmaceutical corporations into even larger entities: According to economic theory, this will result in reduced competition that will give pharmaceutical companies the power to raise prices even further. Research and development of new drugs may also slow down because of oligopoly. Some nations have attempted to combat the problem of high prices for proprietary, "branded" drugs by

encouraging the production of such drugs through "reverse engineering" with the help of "compulsory licensing" laws, i.e., laws that allow local companies to make copies of essential drugs without the permission of the patent holder (as in India and Brazil). Brazil is distributing anti-HIV drugs (locally produced copies of patented drugs) free of charge because it is deemed that control of the spread of HIV/AIDS is of vital importance to the national interest. These activities get the multinational pharmaceutical corporations highly agitated and they have pressured their respective governments and the World Trade Organisation (WTO) to force India, Brazil etc. to disallow these practices (Online NewsHour 2001; Demenet 2001; The Star 2001).

E-commerce in pharmaceuticals is an important recent development. This allows purchasers to use the Internet to compare prices easily and to buy drugs from the cheapest sources overseas. This practice (called "parallel imports") increases market competition and therefore makes the multinational pharmaceutical corporations unhappy by reducing their sales and profits. E-commerce allows purchasers to bypass them and to buy drugs at significantly lower prices directly from companies in India, Brazil, etc.

E-commerce is not without its critics though: critics allege that drugs produced by small Third World drug companies may be of uncertain quality because of poor quality control. Counterfeit drugs can also be sold through e-commerce. Furthermore, national drug regulations can be undermined by e-commerce, e.g., by the purchase of locally banned or controlled drugs through the Internet (Online NewsHour 1999).

FOREIGN INVOLVEMENT IN THE LOCAL HEALTHCARE INDUSTRY

Inflows of foreign capital can be invested in different sectors of the local economy such as in the manufacturing sector or in the service sector. When foreigners set up pharmaceutical factories or factories to produce medical supplies and equipment, they are investing in the manufacturing sector. When they build and operate hospitals and other healthcare facilities and when they buy into or buy over existing facilities owned by locals, they are investing in the service sector. Healthcare corporations from the wealthier countries are expanding into the rest of the world. For example, Johns Hopkins University has established an affiliate called Johns Hopkins Singapore to provide healthcare services and conduct research in the republic (Gazette Online 1998). Private hospitals in Singapore such as Mount Elizabeth Hospital and East Shore Hospital were owned by multinational healthcare corporations from the United States such as American Medical International (AMI) and National Medical Enterprises (NME) in the past (Wynne 2000). Recently, a Singaporean company called Health Management International or HMI became an investor and part owner of Mahkota Medical Centre in Melaka. HMI also holds a 10-year management contract with Mahkota Medical Centre (Far Eastern Economic Review 2001).

Foreigners may also get involved in healthcare in other countries by serving as management consultants or in managing health facilities. Thus, management consultants such as the McKinsey group are active all over the world and Mahkota Medical Centre has high level Singaporean executives on its managerial team (Far Eastern Economic Review 2001).

TRADE IN LEGAL AND ILLEGAL DRUGS

The worldwide trade in legal drugs include the tobacco and alcohol industries (Yach and Bettcher 2000) while the trade in illegal drugs include the production, smuggling, sale and consumption of drugs such as cocaine, heroin, methamphetamine ("Ecstasy" pills) and so on.

Many governments have contradictory policies toward legal drugs such as tobacco and alcohol. On the one hand, they may allow the cultivation of tobacco and the production of cigarettes because of the jobs and tax revenues generated. On the other hand, they may have national health campaigns to discourage smoking in order to reduce the number of tobacco-related diseases and deaths. Similarly, they may allow domestic production, import, marketing and sale of alcoholic beverages while trying to reduce morbidity and mortality linked to alcohol consumption such as liver cirrhosis, domestic violence, motor vehicle and other transportation crashes, etc. Similarly, Northern governments such as that of the United States attempt to pressure other nations to lower trade barriers to the import of tobacco and alcohol while promoting campaigns against tobacco and alcohol consumption at home (Connolly 1992).

The production and "export" of illegal drugs such as cocaine and heroin have contributed significantly to the economies of nations such as Colombia in South America, Afghanistan in Central Asia and the countries of the "Golden Triangle" in Southeast Asia such as Myanmar. The illegal drug industry has also contributed to corruption and social problems in nations such as Colombia (World Press Review 2001a).

The legal consumption of tobacco and alcohol will add to the health problems of many nations today and in the future, e.g., as more and more females in rapidly developing nations such as Malaysia take up tobacco smoking and drinking of alcohol, lung cancer rates, liver cirrhosis and

alcoholism will rise among the female population in the future.

The consumption of illegal drugs such as heroin and Ecstasy is already a significant social problem in Malaysia. Drug addicts often resort to petty theft to get money to fuel their habit. Their personal and social lives are severely disrupted and heroin addicts are also at high risk of contracting the HIV virus through the sharing of needles for drug injection. Addicts who engage in prostitution to obtain money to purchase drugs are also at high risk of contracting the HIV virus.

CROSS-BORDER POLLUTION AND THE "EXPORT OF HAZARD"

The infamous "haze" that first appeared in the early 1990s in insular Southeast Asia is an example of cross-border pollution *par excellence*. Shifting cultivators in Sumatra and Kalimantan have been accused of creating the haze. However, it has been alleged that the main culprits are actually transnational plantation and timber companies that use open burning as a cheap way of clearing the land (ASIANOW 1999). The haze drifting in from Indonesia is an example of a negative "externality" that essentially makes a mockery of the tough environmental protection laws of neighbouring countries such as Singapore.

Transnational corporations have also been accused of moving production from developed countries into developing countries to take advantage of lax environmental and occupational health laws in the latter. This phenomenon of shifting "dirty" industries into less environmentally-conscious countries has been called the "export of hazard" (Frumkin 1998). A good example is the *maquiladora* industries which have sprung up on the Mexican side of the U.S.-Mexico border as American companies relocate production to take advantage of lower wage rates as well as less stringent environmental health and occupational health laws (or weak enforcement of existing laws).

There have also been cases of the dumping of hazardous or radioactive waste produced in industrialized countries on unsuspecting Third World countries. Some cash-strapped governments have even agreed to accept hazardous waste from richer nations in return for financial compensation! (Anyinam 1991; Stebbins 1992; World Press Review 2001b). For example:

> *Russian President Vladimir Putin signed a hotly debated law on nuclear-waste imports to Russia, but proposed that any such imports be subject to approval by a public council. Environmentalists argue that it will turn Russia into a nuclear dump and say Russia's spotty nuclear-safety record casts doubt on its ability to safely handle spent fuel. Proponents say Russia could earn $20 billion in 10 years, importing 20,000 metric tons of nuclear fuel to store and reprocess.*
> *(Christian Science Monitor, July 12, 2001)*

This is akin to a poverty-stricken person turning his or her home and backyard into a (hazardous) junkyard by accepting the rubbish and junk produced by wealthy neighbours in return for money.

THE ADVERTISING AND MASS MEDIA INDUSTRIES AND HEALTH-RELATED BEHAVIOUR

It is well known that a person's behaviour and lifestyle can affect his or her health to a significant degree. For example, the chances of developing lung cancer are increased considerably if one smokes heavily. Similarly, heavy consumption of alcohol is linked to cirrhosis of the liver (besides other ailments). Sexually promiscuous behaviour increases the risk of contracting a sexually-transmitted disease. Risk-taking behaviour such as dangerous driving and indulgence in high risk sports can result in serious physical injury or even death. Lastly, unhealthy eating habits such as diets that are high in saturated fats are linked to diseases of the cardiovascular system.

Unfortunately, the mass media and advertising industries frequently promote (directly or indirectly) behaviour that can have a negative impact on health. For example, advertisers of tobacco and alcohol frequently attempt to tie their brand name products to images of "success", "sophistication" and "sex appeal". Others promote their products by associating it with "toughness", "independence" and "masculinity", e.g., the Marlboro Man image. In the United States, one tobacco company even attempted to promote its "women's cigarette" by tying it to the theme of emancipation of women!

Movies produced by the film industries of America, India and Hong Kong are filled with images of high speed car chases, sexual promiscuity and aggressive and violent behaviour. One cannot help wondering about the long term effects of these movies on the minds of children, teenagers and young adults. For example, the sexual behaviour of urban teenagers and young adults in non-Western countries such as Malaysia and Singapore has changed significantly over the last few decades. There is probably a significant relationship between this change and exposure to "Western" norms of sexual behaviour through the mass media. Accordingly, public health professionals can expect higher rates of sexually-transmitted diseases and teen pregnancies in the near future.

The mass media has also been used to promote the consumption of Western "junk foods" high in sugar, salt and saturated fat content in countries such as Malaysia and Singapore. This has contributed to higher rates of obesity among the

children. Ironically, rising rates of obesity have been accompanied by more and more cases of eating disorders such as anorexia nervosa and bulimia nervosa!

WORLDWIDE WEATHER CHANGES AND PUBLIC HEALTH

Worldwide weather changes originating partly from the economic activities of humankind such as industrialization may exert significant effects on human health in the near future. These weather changes include phenomena such as ozone depletion and global warming. There is concern that chloroflurocarbons are destroying the ozone layer (especially over Antarctica) that protects the earth from excessive ultraviolet radiation. Skin cancer and eye cataracts rates are likely to increase if ozone depletion continues unabated. Global warming is hypothesized to increase the average temperature. This would raise the sea level as ice caps start melting in Arctic regions and in Antarctica. Islands such as the Maldives and low-lying cities such as Venice in Italy may even become submerged and disappear from the face of the earth! Global warming may also change weather patterns all over the world. This may result in catastrophic floods in some areas and prolonged heatwaves and droughts in other areas. Global warming may also contribute to the proliferation of disease vectors such as mosquitoes by increasing their range (into larger geographical areas as well as up into higher elevations) (Last 1998; McMichael & Beaglehole 2000).

ECONOMIC CRISES AND STRUCTURAL ADJUSTMENT PROGRAMMES (SAPs)

Third World governments that mismanage their economic affairs (either because of widespread corruption, excessive spending on armaments or economically unproductive "showcase projects" or because of plain incompetence) can end up with large foreign debts or in situations of economic crisis. Economic crises can also arise because of "external shocks" such as steep rises in the prices of vital imported commodities (such as the price of oil during the first oil shock of 1973-74 and the second oil shock of 1979-80) or drastic falls in the prices of their major exports such as coffee, tea, copper, bauxite, palm oil and so on. In recent years, countries such as Malaysia, Thailand, Indonesia and South Korea experienced economic turmoil because of speculative attacks resulting in steep declines in the value of their respective national currencies (thus raising the prices of imports significantly). This was coupled with large scale decapitalisation of their securities markets as "hot money" flowed out in huge amounts within a short period of time (Jomo 2001).

Economic crises and foreign debt repayment problems often force Third World nations to seek help from multilateral organizations such as the International Monetary Fund (IMF). The IMF, in turn, will demand adoption and implementation of its controversial economic restructuring programmes called "Structural Adjustment Programmes" or SAPs. The terms of SAPs usually include devaluation of the national currency, increases in interest rates, liberalization of the economy, and large reductions in government spending. The last requirement is especially controversial since it involves heavy cutbacks in spending that can hit the lower classes very hard, e.g., cutbacks in spending on health, education and social welfare services, cutbacks in government subsidies for fuel and food that result in sharp increases in the price of public transport and in the prices of essential foods such as rice, corn, cooking oil and so on. At the same time, the prices of imported commodities will rise sharply because of currency devaluation. Unemployment rates will also increase because of cutbacks in government spending. The implementation of IMF-style SAPs is often accompanied by civil disorder (called "IMF riots" by critics of SAPs) in the countries concerned (Weinbaum 1980). Incidents of civil disorder following the implementation of IMF-style SAPs are clear evidence of their negative impact on the health and well-being on the lower classes of Third World countries (George 1990; George 1992).

MULTILATERAL ORGANISATIONS AND NATIONAL HEALTH POLICY

Multilateral organizations dealing with economic affairs such as the World Bank, the International Monetary Fund and the World Trade Organisation (WTO) are becoming increasingly influential in the formulation of national health policy in Third World nations. This is an interesting development since, in the past, international influence came largely from institutions working in the field of health such as the World Health Organisation and the United Nations Children's Fund (Walt 1998). The World Bank, the IMF and the WTO favour private sector involvement in the funding and provision of social services traditionally provided by the government such as health. They also favour foreign investment in health and other social services. Thus, Third World governments are pushed to accelerate privatization of public services and to lower trade barriers and open up their economies to foreign investors (including foreigners who wish to invest in the health sector) (Hong 2000).

In Malaysia, the Government adopted the policy of privatization in 1983 (Economic Planning Unit n.d.). However, the Malaysian Government has been more cautious with respect to the liberalization of the economy and the opening up of the service sector to foreign investment. The policy of

privatizing health services (e.g. corporatisation of the University Hospital in Petaling Jaya, the establishment of Institut Jantung Negara and so on) has its critics. Allegations have been made that after privatization, higher prices have led to decreased access for lower class Malaysian citizens. Critics also allege that the growth of the private sector will lead to deteriorating working conditions and lower quality care as highly experienced medical personnel leave for the more lucrative private sector (Citizens' Health Initiative 1998). This would result in a two-class system of health care, i.e., the rich would be able to obtain personalized care in the private sector while the poor would be treated in overcrowded public facilities staffed by overworked medical personnel (who are likely to be relatively inexperienced Medical Officers doing their compulsory national service or foreign doctors working under contract).

CONCLUSION

In this paper, economic aspects of "globalisation" that impact upon the health of the public has been discussed. this include population movements, the pharmaceutical industry, foreign investment in healthcare services, international trade in legal drugs (such as tobacco) as well as illegal drugs, cross-border pollution and the "export of hazard", the mass media and its effect on health-related behaviour, worldwide weather changes, "structural adjustment programmes" (SAPs) implemented in response to economic crises, and the impact of multilateral organizations on national health policy.

As globalisation proceeds relentlessly because of improvements in transport, communications and computer technology, its effects on public health are bound to increase further. Thus, it is important for public health practitioners to study these effects and keep in mind issues such as those discussed in this article.

REFERENCES

Anyinam, C.A. 1991. Transboundary Movements of Hazardous Wastes: The Case of Toxic Waste Dumping in Africa. *Int J Health Serv* **21**(4): 759-77

ASIANOW, 1999. Heavy Indonesian Haze Triggers Collision, Threatens Health. http://www.cnn.com/ASIANOW/southeast/9908/09/indonesia.haze/

Basch, P.F. 1990. *Textbook of International Health*. New York and Oxford: Oxford University Press.

Bundred, P.E. and Levitt, C. 2000. Medical Migration: Who are the Real Losers? *Lancet* **356**: 245-6.

Christian Science Monitor. 2001. *News in Brief*. July 12 2001. http://www.csmonitor.com/durable/2001/07/12/p20s2.htm

Citizens' Health Initiative. 1998. *A Citizens' Health Manifesto for Malaysia.* http://prn.usm.my/chi.html

Connolly, G.N. 1992. Worldwide Expansion of Transnational Tobacco Industry. *J Natl Cancer Insti Monogr* **12**: 29-35.

Demenet, P. 2001. Fighting Medical Apartheid. *Le Monde Diplomatique* March 2001. http://www.monde-diplomatique.fr/en/2001/03/11academic/

Economic Planning Unit, no date. *Privatization Master Plan*. http://www.epu.jpm.my/epu-pub-pmp.html

Estebanez, P. 2001. More Developed, Worse Hit. *Le Monde Diplomatique* Jan 2001. http://www.monde-diplomatique.fr/en/2001/01/16aidsexpan

Far Eastern Economic Review 2001. *Making House Calls*. 15 February. http://www.feer.com/_0102_15/p050money.html

Frumkin, H. 1998. *Workers in the Global Economy*. In *Maxcy-Rosenau-Last Public Health and Preventive Medicine* (14th edition), edited by Wallace, R.B., 698-717. Stamford, Connecticut: Appleton and Lange.

Gazette Online. 1998. *Hopkins, Singapore Ink Joint Venture*. http://www.jhu.edu/~gazette/janmar98/jan2698/26singap.html

George, S. 1990. *A Fate Worse Than Debt: The World Financial Crisis and the Poor*. New York: Grove Weidenfeld.

George, S. 1992. *The Debt Boomerang: How Third World Debt Harms Us All*. London: Pluto Press.

Greider, W. 2000. If Politics Got Real http://www.thenation.com/doc.mhtml?i=20001113&s=greider

Griffin, M.T. 1991. AIDS Drugs and the Pharmaceutical Industry: A Need for Reform. *Am J Law Med* **17**(4): 363-410.

Hong, E. 2000. *Globalisation and the Impact on Health: A Third World View*. Paper presented at The Peoples' Health Assembly. Savar, Bangladesh, 4 – 8 December, 2000.

Houston, S. 2000. From Livingstone to Ecotourism. What's New in Travel Medicine? *Can Fam Physician* **46**(1): 121-8.

Jomo, K.S. 2001. *East Asian Comparisons*. In *Malaysian Eclipse: Economic Crisis and Recovery*, edited by Jomo, K.S., 256-294. London and New York: Zed Books Ltd.

Jones, S. 2000. *Making Money Off Migrants: The Indonesian Exodus to Malaysia*. Hong Kong and Australia: Asia 200 Ltd and Centre for Asia Pacific Social Transformation Studies, University of Wollongong.

Last, J.M. 1998. *Human Health in a Changing World*. In *Maxcy-Rosenau-Last Public Health and Preventive Medicine* (14th edition), edited

by Wallace, R.B., 781-792. Stamford, Connecticut: Appleton and Lange.

Low, W.Y., Zulkifli, S.N., Wong, Y.L., Yusof, K. 1996. *Dawn of a New Millenium: Issues and Challenges of Public Health in Malaysia*. In *Issues and Challenges of Public Health in the 21st Century*, edited by Yusof, K., Low, W.Y., Zulkifli, S.N. and Wong, Y.L., 191-232. Kuala Lumpur: University of Malaya Press.

McMichael, A.J. & Beaglehole, R. 2000. The Changing Global Context of Public Health. *Lancet* **356**(9228): 495-9.

Online NewsHour 1999. *Internet Rx*. 17 November. http://www.pbs.org/newshour/bb/health/july-dec99/internetrx_11-17.html

Online NewsHour 2000a. *Human Cargo*. 20 June. http://www.pbs.org/newshour/bb/international/jan-june00/human_cargo_6-20.html

Online NewsHour 2000b. *Drug Embargo*. 27 December. http://www.pbs.org/newshour/bb/health/july-dec00/drugs_12-27.html

Online NewsHour 2001. *Indian Pharmaceuticals*. 15 March. http://www.pbs.org/newshour/bb/health/jan-june01/india_03-15.html

People's Health Assembly. 2000. People's Health Assembly (website). http://www.pha2000.org

Rokiah Alavi. 1999. *Patent Protection and its Impact on the Prices of Drugs in Malaysia*. Paper presented at the Second International Malaysian Studies Conference. University of Malaya, Kuala Lumpur, 2 – 4 August, 1999.

Silverstein, K. 1999. Millions for Viagra, Pennies for Diseases of the Poor. The Nation. 19 July http://past.thenation.com/issue/990719/0719silverstein.shtml

Star 2001. Way Open for Cheaper HIV Drugs. 27 April.

Stebbins, K.R. 1992. Garbage Imperialism: Health Implications of Dumping Hazardous Wastes in Third World Countries. *Med Anthropol* **15**(1): 81-102.

Walt, G. 1998. Globalisation of International Health. *Lancet* **351**(9100): 434-7.

Weinbaum, M. 1980. Food and Political Stability in the Middle East. *Studies in Comp Econ Dev* **15**(2): 3-26.

World Press Review 2001a. On the Drug War's Front Lines. April: 6-13.

World Press Review 2001b. Taiwan's Shady Deal with North Korea. May: 45.

Wynne, M. 2000. Health Services in Singapore. http://www.uow.edu.au/arts/sts/bmartin/dissent/documents/health/singapore.html

Yach, D. and Bettcher, D. 2000. Globalisation of Tobacco Industry Influence and New Global Responses. *Tobacco Control* **2**(9):206-16