Editorials

Measuring progress towards reducing health inequalities

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During the past 50 years there has been a gradual improvement in life expectancy: the global average now exceeds 65 years, which is similar to the European average in 1950. The rate of improvement has, however, decelerated in recent decades, and there is a lack of mortality decline in the least developed countries.

Moser et al. (pp. 202-209) show that inequality in life expectancy between countries fell until the late 1980s but increased during the 1990s, mainly because of an increase in adult mortality in sub-Saharan Africa and in the former socialist economies of Europe. In contrast, child mortality levels continue to converge. The authors used the United Nations estimates of life expectancy published in 2000 (1). A primary concern is the availability of accurate empirical data underlying these estimates. As Moser et al. point out, measurement errors are likely to be greater for adult mortality — the major source of divergence in global life expectancy — than for child mortality.

According to the WHO mortality database, only one-third of adult deaths in the world are registered, mainly in high- and middle-income countries. Child mortality data are more widely available from censuses and household surveys in low-income countries. The world health report 2005 — Make every mother and child count, to be published next month, summarizes data availability and shows the extent to which estimates in child mortality in developing countries rely on projections of past trends rather than on empirical data for recent years. This is partly because data collection is infrequent in low-income countries and partly because information in surveys and censuses refers to a specific retrospective period. The mid-point lies on average six years prior to 2004 for household surveys in 58 countries, while vital registration data from 70 countries are now mostly

available for 2001. Therefore, the data used by Moser et al. at best reflect events until the mid-1990s; their remaining analysis is largely based on projections.

It has also been suggested that current mortality patterns deviate substantially from model life tables and that the application of the standard approach, used by the United Nations in 2000, is becoming more problematic when estimating life expectancies in countries without adequate mortality data (2).

The Millennium Development Goals (MDGs) have been adopted to reduce the severe gaps between the rich and poor countries, and between rich and poor populations within countries (3). They have generated considerable commitment, but the demand to know the present position on one of the primary progress indicators — child mortality - has distorted the assessment of progress. Whether countries are on track to reach the goals in 2005 is for almost all low-income countries simply a projection of the trends observed during the 1990s, which can now be estimated with more confidence. So effectively, we a priori assume that the ability of the Millennium Declaration itself to alter unfavourable mortality trends is very limited.

Summary measures of inequality, such as the dispersion measure of mortality (DMM), are subject to several limitations. DMM is a measure of the overall degree of inequality: it does not indicate where in the distribution the inequality may be occurring and it does not provide information about the well-being of the population. Summary measures should be disaggregated into levels and causes of child and adult mortality, so that meaningful inferences can be drawn on how to tackle sources of inequality.

Health distributions should not be evaluated solely in terms of inequality, without regard to the average. Take Anand's example (4) of two countries

A and B of equal population size, each with a life expectancy at birth of 50 years and perfect equality in health achievement (DMM zero). Country A's life expectancy increases to 55 years while country B's increases to 65 years: average life expectancy goes up from 50 to 60 years, but health achievement between the countries has become unequal. Even with a focus on health equality, it would be difficult to prefer the old situation of a 50-year life expectancy for both countries over the new situation of 55 years for one country and 65 years for the other. There is a normative trade-off where we might, if necessary, be willing to sacrifice some aggregate health for more equality. What economists call the efficiency-equity trade-off is deduced from the welfare function, which explicitly incorporates a society's intolerance of inequality in

Health for All by the year 2000, launched to achieve greater equity in health between and within countries, was accompanied by little investment in monitoring and lost steam well before its target date. Monitoring progress towards the MDGs is taken more seriously, which has led to emphasis on data availability and quality and the establishment of initiatives on health information and statistics such as PARIS 21 and the Health Metrics Network. Substantial, well-planned investment, as part of a sustained effort to strengthen health information systems in countries, is necessary to ascertain recent trends and take appropriate action. The MDG momentum in countries and at the international level can be harnessed to improve measurement and help combat inequity in health across the world.

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