Modest global achievements in maternal survival: increased focus needed on sub-Saharan Africa

Fifteen years ago the target of a 75% reduction in the global maternal mortality ratio (MMR) between 1990 and 2015 was specified as an indicator for Millennium Development Goal (MDG) #5 to improve maternal health [1]. As well as marking the end of the MDG era, 2015 also saw a new set of development targets proposed through the Sustainable Development Goals (SDGs) which are to be achieved over the next fifteen years [2]. Coinciding with the transition from MDGs to SDGs, the analysis from the UN Maternal Mortality Estimation Inter-Agency Group (UN MMEIG) [3], published in the present issue of *The Lancet*, reports the extent to which the indicator for MDG 5 was met and what will be needed to achieve the 2030 SDG target of reducing the global MMR to less than 70 per 100,000 live births, with no country exceeding twice that level. This impressive study pools data from 171 countries to derive estimates of the MMR at national, regional and global levels since 1990. The authors also estimate the annual rate of reduction in the MMR over the same period and, assuming similar rates of change over the next 15 years as were seen from 2000 to 2010, contrast model predictions of the MMR in 2030 with those required if the Sustainable Development Goal target is to be met.

The study reports an estimated global MMR this year of 216 per 100,000 live births. This represents a 44% decrease from 1990, which is encouraging, and a sign that substantial progress is possible. However, despite a marked reduction for many countries between 1990 and 2015, the MMR is still alarmingly high in many places, notably in sub-Saharan Africa where many countries still experience over 500 maternal deaths per 100,000 live births. Further, only a few countries worldwide reached the target of a 75% reduction in the MMR since 1990 which is an indication that change in maternal health is happening too slowly. This is confirmed by the projections for the next 15 years, which suggest that the ambitious SDG targets are unlikely to be achieved by 2030 in the absence of rapid and sustained investment in maternal survival, especially in sub-Saharan Africa. To meet the SDG target many of the world's poorest countries will need to improve maternal health outcomes at a rate far beyond that observed between 2000 and 2010 in any country. Nonetheless the study identifies a number of countries which have seen great improvements and which may help our understanding of what works, why and how.

The study offers some candid answers to fundamental and critically important questions about recent progress in maternal health in some of the world's most deprived countries. The findings highlight the urgent need for intensified, concerted efforts at the political level, both internationally and in the areas that are worst affected, to improve maternal health, as well as the need for further research to ensure widespread sustained implementation of scalable, cost-effective interventions to improve access to good maternal healthcare. To this we would add an urgent need for more critical and in-depth case-studies from Rwanda and Cambodia, countries that have seen great improvements in maternal survival, alongside that for Bangladesh [5], and similar to those for child survival in countries including Niger, Tanzania, Ethiopia and Malawi[6-9].

The UN MMEIG's carefully conducted, innovative analysis, takes account of multiple sources of uncertainty [4], and integrates data from a multitude of sources and countries over the past 30 years,

imputing results where data are sparse. Hence it provides unusually high-resolution estimates, both geographically and temporally, and we particularly welcome their approach to estimating and reporting uncertainty in their estimates.

Setting ambitious targets such as those proposed in the Millennium and Sustainable Development Goals is important as these can offer impetus for change. However as with any test of achievement, in order for targets to continue to carry meaning and be effective, it is important that we pay due attention and take stock when the test results are in. Despite much progress in maternal mortality globally since 1990, the outlook for 2030 looks bleak. Particularly in sub-Saharan Africa, a critical analysis of success is needed to help inform countries striving to reach the 2030 SDG goal, alongside sustained investment in maternal health.

AUTHORS: Christian Holm Hansen[1 2] and Joanna RM Armstrong Schellenberg[3]

JS is partly funded by BMGF through a grant, CH declares no competing interests.

POSTAL ADDRESS:
Room G7
MRC Tropical Epidemiology Group
London School of Hygiene and Tropical Medicine
Keppel Street
London WC1E 7HT
UK

AFFILIATIONS:
[1] MRC Tropical Epidemiology Group, London School of Hygiene & Tropical Medicine, UK
[2] Mwanza Intervention Trials Unit, National Institute for Medical Research, Mwanza, Tanzania
[3] Department of Disease Control, London School of Hygiene and Tropical Medicine, London, UK

References

1. UN General Assembly. United Nations Millennium Declaration, Resolution Adopted by the General Assembly. Sept 18 2000. A/RES/55/2. http://www.un.org/millennium/declaration/ares552e.htm (accessed Dec 9, 2015).

2. UN General Assembly. Transforming our world: the 2030 Agenda for Sustainable Development, Resolution Adopted by the General Assembly. Sept 25 2015. A/RES/70/1. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E (accessed Dec 9, 2015).

3. Alkema L, Chou D, Hogan D et al. 2015, "Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group", *The Lancet*, published online November 12, 2015 http://dx.doi.org/10.1016/S0140-6736(15)00838-7.

4. Alkema L, Zhang S, Chou D et al. 2015, "A Bayesian approach to the global estimation of maternal mortality", published online November 10, 2015 http://arxiv.org/pdf/1511.03330v1.pdf

5. El Arifeen S, Hill K, Zunaid K et al. 2014, "Maternal mortality in Bangladesh: a Countdown to 2015 country case study", The Lancet, vol.384, pp. 1366-74..

6. Amouzou A, Habi O, Bensaid K et al. 2012, "Reduction in child mortality in Niger: a Countdown to 2015 country case study", The Lancet, vol. 380, pp. 1169-78.

7. Afnan-Holmes H, Magoma M, John T et al. 2015, "Tanzania's Countdown to 2015: an analysis of two decades of progress and gaps for reproductive, maternal, newborn and child health, to inform priorities for post-2015", Lancet Global Health, July 2015, doi:10.1016/S2214-109X(15)00059-5

8. Countdown to 2015. Maternal, newborn & child survival. Countdown country case study: Ethiopia, understanding progress on child mortality. June 2015. http://www.countdown2015mnch.org/documents/CD_Ethiopia_11May2015_Final.pdf (accessed Dec 9, 2015)

9. Countdown to 2015. Maternal, newborn & child survival. Countdown country case study: Malawi, understanding progress on child mortality. July 2015. http://www.countdown2015mnch.org/documents/CD_Malawi_July2015_2logos_FINAL2.pdf (accessed Dec 9, 2015)