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Maternal near-miss morbidity: is this evidence of maternal health quality in sub-Saharan Africa?

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The article by Samuel Oppong et al. makes interesting reading (Oppong et al. *BJOG* 2019; 126:755–62). It describes a study carried out in three tertiary referral hospitals in southern Ghana that investigated the incidence of and factors associated with maternal near-miss morbidity. The study used the WHO Maternal Near-Miss Screening tool to identify maternal near misses among 8433 live births and reported a maternal near-miss rate of 34.2 per 1000 live births compared with a maternal mortality ratio of 740 per 100 000 live births. This implied a near miss to mortality ratio of nearly 5 : 1, indicating that nearly five deaths are averted for every reported maternal death. The authors compared the results with unmatched controls with uncomplicated deliveries and concluded that women experiencing fever within 7 days of delivery were six times more likely to experience a near miss compared with women without fever.

Although this study is novel and is one of a few large studies that report near-miss maternal morbidity in sub-Saharan Africa, it can be debated whether a better control would not have been women with similar complications who died. Alternatively, the authors could have statistically controlled for potential confounders to identify how mortality was prevented among near misses.

Nevertheless, the study is important for two main reasons. First, using the three-delay model proposed by Thaddaeus and Maine (*Social Sci Med* 1994;36:1091–110), it suggests that although women may experience delays in accessing referral facilities, concentrating efforts on complications through emergency obstetric care can be effective in preventing maternal deaths. This study is a salutary reminder to health workers and policy-makers in sub-Saharan Africa that much can be achieved if there is high-level willingness and determination to prevent maternal deaths.

Second, the reported higher incidence of maternal near misses in this study suggests improved quality of maternal health care in the referral hospitals. Previous studies report higher case fatality rates from obstetric complications in sub-Saharan Africa. Although this study was not designed to document quality of care in the referral facilities, the reported high rates of near misses suggests lower case fatalities associated with complications, and therefore improved quality of emergency obstetric care.

To date, near misses have not been used consistently as a measure of quality of care in regions with high rates of maternal mortality. We suggest that the incidence of near misses is a key indicator of quality of care, because it accounts for all components of emergency obstetric care in referral facilities. Also, any near miss is likely to share risk factors with maternal deaths, so indicating what can be done to avert more deaths. Furthermore, it should motivate providers and policy-makers to take concrete steps to aggressively manage women with severe complications. This is also a call for larger studies that use appropriate controls to enable the identification of specific actions that lead to prevention of maternal deaths in women experiencing severe pregnancy complications.

Disclosure of interest

Friday Okonofua was a reviewer of the original article. Completed disclosure of interests form available to view online as supporting information. ■