ADAPTING MATERNAL AND PERINATAL DEATH SURVEILLANCE AND RESPONSE SYSTEMS DURING COVID-19

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Maternal and Perinatal Death Surveillance and Response (MPDSR)

- Qualitative, in-depth investigations of the causes and circumstances surrounding maternal and perinatal deaths.
- Can lead to a 30–35% reduction in maternal and perinatal mortality when implemented properly.[1]
- Majority of countries have national policies and guidelines in place to notify and review maternal and newborn deaths and stillbirths.[2]
- WHO identified MPDSR as an essential RMNCAH intervention to mitigate the indirect effects of COVID-19 on maternal and perinatal outcomes.[3]

The COVID-19 pandemic could lead to thousands of additional maternal and child deaths due to reductions in coverage of key maternal and child health interventions.[4]

Disruptions to the MPDSR system due to the pandemic

- Decreases in facility births in some countries leading to limitations in the identification and notification of maternal deaths
- Delays in contacting families for community-based death reviews because of lockdown related restrictions
- Unavailability of health-care workers for death review meetings due to the extra burden of COVID-related services.[5]

Examples of adaptations to MPDSR systems during the COVID-19 pandemic in different countries from Asia and Africa provide lessons on maintaining MPDSR practice during such public health crises.

Identification of maternal and perinatal deaths

MPDSR can support documentation on whether the total numbers/rates/ratios of maternal and perinatal mortality have increased or decreased.

Lessons:

- Strengthen community-based surveillance of maternal and perinatal deaths leveraging other ongoing initiatives
- Leverage COVID-19-specific rapid data collection platforms or existing surveillance platforms such as integrated disease surveillance and response (IDSR)

Sri Lanka has a robust functional MPDSR system that has continued to be active during the COVID-19 lockdown. All pregnant women are registered and followed up by a field-based public health midwife, allowing for sharing of information about reducing the risk of COVID-19 during pregnancy. Any deaths are captured and notified within 24 hours to the Family Health Bureau (FHB), and investigated within 14 days by a team of field health-care workers.

In Nepal, a summary verbal autopsy form was developed and used for ease during the pandemic.

The use of the IDSR for systematic identification of SARS CoV-2 infection history among pregnancy-associated deaths in Cameroon is used to improve understanding of maternal mortality associated with COVID-19.

Review of maternal and perinatal deaths

The quality of the review is essential to understand the drivers behind each death and to develop recommendations to prevent future similar deaths.

Lessons:

- Explore adaptive approaches, such as virtual meetings and capacity-building sessions, and simplified forms to overcome pandemic-related travel restrictions and health system disruptions.

In Sri Lanka, a review of maternal deaths during the first wave of COVID-19 identified deaths related either directly or indirectly to COVID-19. These included deaths due to delays in seeking antenatal care because of fear of COVID-19, curfew-related delays in reaching facilities, and delays in maternal care services due to precautions undertaken because of COVID-19.

Nepal has simplified forms used to report and review deaths so that a minimum amount of information to facilitate identification of the cause of death and contributing factors, including possible COVID-19, can be captured.

During the pandemic, Bangladesh is trying to continue MPDSR and to accelerate the process of implementation by doing remote video conferencing with districts.

Response

MPDSR aims to establish a response to address the main drivers leading to maternal and perinatal deaths.

Lessons:

- Leadership, individual motivation and the organizational environment have all been found to be enablers that characterize a positive implementation of MPDSR to prevent maternal and perinatal deaths.
- Identification of gaps could be addressed at the point of care with actions taken immediately, or by different stakeholders at community, district and national levels.
- Follow up and monitor the results of response implementation

Adaptive approaches to respond to issues identified during the pandemic in Nepal included tele-consultations to address issues concerning delayed referral and a PPH management plan that included ensuring supply chains for essential commodities and training on evidence-based interventions.

In Zimbabwe, the change to virtual meetings for the national MPDSR committee resulted in a more rapid response to shortages of human resources. Training was provided on the ICD-MM and ICD-PM classifications and on WHO's guidance on the coding of COVID-19 related deaths. There was widespread dissemination of the weekly disease surveillance reports which had previously been sent to a smaller audience.

References

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Conclusion

MPDSR makes a critical contribution to prioritising the registration of maternal and perinatal deaths, and in providing evidence to promote continuity of essential MNH services during the COVID-19 pandemic. MPDSR can be adapted in real-time and contribute to the resilience of health systems during future crises.

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