

Reviewer's report

Title: Severe maternal morbidity (near miss) as a sentinel event of maternal death. An attempt to use routine data for surveillance

Version: 1 **Date:** 3 September 2008

Reviewer: Robert Clive C Pattinson

Reviewer's report:

Reproductive health: Severe maternal morbidity (near miss) as a sentinel event of maternal death. An attempt to use routine data for surveillance

Question well defined

Yes. This also is a brilliant, original idea, and one which can be potentially very beneficial.

Method appropriate

Yes. The process and analysis were well described. In doing this they demonstrated that using routine data cases can be identified which might have had near misses although the accuracy might be questioned.

Data sound and controlled

The data is well presented and clear. Simple, appropriate statistics were used.

Adhere to standards

Yes

Discussion and conclusion well balanced and supported by data

The discussion is clear.

My only concern is the reliability of the data entered into the HIS and MIS files. The authors searched first on principal and secondary diagnoses, procedures and days in ICU. They then searched for words using the criteria defined by various authors. The problem remains that of the criteria used to define severe pre-eclampsia or severe haemorrhage were not specified and I do not know whether they are specified by the ICD-10. Thus cases that are severe might not be included or less severe cases included.

This is illustrated by Table 3. My understanding of the table is that very few of the near misses were identified using the Mantel criteria. It appears criteria (of organ dysfunction) required by Mantel et al., to be classified as a near miss was not recorded. However, if one looked at the disease diagnoses reported in Mantel, then they would be very similar to that of the authors. Waterstone did not have very strict criteria for diagnosing severe disease and his prevalence was very high for a developed country. Thus, I think the authors have demonstrated that a routine data system can be used to identify near misses. However, I think that

the criteria used to define cases of severe pre-eclampsia or severe postpartum haemorrhage need to be clearly specified for this to be of general use. This should be relatively easily accomplished if there is agreement in the country on the criteria. It would be interesting if the authors would comment on this aspect.

There are sections where the language is unclear and will need revision:

Pg 7, 3rd paragraph, 3rd sentence

Pg 10, 2nd paragraph, 3rd sentence

Does title and abstract accurately convey what has been found

The title accurately conveys the study.

General

This is an excellent article. I really shows a new way forward.

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Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests