COMMENTARY

Mind the gap

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Despite worldwide efforts to reduce maternal mortality, the WHO estimates that in 2017, 810 women died every day, with over two-thirds of these deaths mainly from preventable causes related to pregnancy and childbirth.[1] It was estimated that over 90% of these deaths occurred in low-resource settings, although women are still dying from preventable causes in high resource countries as well. Efforts continue globally to ensure that all maternal deaths are counted and reviewed for preventable causes and antecedent factors, and that appropriate recommendations are made and implemented in order to prevent further deaths. Maternal death surveillance and response (MDSR) remains the cornerstone of quality improvement activities related to improving maternal outcomes. Increasingly, these activities are also being linked to serious maternal complications as well as perinatal morbidity and mortality.

In this issue of *Paediatric and Perinatal Epidemiology*, Jayakody and Knight[2] seek to understand more fully how recommendations to reduce maternal deaths are implemented and acknowledge that the critical "Response" portion of MDSR is often poorly developed. They undertook a scoping review of English language publications focusing specifically on the response to recommendations following confidential enquiries into maternal deaths (CEMD), a form of MDSR. They concluded that overall, the response component was inadequate with substantial gaps between recommendations and implementation. Furthermore, there was a lack of accountability leading to reduced effectiveness of MDSR. Engaging key partners, ensuring that there are appropriate indicators to monitor outcomes, and advocacy were fundamental to success. The question of course is "why is response inadequate?"

The inability to respond to identified gaps depends on the number of maternal deaths and the nature and timeliness of the review process. Many countries have opted for confidential enquires in order to both count and review maternal deaths. While confidential enquiries are viewed as the "gold standard" for maternal death review, many low- and middle-income countries (LMICs) still struggle to ensure adequate facility-level reviews owing to lack of adequate resources. Fewer deaths in high-income settings make individual, confidential reviews potentially more feasible. Despite this, countries such as Canada, the United States

and some European countries still struggle to report maternal deaths accurately and to implement appropriate recommendations. While the “gold standard” may be a confidential enquiry, recommendations from confidential enquiries are often made and potentially implemented years after the maternal death. Local, facility-level reviews might in fact lead to more timely and effective recommendations and actions. In addition, advocates for maternal mortality review argue that any process developed for maternal mortality should also be used to assess the more widespread problem of serious maternal morbidity. The causes of and factors leading to serious maternal morbidity are often similar to causes of mortality: reviews of these “near misses” can help to identify and address modifiable conditions.

While causes of death often differ between low- and high-income countries, response to recommendations may be as challenging as in LMICs. Access to care is frequently identified as a contributing factor and is an issue around the globe. Remote communities in northern Canada, for example, may have limited access to timely and appropriate care (REF). Universal health coverage (UHC) is critical and remains a priority worldwide for those seeking to achieve equitable health care. Advocacy for UHC has been a high-level response to maternal mortality. Countries such as Afghanistan, Mexico, Rwanda and Thailand have shown that UHC is a powerful force to improve the wellbeing of traditionally marginalised populations, specifically women and girls.[3] Some high-income countries, such as the United States, still lack truly universal health coverage ensuring that access to safe, appropriate and equitable care remains a factor in many maternal deaths.[4]

In LMICs, maternal deaths are usually related to haemorrhage, severe hypertension or sepsis with numerous factors impacting the care women receive and why it may be suboptimal.[5] Recommendations are often directed at education, training and resource allocation. High-income countries are increasingly struggling to understand the factors that drive maternal morbidity and mortality, including obesity and its related medical, surgical and anaesthetic risks. Opioid use is a growing factor.[6] New immigrants pose a range of challenges with language barriers, poorly understood cultural differences and unrecognised diseases that are common in their home country but uncommon in their adopted country. It is clear therefore that appropriate responses to recommendations are not homogeneous given the heterogeneity of causes of maternal death.

Regardless of the setting, capturing accurate data is difficult. Vital statistics remains a critical component of maternal death surveillance. The World Bank and the WHO have developed a Global Civil Registration and Vital Statistic Scaling Up Investment Plan[7] covering the period from 2015 to 2024. Millions of people are denied appropriate services, including health coverage, when births and deaths are not recorded. Without accurate vital statistical information, improvements in care, or lack thereof, cannot be monitored.

Rich and informative data collected from confidential enquires do help to guide recommendations and policy development. High-income countries such as the UK, the Netherlands, Japan, France and the Nordic countries have comprehensive review processes. In addition, South Africa, Malaysia, India, Kenya and Malawi, amongst others, also have developed confidential review processes. Jayakody and Knight[2] focus on a lack of accountability, the need for dissemination tools and implementation guides, and the importance of engaging key decision-makers. Systems that include comprehensive review and reporting create a voice to speak to decision-makers, thereby creating a means of implementing recommendations. Even so, the “response” of MDSR is clearly problematic. What can be done to improve this critical component, particularly in countries where a well-conceived and adequately resourced confidential enquiry is not feasible?

While confidential enquiries are ideal, and evidence points to their effectiveness, alternatives in resource-poor settings should be investigated. Countries and regions should be encouraged to start with well-developed local facility reviews with clear recommendations and implementation guidelines, gradually building to a more comprehensive national system. Confidentiality may be difficult to ensure but the principles of no blame or shame and the need to identify system-related factors rather than individual caregiver-related factors remain. Before embarking on any review process, objectives should be clearly stated and appropriate indicators identified. In addition, ability to collect information relating to those indicators should be confirmed in advance. Too often initiatives are implemented without determining how—or whether—progress will be monitored.

Work is ongoing to improve maternal wellbeing, regardless of the setting and resources available. The third Sustainable Development Goal is to promote healthy lives and promote wellbeing for all, at all ages with the goal to reduce the global maternal mortality ratio to <70 per 100 000 livebirths by 2030, with the maternal mortality ratio being no greater than twice the current ratio.[8] Reduction in substance use, universal access to sexual and reproductive health services, avoiding unsafe abortion practices, and achieving universal health coverage are all goals encompassed by the goal to promote healthy lives for all and are appropriate high-level responses to maternal mortality.

All countries should strive to develop robust systems to collect and review information about maternal deaths and severe maternal morbidity. Once in place, developing systems of response that are effective and manageable should be a priority that is addressed early rather than late in the process. Appropriate, measurable and actionable indicators need to be identified. Accountability to key stake holders, in particular women and their families, remains paramount. While every maternal death is a tragedy, not learning lessons and acting on the lessons learnt is a greater disservice.

ABOUT THE AUTHORS

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