

## Lessons for the Sustainable Development Goals from Ethiopia's success: the case of under-5 mortality



Low-income countries face many health and development challenges. In response to these challenges, world leaders have taken counter action and formulated the Millennium Development Goals (MDGs), one of which (MDG4) was to reduce the mortality of children younger than 5 years by two-thirds by 2015. In Ethiopia, under-5 mortality was 166 deaths per 1000 livebirths in 2000,<sup>1</sup> one of the highest in the world. However, by 2016, after 15 years of successful effort, under-5 mortality had decreased to 67 deaths per 1000 livebirths.<sup>2</sup> The achievement of MDG4 in Ethiopia is proof that tailored health and health-related interventions and strategies can be successfully implemented in poorly resourced settings.<sup>3</sup> Yet one of the challenges in countries like Ethiopia is understanding how countries progress in achieving the MDGs. It is imperative to systematically document the lessons from countries that have already successfully achieved the MDGs. This will enable other countries to emulate the experiences of these countries and replicate them to solve the same challenge or other health problems in different or similar settings.

Using mixed methods to pinpoint the success of Ethiopia in reducing under-5 mortality, Jenny Ruducha and colleagues<sup>4</sup> have generated a body of evidence that provides comprehensive information and allows replication of the Ethiopian experience. The case study assessed macro-level factors that have had a potential impact on under-5 mortality, such as national policies, programmes, health financing, and health interventions. Additionally, the authors present the trend and coverage of successful interventions by calendar year and residency, extending their analysis to health equity. The relative contributions of selected interventions designed to reduce under-5 mortality were also estimated. The use of multiple data sources and triangulation of methods are strengths of the study.<sup>4</sup> In line with another study,<sup>5</sup> the authors declare the achievement of MDG4 in Ethiopia, reducing under-5 mortality by 69% between 1990 and 2013. The analysis indicates that half of the averted mortality was due to improvements in child nutrition. Compared with other east African countries, Ethiopia also had the fastest

rate of reduction in under-5 mortality between 1990 and 2013.<sup>4</sup> It is also encouraging to note that, except for early and exclusive breastfeeding, all other health and health-related indicators included in the analysis showed improvements. Despite this progress, however, coverage disparity and health inequity by geographic areas (across regions, and in rural vs urban areas) remain daunting challenges to Ethiopia's health-care system. It is apparent that this continues to be an important bottleneck for the country's health-care system despite major public health triumphs during the MDG era.<sup>6</sup>

In future studies, analyses should comprehensively include all policy determinants of under-5 mortality (ie, all major health interventions, including the expansion of HIV care and prevention of maternal-to-child transmission services).<sup>7</sup> Maternal factors such as education, dietary intake, and nutritional status also determine child health outcomes. The overall socioeconomic trajectory should be considered in similar studies in the future. Incorporating independent, reliable, and unbiased data sources (including subnational studies) in future analyses will provide additional insights.

Ethiopia is facing an unprecedented health phenomenon known as the double/triple burden of diseases, which refers to the coexistence of a high burden of infectious diseases, nutritional disorders, and non-communicable diseases.<sup>8</sup> Health inequities across geographic areas are exacerbating this phenomenon. A reorientation of the health-care system is therefore needed to address this challenge and to ensure health justice in the country. In this respect, Ethiopia has already started a roadmap by endorsing the UN's Sustainable Development Goals (SDGs), 2015–30, a global development initiative with 17 goals, one of which (SDG3) focuses on health (ensure healthy lives and promote wellbeing for all at all ages). It is commendable that the country recognises and uses lessons from the MDGs, sustains successes, and addresses the challenges in future health interventions and strategies to achieve the targets. Ethiopia might also need to redevelop and reformulate targeted strategies, interventions, and programmes by critically analysing

See [Articles](#) page e1142

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the evidence on the current disease epidemiology and demographic transition.<sup>8</sup> Last but not least, informing health investments by actively collating, analysing, and disseminating data should be an integral part of the interventions.

In summary, the data presented by Jenny Ruducha and colleagues<sup>4</sup> explicitly demonstrate the importance of political commitment, multisectoral policies and strategies, and resource mobilisation in reducing under-5 mortality in low-income countries. An interplay between direct and indirect interventions from different sectors has had a positive effect, but further efforts on other health challenges and a strong partnership between sectors will be necessary to further improve progress. The experience in Ethiopia in reducing under-5 mortality provides further evidence and salient lessons as to how low-income countries can solve existing and future health challenges using innovative and inexpensive interventions in the SDG era.

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