

The Network: Towards Unity for Health

COMMUNITY PARTNERSHIPS FOR HEALTH THROUGH INNOVATIVE EDUCATION, SERVICE AND RESEARCH

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TOWARDS EQUITY IN EDUCATION, TRAINING AND HEALTH CARE DELIVERY

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I was delighted to receive an invitation in March 2002 from Arthur Kaufman and Gerard Majoor to address this important conference. At the time, I was working at the University of Sydney. The organizers anticipated that we would be meeting in Dharan, Nepal. However, here we are in Newcastle and I have traveled from New York to participate, along with 350 others from 43 countries!

Newcastle – a centre of excellence in community-oriented health professional education

I spent nine years at the medical school here from its commencement in 1976 until 1985, as its foundation Professor of Community Medicine. From an Australian perspective, it is especially appropriate that the Network hold the first part of this meeting in Newcastle because Newcastle has been a generator of medical education innovation in Australia, attributable to its founding dean, Professor David Maddison, and Charles Engel, Professor of Educational Development and Program Evaluation, Rufus Clarke, Professor of Anatomy and chair of the Undergraduate Education Committee.

The University of Newcastle established the medical school to serve the local community. It planned the medical school to produce doctors for whom the priority was to diagnose and manage humanely the health problems experienced by individuals and communities. It espoused a fully integrated curriculum, offered in problem-based format. Only McMaster, Maastricht and Ben Gurion Universities were comparable, although Flinders University in South Australia was moving concurrently in the same direction, as was Monash in Victoria. The faculty used a new form of organization where a common budget funded the curriculum and research development. Newcastle's first graduates recently celebrated 25 years since graduation.

There was a community-based aspiration for a medical school in Newcastle for decades, held by people such as the late Dr Roy Mills, Professors Alan Hewson, John Duggan, and Sandy Reid and many others. The Royal Newcastle Hospital had a national reputation for innovation, not least for the first Australian hospital-linked geriatric service run by Dick Gibson and Grace Parbery.

At Newcastle in 1983, Professor Rob Sanson-Fisher opened the doors to Indigenous Australians in medical education, building on the work in Newcastle of other health professionals already committed to Indigenous education. Newcastle also provided a ten-week rural term for medical students, well before the current federal government made these terms compulsory. As a result I understand that of the 42 Indigenous medical practitioners currently at work in Australia, 31 are graduates of the University of Newcastle.

The University of Newcastle medical school, under the initial leadership of the late Professor David Maddison, its founding dean, and vice-chancellor Professor Don George, were from then outset committed to the local community. Its education program, and to a lesser extent its research agenda, were aligned with the needs and aspirations of the people of the Hunter Valley. The alignment of the medical school and community drove the formation of a major partnership between the University and the Hunter Area Health Service. This alignment continued under the deanships of Professors Geoffrey Kellerman, John Hamilton, Rob Sanson-Fisher and now Michael Hensley. The partnership with Hunter Health, the area health authority, is now strong and Professor Katherine McGrath, its chief executive officer, has provided dedicated and effective leadership including oversight of a five-stage strategy for the redevelopment of acute care facilities, ambulatory care, and rural health and community health services.

The strong connection to the local community led to improved health services in cancer and palliative care and cardiac surgery, a new teaching hospital and many programs in health promotion. A joint newsletter inspired and produced by Professor Charles Engel brought together news from the regional health service, the medical school and the Hunter Postgraduate Committee. It was a vital organ of unity for health in Newcastle 25 years ago and continues to fulfill this function under the strong and capable editorship of Kathy Byrne. With its recent extensions to the southeast on the NSW central coast and to the north, the Newcastle medical school now serves a population of over 900,000 people.

Australians knew the Newcastle and Hunter community for its strong mutual support. Commercial interests frequently used the Hunter Valley as a test market for new commercial products, because it was an ethnic and socioeconomic microcosm of Australia. It had its own football teams, TV, radio and newspapers. The local television station, Channel 3 and *The Newcastle Herald* combined from time to time to win support through telethons and community appeals for cancer services and medical research.

We used those opportunities to conduct research such as the WHO MONICA program into heart disease, under the direction of Professors Annette Dobson and Richard Heller. Professor Michael Hensley and his colleagues researched asthma and occupational health problems. The Hunter Medical Research Institute, led by John Rostas, continues this co-operation between town and gown and of university and health service with significant investments from the private sector.

Others can take up the recent story of the development of the health sciences in Newcastle with greater accuracy and insight. For example, the formation of the Faculty of Health at the University of Newcastle several years ago led to a (unique, by Australian standards) powerful aggregation of health sciences within one faculty. This has paved the way for experimental work in interprofessional education and a permeation of traditional barriers that prevent consideration of how the future health workforce, whatever professional labels they wear, can best meet the needs of the community.

These developments have established the University of Newcastle, its medical school, its health faculty and its health professional education programs and research more generally, as centers of excellence. Equity and excellence co-exist. The choice of Newcastle as the first city for this year's TUFH Network annual meeting, with its 350 participants from 43 countries, is highly appropriate.

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I am currently working at the Center for Global Health and Economic Development, a joint enterprise of the School of Public Health and the Earth Institute at Columbia University. Professor Jeffrey Sachs leads the Earth Institute in a multidisciplinary commitment to assist less affluent nations to develop. Professor Allan Rosenfield, dean of public health, has had a lifelong commitment to improving maternal health. It is an exciting place. My task has been to assess the extent to which non-communicable diseases threaten less economically advanced societies over future decades.

This paper concerns how we might honor equity more in education and training in the health care professions. First, I define equity in health. Second, I establish the context - the current picture of global health - for which we are educating and training our students and where equity must ultimately be expressed. I conclude by considering practical actions we can take to ensure that our health professional education and training is more responsive to equity.

Equity

Equity features in the Network objects and its Position Papers on primary care, community-based education, and (to a lesser extent) integrating primary care and public health. With quality, relevance and cost-effectiveness, equity is one of four principal values for TUFH, informing each of its 12 projects. TUFH says equity can be part of our ‘possible dream’ for health if we accept ‘the need for rules and negotiation’.

What is this thing called equity? Most of would agree that it has to do with fairness and inequality but beyond the details of our views may differ. Because of the ineradicable connection to fairness, equity is a moral value. I feel equity has been offended when I encounter unfair inequality. When I see Australia’s indigenous community with life expectancies of 20 years less than the Australian average the ethic of equity has been offended.

Equity is an ethic, yes, but when applied to health it is also a matter of life and death. As my correspondent and friend Ed Webber, from the New South Wales Central Coast and a member of the ‘patient class’ as he calls himself, reminded me recently, equity is more than an ethical value. “Your point that ‘equity is an ethical value’ is well taken as far as it goes,” he wrote to me recently, “but where you do not go is that the alternative to said ethical value happens to be sickness, which happens to have little value, ethical or otherwise.”

Paula Braverman from the University of California at San Francisco and Sofia Gruskin of Harvard (1), both of whom work in global health and have a strong interest in human rights as they relate to health, defined equity as it applies to health in a recent WHO Bulletin (2003) as:

“An ethical concept grounded in the principle of distributive justice.

“Equity in health reflects a concern to reduce unequal opportunities to be healthy associated with membership in less privileged social groups, such as poor people; disenfranchised racial, ethnic or religious groups; women and rural residents.

Pursuing equity in health means eliminating health disparities that are associated with underlying social disadvantage or marginalization. Equity ... focuses [our] attention on socially disadvantaged, marginalized or disenfranchised groups within and [among] countries, but not limited to the poor.”

Australia’s health economists have written and spoken frequently about equity in health care, but none has done so more consistently, clearly and passionately than Professor Gavin Mooney. He has taken a special interest in indigenous health. For him equity is ‘equal access to equal care for equal need’ (2).

Mooney extends this definition by recognizing the additional needs of underprivileged people. They may need more access to more care for the same health problem than those with more money, better social support and better opportunities.

When equity is at work, the sick individual who so chooses has his or her needs met to the same degree as other members of his or her community. There is no compulsion to use health care. There is no competition whereby one may be told, “Your need is too great, we can’t afford to treat you so you cannot have this treatment – unless, that is, you pay for it yourself.” A patient in need of a heart transplant or expensive long-term therapy for HIV has the same degree of access – equitable access - to it as a person with

hypertension or mild asthma has to take medication and care for those conditions. This is not the same as everyone getting everything they want. No sick person is told, “Because you are old or poor or receive a pension of some sort, the government will pay for your health care, but will pay the doctor less than he or she would receive for treating a person who can pay themselves.”

As health professional educators and trainers, to take equity seriously requires that we take account of the current and foreseeable health needs of all the people for whose health we have some responsibility. We then set about training professionals who will be capable of meeting those needs. That is easily said, but insight into community needs is not enough to ensure equity. Even when the health needs of communities of responsibility are known, the health professions, especially medicine, have by no means always educated and trained graduates with knowledge and skills, or in sufficient numbers, related to those needs. In Australia, enrollment of medical graduates into training programs reflects remuneration: procedural specialties attract many applicants compared with those that provide non-procedural care for people with chronic illness.

Let me cite another example of how the development of health professional workforce can diverge from community need unless we keep equity in the forefront of our minds. In 1968, I worked in the highlands of Papua New Guinea. My first wife Dorothy and I were the doctors for 14,000 people living in the mountains surrounding the Baiyer River Valley. Our predecessors, especially the nurses at the Baptist Mission, had established a primary care network and a 100-bed district hospital – a teaching hospital in fact for the primary care health workers. Aid-post orderlies and maternal child health nurses provided first-line care and health promotion through nutrition, immunization and hygiene, and infant mortality was lower than in Australia. That system of health care was widespread in PNG.

However, when I returned to PNG thirty years later, I learned that the health service had abandoned many aid posts, that maternal mortality was running high and that HIV was on the rise. Certainly, there were many more doctors and hospital care was generally better,

but I wondered what had happened to the ;primary care network. Health workforce development, no doubt setting out on well-intentioned paths, was not achieving equitable health. Political and economic forces had created uncertainty. Anxiety to do something had led educators and the government to create a health workforce that did not match the needs.

Papua New Guinea is not exceptional. Many low- and middle-income countries offer similar stories of inappropriate workforce development stimulated by our professional imperatives derived from other times and places. Knowledge of local needs is not sufficient to guide health professional education and training. Yet without a clear understanding of what the health needs are and will be, we do not even get to first base.

The changing face of global health

The huge problems of HIV, malaria and tuberculosis, so spectacularly displayed in the sub-Saharan Africas and parts of Asia, are now well recognized and have recently received substantial international attention and aid. These illnesses, undeniably apocalyptic in expression, easily and understandably obscure other huge health challenges such as the non-communicable diseases and injury that are causes of serious loss of global health.

Cardiovascular disease currently accounts for about 30% of global mortality and 10% of the global burden of disease (3). Using current projections, in 2040 the number of CVD deaths in the population over 35 in these countries will be five and ten times the number in 2000. There are about 200 million people worldwide with clinically expressed coronary heart disease, stroke, and other occlusive vascular diseases or diabetes. Heart disease and stroke kill about 17 million people worldwide each year. Eighty percent of these deaths occur in low- and middle-income countries (4,5,6). Urbanization exacerbates

these conditions with its easy supply of cheap high calorie food and lower demands for physical exertion.

The impending wave of non-communicable disease

Spectacular improvements in life expectancy, attributable to falling infant mortality and generally positive changes in health that have occurred during the past century, signal huge gains in global health. Birthrates have declined as parents gain confidence in child survival.

Yet I have been surprised this year to find in my work just how important the non-communicable diseases are becoming in low- and middle-income countries. The population dynamics and epidemiological trends over the past forty years provide allow us to foresee the coming twenty years. We can expect over to see over the next twenty years globally a change in the ratio of numbers of individuals aged 0-4 years and the number of individuals aged 60+ as my colleague Susan Raymond has shown (7).

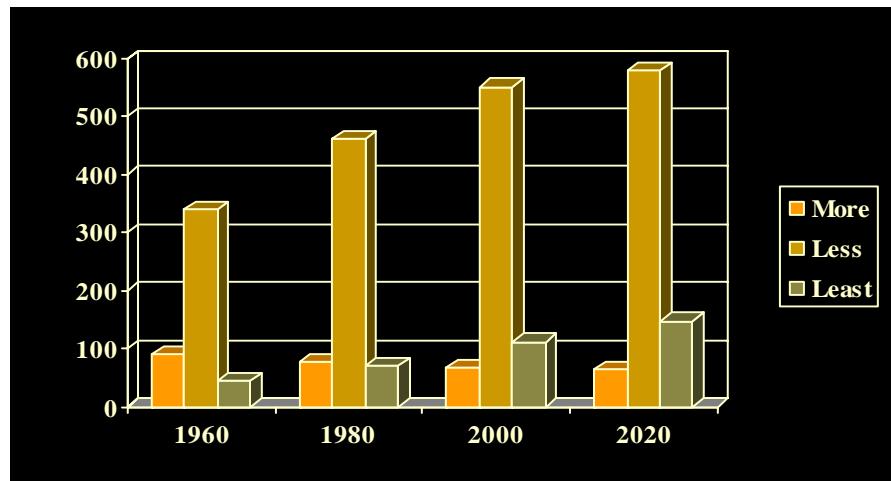
The crossover will occur on average in about 2010 although there are major regional variations in this transition. This trend is most obvious in the one-sixth of the world that is more developed, and least obvious in the one-sixth that is least developed, but quite clear in what I call the Middle Kingdom – that two-thirds of the world’s population including India and China that make up the less developed world. Even now, cardiovascular disease is the leading cause of death in the world. The diseases constituting its range of fatal expression - diabetes, heart attack and stroke - are also among the most important global causes of disability.

In many countries undergoing rapid urbanization, the next twenty years will be ones in which the effects of increased cardiovascular disease risks will accumulate. Hence, these two decades represent a small (but closing) aperture while child dependency is falling, elderly dependency has not risen, and chronic disease risk, while real, can be subjected to aggressive systems of disease prevention and management.

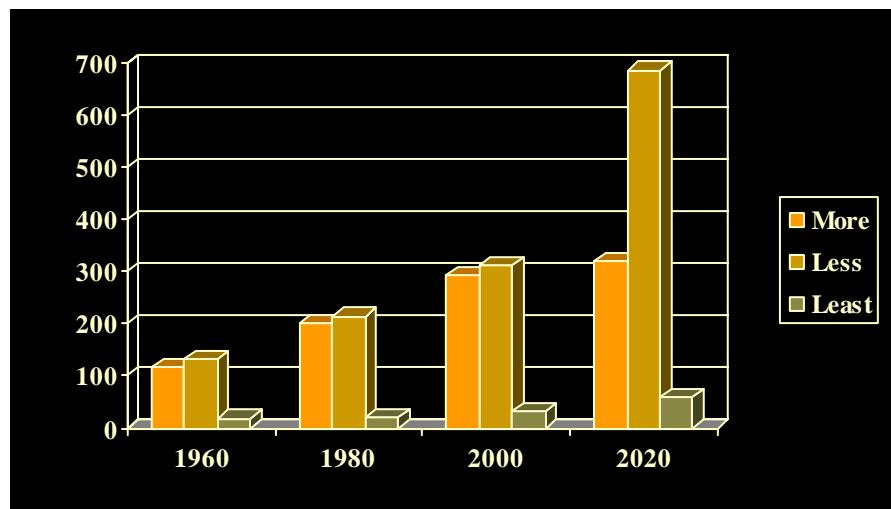
Demographic changes in least, less and more developed countries

UN, World Population Prospects: The 2002 Revision, 2003

Millions
aged 0-4



Millions
aged 60+

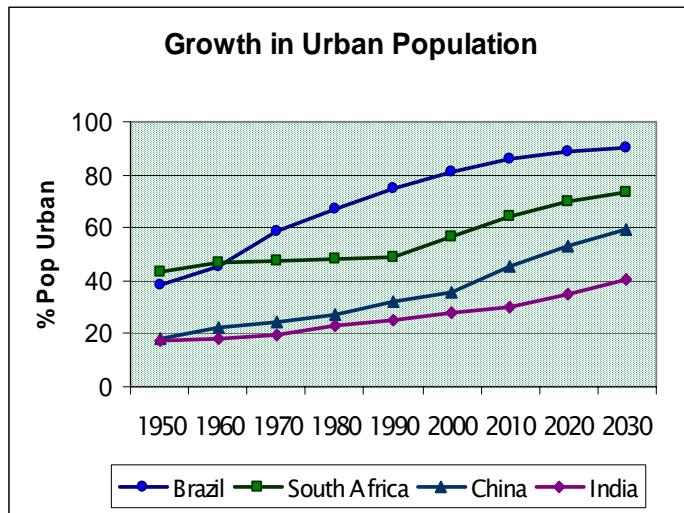


Heart disease – a prime example of NCDs

With my colleagues, development economist Susan Raymond, cardiologist Henry Greenberg and public health physician Sarah Liu, I have been studying the likely impact of CVD in five countries – Tatarstan, a semiautonomous republic of 3-4 million people on the Volga, Brazil, India, China and South Africa. We have a personal connection with

each country, and we chose these countries because of the significance of CVD within them. These countries have different security systems and statistical collections including some social security and workforce data. We used these data to develop pictures of CVD and its impact worldwide now and over the next forty years. We used Portugal, the country with the lowest CVD death rates in the European Union, and the US, where CVD has declined in importance, for comparison.

In the five countries, the percentage of CVD deaths occurring during prime labor years is three to four times that of the US and of Portugal, the latter country having the lowest CVD mortality in the working age group in the EU. Given current rates (which may increase with increasing urbanization), in China in the year 2040 there will be 9.5 million deaths from CVD, over half in the prime working ages of 35-64. In Portugal CVD accounts for 12% of deaths in males and 5.6% of females aged 35-64 years. Despite the predominance of HIV in South Africa as a cause of death in this age group, the comparable figures for CVD are 10.6% for men and (astonishingly) 15.2% for women.



Where we have data relating to hospital admission for CVD, they are consistent with and perhaps even more striking than the death patterns. In Rio Do Sul, in southeastern Brazil, for example, we find hospitalization rates for CVD among those of working age that are

four to five times the CVD mortality rates. This large number of people treated in hospital for CVD indicates a huge wave of illness in people, often of working age that both contributes to higher working age death rates and pulses forward carrying CVD as a cause of higher death rates after age 65.

The impact of CVD on workers

What we see at present, therefore, is an already disproportionate impact of CVD within the most important economically productive years in the countries we have studied. Set against the changing demography of less-developed nations, if left unchecked each will face the economic consequences of lost productivity now and in the next 20 years and the increasing burden of the costs of care for sufferers from CVD in later life as the number of individuals aged 60+ continues to grow.

CVD as a women's health issue

CVD is also a women's health issue. The differential impacts of CVD on women are often particularly striking. They occur on three dimensions.

First, CVD can be just as important a cause of morbidity and mortality for women as it is for men, especially relative to population structure. By 2040, women in some countries will represent a higher portion of CVD deaths than their gender's portion of the population. In China, 49.5 percent of the population will be women. However, using even current death rates, they will represent 54.6 percent of CVD deaths. In Brazil and China, the rate of growth of CVD deaths among working aged women between 2000 and 2040 will be higher than for men. In addition, in Brazil, Russia, and South Africa, CVD in 2000 accounted for a higher portion of women's deaths than those of men. In South Africa, the rates are highest among poorer women.

Indeed, in South Africa, even with the overwhelming presence of HIV/AIDS as the leading cause of death, cardiovascular disease ranks third in terms of women's disease burden and only sixth for men. Moreover, within South Africa's non-communicable

diseases pattern, the CVD burden comes to rest most heavily on poor women. CVD is the cause of the highest portion of years of life lost to non-communicable diseases for poor women, 45.5%, compared to between 35% and 36% for poor men and the wealthy.

In 2001, Nguyen and others compared the causes of excess mortality among women aged 30-69 years in low and middle-income countries compared with age-matched non-smoking US women (8). Cardiovascular disease dominated, accounting for 42% of the excess deaths, compared with 11% attributable to HIV, 8% to accidents, 7% to causes associated with maternity and 11% to other NCDs.

The importance of CVD may be equally consequential for women in other African countries. Although only focused on stroke, a study of urban and rural populations in Tanzania found that stroke death rates were higher for urban women than for urban men.

Second, CVD morbidity can also disproportionately affect women. In Rio do Sul, Brazil, women have higher rates of CVD morbidity (as measured by hospitalization) in all age working age groups than do men. When these morbidity data are corrected to eliminate congenital heart disease, women still have overall higher morbidity rates than men, and higher rates in the 35-44 age group.

Third, CVD contributes powerfully to widowhood. The high rates of death among men in the prime of life mean that CVD is creating an equivalent cohort of widows. When 40% to 50% of men between the ages of 35 and 64 die, women's life expectancy exceeds that of men, and as most women are married, mortality can create significant cohorts of widows whose need for support persists over long periods.

Taking action about CVD

We can do much about these problems. We know from achievements in Finland, Poland and the former Czechoslovakia that we can make rapid gains if we alter national diet towards less dependence on animal fat and more fruit and vegetables and vegetable oils. (9,10). We also know the positive potential of pharmaceutical treatment to influence favorably the lives of individuals at heightened risk of CVD end points. Primary care facilities can offer and administer these therapies, and the WHO and other groups are working towards that end with trials about the most effective and inexpensive ways of doing it.

Health education and the attainment of equity

In response to these figures commercial health care and medical professional interests push for hospitals with angioplasty and cardiac surgery capabilities. While these may have a limited place in the scheme of things, they can bankrupt the health budgets of less affluent countries and deny hundreds of thousands of citizens simpler but effective care. I visited Manila in 1982. There I saw high-rise facilities for renal and cardiac medicine, reflecting the medical problems of the late President Ferdinand Marcos. Meanwhile the expenditure per annum on health care for citizens was less than \$3 a year.

The data on trends in global health call for every country to prepare for an increase in chronic disease, especially as the numbers of older people increase, whatever else their health problems might be. As educators we need to be armed with epidemiological data about both the needs of our people and how those needs can be met and, at best, what preventive and therapeutic interventions can be offered to the people in need in the most affordable manner by way of amelioration.

Once we are sure that we know what the principal health problems are, both now and for the future, and can see their causes and understand the nature of proven effective interventions, we will have made a start on the journey towards improving equity in health. However, unless the community knows about and supports the needs analysis, and governments do so as well, our resolve will fail. The resistance of some elements of

the South African government to treatment of people with HIV has been a complex dynamic, but is an example where political intervention limits effective treatment.

Equity and expectation in the age of globalization

The demographic transition and the emergence of cardiovascular and other degenerative diseases are occurring in concert with huge progress in communication technology. One aspect of this revolution, as Henry Greenberg and Richard Farmer pointed out recently, is the growing access of the community to information about best treatment for medical problems (11). Access to the worldwide web is now indeed worldwide.

As *The New York Times* foreign correspondent Thomas Friedman (12) puts it in his book about globalization, The Lexus and the Olive Tree, “The world has become an increasingly interwoven place, and today, whether you are a company or a country, your threats and opportunities increasingly derive from whom you are connected to. This globalization system is also characterized by a single word: the Web...a symbol that we are all increasingly connected and nobody is quite in charge.” With a little effort, anyone can find out about best treatment for his or her health problem, directly or through internet cafes in remote villages. The information may be overwhelming and highly dubious in its connection to therapeutic science and this poses a major challenge. As educators we should take an active interest in developing ways of assisting people critically to sift information available on the web.

Widespread public knowledge of the possibilities for treatment for problems such as diabetes and heart disease is likely to put pressure on representative governments to come up with the goods – literally. For example, publicity, carried on the net about the ‘polypill’, a composite of drugs that reduce substantially the probability of cardiovascular events (13), especially applicable to individuals at high risk, has reached the four corners of the earth. In countless less-developed nations, satellite TV dishes perch on rooftops of houses that lack basic sanitation.

In open societies, knowledge of what treatment is available in affluent countries will influence public expectation, including expectations of their politicians. As countries develop economically, governments come to pay more, both absolutely and compared to out of pocket payments, for health care (14). Community expectations about health and health care have increasing political influence as countries grow economically. This can work positively for those seeking to secure greater equity in health. It can assist those who seek to educate and train existing and future health professionals to meet the health needs of those communities.

Rising community knowledge and expectation can help the health professional educator. They can inform his or her agenda and give the educator strong support to move forward. It is also true that, as those of us who have tried it know, working with communities is no simple task. Individual members of those communities play out their personal agendas and altruism is not always strong. Equity is not an automatic attribute of either the process or outcome of community consultation. It needs to be nurtured. It needs leadership, small 'p' political leadership, from those of us who hold equity to be valuable to be exercised in community consultation, in discussions with government, in student selection and curriculum design.

Whether one is responding to the appalling challenge of HIV/AIDS and poverty in the African continent, or to the incipient epidemic of cardiovascular disease in the expanding cities of Asia, the health workforce is critical to ameliorate and manage the diseases and to attempt to promote the health of those populations. To do this equitably is terribly hard work, the opposition sometimes residing among the established professions and their attachment to outmoded notions of what constitutes professional practice and professional education and training.

More often, however, it is the larger political and economic forces that cause the problems that inhibit progress towards equity. Social ethos determines whether equity is valued and the factors that determine ethos lie in social structures and commercial arrangements that are largely beyond the influence of the health science educator. For

equity to achieve normative status, social transformation is necessary in many places. That is no simple matter. As Vaclav Klaus, the prime minister of the Czech Republic put it almost ten years ago (15):

Systematic transformation is not an exercise in applied economics or applied political science; it is a process which involves human beings, which affects their day-to-day life, which creates new groups of gainers and losers, which changes the relative political and economic strength and standing of different economic groups and which, therefore, destroys the original political, social and economic equilibrium.

This complex task requires the efforts of politicians, educators, clinicians and private enterprise. We need to support one another as educators mutually in it. Conferences such as the recent The Network: TUFH conference in Newcastle serve an important purpose in binding us together in a common task. Part of that task is to consider how, if we value equity ourselves, we will work and advocate within the larger social and political contexts of our countries to support equity as individuals and professionals. Working to inform the citizenry about what we know of health could be major method by which we fulfill our responsibility in this regard.

I offer two apparently contradictory comments about information and its role in the achievement of equity. The first is that information of itself will often be insufficient to bring about change. The second is that we should not underestimate the power of information as an inducer of radical change.

George Monbiot, eminent *Guardian* journalist and advocate for global justice, in his book that calls for a new form of global government in response to globalization called *The Age of Consent* (16), quotes the novelist Michel Houellebecq's concept of 'metaphysical mutations' (17). These mutations are rare historical events like the emergence of Christianity and Islam and the Enlightenment and the ascent of science. They occur by a combination of radical new knowledge and information and a platform from which that

knowledge can be launched. Just as the Roman Empire provided a platform on which Christianity could propagate throughout Europe, Asia Minor and the Middle East, so Monbiot suggests that the forces of globalization, especially the www and cell phone, may be the platform for a new metaphysical mutation, one in which makes information available to all and in which that information will drive political change and challenge many prevailing power structures.

My colleague Susan Raymond, from her experience as a leading development economist, wrote presciently a decade ago about the emerging democracies in Central and Eastern Europe, and the importance of parliaments, press and people in an emerging political process that will set many agendas including that of health care. She said (18):

The *people*, not only through the political process but also through the hundreds of consumer and non-profit organizations springing up in the fertile soils of new democracies, are newly empowered to engage in the health policy debate.

Management changes, financing reforms, privatization, liquidation, payments, control, and ownership – all are now subject to public review. It is right and proper that [Parliaments, the press and the people] occupy positions of decision-making power [in relation to health policy]. The policy that lives by the technocrat will die by the technocrat.

Dr Raymond argued that informing the new constituents in the health policy debates in new democracies is essential to securing a democratic health policy, one in which we might hope that equity would flourish. We should give our fellow citizens the information that we hold about their health describing the problems as we see them, their causes, and possible routes of escape. If we believe that the information we have is both valid and useful, then we can and should share it with all without fear. This equitable distribution of information about health status, what the problems are, what is coming and what might be done may mark not only the beginning of greater equity of health but a small component of a metaphysical mutation that could lead to a more equal and happier world in general.

What the Network: TUFH can do about equity

The Network:TUFH can move across national and professional boundaries. It should model in its mission, governance and communication a new generation global agency which is contributing to a new world order where equity concerns are taken with increasing seriousness.

The Network:TUFH is already a global organization and has within its power to influence global agendas. One of those agendas must be the promotion of equity as a major, if not the central, value that should be reflected in all health services of the future. This aspiration should be welded onto everything we do.

The Network:TUFH can serve as a global fellowship for professionals concerned about equity, using its extensive media of listservs, newsletter, journal and alerts. Educators who hold equity as a principal value are a small minority and we need to stick together and support one another. We should encourage our fellow health professionals together to educate and train the next generation of health workers, who may be different in name and style from today's professionals.

Braverman and Gruskin propose five actions for the health sector to take to contribute to the achievement of equity. First, we should institutionalize concern for equity in all health services and professional education, and not have it as an afterthought. What is the likely effect of this service or this form of education on equity? Should be a question we ask when confronted with a choice. When a new training program is proposed for medical graduates seeking specialty training, the case for equity should at least be put, even if it is largely ignored at present.

Second, we should attend to the public health functions that create the conditions for health. This is in recognition of the fact that many of the determinants of health lie

beyond the health service, and that if we concentrate exclusively on health services as a way to reduce inequity we may miss big opportunities.

Third, we should support efforts to implement equitable financing for health care. While health care remains a commodity that can be purchased by private means in such a way as to give advantage to the rich, we do not achieve equity.

Fourth, we should ensure that health services respond to the major causes of preventable disease among the poor. This requires an epidemiological appraisal of need and preventability, and organization of services accordingly. This will evoke opposition and should not be seen as a simple or easy task. The Network: TUFH could develop methods through its workshops and position papers that could be adapted by members to define local health needs. The Network: TUFH could stimulate and develop local educational responses to those needs (as it has done with ageing and other modules).

Fifth, we should monitor policy and action in other sectors for its impact on health equity. This is somewhat related to the second proposal, about public health, but calls for a careful impact assessment of proposals in other sectors for their effects on equity and health. As the development economist Amartya Sen has often argued, we can and should pay more attention, more brain-power, to predicting possible impacts before we engage in changes in public policy or other developments that could affect the lives of people (19).

The equity agenda is a long and hard one. However, we should remember that for the first time in history we now have it within our power to eradicate grinding poverty and its consequences. Five-sixths of the world are no longer caught in grinding poverty and the affluent one-sixth commands such stupendous resources that it could deal with the remaining poverty in a co-operative and constructive fashion if it so chose. Yale University ethicist Peter Singer captures this optimism in concluding his book *One world* (20). He writes:

The 15th and 16th centuries are celebrated for the voyages of discovery that proved that the world is round. The 18th century saw the first proclamations of universal human rights. The 20th century's conquest of space made it possible for a human being to look at our planet from a point not on it, and so to see it, literally, as one world. Now the 21st century faces the task of developing a suitable form of government for that single world. It is a daunting moral and intellectual challenge, but one that we cannot refuse to take up. The future of the world depends on how well we meet it.

Acknowledgements

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