Determinants of Maternal Near Miss at a Tertiary Care Hospital in Ahmedabad, Western India

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Abstract

Background: The aim is to study the various demographic characters, etiologies and outcomes of Maternal Near Miss (MNM) in antenatal and postnatal women coming to a Tertiary Care Hospital in Ahmedabad, Gujarat (Western India). Material and Methods: This is a retrospective observational study conducted between June 2021 and July 2022at SVPIMSR, Ahmedabad. 78 pregnant women based on WHO near-miss criteria were included.Details were recorded by studying the case sheets of the patients and asking relevant focused questions to the patients themselves or their relatives regarding the patient's condition at the time of admission.Detailed history, clinical examination, treatment given, causes of referral in case the patient was referred from outside were noted. Results: In this study, Obstetric Haemorrhage (69.2%) and hypertensive disorders of pregnancy (30.7%) were the leading causes of MNM cases. Majority of the women (56.4%) belonged to the age group of 18-25 years, were multiparous (83.3%). 74.4% cases were emergency cases and 66.7% were referred cases. The maternal near-miss to maternal death ratio in our study is 8.9:1. 66.5% cases were referred due to various causes like lack of HDU facility, blood and blood products, NICU facilities etc from the peripheral centres. 18 near-miss cases (23.1%) were identified to have a delay; maximum was level 1 delay(12.8%). 31.5% of MNM cases required blood and blood product transfusion. 25% were admitted to the intensive care unit. Conclusion: Timely recognition, prompt treatment of MNM cases with availability of essential services like blood banks and obstetric ICUs at the primary level of treatment can help in preventing adverse outcomes. Reviewing near miss cases gives significant information about the three delays in health seeking so that appropriate action is taken. Delay in referral to tertiary care centres can be avoided by proper education to identify warning signs and symptoms and training to give primary treatment amongst primary care doctors.

Keywords: - Maternal Near Miss (MNM), Pregnancy, Obstetric Haemorrhage, Hypertensive disorder of pregnancy, Tertiary care