The need for leadership in global health

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ABSTRACT

- Globalisation has brought with it many advances in health, but also a new range of challenges.
- There is a need to move from "nation-focused" (international) public health to global public health — and the terminology we use here matters.
- Global public health leadership requires that respect be shown to evidence, especially that about the changing nature of disease worldwide.
- The Australian medical and research communities have a significant opportunity to provide global public health leadership.

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Global health! Why should you, dear Reader of the *Medical Journal of Australia* and probably of the medical persuasion, read on? We offer you three reasons. First, given your concern for people's health and wellbeing, you are already equipped to confront the major pressing global health problems of today — you have the right attitudes and values. Second, the drivers of the global health agenda are in great need of medical advice: failed diagnosis abounds. Third, the challenges in global health for the coming decades are far more familiar to you, as a medical practitioner in a highly economically advanced nation, than was the case when the only threat to world health was infectious disease. So please do read on!

Others share our view about the importance of medical engagement with global health. In reviewing the contribution that the immense United Kingdom National Health Service could make to global health recently, its previous chief executive officer, Lord Nigel Crisp, provided a report that specifies how, through shared policy development, assistance with workforce development and sharing information — ideas and reports of success — medicine can indeed make a profound contribution to global development.[1]

Global health and international health: is there a difference?

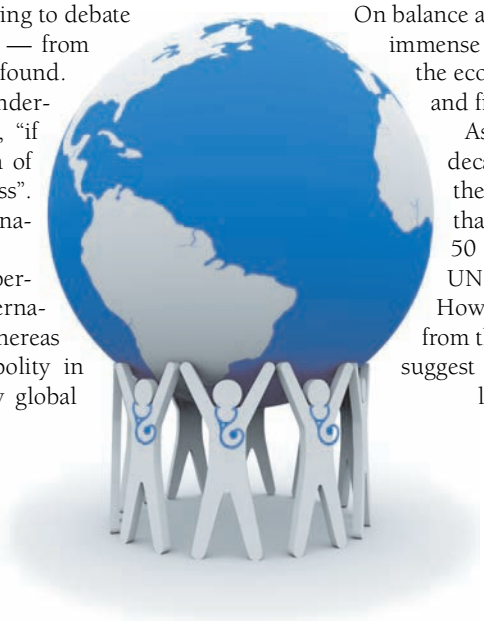
"Globalisation" is generally taken to imply that global economic and financial interests and multinational industries now shape and even determine our destiny. It is the scale of these forces that surprises us: China's trade, reaching to every country, generates a surplus that grows by US$1 billion a day![2]

In line with the popularity of the word "global" in general, the star of *global* health is rising and that of *international* health is falling. In 1950, PubMed listed 54 papers on global health and 1007 on international health, but by July 2005, the listings were 39 759 and 52 169.[3] A search for "global health" on the *BMJ* website lists 1181 papers published between 1998 and June 2007.

It does not help the cause of the sick and dying to debate for long whether this change in terminology — from international to global — means anything profound. Nevertheless, as Confucius urged us when wondering how best to govern the state (or globe), "if language be not in accordance with the truth of things, affairs cannot be carried on to success". So, is there a real difference between "international" and "global"?

English journalist George Monbiot argued persuasively that there is, or should be.[4] "International" suggests the primacy of nations, whereas "global" opens the door to new forms of polity in which decisions are made and supported by global laws that transcend pooled national interests. Disarmament, he suggests, will never be complete so long as nations have a collective say, referring always to the bottom line of their self-interest in the matter. But it is conceivable that a globalised world might legislate the abolition of all arms. If universal disarmament were discussed at the United Nations, no country would agree to give up all its weapons and so the discussion would stop. To tackle the consequences of the billions of lethal weapons in the world, we need a form of global governance, Monbiot says.

The disengagement of Australia and the United States from the Kyoto-based debates about global climate change illustrates how, when an international rather than a global perspective is adopted, problems are perpetuated, or at least incompletely solved. Global problems require leaders who recognise new models of diplomacy and engage in the frustrating and difficult conversations that are essential for confronting them as a global community. Think for a moment not only of climate change, but also of obesity, tobacco and ageing; Box 1 describes the current international efforts to reduce the burden of tobacco. Are these problems that will yield satisfactorily and permanently to international, rather than global, action?



Human flourishing and globalisation

On balance and for the majority, globalisation has brought immense benefits to humanity. Here we are looking at the economic effects of globalising trade, commerce and financial institutions.

Associated with globalisation, the past two decades have witnessed tremendous progress in the health of all but the poorest countries, and that progress seems set to continue. There are 50 countries deemed least-developed by the UN, where poverty remains a high hurdle.[7] However, in line with progress elsewhere, data from the *World population prospects: the 2006 revision* suggest that many of these countries will achieve at least several core health development goals by 2020.[8] The Center for Global Development highlights improvements in global health gained through a range of successful large-scale interventions.[9]

Fertility rates in developed and least-developed countries are converging. Fertility in developing countries has decreased

1 Testing the limits of international health

The World Health Organization Framework Convention on Tobacco Control is the world's first international public health treaty, and entered into force in 2005.[5] There are now 148 countries that are parties to the treaty, which seeks to reduce tobacco consumption through proven control mechanisms such as taxation, restrictions on advertising, and public health education.[5,6]

Much now depends on the signatory countries enacting enabling legislation to permit the appendiceal protocols to take force. The extent to which the protocols will, indeed, be enacted relies on the political will of the countries concerned and the extent to which tobacco industry lobbies against such enactment.

The strength of the treaty lies in its binding requirements on the signatory countries. The weakness of the treaty lies in the arbitrary way in which countries may interpret, develop and then enact the treaty clauses. The United States has signed but not ratified the treaty, and neither has China nor Indonesia. Nevertheless, the treaty moves many countries that previously had taken a timid or null approach to tobacco control in the direction of better health through less use of tobacco. The treaty is a landmark in international health — there is nothing that matches it for strength and likely effect. It is an example of the best that can be achieved through international action that must, by virtue of the political structure of the participating nations, look to preserve their own interests first, including the strength of economies that, in some cases, depend on the tobacco industry. Nevertheless, we can perhaps still aim for a global approach in which people take precedence over national economies. ◆

from six children per woman in 1960 to around three today.[10] The UN estimates that, by 2050, three out of every four countries in the less-developed regions will be experiencing below-replacement fertility.[4] By 2050, life expectancies in the least-developed nations will be within 10 years of those in developed nations. At the world level, life expectancy at birth is likely to rise from 65 years today to 74 years in 2045–2050.[11]

The prevalence of contraceptive use is 70%–80% in many countries.[12] Between 1980 and 1998, maternal mortality declined by 42% in Mexico, 43% in Argentina, 58% in Chile, and 35% in China.[13] Although the estimated number of women worldwide who die each year from causes related to pregnancy and childbearing is 585 000, 90% of these deaths are in the least-developed nations of Africa and Asia.[14]

But, as with any dramatic technological progress, some people have been — and continue to be — left behind, even worse off, as the majority surge forward. Equity poses a major problem: there are wide gaps between the health status of the poor and other socially and economically disadvantaged marginalised groups, and the rich and privileged, both globally and within countries and regions.[15] As such, aggregate statistics regarding "global health" need to be interpreted with caution.

Priority setting in global health

The nature of the world's health problems has changed significantly in recent years. The breadth and depth of challenges facing the global community were brought into the full light by the World Health Organization's publication of global burden of disease (GBD) estimates for 2002.[16]

The GBD presents a picture of current patterns of disease everywhere, measuring their effects as causes both of death and of suffering and disability. The study shows that commonly held views of what ails the globe are not always accurate.

The GBD is a set of health intelligence for the world. It shows that malnutrition is the greatest global burden, followed by HIV, then depression, heart disease and stroke, and then cancer. The study also examined factors that raise the risk of these problems, chief among which is tobacco. There are a billion obese people in the world,[17] but obesity is not always on the agenda of conferences on nutrition, which are more often exclusively concerned with undernutrition.

The GBD study points to the importance of tobacco, and there are five million deaths a year attributable to it,[18] many occurring among poorer people in struggling economies. Compare these deaths with the four million a year from HIV and the attention that they attract.

The women's health movement continues to focus its attention on obstetric health and neonatal survival, with the addition of HIV[19] — all worthy things to do. But women in much of the developing world, during their years of family formation, are two to four times more likely to die of heart disease or stroke than obstetric causes and HIV. However, these diseases, say aid agencies that ignore them, are diseases only of postmenopausal women who, it is implied, are of no value or special interest. How on earth would one raise aid for such people? How on earth indeed, when even the basic facts about these matters do not inform debates or modify attitudes.

The inaccurate use of global health intelligence leads to a lack of breadth of vision and what economists term allocative inefficiency. Allocative inefficiency arises when a factory committed to making nuts and bolts produces nuts 10 times more frequently than bolts. An example of this in health is when an exciting or devastating disease, especially if exotic in origin (with SARS as a recent example) fills all our visual fields, causing us to overlook more mundane but ultimately more important issues. Because so much effort in aid is driven by topic-specific funding, and because this concentrates often on one thing (HIV or peri-obstetric maternal wellbeing), academics may overlook their responsibility to tell the truth, be seduced into truncating their message, and focus their attention on one illness or problem to the exclusion of all others. This is despite the evidence that the best health development effort addresses fundamental social, political and economic determinants, and may well have multiple diseases on its agenda.

A new order of leadership

The World Bank is taking on an increasing role in determining health-related priorities in developing countries,[3,20] with significant implications for the WHO because of the bank's funding role. At the same time, there have been significant increases in philanthropy-driven global health partnerships — namely the Bill & Melinda Gates foundation, which notably does not prioritise chronic disease-related initiatives, but which has done splendid work regarding HIV.[21] The current WHO Commission on Social Determinants of Health, chaired by Sir Michael Marmot, may well bring into the open the power of society and the global reach of commerce in the determination of health and not simply specific diseases.

Would a concept of global health that began with comprehensive intelligence about health and disease stand a chance of success? Yes, indeed — but do not underestimate the political courage needed to make it work. It would require countries to sign on to cut their self-

2 The struggle to achieve a response to climate change

International action in regard to the hole in the stratospheric ozone layer led to a virtual universal ban on the further production of aerosol chlorofluorocarbons, which were held to be responsible.[24] The countries that participated in the ban stood to gain considerably from the action, not least because refrigerant and aerosol industries were able to make the switch away from chlorofluorocarbons at relatively little or no cost.

In contrast, the circumstances surrounding global warming and its attribution to the release of excess carbon into the atmosphere are characterised by a complexity of national interests, massive investments by highly developed economies in carbon-releasing fossil fuels, and the resistance of the United States to participate in the Kyoto proposals.[25] The Kyoto Protocol[26] is an attempt to bring the world's nations together, in a similar fashion to that which brought successful relief to the erosion of the ozone layer. However, this *global* problem, with serious health consequences, remains unsolved by such *international* activity.

Until the global nature of climate change is accepted, together with the limits to sustainability associated with fossil fuel use, progress will be limited. However, the real question is whether the world will achieve a form of global polity in time to deal with the problem preventively, or whether we must experience serious breakdown before we act. There is no easily applicable technology, equivalent to replacement of aerosol fluorocarbons, that alleviates global warming. However, the serious action by the European Community to achieve control over the release of carbon, with carbon trading systems,[27] could act as a model. But the success of an international approach, as opposed to a global one, remains doubtful. Could it be that global warming will be the serious, common problem that drives the world to find a form of legislation that could be enacted globally, and presumably policed globally, to achieve a truly global approach to the future? ◆

interested export of unhealthy products, such as tobacco and mutton flaps, the latter being an obnoxious trade in which both the US and Australia participate, shipping high-fat offal to the Pacific nations.[22] It would require leadership of a different order. Perhaps if British ex-Prime Minister Tony Blair had concentrated on the reduction of poverty in Africa and been spared the agony of Iraq, he might have been the first truly global leader. Perhaps in his new incarnation as Middle East envoy he will become so.

Leadership of this style would expand the agenda of global health to include the emerging epidemics of serious and long-term illnesses such as heart disease and stroke in the developing world.[23] It would encourage aid agencies and global health academia to fight the real war, instead of selected sections of it that suit current political whims and academic institutions. Hard work, to be sure, but the interesting possibility is this. If we could do it with health, maybe we could transfer what we have learned to other areas of international and global importance. Climate change is a current global concern that will require concerted *global* effort. However, the lack of a global forum and policy through which to address this has meant that action is languishing: there is insufficient impetus for action at the national level (Box 2).

What then should be our practical response and what could Australian leadership in global health hope to achieve? Given the nature and potential solutions for our current global health problems, it is encouraging to see academia in Australia responding by creating institutes and centres of global health, such as the George Institute initiated by the University of Sydney (http://thegeorgeinstitute.org) and, more recently, the Nossal Institute at the University of Melbourne (http://www.ni.unimelb.edu.au). Competition among these centres makes good sense by harnessing academic ambition and pointing it towards these problems. These centres have been successful in attracting support from foundations. By their location, they create opportunities for scientists in many disciplines to explore the significance of their work for health beyond our shores. It will be interesting to see if faculties of law can be drawn in to these institutes as major players, together with political scientists, to explore how their reach might become more global and less international (in the narrow sense) with time.

The drive to do something about health beyond our shores, although it must harness vested and self interest (in the detection and halting of incipient epidemics that may threaten us, for example), can also burn the alternative, non-fossil fuels of humane values and ethical energy. Altruism is a deep vein in the hearts and minds of many students entering medicine, and remains among many doctors in practice. We see countless examples of its local application, despite the tangle of insulating tape that masquerades as bureaucratic regulations. But our compassion cannot sensibly stop at our shores. Discussions about equity in access to health care and to the things that make for good health in Australia should be set within the context of truly desperate global inequities, as the stimulus to go beyond national boundaries in the pursuit of fairness in health.

Australia is a small player in the global game, but we should not underestimate our pulling power. Our influence is perhaps greatest in the Asian and Pacific setting, and can be exercised when political leadership is sensitive to our geography and the competing and different cultures of our neighbours. Were an enlightened Australian federal government to establish a multibillion dollar foundation for global health, as it could easily afford, it would then be in a position to assume a leadership role. This could extend to an interest in finding common, regional solutions to the chronic and infectious diseases of the region, committing biotechnology to this task, and offering in-depth education and training opportunities for future regional leaders. This is a moment of great global challenge, and is recognised as such in relation to the environment, sustainability and peace. An Australian federal government committed to looking out to espouse health and humanitarian outreach to the world, rather than in to find reasons for squabbling with our own states, could be just what the world needs.

A profound ethical challenge stares us in the face if we take global health seriously — to apply our energies in making the world, by any and every means, a healthier and more sustainable place for all people, not just for us. Those who wish to lead us in global health endeavour should point to ways in which this goal can be achieved, then push forward, and be prepared for many to follow.

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References

1 Crisp N. Global health partnerships: the UK contribution to health in developing countries. London: COI, 2007. http://www.dfid.gov.uk/pubs/files/ghp.pdf (accessed Oct 2007).
2 Jeffrey S. Lost in translation. *The Economist* [Internet] 2007; 17 May. http://www.economist.com/background/displaystory.cfm?story_id=9184053 (accessed Jun 2007).
3 Brown TM, Cueto M, Fee E. The World Health Organization and the transition from: "international" to "global" health. *Am J Public Health* 2006; 96: 62-72.
4 Monbiot G. The age of consent: a manifesto for a new world order. London: Flamingo, 2003.
5 World Health Organization. Updated status of the WHO Framework Convention on Tobacco Control. http://www.who.int/tobacco/framework/countrylist/en/index.html (accessed Jul 2007).
6 World Health Organization. WHO Framework Convention on Tobacco Control. Geneva: WHO, 2003. http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf (accessed Oct 2007).
7 United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States. List of least developed countries. http://www.un.org/special-rep/ohrlls/ldc/list.htm (accessed Jun 2007).
8 United Nations Population Division. World population prospects: the 2006 revision population database. Geneva: UNDP, 2007. http://esa.un.org/unpp (accessed Jun 2007).
9 Center for Global Development. Millions saved: proven successes in global health (2007 edition). CGD Brief March 2007. http://www.cgdev.org/content/publications/detail/14493 (accessed Oct 2007).
10 United Nations Population Fund. State of world population. Geneva: UNFPA, 2003. http://www.unfpa.org/swp/2003/pdf/english/swp2003_eng.pdf (accessed Oct 2007).
11 Earthtrends. Population, health and human well-being — demographics: life expectancy at birth, both sexes. http://earthtrends.wri.org/text/population-health/variable-379.html (accessed Jun 2007).
12 The future of fertility in intermediate fertility countries. New York: Department of Economic and Social Affairs, Population Division, United Nations Secretariat, 2002. http://www.un.org/esa/population/publications/completingfertility/RevisedPEPSPOPDIVpaper.PDF (accessed Oct 2007).
13 World Health Organization. Mortality database. http://www.who.int/healthinfo/morttables/en/index.html (accessed Jul 2004).
14 Brands A, Yach D. Women and the rapid rise of noncommunicable diseases. World Health Organization, 2002. (NMH Reader No. 1.) http://whqlibdoc.who.int/hq/2002/WHO_NMH_02.01.pdf (accessed Oct 2007).
15 Gwatkin D. Health inequalities and the health of the poor: what do we know? What can we do? *Bull World Health Organ* 2000; 78: 3-15.
16 World Health Organization. Burden of disease project [website]. http://www.who.int/healthinfo/bodproject/en/index.html (accessed Jun 2007).
17 World Health Organization. Overweight and obesity. http://www.who.int/dietphysicalactivity/publications/facts/obesity/en/ (accessed Jun 2007).
18 World Health Organization. Tobacco free initiative [website]. http://www.who.int/tobacco/en/ (accessed Jun 2007).
19 Raymond SU, Greenberg HM, Leeder SR. Beyond reproduction: women's health in today's developing world. *Int J Epidemiol* 2005; 34: 1144-1148.
20 Adeyi O, Smith O, Robles S. Public policy and the challenge of chronic non-communicable diseases. Washington, DC: World Bank, 2007.
21 Bill and Melinda Gates Foundation. Global health: priority diseases and conditions. http://www.gatesfoundation.org/globalhealth/pri_diseases/ (accessed Sep 2007).
22 Evans M, Sinclair RC, Fusimahohi C, Liava'a V. Globalization, diet and health: an example from Tonga. *Bull World Health Organ* 2001; 79: 856-862.
23 World Health Organization. Preventing chronic disease: a vital investment. Geneva: WHO, 2005.
24 United Nations Environment Program Ozone Secretariat. Key achievements of the Montreal Protocol to date. UNEP, 2004. http://ozone.unep.org/Publications/MP_Key_Achievements-E.pdf (accessed Oct 2007).
25 Greenpeace USA. US withdraws from Kyoto Protocol. http://www.greenpeace.org/usa/news/u-s-withdraws-from-kyoto-prot (accessed Jul 2007).
26 Kyoto Protocol to the United Nations Framework Convention on Climate Change. 1997. http://unfccc.int/resource/docs/convkp/kpeng.html (accessed Oct 2007).
27 European Commission. Emission trading scheme (EU ETS). http://ec.europa.eu/environment/climat/emission.htm (accessed Jul 2007).

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