
This short report describes the content and process analysis of the maternal death review aimed at addressing the underlying causes of maternal and perinatal deaths.

We examined Maternal and Perinatal Death Surveillance Review (MPDSR) from both process and content perspectives. A sample of 45 maternal death reviews were examined to assess regional variations and the underlying causes of maternal deaths and events leading up to maternal deaths at Lacor Hospital, Mbarara Regional Referral Hospital, and Lira Regional Referral Hospital in Uganda. Interviews were conducted with MPDSR focal persons to identify strengths and gaps in the MPDSR process and to explore solutions appropriate to each level of MPDSR in accordance with the MPDSR guidelines at three levels: facility, district, and national. The interviews and analysis aimed at exploring the MPDSR cycle at all three levels to determine existing strengths, gaps, and solutions appropriate for quality improvement. The processes of MPDSR were analyzed using a score card with indicators largely drawn from MPDSR guidelines and supported with DHIS2 statistics.

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Number of maternal deaths in the last 3 months</td>
<td>6</td>
<td>29</td>
<td>475</td>
</tr>
<tr>
<td>Number of maternal deaths reviewed in the last 3 months</td>
<td>0</td>
<td>21</td>
<td>204</td>
</tr>
<tr>
<td>Percentage of maternal deaths reviewed</td>
<td>0</td>
<td>72%</td>
<td>43%</td>
</tr>
<tr>
<td>Number of perinatal deaths in the last 3 months</td>
<td>Missing</td>
<td>461</td>
<td>1020</td>
</tr>
<tr>
<td>Number of perinatal deaths reviewed in the last 3 months</td>
<td>Missing</td>
<td>69</td>
<td>694</td>
</tr>
<tr>
<td>Percentage of perinatal deaths reviewed</td>
<td>Missing</td>
<td>15%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Functionality of MPDSR Committee

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>National/District/health facility has an MPDSR committee</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSR committee is constituted according to the guidelines</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSR committee notifies maternal and perinatal deaths</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>MPDSR committee synthesizes findings and gives feedback</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSR committee recommends actions on basis of MPDSR</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSR committee mobilizes resources to implement recommended actions</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSR committee follows up implementation of recommendations</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSR committee institutionalizes Maternal Death Reviews</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSR members are oriented on MPDSR process</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSRs are done within 7 days, aggregation and cleaning of data at national level done by 15 days after the end of the quarter</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>MPDSR committee has an action plan</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Action plan contains clearly defined activities</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>MPDSR committee has verifiable means of monitoring implementation of action plan</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>There is a QI team that closes performance gaps identified during the review</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>QI team/MPDSR team has a change/intervention being tested currently</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>There are means of verifying improvements by MPDSR team</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>There are confidential inquiries by independent assessors for maternal &amp; perinatal death</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Key

- **Within guidelines**
- **N/A**
- **Not applicable**
- **Outside of guidelines**
- **DHIS2 statistics**

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Process Analysis of MPDSR

- There is an MPDSR committee at facility, district, and national levels
- MPDSR committees are largely constituted according to guidelines
- MPDSR committee makes recommendations based on MPDSR
- MPDSR committee notifies maternal and perinatal deaths (at varying degrees of response to timelines)
- MPDSRs at facility and district levels not done within set timelines
- MPDSR committees are not well oriented on their roles at the facility and district levels

Content

- The causes of death are those within the common knowledge (i.e., postpartum hemorrhage, eclampsia and pre-eclampsia, sepsis, obstructed labor, etc.), so we want to better understand why these events happened
- Avoidable factors are mainly delay in seeking care (25%), lack of blood products, supplies and consumables (16%), inappropriate intervention (15%), and lack of transport (15%)
- Majority of the referrals to Lacor Hospital were from Health Centre III facilities (67%) whereas 70% of referrals to Mbarara Regional Referral Hospital were from other hospitals (i.e., district hospitals)

Opportunities to Strengthen the Process

- MPDSR process is more of a data collection and reporting tool than an improvement tool
- No documented action plans to close gaps at all levels
- No verifiable means of monitoring implementation of action plans
- No QI teams to close performance gaps at facility and district levels

Strength and gap analysis of the MPDSR at facility, district and national levels

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>- There is an MPDSR committee at each level</td>
<td>- There is no action plan for the MPDSR committee at all levels</td>
<td>- Guidelines envisage actions to avert future occurrence</td>
</tr>
<tr>
<td>- MPDSR committees are constituted as per the guidelines</td>
<td>- MPDSR process is focused on reporting and not improvement</td>
<td>- Notification &amp; improvement are provided in guidelines</td>
</tr>
<tr>
<td>- MPDSR committee recommends actions on the basis of MPDR</td>
<td>- MPDSRs are not done within the stipulated time</td>
<td>- Guidelines require auditing within 7 days</td>
</tr>
<tr>
<td>- MPDRS committee synthesize findings and give feedback</td>
<td>- MPDSR members are not oriented on the process</td>
<td>- Orientation is key for the functioning of committees</td>
</tr>
<tr>
<td></td>
<td>- There are no verifiable means of monitoring implementation of recommendations</td>
<td>- Periodic reviews at all levels will ensure coordination and implementation of actions</td>
</tr>
<tr>
<td></td>
<td>- There are no QI teams to close performance gaps</td>
<td></td>
</tr>
</tbody>
</table>

Conclusions and Recommendations

The MPDSR process identifies gaps responsible for maternal and perinatal deaths and makes recommendations on corrective action. However, any such death reviews without a follow-up action is futile. The absence of improvement structures to follow through with these recommendations is simply recycling causes of maternal and perinatal deaths over years. To significantly interrupt the repeated cycles of maternal and perinatal death, we propose: 1) activities to systematically enable MPDSR committees to follow through with their recommendations to change the health system at the national, district, and health facility levels, using evidence-based science, 2) the reviews should describe in detail why the woman died, and 3) holding periodic reviews of actions implemented at each level.

This short report was made possible by the support of the American people through USAID. The contents of this case study are the sole responsibility of URC and do not necessarily reflect the views of USAID or the United States Government.