Maternal Near Miss Reviews in India

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India has made significant progress in reducing its maternal mortality ratio (MMR) from 212 to 175 – however, the country has a long way to go to meet Millennium Development Goal No. 5, reducing MMR to 100 by 2015, and the national 12th plan goal of reducing MMR to 100 by 2017. The National Maternal Health Review programme launched by the Ministry of Health and Family Welfare, Government of India (GOI) in 2015, was a useful initiative to gather detailed information on various factors at facility, district, community, regional and national levels that were to be addressed to reduce maternal deaths. However, given that the number of maternal deaths has seen an overall decline, the number of maternal deaths at each facility is no longer being tracked, making it difficult to get a full continuum of factors which may have contributed to the deaths.

Maternal Near Miss (MNN) cases generally occur more frequently than maternal deaths, and therefore a more reliable quantitative analysis can be done which can provide a more comprehensive profile of the health system functioning. Identification of the obstacles and gaps in the health system and a coordinated approach to resolve these can ultimately lead to an improved health system.

Under the guidance of the GOI, a National Technical Group (NTG) was constituted to guide the 12th plan in considering the national implementation of MNN. Between 2013-2014, the NTG completed the task of framing up the MNN definition, criteria for selection of MNN cases, tools for reporting MNN, and the broad operational plan for its implementation.

In the Indian context, Maternal Near Miss would be defined as a woman who survives all threatening conditions during pregnancy, delivery, immediate postpartum (within 42 days of delivery), and postpartum (within 42 days of delivery) with complications or interventions resulting in one or more of the following conditions: hemorrhage, sepsis, hyper tension, pre-eclampsia/eclampsia, severe anemia, respiratory dysfunction, cardio pulmonary dysfunction, hypoxic ischemic encephalopathy, renal dysfunction, sepsis, thrombocytopenia, and major obstetric emergencies.

The major complications that contribute to MNN are: hemorrhage, infection, and obstructed labor. MNN is an indicator of obstetric, medical, and surgical interventions required, or otherwise, to save a woman's life.

To identify an MNN case, criteria were divided into five broad sections with adverse events under each section to facilitate identification and tabulation of causes leading to MNN. The four sections and adverse events were pregnancy-specific disorders (hemorrhage, sepsis, hyper tension), pre-existing conditions aggravated during pregnancy (anemia, respiratory dysfunction, cardio pulmonary dysfunction), iatrogenic factors (obstructed labor, malpresentation, malposition), and obstetric emergencies (cerebral edema, eclampsia).

It is estimated that about 28% of MNN cases occur during labor and delivery, 40% during the immediate postpartum period, and 32% during the postpartum period. The delivery complications that contribute to MNN are: infection, hemorrhage, obstructed labor, and anesthesia. MNN is an indicator of obstetric, medical, and surgical interventions required, or otherwise, to save a woman's life.

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A detailed paper on this topic, with full references, can be viewed at the following link: www.onlineibrary.wiley.com/doi/10.1111/1754-4860.12042/pdf.