

CENTENNIAL REVIEW

Health, development and the Millennium Development Goals

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The Millennium Development Goals (MDG), which emerged from the United Nations Millennium Summit in 2000, are increasingly recognized as the over-arching development framework. As such, the MDG are increasingly guiding the policies of poor countries and aid agencies alike. This article reviews the challenges and opportunities for health presented by the MDG.

The opportunities include that three of the eight MDG relate to health — a recognition that health is central to global agenda of reducing poverty, as well as an important measure of human well-being in its own right. A related point is that the MDG help to focus attention on those health conditions that disproportionately affect the poor (communicable disease, child health and maternal health), which should, in turn, help to strengthen the equity focus of health policies in low-income countries. Further, because the MDG are concrete, it is possible to calculate the cost of achieving them, which in turn strengthens the long-standing calls for higher levels of aid for health.

The challenges include that, while the MDG focus on specific diseases and conditions, they cannot be achieved without strengthening health systems. Similarly, progress towards the MDG will require health to be prioritized within overall development and economic policies. In practice, this means applying a health 'lens' to processes such as civil-service reform, decentralization and the drawing-up of frameworks of national expenditure. Finally, the MDG cannot be met with the resources available in low-income countries. While the MDG framework has created pressure for donors to commit to higher levels of aid, the challenge remains to turn these commitments into action. Data are presented to show that, at current rates of progress, the health-related MDG will not be achieved. This disappointing trend could be reversed, however, if the various challenges outlined are met.

In the year 2000 the global community made an historic commitment: to eradicate extreme poverty and improve the health and welfare of the world's poorest people within 15 years. The commitment was the United Nations Millennium Declaration (United Nations, 2000) and derived from it are eight time-bound goals, known as the Millennium Development Goals (MDG).

The MDG (www.who.int/mdg; see Table 1) have gained wide-spread acceptance in rich and poor countries alike. They are seen to provide an over-arching framework for development efforts, and benchmarks against which to judge success.

International commitment to the MDG was re-affirmed in September 2005 at the World Summit, where heads of state again endorsed the goals. With the MDG target date of 2015 just 9 years away, now is the time to review progress, take stock of the achievements, and address the challenges.

In its recent publication, *Health and the Millennium Development Goals* (WHO, 2005a), the World Health Organization (WHO) identified five opportunities offered by the MDG, and five challenges that are likely to impede progress towards the goals. This review summarizes those opportunities and challenges and explores one of the challenges in more detail: namely, the relationship between health and development policy. It concludes by

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giving an overview of the WHO's work on the MDG.

THE MILLENNIUM DEVELOPMENT GOALS AND HEALTH

Opportunities

The MDG represent an important set of opportunities for the health sector.

Firstly, the goals provide a common set of priorities on how to tackle poverty. This unprecedented level of agreement between national governments, international agencies and the United Nations system brings both political momentum and focus to development efforts, helping to ensure that the needs of poor people remain at the top of the development agenda.

Secondly, health is at the heart of the MDG, with the recognition that better health is central to the global agenda of reducing poverty as well as an important measure of human well-being in its own right. Health is represented in three of the eight goals, and makes an acknowledged contribution to the achievement of all the others, particularly those related to education, gender equality and the eradication of extreme poverty and hunger. Importantly, the health goals also focus on problems that disproportionately affect the poor — communicable disease, child health and maternal health.

Thirdly, the MDG set quantifiable and ambitious targets against which to measure progress. These provide an indication of whether efforts to improve health are on track, and a means of holding decision-makers to account. Worryingly,

data released in 2005 show that progress towards the health-related MDG lags behind that made towards the other goals (see Box 1).

Fourthly, it is possible to calculate what it would probably cost to achieve the MDG, and this, in turn, draws attention to the massive funding gap between what is available and what is needed. This provides additional support to the long-standing calls from the health sector for its funding to be dramatically increased.

Fifthly and finally, a unique feature of the MDG is that the eighth goal calls for a global partnership for development, recognizing that there are certain actions rich countries must take if poor countries are to achieve goals 1 to 7. Goal 8 is a reminder that global security and prosperity depend on a more equitable world for all.

Challenges

Importantly, the MDG have also helped to crystallize the challenges. As developed and developing countries begin to look seriously at what it would take to achieve the health-related MDG, the bottlenecks to progress have become clearer. These challenges — again, five have been identified — are summarized below. They also represent core elements of the WHO's strategy for achieving the MDG, as discussed below.

The first challenge is to strengthen health systems. Without more efficient and equitable health systems, countries will not be able to scale up the programmes for disease prevention and control that are required to meet the specific health goals — of reducing child and maternal mortality and rolling back HIV/AIDS, tuberculosis and malaria. The Bellagio Study Group on Child Survival has estimated that universal access to broad-based health services could, on its own, meet 60%–70% of the decreases in child-mortality and 70%–80% of the decreases in maternal mortality required to achieve the relevant MDG (Claeson *et al.*, 2003). In practice, the strengthening of

TABLE 1. *The eight Millennium Development Goals*

Goal 1: Eradicate extreme poverty and hunger
Goal 2: Achieve universal primary education
Goal 3: Promote gender equality and empower women
Goal 4: Reduce child mortality
Goal 5: Improve maternal health
Goal 6: Combat HIV/AIDS, malaria and other diseases
Goal 7: Ensure environmental sustainability
Goal 8: Develop a global partnership for development

BOX 1

Progress Towards the Health-related MDG

From the 1990 baseline date for the targets, 2006 is well past the half-way mark on the path towards the MDG target date of 2015. The health data available so far are not encouraging. They indicate that, if the trends observed during the 1990s continue, most poor countries will not meet their health-related MDG.

None of the poorest regions of the developing world are currently on track to meet their target level of child mortality, for example (Fig. 1). Declines in maternal mortality have been limited to countries with already low levels; countries that had high levels of maternal mortality in 1990 are recording no change or even an increase.

The data on the coverage of some health interventions are more hopeful. The percentage of women who have a skilled medical person with them during delivery, for example, has increased rapidly in some regions — especially in Asia, albeit from a low baseline. Use of insecticide-treated bednets has risen, and coverage of effective anti-tuberculosis treatment has expanded. Unfortunately, coverage of child-health interventions does not appear to be following this encouraging pattern: the median coverage of the key preventive and curative interventions for improving child survival remains at between 20% and 25%.

It is important to recognize the inter-dependence of the goals: progress with one health goal (particularly the containment of the AIDS epidemic) will affect progress with others, such as child mortality. Similarly, progress towards the health goals will have a positive impact on overall poverty, and the efforts in health will have a mutually reinforcing relationship with the efforts to improve education and water supplies.

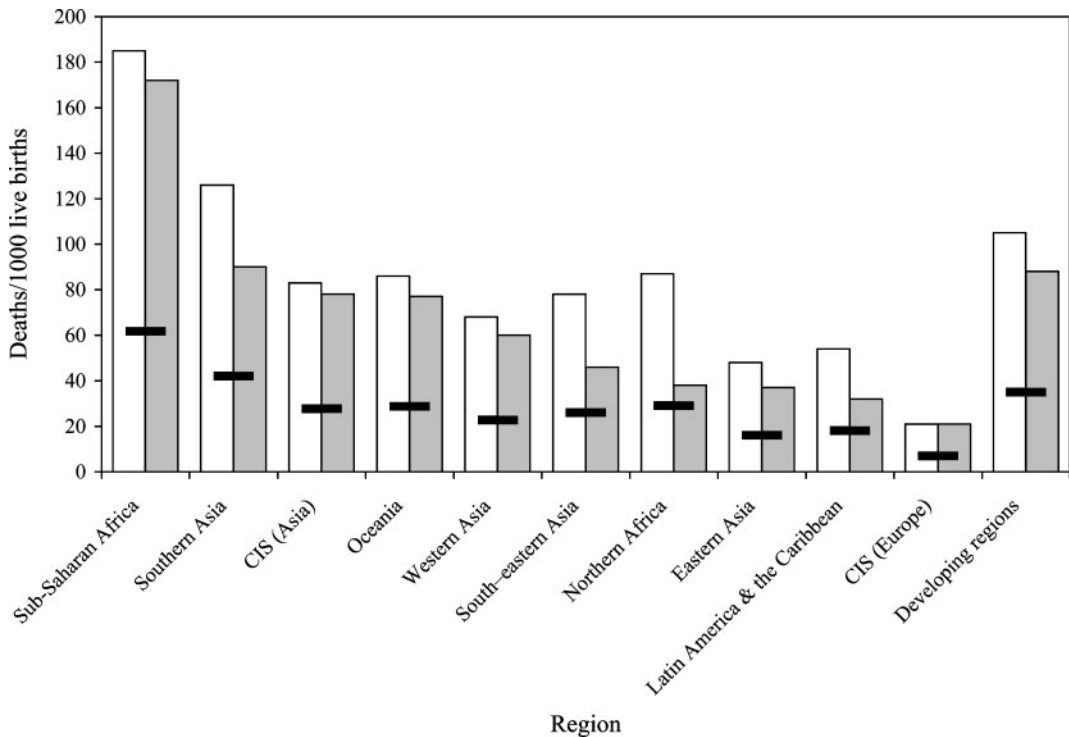


FIG. 1. Regional progress in reducing mortality among children aged <5 years towards the target levels set, as part of the fourth Millennium Development Goal, for 2015 (United Nations, 2005). The data shown are the baseline values in 1990 (□), the values recorded in 2003 (■), and the target values for 2015 (indicated by horizontal bars). CIS, Commonwealth of Independent States.

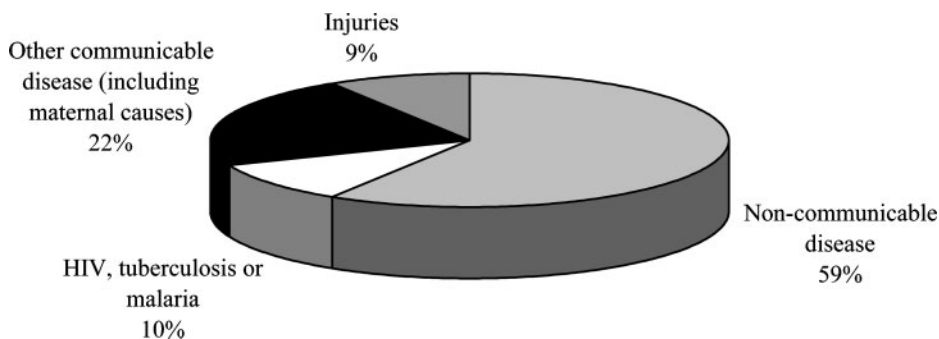


FIG. 2. The causes of the 57 million deaths, among individuals of all ages, that occurred in 2002 (WHO, 2005a).

health systems has a number of elements, from tackling the human-resources crises to establishing an equitable health-financing system (which ensures both that poor people can access care and that health costs do not cause impoverishment) and strengthening each government's regulation and 'stewardship' of non-state providers. Although these complex issues are not the subject of this article, their importance to the achievement of the MDG cannot be stressed enough. If the poor record of progress towards the health-related MDG (see Box 1) is to be reversed, health planners and donors will need to pay more attention to health-systems constraints in future.

The second challenge is to ensure that health is prioritized within overall development and economic policies. This means looking beyond the health system and addressing the broad determinants of ill-health — low levels of education, poverty, unequal gender relations, high-risk behaviours, and an unhealthy environment — as well as raising the profile of health within national processes for poverty reduction and government reform. This particular challenge is elaborated below, in the section on health and development

The third challenge is to develop health strategies that respond to the diverse and evolving needs of countries. The MDG indicate desirable outcomes in terms of overall improvements in human well-being. This means designing cost-effective strategies to address those diseases and

conditions that account for the greatest share of the burden of disease, now and in the future. As Figure 2 shows, in addition to the priorities reflected in the MDG, efforts to reduce violence and injuries, as well as non-communicable diseases such as those related to cardiovascular disease and tobacco use, will need to be tackled. Further, reproductive-health interventions will be essential in all countries.

The fourth challenge is to mobilize more resources for health in poor countries. Currently, low-income countries cannot 'afford' the MDG and aid is not filling the gap. Development assistance for health was estimated at U.S.\$8100 million (€6300 million) in 2002, the most recent year for which figures are available (Michaud, 2003). This represents a significant rise — up from a mean of U.S.\$6400 million/year between 1997 and 1999 — and reflects an upward trend in overall aid levels. While these increases are welcome, they remain far short of the amounts that are needed. The United Nations Millennium Project recently estimated that meeting all the MDG would require an estimated U.S.\$135,000 million of official development assistance in 2006, rising to U.S.\$195,000 million by 2015. Importantly, the Millennium Project notes that these increases remain well within the target adopted by the United Nations General Assembly in 1970 and recently renewed at Monterrey — that rich countries should allocate 0.7% of their gross national product (GNP) as development aid (U.S.\$135,000

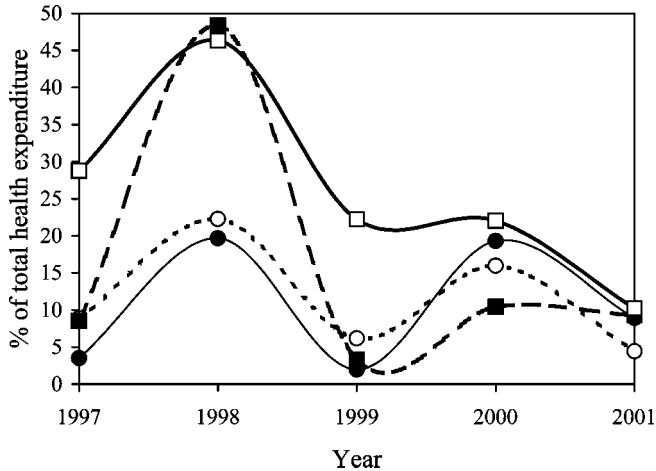


FIG. 3. Donor commitment for health, as a percentage of the total annual health expenditure, in Guinea (●), Benin (○), Burundi (■) and Liberia (□) between 1997 and 2001 (World Bank, 2005).

million is currently equivalent to 0.44% of the combined GNP of these countries).

Within health, there have been a number of studies on the need to increase spending. In 2001, the Commission on Macroeconomics and Health estimated that a minimally adequate set of interventions — and the infrastructure needed to deliver them — would cost in the region of U.S.\$30–40 *per capita* (WHO, 2001). Other estimates indicate that as much as U.S.\$60 *per capita* is needed (WHO, 2000). While these figures differ markedly, the over-riding message is clear: in the poorest countries, health spending needs to be of a different order of magnitude compared with its current level, of just U.S.\$8–10 *per capita* in the least developed countries.

In addition to high levels of aid, donors are increasingly aware that they need to provide more effective aid. This has many implications, among the most important of which is that donors must improve the predictability and reduce the volatility of their aid. Typically, donors only commit aid 12 months in advance, and levels of aid can vary greatly from year to year. Figure 3 illustrates this problem dramatically for four countries. When the amount of aid a country receives is likely to change at short notice, it is impossible for ministries of health

and finance to make long-term plans, such as employing more doctors or nurses, widening access to AIDS treatment or scaling-up health-service provision. Furthermore, with the proliferation of new forms of development assistance for health — particularly the larger global-health partnerships, such as The Global Fund to Fight Aids, Tuberculosis and Malaria — it is critically important that these new processes strengthen rather than undermine national systems.

The fifth challenge is to improve the quality of health data in order to measure each country's progress towards the MDG. At a global level, the demonstration of progress can help to generate further resources and sustain political momentum for health-sector investment. At country level, reliable information can help ensure that policies are correctly orientated and targeted at those most in need. The WHO's specific role in tracking progress towards the health-related MDG is discussed below.

HEALTH IN DEVELOPMENT

It has long been recognized that better health services alone will not improve health outcomes. Several factors, including levels

of education, women's empowerment, and access to water and food, all have a direct impact on health status (see Table 2). Many programmes of public health and environmental health are designed to address these 'broad determinants' of health.

Efforts to address health, within the context of development policy, build on these traditional public-health approaches but go further in at least two important ways. Firstly, 'health in development' work recognizes a bi-directional link between health and poverty reduction, namely that poor people are more likely to get ill and that better health outcomes can, in turn, generate economic growth. Secondly, 'health in development' means looking at how policies across government impact on health and are affected by health.

Health and Poverty Reduction

The poor — particularly poor girls and women — tend to suffer worse health and die younger than their more affluent counterparts. They have higher-than-average levels of child and maternal mortality, higher incidences of disease, and more limited access to health care and social protection (Anon., 2003). Health is a crucially important economic asset for many poor people — their livelihoods depend upon it. When a poor person becomes ill or injured, their entire family often becomes trapped in a downward spiral of lost income and high health-care costs.

Conversely, investments in health are increasingly recognized as an important means of economic development and a

prerequisite for developing countries — and, in particular, for poor people within those countries — to break out of the cycle of poverty. Indeed, there is evidence that investments in health can have positive economic returns. Over the period 1965–1990, for example, health and demographic variables accounted for as much as half of the difference in growth rates between Africa and the rest of the world (Bloom and Sachs, 1998). Healthier populations and disease-eradication programmes can also help to attract private investment and to encourage tourism.

Policy Coherence Across Governments

Given these links between health and poverty, it is important that any country's strategy for poverty reduction not only demonstrates a clear understanding of the causal links between better health and poverty reduction but also includes explicit health objectives in the key sectors that influence the health outcomes of poor people (Anon., 2003). As mentioned above, the sectors with a direct influence on health outcomes include education, nutrition, water and sanitation. It is also necessary, however, to look at those policies, processes and programmes that influence the functioning of the ministry of health and the delivery of health services. These include:

- (1) civil-service reform, which affects the supply of health workers. Low salaries make it hard to attract and retain staff, particularly in remote rural areas, and can fuel corruption. In most countries it is impossible to increase salaries for

TABLE 2. *Some broad determinants of health*

- Among children aged <5 years, 53% of annual deaths are associated with malnutrition.
- Iron-deficiency anaemia is the second leading cause of disability and may contribute to 20% of maternal deaths.
- At least 25% of the global burden of disease may be attributed to environmental conditions; a child dies every 15 s from diarrhoea, caused largely by unsafe water and inadequate sanitation. Indoor air pollution causes an estimated 2 million deaths/year, with women more likely than men to be exposed to harmful cooking fumes.
- There is a strong correlation between literacy of mothers and child mortality: the results of a study in India indicated that a 10% reduction in female illiteracy would result in the reduction of infant mortality by 12.5 deaths/1000 (Gokhale *et al.*, 2002).

health staff at a different rate than for other public-sector workers, because of concerns about inflationary spill-over effects on other areas of the civil service. Yet, given the (often extreme) shortages of health workers, there may be a special case for increasing their salaries and incentives over and above those of other public-sector workers. The health sector must engage with the processes of civil-service reform if it is to win this argument.

- (2) budgeting and expenditure systems. In addition to receiving insufficient resources, health services may receive their budget — for salaries, medicines etc — erratically or late. This problem, which creates management and administration difficulties and contributes to the poor quality of services, usually runs right across the public sector, and can only be addressed with government-wide reform. Public-expenditure reviews can help to identify key problems and formulate recommendations for reform. Again, the health sector needs to engage in such processes if its particular concerns are to be addressed.
- (3) decentralization can have a profound impact on the delivery of health services, as management and accountability for service delivery moves from central to local government. On the one hand, the process may bring health services closer to the people they serve, with increasing responsiveness to local needs. On the other, scarce resources may be diverted away from national health priorities once local authorities have jurisdiction over the allocation of funds. Either way, strong links between the ministries of health and local government are required to identify and work through the issues.
- (4) participatory processes are important mechanisms for ensuring that poor communities and their representatives are involved in setting the agenda for

national development. Those responsible for the development of health policy could make good use of the results of participatory processes, which can help to identify the varying needs of different poor populations (e.g. by gender, age and ethnicity) rather than treating the poor as an aggregate group.

Health issues are rarely taken into account when such programmes and processes are designed and implemented, and the contribution of health professionals to them is usually limited. There are good reasons for this: lack of capacity within ministries of health that are already over-stretched; no tradition, in the oversight ministries (such as those of finance and planning), of consultation with line ministries; and no clear mechanisms for consultation.

‘Health-and-development’ work aims to fill this gap. Action in at least three areas is required. Firstly, the building of leadership capacity within health ministries, to facilitate discussion with the ministries of finance and planning. This in turn will require better understanding of economic policies (including macro-economics) and the kinds of government-wide reform processes mentioned above. Secondly, stronger planning processes within ministries of health, and, in particular, greater capacity to link plans with budgets. And finally, improved mechanisms and processes for intersectoral dialogue — which should, in turn, be supported by greater collaboration between donors and development partners.

THE ROLE OF THE WORLD HEALTH ORGANIZATION

The tackling of diseases and conditions that disproportionately affect the poor is central to the WHO’s work. Efforts to achieve the MDG are thus part of the WHO’s ‘core business’, and the organization already has extensive programmes to assist countries to tackle tuberculosis, malaria and HIV/AIDS, to improve child and maternal health and

nutrition, to scale-up access to essential medicines, and to measure progress (see Box 2). As a reflection of this involvement, the WHO's commitment to the Millennium Declaration has been reaffirmed by the World Health Assembly (WHO, 2005*b*) and the organization's next General Programme of Work will run from 2006 to 2015 — a time-frame chosen specifically to correspond with the MDG target date of 2015.

BOX 2

MDG Monitoring

One of the WHO's specific roles in relation to the MDG is to contribute to monitoring. To this end, the organization has worked with other United Nations agencies to identify the indicators associated with each health-related MDG and target. It is now collaborating to establish complementary and coherent reporting procedures for the MDG. The WHO shares responsibility with the United Nations Children's Fund (UNICEF), the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the United Nations Population Fund (UNFPA) for reporting on the relevant MDG indicators. The WHO's work on MDG reporting is integral to its efforts to strengthen health-information systems at country level, currently being taken forward by the Health Metrics Network (www.who.int/healthmetrics/en).

The WHO's mandate does, however, clearly extend beyond the areas covered in the MDG (if they are interpreted narrowly). It is therefore important not to lose sight of the intent of the MDG to improve people's health and livelihoods overall, rather than just those aspects that are reflected in the specific goals, targets and indicators. As discussed above, attention needs to be given to the growing problems attributable to non-communicable diseases and their determinants, and particularly to reproductive health.

Achievement of the MDG will also require much greater attention to health systems and to health and development issues. The WHO is working with member states to improve all the functions of national health systems, and to build capacity in ministries of health to improve the expression of health policy within poverty-reduction strategies and plans for medium-term expenditure frameworks. To mobilize stronger political support, to address some of the development issues that have limited progress towards these goals, the WHO has worked with the World Bank to convene a high level forum on the health-related MDG (www.hlfhealthmdgs.org). This forum has brought together key policy-makers from ministries of finance and development agencies, to consider in some detail many of the issues outlined in this review.

So, although the MDG do not reflect the entirety of the WHO's work, they are not only central to the organization's agenda in assisting its member states but also important milestones against which the organization's overall contribution to health development can be measured. The MDG provide a new lens through which the WHO can assess existing programmes, and a framework to guide further support. They are also, potentially, a new form of accountability — both for governments and for international organizations — as 'progress in health' is increasingly judged in terms of progress towards the health-related MDG.

CONCLUSIONS

The health-related MDG represent one of the greatest challenges in international development, not least because they include the goal of reversing the global epidemic of HIV/AIDS. To this has to be added the requirement for steep declines in child and maternal mortality — an area where progress lags far behind aspirations in many parts of the world. The improvement of

health outcomes will not be possible without major improvements in systems for health-care delivery, which in turn depend not only on changes in public-sector management but also on policies and interventions well beyond the health sector itself. Moreover, improvements in health are essential if progress is to be made with the other, 'non-health' MDG, such as the reduction of absolute poverty.

If current trends continue, most of the health-related MDG will not be reached in most parts of the world. Accelerated progress is, however, possible. It is a matter of political choice in both the developed and developing world. It is also apparent that substantial progress, even if it falls short of the targets set in 2000, could dramatically transform the lives of millions of the world's poorest people. The MDG are one means of exerting the leverage that can make this happen.

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