Comment

A call to action: the global failure to effectively tackle maternal mortality rates

Maternal death rates are rising again in many countries, yet this alarming fact has gone largely unacknowledged in the medical and lay press. In 2020, one woman died every 2 min from preventable causes related to pregnancy.¹ This statistic represents approximately 800 women dying daily-a maternal mortality ratio (MMR) of 223 maternal deaths per 100 000 livebirths, which is far removed from the UN Sustainable Development Goal target 3.1 to reduce the global MMR to less than 70 deaths per 100000 livebirths by 2030. Between 2000 and 2020 the global MMR declined by 34.8% (from 342 deaths per 100000 livebirths to 223 deaths per 100000 livebirths). During the period 2016-20, MMRs stagnated in 133 countries, and increased substantially in 17, mainly in western Europe, North America, Latin America, and the Caribbean. Between 2000 and 2020, eight countries recorded substantial increases in MMRs: Venezuela (182.8%), Cyprus (107%), Greece (101.1%), the USA (77.9%), Mauritius (62.1%), Puerto Rico (55.9%), Belize (51.3%),

Differences between countries mask the true burden of mortality in countries with the highest MMRs. In three sub-Saharan African countries, the MMR in 2020 exceeded 1000 deaths per 100 000 livebirths: South Sudan (1223), Chad (1063), and Nigeria (1047; figure B). Nigeria alone recorded 82000 deaths in 2020, representing 28.5% of global maternal deaths, while India, the Democratic Republic of the Congo, and Ethiopia each recorded over 10000 deaths (figure C).¹ In the USA, the MMR increased from 20.1 deaths per 100000 livebirths in 2019 to 23.8 deaths per 100000 livebirths in 2020, and 32.9 deaths per 100000 livebirths in 2021,³ with significantly higher mortality rates recorded among Black women than among White and Hispanic women. MMRs increased across all age groups in the USA between 2020 and 2021, with a strong age gradient ranging from 20.4 deaths per 100000 livebirths in women younger than 25 years to 138.5 deaths per 100 000 livebirths in those older than 40 years.⁴

and the Dominican Republic (36.0%; figure A).¹

Territorial disparities within countries have also been reported, such as in Brazil, where the MMR reached 74.7 deaths per 100000 livebirths in 2020; excess maternal deaths reflected socioeconomic inequalities and poor access to maternal health-care services.⁵ As of April 15, 2023, preliminary data in the Brazilian Ministry of Health live reporting system⁶ report 2941 maternal deaths among 2672046 livebirths in 2021 (ie, a MMR of 110.1; figure A).

In the WHO European region, approximately 1000 women died due to complications related to pregnancy in 2020.⁷ In the UK and Ireland, the MMR increased by 51% in the period 2018–20 compared with the MMR between 2015 and 2017 (6.04 deaths per 100 000 livebirths).³ Black and Asian women had a greater likelihood of death than White women (3.7 times higher and 1.8 times higher, respectively).

According to WHO, evaluating the effect of COVID-19 on maternal mortality is not yet possible as only approximately 20% of countries have reported data for 2020. In the USA, COVID-19 was a contributing factor in a guarter of all maternal deaths in 2020-21.8 The Pan American Health Organization reported a 20-year setback in maternal health in the Americas due to the COVID-19 pandemic, with the 16.4% reduction in MMR observed between 1990 and 2015 being followed by a 15% increase between 2016 and 2020.9 In Brazil, the excess maternal mortality in 2020 was 1.40 deaths per 100000 livebirths, far higher than predicted, even when considering the excess mortality for women of childbearing age due to COVID-19.10 Racial and socioeconomic disparities were also identified in the excess maternal mortality, with women who died due to complications related to pregnancy having 44%, 61%, and 28% higher odds of being Black, living in a rural area, and being hospitalised outside their municipality of residence, respectively, than the control group.¹⁰ In Chile, the MMR increased from 19.2 deaths per 100000 livebirths in 2019 to 28.1 deaths per 100 000 livebirths in 2020, reversing a 30-year decline. Only 29% of these excess deaths were directly attributed to COVID-19.11

There was a clear reduction in the utilisation of maternal health-care services during the COVID-19





Figure: MMR estimates for the period 2010–20

Figures created with data from the UNICEF Data Warehouse.² (A) MMR estimates for Brazil and the eight countries and territories that recorded substantial increases in MMR between 2000 and 2020. (B) MMR estimates for the three countries (all in sub-Saharan Africa) where MMRs in 2020 surpassed 1000 maternal deaths per 100 000 livebirths. (C) MMR estimates for the three countries that recorded over 10 000 maternal deaths each in 2020. MMR=maternal mortality ratio. pandemic in both low-income and middle-income countries (LMICs) and high-income countries (HICs). During the period March-December, 2020, initial antenatal care visits decreased by 32% and institutional births decreased by almost 16%.¹² Moreover, epidemiological data in Brazil showed that among the pregnant women who died due to COVID-19 in 2021, 59% had no previous risk factors or comorbidities.10 The contribution of the pandemic to the increase in maternal mortality is, therefore, probably due to both infection with SARS-CoV-2 and the detrimental effect of the pandemic on health-care services. As population immunity to SARS-CoV-2 increases, the contribution of infections to maternal mortality is expected to decrease. Unfortunately, women's health care has been disproportionately affected by the pandemic, particularly in LMICs.13

The fact that maternal mortality is rising again is a major scandal in both LMICs and HICs. We call on the global health-care community, including the UN, WHO, national governments, and health-care professionals, to bolster the provision and quality of maternal health care, redouble efforts to reduce MMRs again, and rectify the damage wrought by the pandemic on women's healthcare services. The need to collect high-quality, real-time data on the provision of maternity care and pregnancy outcomes in all countries is more pressing than ever.

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