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Narrowing health inequalities in Sri Lanka: issues and challenges

For several decades Sri Lanka has shown better health outcomes compared to countries with similar income levels. These outcomes are mainly for infant and maternal mortality rates (IMR and MMR respectively) and life expectancy at birth. The country is often hailed as a model to achieve 'good health at low cost' [1, 2]. However, the apparently 'good' figures are average values that conceal wide variations in outcome between individuals or population groups. For example, the IMR in the lowest and highest wealth quintiles in Sri Lanka is 25 and 13 per 1000 live births [3]. These variations are known as health inequalities or health disparities and signify a comparison of health, especially among population or between social groups. They are observed between countries and within countries [4]. Within a country, the relatively poor (i.e. lower income or wealth) have worse health outcomes than their affluent counterparts. These worse outcomes are not confined to the poor and instead there is a gradient in health outcomes. In Sri Lanka the IMR falls step-wise from the lowest income quintile to the highest: 25; 21; 19; 14; and 13 (per 1000 live births) [3].

The gradient in health outcomes is almost universal. It is observed in a range of health outcome measures including morbidity and mortality rates for communicable diseases and for several non-communicable diseases. It is seen in several dimensions of the social environment other than income. These include categories such as educational achievements (e.g. no education, primary education, secondary education and higher education), occupation (e.g. manual workers without skills, clerical workers, administrative and professional jobs) and social status [5]. These gradients in health outcomes are not completely accounted for by genetic differences, biological determinants (e.g. obesity or serum cholesterol levels in the case of coronary artery disease), behavioural patterns (e.g. smoking), or by healthcare utilization. The evidence submitted by the WHO Commission on Social Determinants of Health (CSDH) suggests that one of the most powerful causes for gradient is social circumstance, i.e. the conditions in which people live and work, which are referred to as the social determinants of health [6]. Social circumstances can be modified by society, and arguably the gradient in health outcomes is to a large extent preventable.

The avoidable or preventable health inequalities are known as health inequities (HI). HI tend to be unjust as they constitute preventable morbidity or mortality. CSDH called for action in 7 broad areas in several sectors, including health. In order to tackle the key social determinants of health they identified 5 sectors: education (e.g. investing in the early years of life); living environment (e.g. greater availability of affordable housing, control of alcohol outlets), employment (e.g. improved working conditions); social protection (e.g. support throughout life to face old age and shocks, such as illness) and

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health (e.g. universal healthcare which is vital to good and equitable health) also proposed activities to tackle the inequitable distribution of power, money and resources (e.g. allocations based on principles of equity, progressive taxation to narrow income disparities and empowerment through fair representation in decision-making) and recognized the importance of continuing research and evaluation of interventions to narrow HI (i.e. measuring and understanding the problem and assessing the impact of action). There are several other publications that have identified social determinants of health at country levels. Canada describes 11 social determinants: aboriginal state, early life, education, employment and working conditions, food security, health care services, housing, income and its distribution, social safety net, social exclusion, unemployment and employment security [7]. British literature recognises social organization, labour market disadvantages, early life influences, social support, transport facilities, social exclusion, ethnicity, neighbourhood and housing as important determinants [5, 11]. The WHO of Europe has identified 8 determinants and outlines evidence-based interventions on early life, stress, social exclusion, working conditions, unemployment, social support, addiction, food and transport [8]. Some have even gone a step further and emphasize the relative importance of social democratic political systems and the emanating social policies as key determinants to narrow health inequities [9].

Possible entry points to tackle health inequities have been described largely for Europe and North America [6, 10, 11]. However, developing countries should formulate their own strategies to achieve health equity for two reasons. Firstly, these countries lack reliable, longitudinal and comprehensive data to measure health inequalities and analysis to decipher their pathways. Delaying action on health inequities until detailed research data is available is not an option as delay cost unnecessary lives. Secondly, local historical, political, social and cultural contexts differ from the more affluent European and North American countries. These contextual factors need to be considered when planning action on HI. For example, developing countries struggling with internal conflicts, or attempting to gain rapid economic development in a globalizing world, may not consider health equity a political priority. A comprehensive state-wide thrust towards achieving health equity therefore may not be feasible. A reasonable alternative is the “middle way” (or a Sri Lankan Model!) that is responsive to these issues and takes a pragmatic approach. Three steps are recognized in this approach:

- a) Identifying areas that clearly lead to health inequality. This is done by using available literature, noting key informant opinions, and if necessary by performing rapid assessments of health equity in specific areas
- b) Selecting by consensus a few priority areas that generate HI and need urgent attention
- c) Intervening with using a multi-pronged approach using a few pragmatic evidence-based interventions that are likely to be most effective and efficient to narrow health inequities [12].

In the next few paragraphs this model is applied to Sri Lanka. Five areas that are likely to lead to HI are proposed with the intention of stimulating a debate. The selected areas are not comprehensive e.g. tobacco and alcohol consumption are not dealt with in this paper because policies and institutional structures to tackle them are in place.

Education

Early childhood development plays a critical role in adult health outcomes [5, 6]. In Sri Lanka, the expanding pre-school system is poorly regulated and driven mainly by profit. As their quality and standards vary, they may lead to

differential impact on cognitive development of children. An appreciable proportion may be harmed by lack of, or poor quality, pre-schooling. Facilities in primary education too show gross inequalities. Even within Colombo, smaller schools managed by Provincial Councils are relatively under-resourced compared to the more affluent national schools.

Living environment

There is increasing recognition that housing improvements reduce incidence of respiratory illness [5]. Characteristics in the built-environment (e.g. cycle lanes) promote physical activity, and the availability of green spaces (e.g. parks) reduces all-cause mortality rates [6, 13]. Poor quality of housing (e.g. almost 50% of Colombo city dwellers live in low-income settlements consisting of 6% of space), houses in vulnerable regions (e.g. areas exposed to floods) and lack of permanent shelter for some of the internally displaced groups are long standing problems facing the country. Action is also required to protect current and future generations from an 'unhealthy food' environment encouraged by intense and sophisticated promotion of 'fast foods' and sweetened drinks aimed at children [14]. Interventions could include differential taxing to discourage consumption of unhealthy food, regulation of advertisements that are aimed at children and ensuring the availability of healthy foods at 'fast food' outlets.

Employment conditions

Lack of job security and a poor supporting working environment contribute to premature mortality and excess morbidity [5]. In Sri Lanka, more than 50% of employees are in the 'non-formal' sector (e.g. farmers and fishermen, 'migrant workers', domestic servants, self-employed, small scale businesses, construction workers). They have minimal job security, irregular levels of earnings and savings, and few avenues for compensation after suffering occupational injuries. Therefore the country needs policies that will protect such workers in an inclusive manner (e.g. legal processes to formalize employment, covered by a more comprehensive Occupational Health and Safety Act).

Social protection

Social protection facilitates recovery from illness and improves health outcomes [5, 6]. Unfortunately Sri Lanka lacks effective social support for needy groups (e.g. the destitute elderly, those who suffer from chronic illness, the long-term unemployed, or retirees from the 'non-formal' sector who have limited financial security). Thus we should develop a coordinated and effective response to improve social protection. This initiative should include dedication of more funds for social protection, aligning the numerous institutions involved in the area of social support (e.g. 'Samurdhi' benefits, Ministry of Social Services) and in order to support chronically ill, establish formal linkages

between social services and health (e.g. by having medical social workers).

Healthcare

Equitable healthcare which is affordable is essential to tackle health inequities. The region is facing an epidemic of non communicable diseases (NCDs) with escalating costs. Recent studies suggest that those accessing the state sector for NCDs pay out-of-pocket for a large proportion of costs [15]. This leads to a "Medical Poverty Trap" and poorer groups begin to compromise on their adherence to treatments with resultant poorer outcomes [15]. The state sector has to invest in basic facilities and introduce service innovations to counter the unnecessary 'out-of-pocket' expenditures which lead to inequities in health outcomes from NCDs.

How do we implement these strategies in Sri Lanka?

In order to narrow HI, the health sector must work with other sectors. This will require institutional arrangements at different levels, mobilisation of civil society groups and changes to the attitudes of healthcare workers. At a national level, institutional arrangements could include reactivation of the National Health Development Council (which was a ministerial group chaired by the prime minister) or launching of a high-level Commission under the head of state (similar to the Commission on Macroeconomics and Health in Sri Lanka) or Task Force (e.g. similar to the recently convened task force to tackle dengue). Such concerted efforts will be required to tackle multi-sectoral issues by legislation, advocacy and through organisational processes. Similar institutional arrangements are necessary at the Provincial or District levels (e.g. District Development Committees). At the grass-root level multi-sectoral action could be undertaken by revitalizing Primary Health Care [16]. Two actions will encourage and ensure that other sectors routinely consider health impacts of their policies. One is to commence Health Impact Assessments (HIA), a well recognized tool to evaluate health impacts of other sector activities (e.g. development schemes, trade agreements and economic policies). HIA ought to be a pre-requisite for large and medium-scale projects, similar to Environment Impact Assessment. The technical expertise is available in the WHO, and has been which has successfully applied to many countries [17]. Another is to use an equity lens to express routine data (e.g. analyses of the Census or Annual Health Bulletin of the Ministry of Health to demonstrate health and other inequalities).

The leadership or contributions by professionals and scientists from diverse disciplines and civil society are vital for the success of these initiatives. Sri Lanka has taken a multi-pronged approach. A multi-disciplinary working group was formed by the Ministry of Health that has conducted awareness-raising workshops and hosted regional consultations. Professional associations and civil

society groups are playing a key role in awareness raising activities and the Sri Lanka Medical Association (SLMA), the College of Medical Administrators of Sri Lanka and the Sri Lanka Association for the Advancement of Science (SLAAS) have identified themes relating to health equity and / or social determinants of health for 2010. Research institutions have risen to the challenge and some have gained recognition in the region as experts in health equity analyses (e.g. Health Policy Institute). Other research groups and universities should be encouraged to conduct research in this area by dedicating more funds for inequality and SDH-related research. Trade unions (e.g. GMOA) and individual professionals too can play a key role by supporting activities to tackle HI. These include mobilising social and public health measures that improve health and having a wider population perspective of health during patient care and interactions with the community [17, 18]. Together we can narrow the health gap and help reduce preventable causes of human suffering and premature death.

References

1. Halstead S, Walsh, Warren K. Eds. *Good Health at Low Cost*. Bellagio, Italy, The Rockefeller Foundation, New York, 1985.
2. The World Bank. *World Development Report 1993: Investing in Health*. Oxford, Oxford University Press, 1993.
3. http://www.statistics.gov.lk/DHS/dhs_report/chapter_8_infant_and_child_mortality. accessed 4 August 2010.
4. Mackenbach JP, Stirbu I, Roskam AJR, *et al* for the European Union Working Group on Socio-economic Inequalities in Health. Socioeconomic Inequalities in Health in 22 European Countries. *New England Journal of Medicine* 2008; **358**: 2468-81.
5. Marmot M, Wilkinson RG. Eds. *Social Determinants of Health*. 2nd ed. Oxford, Oxford University Press, 2006.
6. World Health Organization. *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health: Final Report of the Commission on Social Determinants of Health*. Geneva, 2008.
7. Raphael D, Romanow RJ, Bennett C. *Social Determinants of Health. Canadian Perspectives*, 2nd ed. Canadian Scholars 2009.
8. Wilkinson R, Marmot M. *Social Determinants of Health: The Solid Facts*. 2nd ed. World Health Organization 2003.
9. *Political and Economic Determinants of Population Health and Well-Being: Controversies and Developments*. Ed: Navarro V, Muntaner C. Baywood Publishing Company 2004.
10. Blas E, Gilson L, Kelly M, *et al*. Addressing social determinants of health inequities: what can the state and civil society do? *Lancet* 2008; **372**: 1684-9.
11. The Marmot Review 'Fair Society, Health Lives'. www.marmotreview.org accessed 5 August 2010.
12. Bamba C, Gibson M, Sowden A, *et al*. Tackling the wider social determinants of health and health inequalities: evidence from systematic reviews. *Journal of Epidemiology and Community Health* 2010; **64**: 284-91.
13. Mitchell R, Popham F. Effect of exposure to natural environment on health inequalities: an observational population study. *Lancet* 2008; **372**: 1655-60.
14. Anonymous. Editorial: Childhood obesity: affecting choices. *Lancet* 2010; **375**: 611.
15. Perera M, Gunatilleke G, Bird P. Falling into the medical poverty trap in Sri Lanka: what can be done. *International Journal of Health Services* 2007; **37**: 379-98.
16. Regional Conference on Revitalizing Primary Health Care. 6-8 August 2008, Jakarta, Indonesia. (http://www.searo.who.int/EN/Section1243/Section2447_14592.htm).
17. Raphael D. Getting serious about the social determinants of health: new directions for public health workers. *Promotion and Education* 2008; **15**: 15-20.
18. The Royal College of Physicians. *How doctors can close the gap. Tackling the social determinants of health through culture change, advocacy and education*. 2010. The Royal College of Physicians. London.

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