Reviewer's report

Title: Assessing the quality of record keeping for cesarean deliveries: results from a multicenter retrospective record review in five low-income countries

Version: 4 Date: 5 February 2014

Reviewer: Nanna Maaløe

Reviewer's report:

OVERALL IMPRESSION:

Thanks to the authors for the substantially rewritten manuscript. As mentioned earlier, this research reveal some interesting and important record keeping as well as obstetric care quality issues that are widespread in developing countries. In this latest version of the manuscript, all sections relate to the objectives, the methodology and key results are presented more simple and clear, table 4 is easier to read, and the discussion is sharpened. However, there are still minor essential revisions, please see below. Also, throughout the manuscript the text could be more concise and empty words removed.

MINOR ESSENTIAL REVISIONS:

In general:

Sometimes it is written “CS delivery”, please remove “delivery”. Also, “cesareans” is still used, please use the abbreviation “CS” throughout the manuscript.

Abstract:

1. Please move “to learn about record-keeping practices” to the methods section of the abstract.

2. Please remove “disappointingly” from the result section, as such adjective belongs in the discussion/conclusion sections.

3. In the conclusion, please consider rephrasing to “Deficits in the quality of CS record keeping across…”.

Background:

This section needs a rewrite. Currently, it seems more like the discussion/conclusion of the study than the introduction. E.g. the second sentence is nearly the overall conclusion of the current study – why conducting the present study if reference 2 already exists? Please make this clearer in the background section. Importantly, a background section sets the stage. Therefore, include only
important background information, explain the rationale or why the study is important, and conclude with a direct statement why the study was done and what is to be learned as well as the overall study methodology (e.g. retrospective, criterion-based record review…).

Also, consider removing “primary” from the following sentence: “The primary objectives of this study are to: (1) assess the quality of CS record keeping; and (2) identify and make recommendations about priority areas for CS audits”.

Methods:

1. Please rephrase “…40% in Guinea [20] to between 50-60% in Mali…” to e.g. “…40% in Guinea [20] and 50-60% in Mali…”.

2. Regarding partograph quality, it would be interesting to know what led to acceptable or unacceptable use – what are the criteria of the nine-point check list? E.g. was partograph quality unacceptable if vaginal examination was performed less than every 4 hours or fetal heart rate monitored less than every 30 minutes?… Also, whether action line is crossed does not necessarily have anything to do with the quality of record keeping. This could be stressed with e.g. a new paragraph.

3. Please insert e.g. “from”: “When individual patient files could not be located, hospital registers (e.g. FROM delivery room, operating theater…”

4. Please insert the missing full stop: “…data of interest The tool was translated into French…”

5. Regarding ‘Data analysis’, the qualitative interviews are missing. Were they e.g. transcribed and coded?

Results:

6. Concerning “Among the partographs reviewed, the percentage showing the action line had been crossed (indicating the need for an intervention, such as labor augmentation, assisted delivery, or CS) ranged from 1.5% to 46.9% (Table 3)”: As mentioned in the last review, assisted vaginal delivery should not be considered in first stage of labour where the cervix is not fully dilated, and therefore should not be mentioned in relation to crossed action line.

7. Please insert “that”: “Key informants from all study sites stated THAT there were no formally…”

8. Concerning ‘Maternal outcomes’, “Information about whether women experienced complications was missing in at least one-third of the records reviewed from five sites” and “Data on maternal outcomes were missing for more than 10% of files reviewed at three sites” are confusing. It appears that one paragraph is about complication other than death and one about maternal deaths – please make it clearer.

9. Concerning “Focusing on the four sites with the highest percentage of deaths
(all three sites in Niger and Guinea B), seven of the 40 deaths occurred” – did all of the 40 deaths take place at these sites? Please make this clear.

10. Please change the semicolon to a full stop for simplicity: …cases at one site; it was not used at the Guinea site.

Discussion:

11. Please rephrase “CS time to decision” to e.g. “time of decision to perform CS”.

12. This statement needs a reference, as it is not shown by the present study: "Incomplete, inaccurate, and inaccessible medical records directly impact decision making and care. Improved record keeping would facilitate routine monitoring, reporting, and clinical audits that could help facility staff identify deficiencies in care.”

13. Please insert “be”: “This would easier and quicker to complete”

14. Concerning “The data also suggest a possible delay in the timely receipt of care at the facility, though this finding could also be due to women’s arrival at the facility in advanced labor”, if it is lack of action after crossed action line that you are referring to, partograph has been started and it is then illogical that it is caused by pre-hospital delays.

15. Please correct “were done for “other reasons,” hinting at”

16. Please rephrase: “in obstructed labor, one the most frequently”

17. Please insert “maternal” and consider starting a new paragraph: “The majority of the recorded MATERNAL deaths occurred at four sites; most of the women had…”

18. Please insert e.g. “diagnosed”: “Information was not available on how many CSs were performed on DIAGNOSED intrauterine fetal deaths”

19. Please insert “perinatal”: “Nearly three-quarters of files had no information on cause of PERINATAL death”

20. Please correct: “based on “best practices.” While”

Conclusions:

21. Please remove “gaps in” or “deficits”.

Table 6:

22. It seems that ‘perinatal deaths’ should not be in bold writing?

DISCRETIONARY REVISIONS:

Methods:
1. The paragraph on “Key informant interviews…” might fit better under the ‘Study sample’ subheading; at least the number of interviews made and the professions of key informants.

2. The paragraph on ethical approvals might fit better under the ‘Study sites’ subheading, as it is not ‘Data analysis’.

Results:

3. Maybe ‘postdates’ should be mentioned in citation marks?

4. Regarding the division of indications into maternal and fetal, it may be argued that e.g. prolonged or obstructed labour is both a maternal and fetal indication, as it implies risk to both mother and child?

Discussion:

5. Could this be clearer?: “10% or more of the data were missing from at least three or more sites.”

6. Consider starting this sentence with e.g. ‘additionally’: “ADDITIONALLY, studies have shown that partograph use and early interventions for women experiencing a delay…”

7. Consider ‘information’ instead of “a lot”.

8. Consider starting this sentence with e.g. ‘additionally’: “ADDITIONALLY, studies have shown that partograph use and early interventions for women experiencing a delay…”

9. Consider ‘information’ instead of “a lot”.

10. Consider dividing “Maternal and fetal outcomes” into two subheadings.

11. Concerning “These data indicate that the women experienced delays in arriving at referral center and/or upon arrival”, this is further stressed by many of the women having uterine rupture indicating severe delay in action.

12. Consider starting this sentence with e.g. “Overall”: “Overall, the maternal case fatality rates in this sample are high”

13. Consider rephrasing “dead babies”

14. Concerning “However, clinicians know what to write to make a procedure sound “medically justified”, consider including e.g. “and contrary, relevant procedures done may not have been recorded due to high work load”.

15. Consider including “also”: “We did not collect detailed information about intrapartum care. ALSO, because we did not collect data about the availability of and capacity for providing emergency obstetric…”

Conclusions:
16. Consider rephrasing “The primary benefit of this study is that it highlights common shortcomings in CS record-keeping across a range of facilities in a variety of low-income countries” to e.g. “This study highlights common shortcomings in CS record-keeping across a range of facilities in a variety of low-income countries.”

17. Consider rephrasing “of the decision-making timeframe for initiating surgery” to e.g. ”of the decision-to-delivery interval”.

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

**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.