

Maternal and child health: gains, but a long journey ahead

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Fifteen years ago, the Millennium Summit of the United Nations resulted in the Millennium Declaration, in which all 189 member states committed to achieving eight “millennium development goals” by 2015. These ambitious goals included eradicating poverty, achieving universal primary education, improving health and environmental sustainability and developing global partnerships for development.

As we anticipate the launch of the post-2015 agenda — sustainable development goals were launched in September 2015 — it is important to reflect on the lessons we have learned thus far, and particularly the progress that has been made on development goals 4 and 5: reducing child mortality and improving maternal health. In addition, we discuss the global responsibility and strategy for achieving equity in global health.

Millennium development goal 4 called for a two-thirds reduction between 1990 and 2015 in mortality among children under five years of age. Data on child mortality come from the Global Burden of Disease Injuries, and Risk Factors (GBD) Study (involving 187 countries),¹ the UN Inter-agency Group for Child Mortality Estimation² and Countdown to 2015: Maternal, Newborn & Child Survival (which monitors 75 priority countries that account for more than 90% of global childhood mortality).

During the period from 1990 to 2013, the GBD study reported a 42% decrease in mortality among neonates and a 52% decrease in mortality among children aged 1–59 months,¹ which was consistent with data reported by Countdown to 2015 and the UN. In 2014, however, it was still estimated that about 18 000 deaths occur daily, most of which are from preventable causes such as infection or complications during birth,^{3,4} with the greatest burden in sub-Saharan Africa and South Asia. Despite the nearly 50% decrease in child mortality, stillbirths have neither decreased nor received attention.⁴ Moreover, these improvements have not been uniform across countries or populations. For example, only 17 of 75 monitored countries are projected to achieve goal 4, and only nine countries are expected to achieve goal 5.⁵

Childhood mortality is inextricably linked to maternal health, and goal 5 targeted both a three-quarters reduction from 1990 levels in the maternal mortality ratio and universal access to reproductive health by 2015. Maternal death has decreased by 45% from an estimated half million deaths in 1990,⁴ and access to reproductive health has improved, with increased coverage by skilled birth attendants in both rural and urban areas.⁶ Despite these advances, more than 50% of maternal deaths in low- and middle-income countries are due to complications related to pregnancy and childbirth. In addition, many deaths are caused by pre-existing medical conditions such as diabetes, obesity and HIV, which can be aggravated by pregnancy. Furthermore, more than 140 million women worldwide do not have access to voluntary family planning.

The substantial progress that has been made in maternal and child health has shown the strength in collaborations among governments, civil societies, international organizations and private–public sectors. However, Countdown to 2015 has consistently highlighted substantial disparities between and within countries, with only nine of the countries enrolled in the GBD study likely to achieve both goals.³ Much work remains, and lessons from positive outliers can be useful. For example, improvements seen in Bangladesh were unprecedented. The country has the lowest infant and child mortality (under five years of age) in Southeast Asia despite spending less money than its neighbours.⁷ The success in Bangladesh can be attributed to an emphasis on gender equality, empowerment of women, school enrolment, a resilient health care system with strategic community-based service delivery and resilience to natural disasters.

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KEY POINTS

- Millennium development goals 4 and 5 have driven substantial progress in maternal and child health, but improvements have not been uniform and unnecessary deaths still occur.
- Fragile states and those affected by recent conflicts or natural disasters account for 80% of high-mortality countries.
- Promotion of gender equality and development of resilient health care systems are needed to realize additional gains.

Fragile states with little or no health system resilience that have suffered recent conflicts (e.g., Democratic Republic of Congo and Syria), natural disasters (e.g., Haiti) or disruption to health services as a result of the Ebola outbreak (e.g., countries in West Africa), are unlikely to achieve goals 4 and 5.⁸ Additional factors that drive improved maternal and child health targets include political stability, financing for stable and resilient health care systems, human resources deployed to reach marginalized populations and key investments in promoting education, empowerment and poverty alleviation.

Millennium development goals 4 and 5 cannot be examined in isolation from the other development goals. Indeed, estimates from 915 censuses and national surveys show that an increase in educational attainment in women is associated with 51.2% fewer deaths among children under five years of age.⁹ For every additional year of education in women, mortality for children in this age group is estimated to be reduced by 8.5%.⁵

Maternal and child health rely on interaction among families, health systems and policies within an overarching framework of stable political, economic, social, technological and environmental factors. As countries move toward building resilient health care systems,¹⁰ they must focus on both a robust primary health care system and a strong hospital system where quality care is ensured. Countries that have shown improvement, such as Bangladesh, have offered a spectrum of services: preventing and treating malaria, diarrheal diseases and pneumonia; increasing vaccination rates; improving nutritional status, breastfeeding and childbirth care; and satisfying the demand for family planning.⁷ Working in collaboration with primary care, a strong hospital-based system with stable referral pathways enables the success of such initiatives.

Not only did the millennium goals provide mortality reduction targets, they laid the groundwork for interventions aimed at achieving higher levels of equitable and effective care across the continuum of maternal and child services. Recent research focusing on considerations of cost-effectiveness, long-term benefits AND sus-

tainable gains for women's and children's health represents a paradigm shift from traditional outcomes, such as short-term morbidity and mortality.¹¹ Greater growth in gross domestic product through improved productivity may result in the prevention of the needless deaths of 147 million children and 5 million women, as well as 32 million stillbirths, by 2035.¹¹ With a focus on universal health care in the post-2015 agenda, policies for women's and children's health need to be guided by the best evidence.

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