

INTRODUCTION

Can developing countries gain useful insights by examining the historical contexts of health in developed countries despite the differences in their circumstances? The intuitive answer is 'yes', but the specific cultural circumstances of developing countries must also inform autochthonous health decision-making. Further, the realisation of good public health states has been demonstrated to be obligately linked to community involvement in public health policy-making. ¹

The World Health Organization (WHO) defines health in the following manner: "health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." In 1977, this definition was enhanced by a declaration of the World Health Assembly, the annual meeting of the member governments to the World Health Organization. This elaboration on the original WHO definition of health declared that "the major social goal of governments and WHO should be the attainment by all people of the world by the year 2000 of a level of health that would permit them to lead a socially and economically productive life." Since 'socially and economically productive' are terms which may be subjectively applied, for the purposes of this paper, 'good health' will be assumed to be correlated with the positive presence of at least the five following indicators: longevity of life, reduction in infant mortality, clean drinking water, good systemic and individual sanitation practices, and improvements in overall living standards. These are conventionally employed as determinants of good health, although good health is not exclusively described by these five indexes.

The remainder of this paper will hopefully build a rational case in support of this intuitive response to the central question. The objectives of this paper include the following:

¹ Macfarlane, S., et al. Public health in developing countries. *Lancet* 2000; 356: 841.

² World Health Organization (WHO) definition of health, World Health Organization, 2000.

³ WHO Global Strategy for Health for All by the Year 2000, World Health Organization, 2000.

⁴ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing, Pearson Education Ltd: Essex, p. 7.

one, a brief summary of some of the complexities to comparisons of health systems of different nations; two, some views regarding why in some cases it may be useful for even very different countries to examine the health policy-development experiences of one another; and three, some conclusions in support of why activities in one country may have relevance and implications for another.

APPLES TO APPLES?

The WHO recently published the results of its comparative study of the performances of the health systems of its 191 Member States in an effort to provide a framework for the improvement of health systems world-wide.⁵ Health assessments made between countries though are often confounded. What causes mortality differs markedly between developed countries and developing countries. The populations of developed countries are ageing; those of developing countries are predominantly younger. Diseases of age – cancers, hypertension, etc. – are major causes of death in developed countries, while infectious diseases and malnutrition are the major causes of death in developing countries. Geography plays a role in differentiating the health of populations. Populations in North America, North and Western Europe have very low risks for tropical diseases such as malaria, yellow fever, and schistosomiasis compared to those in South Asia, sub-Saharan Africa, and Latin America. In addition, the most common influences on good health status – lifestyle, diet, and fitness – are themselves influenced by, and therefore vary by, culture. Individual and cultural attitudes and responses may influence evaluations of health status and consumer satisfaction with health services. These facts make it impossible to simply transfer health programs and systems despite success in other countries. Conclusions from the WHO research supports empirical impressions that rational approaches to improving health within countries incorporates understanding what other countries have tried.

Trends in health contexts for developed and developing countries have diverged in recent years. During the last decade, poverty, conflict, and HIV infection rates have begun to reverse positive trends in infant mortality and life expectancy for many developing countries in ways not experienced by most developed nations, with some exceptions (e.g., the Republic of Tanzania in East Africa⁶ and Kerala State in India⁷).⁸ Recent conflicts in Africa, the Middle East, and Eastern Europe have furthered strained limited resources and distracted welfare leadership. Rising poverty has a negative correlation to good nutrition and improvements in living standards for individuals. The benefits of new health technologies and expensive new medicines – including HIV therapies – have remained largely unavailable to developing countries. In many countries in sub-Saharan Africa, HIV infection alone has had a significant impact on life expectancy. In June 2000, the WHO released its healthy life expectancy rankings for infants born in 1999 based on disability-adjusted life expectancy (DALE) calculations that summarise the expected number of years lived in "full health". Of 191 countries, all of those ranked among the bottom 10 in terms of DALE were countries in sub-Saharan Africa, and life expectancy in southern Africa was estimated to have been reduced by 15 to 20 years with current HIV infection rates as compared to southern Africa without HIV. 9 In July 2000, at the XIII International AIDS Conference, it was estimated that in South Africa alone, up to 50 percent of its young people will die from HIV/AIDS-related diseases. 10

Under societies with constrained federal and political resources, human and monetary capital may not be directed toward health system improvements or toward health-related

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⁵ "Message from the Director-General", *The World Health Report 2000 - Health Systems: Improving Performance*, Geneva: WHO, June 2000.

⁶ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing, p. 13.

⁷ Kutty, V.R., et al. How Socioeconomic Status Affects Birth and Death Rates in Rural Kerala, India: Results of a Healthy Study. *International Journal of Health Services* 1993; 23 (2), p. 381.

⁸ Macfarlane, S., et al. Public health in developing countries. *Lancet* 2000; 356: 841.

⁹ Press Release, World Health Organization, 04 June 2000.

¹⁰ Closing address of the former President of South Africa, Mr. Nelson Mandela, XIII International AIDS Conference, July 14, 2000.

activities such as sanitation projects or improvements in water systems. Transport networks needed to improve access to health services, and educational resources for rural populations, may not be sufficiently funded. These types of restrictions may account for why poverty has been linked to mortality and is considered "the central health problem in developing countries". ¹¹

Though developed countries have fewer national financial constraints, and most have enjoyed peace and political stability in recent years, most also have populations and regions that demographically resemble those of developing countries. Considerable policy research as well as medical insurance experience has been conducted in many developed countries to ensure provision of health services specifically for internal poor populations, e.g., the Medicaid insurance program in the United States. The investigation into the relationship of health and social class in the United Kingdom resulted in the Black Report in 1980 and the Whitehead Report in 1987. The creation of universities for the study of public health near the beginning of the 20th century in Western Europe and North America was another result of the recognition for policy study to improve health conditions and inequities for disadvantaged populations internationally and domestically. Later, public health schools were founded around the world. The experiences of developed countries with health aid programs; the results of population studies of the health of its poor, and the research of Western public health institutions may be useful for developing countries investigating health improvement for its populations.

Anti-poverty programs have a historical interaction with the development of government-financed health systems – particularly for hospital services. In Britain, Norway, Poland, Sweden, and Switzerland, hospitals were first begun and managed by charitable institutions and were almost exclusively originally utilised by those who could not afford to

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¹¹ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing, p. 48.

have home visiting medical assistance. National funding for hospital services evolved from social assistance and charity welfare law. 13 And as the programs and their administrating bodies grew, hospital administration gradually began to come under federal regulatory and/or financial supervision. As will be discussed next, this historical experience with funding and administrating universal health services of developed countries may be useful for nations with large populations of poor people.

PRECEDENCE AND PROLOGUE

On the most basic level, historical approaches to health decision-making require reliable health statistics. Increases to longevity of life and reductions in infant mortality rates in most developed and many developing countries during the mid-20th century reflected successes in the context of these two health indicators. 14,15 But reliable statistics concerning life expectancy and infant mortality require consistent and detailed civil registries. Such systems were first developed in Britain and Western Europe in the late 18th century, and have been used to evaluate health and social trends as per the Black Report in Britain, reports issued by the Centers for Disease Control and Prevention in the United States, and other studies elsewhere.

The usefulness of reliable, comprehensive population records may be illustrated by a brief review of the work of the historical epidemiologist, Thomas McKeown, in Britain in the late 1970s. McKeown reviewed mortality statistics and their temporal relationships to such health determinants as nutritional and water supply improvements, personal hygiene campaigns and the widespread use of soap, medical technology advancements, and reductions in family size. He knew that the average life expectancy was increasing during the late 19th century. His research found that extensive municipal sanitation improvements were

¹² Macfarlane, S., et al. Public health in developing countries. *Lancet* 2000; 356: 843.

¹³ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing p. 67. ¹⁴ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing, p. 3.

¹⁵ Hill, K., "The Decline of Childhood Mortality", <u>Life, Death, and Health</u>, p. 37.

not completed in Britain until this period, and soap had only recently come to be regularly used by the working classes. He also understood that changes in personal hygiene would affect transmission rates of typhoid and cholera, but would have no effect on other infectious killers such as measles, pertussis, tuberculosis, or diphtheria. He deduced that this meant that the public response to the health education campaigns for personal hygiene could only account for approximately one-fourth of that period's decline in mortality.¹⁶

Prior to the widespread use of diphtheria vaccination and anti-toxin in the 1930s, thousands of infants and children died annually in Britain from diphtheria. Death due to diphtheria in young children did decline after the widespread use of medical diphtheria preventions and cure, but the major declines in the burden of disease began well before the time of their wide availability. McKeown was able to determine that besides the medical technology, some of the other factors that changed during this time – such as lower household crowding due to decreasing family size, improved living standards, and improved nutrition standards due to lower food prices – were also important to the control of the spread of infectious diseases such as diphtheria. ¹⁷

Over time, such evaluations of mortality and life expectancy rates aid inferences to what influences good health. Through his evaluation of the historical changes in British mortality rates, McKeown was also able to come to an opinion regarding the factors that made the most significant contributions to good health in Britain. He determined these to be improved nutrition and living standards, improved water supplies and sanitation, personal hygiene, and improved acute medical care. This type of data can inform evidence-based public health work for developed and developing countries when the health challenges are similar to the historical precedent.

¹⁶ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing, p. 7.

¹⁷ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing, p. 6.

¹⁸ Julian LeGrand, Foundations of Health Policy, lecture 2, October 10, 2000.

Although societal health is reflected by local traditions, many of the countries of the developing world were once colonies of the nations now considered to be 'developed'. This may be particularly true of countries where donor agencies may play a role in health structures. Foreign donor countries often influence both economic policy and health policy. Internationally-administered donor agencies commonly advocate public health funding by relating it to national poverty, making poverty useful in securing health resources. Advocacy though, often comes at a price, and foreign donors exhibit influence on health policies in many countries and this influence may not always be to the benefit of the recipient country.

Although developing nations today are socio-economically different from 19th century Europe, much of the health infrastructure of former colonies – the national health departments and provider systems, medical education practices, hospitals – still reflects the historical infrastructure of the colonisers. Where similar infrastructure exists, the experience with health policy development and health reform of developed nations may have relevant application to developing countries.

As stated, historically, organised health services in Europe began with the organisation of hospitals by charitable and religious entities, many of which may have travelled to the colonies with the colonisers. Similar moduses of organisation may have been transferred. When Portugal and Spain established colonies in Latin America, the Catholic Church and charitable institutions of the wealthy colonists provided hospital services; hospitals in Asia and Africa began with services provided for European armies and colonists that were later extended to the local populations. Many of these hospitals have endured to modern times.²¹

²¹ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing, p. 66 - 68.

¹⁹ Macfarlane, S., et al. Public health in developing countries. *Lancet* 2000; 356: 842.

²⁰ Walt, G. (1994) <u>Health Policy: An Introduction to Process and Power</u>, Witwatersrand University Press: Johannesburg, p.5.

Just as the founding of hospitals in the developing world mirrored the establishment of hospitals in Western Europe, the evolution of systems of financing medical services has also sometimes been similar. Mining companies in Germany organised medical services for workers from the 16th century²²; in Latin America, mining companies and large plantations began to provide medical care for their workers. Gradually, these voluntary contributions of employers to health funds became obligatory and the local governments began to oversee the regulation of the funding. As expenditures for the provision of hospital and other medical services grew in Europe, and as more people began to demand health services from these institutions, health insurance schemes were needed. Generally speaking, the development of health insurance schemes in Europe appear to reflect some historical pattern. With rising standards of living, universal health services become desired and schemes to extend health services to those who cannot or do not work are the ultimate challenges.²³ The insurance schemes in the developed countries have often evolved from various directions from voluntary private insurance, to trade/union group insurance, to employer-funded insurance, to funding via revenue raised from social security or other taxation contribution schemes.

In many developing countries, particularly those where informal systems have been allowed to develop, the deliverers of health care (the providers) receive direct payment for services from consumers. This frequently results in unintentional system incentives for health care and costs to be inequitable. Gratitude payments (or tips) are given to doctors in some parts of Eastern Europe that may influence the quality of the care received. Public clinic services are sometimes diverted to higher revenue private office hours, for example in South Africa. High pre-payment charges place regressive financial burden on the poor in India and Peru. ²⁴ Poor people living marginally above the poverty line may be omitted from

²² Abel-Smith, B. (1994) <u>An Introduction to Health: Policy, Planning and Financing</u>, p. 70.

²³ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing p. 65 - 76.

²⁴ "How Well do Health Systems Perform?" - The World Health Report 2000 - Health Systems: Improving Performance, Geneva: WHO, June 2000, p. 38.

coverage in countries that rely heavily on private insurance schemes such as in Singapore.

According to the WHO "World Health Report", nations must set objectives for the performance of their health systems in regards to improving health, as well as the "goodness" (best achievable level of average health) and "fairness" (achievement of equity within the population) of their systems. ²⁵ None of the developed countries have achieved total goodness or fairness in regards to provision of health services, but many have developed experience with various finance models that may offer guidance for why efforts may or may not work.

Many developing countries are seeking to expand the coverage of medical services to a greater percentage of their population while trying to avoid regressive financing at the expense of the poor. Voluntary health insurance subscriptions existed from the late 18th century in Britain, Denmark, and the Netherlands, and spread to Southern Europe and in Latin America in Argentina, Brazil, and Uruguay, for example. Compulsory medical insurance provided by taxation of members spread to the colonies by way of Britain, Denmark, Belgium, France, and Italy and transferred to colonies in Africa, India, Spain, Portugal, and Italy to Latin America.²⁶ Developing equitable funding structure for compulsory schemes has been a challenge, social security taxation has been long-used in France and Scandinavia, but may not be the solution for South Asia and Africa. Developing countries with low per capita income, has lower limitations on taxable capacities – i.e., working persons with marginal income have less money available for redistribution via social security taxation. This may mean that developing countries may need to consider financing options that do not rely very heavily on taxation and financing mixes of subsidy and taxation may need to change over time in ways that differ from developed countries. Although healthier nations can become more prosperous, age distributions affect capacities to earn

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²⁵ "Overview" - The World Health Report 2000 - Health Systems: Improving Performance, Geneva: WHO, June 2000.

²⁶ Abel-Smith, B. (1994) An Introduction to Health: Policy, Planning and Financing, p. 65 - 76.

income. In developing countries, the improved rate of survival of children, and in developed countries, the ageing of the overall population, may differently invite spiralling costs.

Capitation arrangements (where local or federal governments may establish a global budget by doctor, by hospital, or by medical administrating authority based on the size of the population served) have contained costs for programs in Britain (GP fund-holding) and Germany. While all aspects of these programs may not work in all settings, some of the insights gained may be useful to developing countries.

SOME CONCLUSIONS

Historical experiences rarely lend themselves to direct transfer to new contexts.

Contexts also change over time. More information is now known today about health promotion that was not available historically to developed countries. Developing countries have the opportunity to build upon a modern base of scientific knowledge. Also, the historical conditions of health-related activities – e.g., the state of water and road systems, local sanitation practices – are quite different from conditions in today's developing countries. But understanding why things historically changed in developed countries over time does inform the relative importance of what affects the determinants of good health.

And review of the historical case record of developed countries can help developing countries adapt their own answers to their specific case needs to questions such as: Does it look like prevention experiments have worked? Is prevention more cost-effective than cure for our situation? What is the relationship between a desired result and isolated or combined inputs of health determinants such as education, infant mortality, and conditions of good nutrition? What can be done to positively influence selective sociological factors that may improve our health circumstances?

The state of health in developing and developed countries is markedly different, but the overall objectives of good health – extending and improving the quality of life for as

many persons as possible – are similar. Many of the challenges to good health outcomes – achieving efficiencies and equity, controlling costs – are essentially the same.

On the practical side, comprehensive statistical records of demographic, environmental, and epidemiological data on populations in developed countries with similar life circumstances as populations in developing countries may be useful in health planning and for predicting outcomes to tried health interventions. Experience with expensive new technologies and health and social research results may have had longer periods of examination, and developing countries may be able to take a more selective approach to adopting expensive "advancements".

On the policy side, developing countries may be able to benefit from the experiences gained from the health structure and financing experiments of developed countries without the historical opportunity costs associated with those experiments. Ironically, the health successes of the last century of improved infant mortality, better nutrition, and longer life expectancies have economic implications as populations grow and health demands increase. Ideally, developing nations should adopt a strategic approach to the application of the experiences of developed countries to their own health challenges. Reviewing the experiences of developed nations may have relevant implications for allocations of health investment and human capital for countries where resources are scarce. User fees, capitation arrangements, centralised and localised global budget-setting and other forms of health planning and financing have had a long histories of experience with varying degrees of successful implementation in developed countries.²⁷

Finally, successful health policies require cultural commitments for successful local implementation and results reflective of good health. Cultural appropriateness to health interventions must be respected and incorporated. Finding the best mix of human and

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²⁷ Aas M., Incentives and Financing Methods, *Health Policy*, Vol. 34, pp. 205-220, 1995.

financial inputs, taking a "buffet-style" approach to picking the best of experiences from developed countries who have tried to meet health policy and equity challenges – and adapting those mechanisms locally – will be the best approach for developing countries to support good health to its citizens.