Understanding Global Trends in Maternal Mortality

Regional Trends in Maternal Mortality

At the regional level, declines in the total number of maternal deaths during this time period were observed for all regions except Sub-Saharan Africa and Oceania. Whereas the estimated annual number of maternal deaths increased slightly in Sub-Saharan Africa (from 199,000 to 204,000) a profound decline in the total number of maternal deaths across Asia (from 315,000 to 139,000) drove global trends (Table 1). As a result of these divergent patterns, the largest share of the burden of maternal deaths shifted from Asia to Sub-Saharan Africa over this period. More specifically, in 1990, around 58% of maternal deaths worldwide occurred in Asia (43% of global maternal deaths occurred in Southern Asia) and 36% in Sub-Saharan Africa; in contrast, in 2008, 57% of global maternal deaths occurred in Sub-Saharan Africa and 39% in Asia (30% in Southern Asia).

Examining regional trends in MMR for the developing world, we observe growing disparities in the risk of maternal mortality over the period 1990–2008 (Figure 1, page 34). In 1990, Sub-Saharan Africa exhibited the highest MMR among the developing regions, 870 maternal deaths per 100,000 live births. The next highest MMRs were observed in Southern Asia (590) and Southeastern Asia (380). Disparities in MMR between Sub-Saharan Africa and other developing regions grew over the period 1990–2008, as the rate of decline in MMR in Sub-Saharan Africa, 1.7% per year (uncertainty interval, 1.1–2.1%), was slower than the declines observed in all other developing regions with the exception of Oceania, 1.4% per year (uncertainty interval, −4.5–7.2%). In Southern and Southeastern Asia, average annual declines in MMR over the period were much more rapid, at 4.2% (3.6–4.8%) and 4.7% (3.8–5.6%), respectively. The estimated absolute decline in MMR between 1990 and 2008 was largest in Southern Asia (590 to 280) and similar in Sub-Saharan Africa and Southeastern Asia (870 to 640 and 380 to 160, respectively).

The relative stagnation since 1990 in the decline in MMR observed for Sub-Saharan Africa, relative to other regions of the world, can be attributed partly to the HIV/AIDS epidemic. The MMR observed for Sub-Saharan Africa in 2008 was 640; if maternal deaths related to HIV/AIDS were excluded, this figure would be reduced to 580 (Figure 2, page 35). However, this adjusted figure is still much higher than those observed in Southern and Southeastern Asia (280 and 160, respectively).

It is important to note that, as is the case for the global estimates, there is considerable uncertainty surrounding regional MMR estimates in both 1990 and 2008 (Figure 1). Also, there is significant heterogeneity in country-specific trends within regions, which we discuss in the next section.

Country Trends in Maternal Mortality

The Maternal Mortality Estimation Inter-Agency Group considers countries to be “on track” to meet the MDG 5 target if the estimated rate of decline in the MMR has been 5.5% per annum or greater. “Making progress” is defined by a rate of decline that is greater than or equal to 2.0% but less than 5.5%, “insufficient progress” by a rate of decline greater than or equal to 0% and less than 2.0%, and “no progress” by an MMR that is rising. Of the 88 countries in which the MMR was observed to be greater than or equal to 100 in 1990, estimates indicate that 10 are on track, 48 are making progress, 22 are making insufficient progress and eight are making no progress (Web Appendix Figure