Reviewer's report

Title: Severe maternal morbidity and near miss: occurrence and associated factors in Sergipe, Northeast Brazil

Version: 4 Date: 13 August 2013

Reviewer: Tom Witteveen

Reviewer's report:

Major compulsory revisions
In my opinion this is still an important study to provide information about rural areas and stimulate this in the future for other countries.

The inclusion criteria for both cases as control are still unclear to me. This is my major problem with this study. I understand that for the cases the who mnm tool is used, but in my opinion you can discuss these terms (see minor revisions). At least add some text in the discussion about the difficulty within this subject.

The limitations for a study in this setting should also be recognised more in the discussion. Also give an interpretation to what this might have done to the results.

Minor essential revisions

Introduction
I don't agree with this sentence: "SAMM is more broadly defined and cases are less serious than the NM situations." This is discussable and depends highly on the criteria used, which are different for most countries. Also terms of SAMM are discussed around the world. Even the WHO has made one tool to apply to both situations and does not define these seperately. You could also choose to use only one term. Better to add a sentence about the discussion nowadays and the difficulty to define SAMM and NM.

Methods
What is "A cross-sectional study with a nested case-control component"? Choose one.

SAMM/NM: specify these terms SAMM/NM

"The population is of a low socioeconomic level and the vast majority depend on the public health system.": can you add some kind of reference numbers which gives an image of the SES status?

Shouldn't you include maternal deaths? It is a maternal miss.

You describe you use the who maternal miss criteria (the tool?) and then divided into SAMM or NM, how can you make this differentation? Because the tool does
not give you this information. If you include according to the near miss tool, it is a 
near miss. The term SAMM is not used by th who? I think you mean severe 
maternal complications, but it is unclear, so please explain more. Maybe use 
potentially life-threatening and life-threatening (NM)?

Eligible to be controls? Criteria? No complications at all? "The exclusion 
condition for controls was not having any eligible criteria for SAMM or NM or if 
they refused to participate." I read this as that controls were excluded if the did 
not have any SAMM criteria... it should be the other way around? delete "not"

The statistical part should be shorter.

Why is this included? "The authors used the STROBE statement and revised the 
paper accordingly." BMC guideline?

Discussion

Limitations: this is still too short. There might be selection bias (inclusion criteria 
of controls and a bias between different obstetricians (how many different doctors 
where there?) which included the cases. Students did all the anamnestic 
information which might also lead to missing data for important condition related 
information.

The english grammar is much better in this version.

**Level of interest:** An article whose findings are important to those with closely 
related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the 
statistics.

**Declaration of competing interests:**

I declare that I have no competing interests