## Human health

Tim Colbourn\*, Jasmine Gideon†, Nora Groce‡, Michael Heinrich§, Ilan Kelman¶, Maria Kett‡, Richard Kock\*\*, Susannah H. Mayhew†† and Jeff Waage‡‡

\*University College London, Institute for Global Health, †Birkbeck College, Department of Geography, Environment and Development Studies, †University College London, Leonard Cheshire Disability and Inclusive Development Centre, \*University College London, School of Pharmacy, \*University College London, Institute for Global Health and Institute for Risk and Disaster Reduction, \*\*Royal Veterinary College, Department of Pathology and Pathogen Biology, †London School of Hygiene and Tropical Medicine, Department of Global Health and Development, †London International Development Centre; School of Oriental and African Studies, Centre for Development, Environment and Policy

# What is the historical process by which goal setting in this sector has developed?

In high-income countries, goal setting in the sphere of human health has had a national focus, with governments setting targets in response to lob-bying from a combination of interest groups. These groups include bodies of health professionals and experts, non-governmental organisations (NGOs) and charities, and industry and media, and public pressure has been exerted via the influence of all of these groups. Middle-income countries that have a degree of representative democracy have followed similar processes, and are therefore becoming less connected or bound to global development agendas, including those on human health. These countries are instead becoming more

#### How to cite this book chapter:

Colbourn, T, Gideon, J, Groce, N, Heinrich, M, Kelman, I, Kett, M, Kock, R, Mayhew, S. H., and Waage, J. 2015. Human health. In: Waage, J and Yap, C. (eds.) *Thinking Beyond Sectors for Sustainable Development.* Pp. 29–36. London: Ubiquity Press. DOI: http://dx.doi.org/10.5334/bao.d

focused on their own development plans, developed from within their borders or through regional bodies and economic groupings.

In contrast, goal setting in human health in low-income countries has, and continues to be, predominantly influenced by international organisations such as the WHO, UNICEF, and the United Nations Population Fund (UNFPA), and donor institutions upon which many low-income countries remain dependent. The last 15 years or so have seen a shift towards the influence of private philanthropic donor institutions such as the Bill & Melinda Gates Foundation (BMGF), but high-income-country government donors such as the United States Agency for International Development (USAID) and the UK Department for International Development (DFID) remain very influential, since they are major sources of funding for many low-income countries, especially in relation to human health. These donors, along with other interested parties from high-income countries, also fund global initiatives, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the Global Alliance for Vaccines and Immunisation (GAVI), and the President's Emergency Plan for AIDS Relief (PEPFAR), and contributed to setting the health-related MDGs in the early 2000s.

Thus for low-income countries there has been, and continues to be an array of international organisations (including large NGOs that implement human health interventions such as Save The Children, World Vision, and the International Planned Parenthood Federation (IPPF)) that influence the setting of goals in human health. These international organisations often also have competing agendas, which can hamper coordinated delivery of health interventions, as well as stifle local priorities.

The creation of health goals for the MDGs reflects the diversity of parallel, international health initiatives competing for attention at the turn of this century. This resulted in no less than three specific health goals on maternal and child health and infectious diseases, as well as health-related targets in other goals, such as improved sanitation and reduced hunger. Each of the three goals had its own targets and indicators, and its own implementation programme.

Many have observed that top-down vertical programmes such as these, reflecting donor priorities, may have had a disruptive effect on national efforts to strengthen the broader (horizontal) health system by diverting staff and resources, and setting priorities that are not locally relevant. Conspicuously absent were voices from within the low-income countries themselves, whether from governments, civil societies, bodies of health professionals and experts, local industries (often under-developed or subservient to transnational highincome country corporations), media, local communities, or otherwise.

It is also important to recognise that parallel processes of measurement such as the Global Burden of Disease (GBD) studies (Murray et al. 2012a; Murray et al. 2012b), via the risk factors and diseases they choose to measure and their grouping of these into categories, also have an influence on what human health problems are targeted internationally, and consequently, what goals are set. There are different approaches to quantifying human health in different countries (e.g. quality adjusted life years (QALY) in the UK (NICE 2008) and other high-income countries), and in sectors such as the insurance industry. But as a global goal setter, the GBD measure stands out, and also provides the 1990 baseline estimates for the MDGs, therefore perhaps also influencing the MDGs goal-setting process. Again as with the policy goal agenda outlined above, the voices of low-income country governments, organisations, and citizens are absent from this process. Poor quality or absence of data from low-income settings can also hamper appropriate priority setting.

## What progress has been achieved in this sector through the Millennium Development Goals and other processes?

Through the MDGs, or at least according to the MDGs targets, human health has improved. There are measured reductions in child and infant mortality: MDG 4 (Reduce child mortality) is on track in some of the high-priority countries, and deaths in children under five have declined from approximately 12 million in 1990 to 6.3 million in 2013 (Wang H, Liddell CA, Coates MM, et al. 2014). Reductions are also recorded in maternal mortality, and although MDG 5 (Improve maternal health) is not on track, maternal deaths have nevertheless dropped from approximately 543,000 a year in 1990 to 287,000 in 2010 (Lozano et al. 2011; WHO & UNICEF 2012). A reduction in the incidence of new HIV infections and recent large expansion of antiretroviral treatment for AIDS, as well as a reduction in cases of active tuberculosis (though multidrug resistant tuberculosis is an emerging threat) and in deaths of children under five from malaria (WHO Global Malaria Programme 2013), collectively mean that MDG 6 (Combat HIV/AIDS, malaria, and other diseases) is mainly on track. Many other areas of human health measured by the GBD study, in particular communicable diseases such as lower respiratory infections and diarrhoeal diseases, nutritional deficiencies, and chronic respiratory diseases, also appear to be improving (Murray et al. 2012b). Given that these diseases were not included in the MDGs targets, it is likely that other processes such as demographic shifts and improvements in living standards have been as, or more important to progress in human health than the MDGs.

We should also recognise that non-communicable diseases related to lifestyle factors, pollution, and industrialisation (e.g. trauma from road traffic accidents) are on the rise in many areas of the world. Given these were also not included in the MDGs targets, the narrow focus of the MDGs may have contributed to overlooking such emerging issues.

The most notable processes specifically aimed at improving human health are perhaps increased investment in health systems by governments via donor funding, taxation, and most recently, health insurance. The Abuja Declaration of 2001, which generated a commitment to allocate 15 per cent of government spending to health, although with limited success, may have been a catalyst for such increased funding. It is also possible, however, that along with the large increase in donor funding for health, such improvements have been partially driven by the MDGs agenda.

MDGs 8 (Develop a global partnership for development) and 1 (Eradicate extreme poverty and hunger), respectively, contain goals related to improved sanitation and reduced hunger and are therefore also related to human health. However, they have been less identified with specific health outcomes, less championed, and less achieved than the 'health' MDGs (MDGs 4-6). In some regions, for example Africa, increases in food availability based mostly on cereal production or through food aid have not been followed by improved statistics on nutrition, with stunting still persisting in many countries and nutrition security remaining a critical need. MDG 6 in particular, can be said to have had greater ownership by powerful groupings such as The Global Fund to Fight AIDS, Tuberculosis and Malaria, the PEPFAR, and the BMGF, who introduced the issue onto low-income country agendas ahead of competing priorities in health and other sectors (United Nations 2008).

We should also recognise that there are other aspects of human health (e.g. mental well-being) not included or well accounted for in the MDGs or GBD for which we do not have agreed measures, and for which we can therefore not determine progress. In the last chapter of this book, we focus particularly on the important links between education and sexual and reproductive health (SRH), initially neglected in the MDGs, with its important implications for population growth and wellbeing.

### What is the current debate about future goal setting?

The main issues in the debate about future goal setting in human health concern broadening the horizon of goals to include concepts such as universal health coverage, the continuum of care, the life-course approach to health services provision integration, and convergence towards minimum global standards in absolute terms, everywhere. The High-Level Panel of Eminent Persons on the Post-2015 Development Agenda has already drafted human health targets relating to preventing deaths in children under five, ensuring maternal mortality below a set level, increasing vaccination coverage to a minimum level, ensuring universal sexual and reproductive rights, and reducing the burden of key infectious, neglected, and non-communicable diseases (High-Level Panel of Eminent Persons 2014). The Sustainable Development Solutions Network's main goal is to return to the idea of universal access to primary health services, which they believe should include access to services for the prevention and treatment of both non-communicable and communicable diseases, reproductive and sexual health services, pre- and post-natal care, and skilled birth attendance (Sustainable Development Solutions Network 2014). However, the

use of evidence and the power and politics behind goal setting must also be considered (Buse & Hawkes 2013).

Strengthening health systems is gaining traction, with the idea that goals related to the improvement of key health system building blocks need to be achieved in order to allow specific health-related goals to be attained (Freedman et al. 2005). These building blocks include: training and retaining enough human resources for health; buying and distributing adequate and affordable stocks of drugs, supplies, and equipment; building and maintaining adequate health facilities at primary, secondary, and tertiary levels; having an adequate health information system with two-way feedback; and having adequate management and financing to ensure cost-effective and responsive services (WHO 2010). However, sufficiently improving health systems is a long-term endeavour, and requires sustained investment over decades. It therefore does not easily lend itself to the setting of goals that are easily achievable or digestible over short time frames.

Equity is also an increasingly important consideration. Measuring the coverage of key maternal, neonatal, and child health (MNCH) interventions for each wealth quintile and the disparity between them has been a recent focus of the Countdown to 2015 initiative, evaluating progress towards MDGs 4 and 5 (Countdown to 2015 (2014)). However, some fear the bottom 10 per cent are not even measured in such assessments of equity, and should be the real focus of future goals, given that current efforts to focus on easier-to-reach populations can increase inequality. Emerging from the recent Global Health 2035 report (Jamison et al. 2013), the idea of Grand Convergence aims for 16-8-4: an under-five mortality rate of 16 per 1,000 live births, an annual AIDS death rate of eight per 100,000 people, and an annual death rate from tuberculosis of four per 100,000 people (Lancet 2014). Such targets necessarily require equity between countries to increase as they converge on similar mortality rates. There are also calls to mainstream consideration of persons with disability, who comprise 15 per cent of the population (United Nations 2013; WHO 2011), by integrating services for people with disabilities into all health systems.

Debates also abound as to how to conceptualise health and health-related goals. On the one hand, there are many stakeholders who would like to see the work on the current health-related MDGs on maternal and child survival and on reducing AIDS, tuberculosis and malaria, finished. There are also those who would like to see goals set on non-communicable diseases, such as ischaemic heart disease, diabetes, stroke, and cancer, which together make up significant burdens of ill health as defined by the GBD study (Murray et al. 2012b; Buse & Hawkes 2013). On the other hand, some stakeholders would like to see a shift away from the narrow definitions of health favoured by clinical medicine towards the broader (and also preventive as well as curative) foci of public health and global health; and would like to see goals related to more holistic understandings of health. Indeed, many conceptualise health as mental and physical, as well as social and environmental, and would like to see concepts such as quality of life, well-being,

or health-related capabilities used in goal setting. These concepts, which require qualitative as well as quantitative investigation, are all very difficult to measure, and are perhaps therefore less likely to become future goals. Nevertheless, they are more relevant to integrating human health with other spheres that also impact on quality of life, well-being, and capabilities, and many would like to see such integration reflected in future goal setting. Others argue, however, that simple pre-existing goals such as reducing the under-five mortality rate already capture a lot of complexity and constitute cross-cutting indicators of success for human health and many other important spheres (Hulme 2013).

Calls to broaden the health sphere beyond human health are also being made. The One Health Initiative calls for an integration of human, animal, and environmental (ecosystem) health (Kaplan, Kahn & Monath 2009). The Rio+20 summit has also fostered calls for joint consideration of the linkages between and the integration of 'ecosystem processes, anthropogenic environmental changes (climate change, biodiversity loss, and land use), socio-economic changes, and global health' (Langlois et al. 2012. p.381). Perhaps soon 'planetary health' will supersede 'global health' (Haines, Whitmee & Horton 2014).

The methods of achieving future goals in human health are of course also crucial, and are also subject to intense debate. Most notable is the debate surrounding the extent to which future goals should be nationally led and reflect local country-specific priorities and standards, verses how much they should continue to be donor-led 'global priorities', and how much less-powerful and less-rich voices from the global South should be heeded in setting global priorities (Hulme 2013). Shifts in finance as well as in politics are key here. Taxand insurance-based systems may be more sustainable, but also require greater democracy and accountability to work properly. Paradoxically, such greater accountability may only occur via reduced dependence on external forces, such as donor governments and institutions.

Although nationally led prioritisation is vital, it is also worth noting that global standardisation is critical to retain and secure the equitable protection of health and rights. There is a danger that governments will ignore or actively suppress morally, socially, or religiously contested issues such as abortion or lesbian, gay, bisexual, and transgender (LGBT) rights, or will restrict access to health resources for certain political, ethnic, or social groups for political reasons; this danger is more prevalent, although not exclusive to countries without established democracies.

The current draft proposal of the Open Working Group for Sustainable Development Goals (OWG 2014) addresses human health directly in only one of 17 goals. However, this goal (Ensure healthy lives and promote well-being for all at all ages) has nine numbered sub-goals, with targets covering everything from the subjects of the existing health MDGs to non-communicable diseases, mental health, substance abuse, road traffic accidents, family planning, universal health coverage, and pollution. Four additional lettered sub-goals are also included on tobacco, access to medicines, health workers, and early warning systems. Health will be affected by many of the other 16 goals, including those related to poverty, hunger, water and sanitation, the environment, inequality, and cities. With 17 goals and hundreds of targets, clearly this is an agenda far more ambitious than the MDGs. What its final form will take, including how targets will be set for the numerous sub-goals that are so far only vaguely defined, and how far it will be delivered given the complexities discussed above, remains to be seen.

#### References

- Buse, K., & S. Hawkes. (2013). Health post-2015: evidence and power. *Lancet*. Published online 20 September 2013.
- Freedman, L. P., Waldman, R. J., de Pinho, H., Wirth, M. E., Chowdhury, M. A. R., & Rosenfield, A. (2005). Transforming health systems to improve the lives of women and children. Lancet, 365, 997-1000.
- Haines, A., Whitmee, S., & Horton, R. (2014). Planetary health: a call for papers. Lancet, 384, 379–380.
- High-Level Panel of Eminent Persons. (2014). Goal 4: Ensure Healthy Lives (The report of the high-level panel of eminent persons on the post-2015 development agenda). New York: United Nations.
- Hulme, D. (2013). The Post-2015 Development Agenda: Learning from the MDGs. Southern Voice Occasional Paper 2. Dhaka, Bangladesh: Centre for Policy Dialogue.
- Jamison, D. T., Summers, L. H., Alleyne, G., Arrow, K. J., Berkley, S., Binagwaho, A., Bustreo, F., et al. (2013). Global Health 2035: a world converging within a generation. Lancet, 382, 1898-1955.
- Kaplan, B., Kahn, L. H., & Monath, T. P. (2009). One Health-One Medicine: linking human, animal and environmental health [whole special issue]. *Veterinaria Italiana*, 45(1).
- Lancet (Editorial). (2014). Grand convergence: a future sustainable development goal? Lancet, 383, 187.
- Langlois, E. V., Campbell, K., Prieur-Richard, A. H., Karesh, W. B., & Daszak, P. (2012). Towards a better integration of global health and biodiversity in the new sustainable development goals beyond Rio+20. Ecohealth, 9(4), 381-385.
- Lozano, R., Wang, H., Foreman, K. J., Rajaratnam, J. K., Naghavi, M., Marcus, J. R., Dwyer-Lindgren, L., et al. (2011). Progress towards Millennium Development Goals 4 and 5 on maternal and child mortality: an updated systematic analysis. Lancet, 378, 1139–1165.
- Murray, C. J. L., Ezzati, M., Flaxman, A. D., Lim, S., Lozano, R., Michaud, C., Naghavi, M., et al. (2012a). GBD 2010: design, definitions, and metrics. Lancet, 380, 2063-2066.

- Murray, C. J. L., Vos, T., Lozano, R., Naghavi, M., Flaxman, A. D., Michaud, C., Ezzati, M., et al. (2012b). Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet, 380, 2197-2223.
- National Institute for Health and Clinical Excellence (NICE). (2008). Guide to the methods of technology appraisal. London: National Institute of Clinical Excellence.
- Open Working Group. (2014). Proposal for Sustainable Development Goals. Retrieved from https://sustainabledevelopment.un.org/focussdgs.html
- Sustainable Development Solutions Network. (2014). Health for All. Sustainable Development Solutions Network. A Global Initiative for the United Nations. Retrieved from http://unsdsn.org/what-we-do/thematic-groups/ health-for-all/
- United Nations. (2008). Delivering on the global partnership for achieving the millennium development goals. MDG Gap Task Force Report. New York: United Nations.
- United Nations. (2013). Outcome document of the high-level meeting of the General Assembly on the realisation of the Millennium Development Goals and other internationally agreed development goals for people with disabilities: the way forward, a disability-inclusive development agenda towards 2015 and beyond. A/RES/68/3. Retrieved from http://www.un.org/disabilities/ default.asp?id=1590
- Wang H, Liddell CA, Coates MM, et al. (2014). Global, regional, and national levels of neonatal, infant, and under-5 mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. The Lancet 2014; 384(9947): 957-79.
- World Health Organization (WHO). (2010). Key components of a wellfunctioning health system. Geneva, Switzerland: WHO.
- World Health Organization (WHO). (2011). World Report on Disability. Geneva, Switzerland: WHO.
- World Health Organization (WHO) Global Malaria Programme. (2013). World Malaria Report. Geneva, Switzerland: WHO.
- World Health Organization (WHO) & United Nations International Children's Emergency Fund (UNICEF). (2014). Countdown to 2015, maternal, newborn and child survival: fulfilling the Health Agenda for Women and Children, the 2014 report. Retrieved from http://www.healthynewbornnetwork.org/sites/default/files/resources/Countdown\_to\_2015-Fulfilling%20 the%20Health\_Agenda\_for\_Women\_and\_Children-The\_2014\_Report-Conference\_Draft.pdf