

## EDITORIAL

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# Maternal Mortality: Still far from the 2030 goal

## Mortalidad Materna: Todavía lejos de la meta al 2030

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Throughout history, the care of childbirth, a process that is supposed to be natural and spontaneous, has evolved in its care, first by the women themselves, and later by midwives, without being free of fatal maternal-perinatal outcomes. It was in the Middle Ages that medical care was introduced, supposedly to reduce fatal outcomes. In spite of this, only the care of difficult deliveries to extract the fetus alive or dead was improved, while cases with complications and maternal and perinatal deaths continued to occur in large numbers and did not improve with the Conquest.

In the last century we began to better understand the causality of maternal deaths (MM), learned how to prevent and often resolve complications, improved the safety of cesarean sections, and modern technology was incorporated into routine care, starting with hand washing. Before the development of the microbial theory of disease, and not without resistance from his own colleagues, from statistical analysis, Semmelweis demonstrated the impact of this seemingly simple measure to reduce mortality caused by puerperal fever<sup>(1)</sup>.

However, maternal deaths have not been eradicated, despite advances in science and technology; nor, in many cases, do we have sufficient information to enable us to develop strategies to reduce them. For this reason, they continue to be a public health problem, especially in countries like ours where pregnancy, childbirth or within a few weeks of childbirth still pose a risk to women's lives.

From a long-term perspective, the absolute number of maternal deaths in Peru has tended to decline steadily, due to increasing urbanization and the improved capacity of our health services to deal with obstetric emergencies. This is despite the fact that equitable access and availability for the population has not yet been achieved. According to the 2000 Demographic and Family Health Survey (ENDES, for its acronym in Spanish), the maternal mortality ratio (MMR) for the previous seven years was 185 per 100,000 live births. In the same year, MINSAs National Centre for Epidemiology, Prevention and Disease Control (CDC) recorded 619 MM<sup>(2)</sup>.

Since then, the downward trend measured in MM registered and as MMR, continued until 2019 (302 MM) to reverse in the worst years of the COVID-19 pandemic, 2020 and 2021, when, respectively, 439 and 493 MM were registered. According to MINSAs CDC, which has hundreds of qualified professionals for epidemiological surveillance, in those years the MMR would have increased from 80.9 to 87.4 per 100,000 live births. The situation quickly recovered its downward trend, with 291 MM in 2022 and 264 MM in 2023<sup>(2)</sup>. However, for a full interpretation of MMR, it is necessary to consider that this decline took place in a context of



declining births, apparently exacerbated by the pandemic, making it insufficient to limit ourselves to its count.

Likewise, a relevant aspect for the analysis and prevention of maternal deaths is to observe the progressive change in causality, as well as the time at which they occurred, whether during pregnancy, childbirth or the puerperium. Thus, we see that the percentage of maternal deaths due to direct causes (hemorrhage, hypertensive disease, abortion and others) tends to decrease, since in 2001 it accounted for at least three out of four of all maternal deaths, while in 2023 it did not exceed two thirds. At the same time, indirect maternal mortality (caused by cerebrovascular disease, heart disease, cancer, malaria, etc.) has tended to increase. In 2000, approximately one in eight maternal deaths was due to indirect causes, while in 2023 it was two in five. In the worst years of the COVID-19 pandemic, 2020 and 2021, it rose to 16.2 and 28.8%, respectively. Seen in the long term, an obstetric transition would be underway, as has also been described in other countries<sup>(3)</sup>. However, the country still lacks a national plan to implement strategies to achieve the reduction targets, based on the analysis of national and departmental profiles. The latter was in force from 2009 to 2015<sup>(4)</sup>.

Within the framework of the Sustainable Development Goals (SDGs), Peru has set out to reduce the national estimate to 33 MM per 100 000 live births by 2030<sup>(5)</sup>, a level that is around half of the year for which it was established. Therefore, monitoring its achievements requires that the MMR estimate be systematic and comparable over time, at the national and departmental levels.

In this context, and partly explained by the pandemic, the role of administrative records and the ENDES, which since the beginning of the pandemic show a drop in fertility of no less than 10% compared to the projections derived from the 2017 census, makes more sense. This is a decline that would probably have been even more marked without the migrant and refugee population from Venezuela, which, particularly in Lima, represents approximately 10% of its population<sup>(6)</sup>. And it is in Lima that births would have fallen the most in the post-pandemic period<sup>(7,8)</sup>. By the first half of 2024, birth registration

did not exceed two hundred thousand, with just over two hundred and forty thousand in 2022, and a few thousand more in 2019. These rapid changes are taking place amid other sub-national heterogeneities, especially in highland departments, whose populations are tending to decline, which significantly affects the estimation of the national and departmental MMR<sup>(9)</sup>.

In this regard, the recording and estimation of live births, which form the denominator by which maternal deaths are divided, is highly relevant. Calculating MMR using current official birth projections that do not incorporate the effect of the pandemic would be different from calculating MMR using direct post-pandemic observations, considering administrative records and ENDES.

The next population census would provide an opportunity to make such an estimate<sup>(10)</sup>. This could be done by applying a question that several countries have already used to estimate maternal mortality, as well as by awaiting new projections generated from the new census planned for 2025<sup>(11)</sup>. In the latter case, the results would be available three to four years before the end of the SDG cycle in 2030.

As we have reviewed, a reliable source at the national level to make the estimate is the CDC of MINS<sup>(12)</sup>. This does not exclude that it would also be necessary to evaluate its coverage, age profile, timeliness and quality of its attribution of causes, as well as the limitations imposed by geographical access to services with greater resolution capacity. This would require greater access to epidemiological surveillance registry databases.

Reducing maternal mortality in the country and globally requires overcoming many challenges. It is not enough just to prevent unplanned pregnancies or to improve the capacity to respond to them. We must also look at changes in causality, improve our indicators and monitoring of MM reduction, and finally estimate in a reliable and systematically comparable way the MMR at national and subnational levels, its levels, trends, profiles (of causes and ages) and its determinants. Peru has the technical capacity to reduce MMR and achieve the 2030 target; it would only need to give it greater political priority.



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