

Life, death, and disability in 2016

In this week's issue of *The Lancet*, we publish the latest global, regional, and national estimates and analyses from the Global Burden of Diseases, Injuries, and Risk Factors Study 2016 (GBD 2016), covering the period 1990 to 2016. The GBD is a herculean effort that annually tracks disease burden across countries, time, age, and sex. In 2016, there were an estimated 128.8 million livebirths and 54.7 million deaths. The good news is that globally, mortality rates have decreased across all age groups over the past five decades. For the first time, the estimated number of deaths in children under 5 years fell below 5 million, and there were 230 000 maternal deaths. Deaths from communicable diseases have largely decreased apart from dengue, where deaths increased by 81.8% since 2006 to 37 800 in 2016. There were an estimated 1.03 million HIV/AIDS deaths, 1.2 million tuberculosis deaths, and 719 600 malaria deaths.

However, an estimated 72.3% (39.5 million) of all deaths in 2016 were from non-communicable diseases. Since 2006, deaths from ischaemic heart disease (IHD) have increased by 19% globally. The Socio-Demographic Index (SDI) is a metric that measures a country's development. IHD is the leading cause of premature mortality in all SDI categories apart from the low SDI grouping. Diabetes caused 1.43 million deaths in 2016, an increase of 31.1% since 2006. Levels of obesity continue to rise worldwide. Smoking and poor diet remain leading risk factors of ill health. Regrettably, the largest increase in deaths from injuries was from conflict and terrorism. Deaths from firearms were the largest proportion of overall interpersonal violence. Sadly, the prevalence of mental health conditions globally also shows little improvement since 1990. Indeed, major depressive disorders ranked in the top ten causes of ill health in all but four countries worldwide in 2016.

Overall, the findings show that the world is becoming healthier, but progress is uneven. People are living longer, but with more disease. As SDI rises, the gap between healthy life expectancy and life expectancy (ie, the time living with ill health) is less for high SDI countries compared with low SDI countries. So, while there is an expansion of morbidity as life expectancy increases, there is a relative compression of morbidity (less time spent with ill health) as a country becomes richer.

This year, each paper contains a vast amount of new data

and analyses. The study showcases exemplar nations, such as Ethiopia, the Maldives, Nepal, Niger, Peru, and Portugal, where observed life expectancy was greater than expected life expectancy based on their SDIs. It will be important to learn the reasons for progress in these countries. In the first-year analysis of country progress towards meeting the health-related Sustainable Development Goals, no countries are projected to meet more than 13 of the 24 targets by 2030. Singapore, Iceland, and Sweden were the best performers in 2016 while Somalia, the Central African Republic, and Afghanistan were the poorest.

In 2013, the core message from the *Lancet* Commission on Investing in Health (Global Health 2035) was that the world has a unique opportunity to end preventable mortality in a single generation. The report argued that a grand convergence in mortality and life expectancy, where rich and poor countries converge to being the same in 2035, is possible. But when one looks at the estimates from GBD 2016, the picture is mixed. There is some evidence of convergence in mortality. But in some areas, there has been a relative divergence—for example, in men and women aged 30–54 years. The Commission must review and reflect on these findings in its future work.

One message from these papers is that there are certain health issues that need specific attention in different countries. These challenges will require strengthening of the health system, together with more vertical initiatives—universal health coverage alone will not suffice. There should be a global forum where these results and their policy implications are discussed. We propose that WHO, the World Bank, and other technical and multilateral agencies join together annually to discuss the GBD findings, and how they should influence decision making.

Looking ahead, a key further task for GBD is how to incorporate one of the defining challenges of our times—threats to our planetary health—into their analyses. For example, the likely effects of climate change on the displacement of people will be substantial. Human beings also depend on a variety of ecosystem resources for their health and wellbeing. To recognise these new risks, the GBD will have to consider developing additional health-related metrics that relate to planetary health: such as concerning biodiversity, climate change, and ecosystem services. Therein lies a challenge for the next GBD. ■ [The Lancet](#)



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See [Global Health Metrics](#) pages 1084, 1151, 1211, 1260, 1345, and 1423

See [Viewpoint](#) page 1460

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