Reviewer's report

Title: Maternal and fetal outcomes of low risk women presenting in latent phase compared to active phase of labour at Bugando Medical Centre Tanzania

Version: 2 Date: 14 October 2013

Reviewer: Mdegela Mselenge

Reviewer's report:

MAJOR COMPULSORY REVISIONS

TITLE:
1. The title is generally focused. However it could be improved. The study seeks to explore more than just maternal and fetal outcomes of labour. I would suggest a more inclusive title. Suggestion; 'Labour management and obstetric outcomes among pregnant women admitted in latent phase of labour compared to those admitted in active phase at Bugando Medical Centre in Tanzania'.

ABSTRACT:
Background
1. There should be a statement describing what 'low risk women' means in this study so readers understand from the start what it is all about. This could come as early as a third sentence in the background.
2. It may be important to state as well whether or not standard management protocols/guidelines exist in the labour ward at this centre and are routinely used or not.

Methodology
3. I think the study type is 'descriptive cross sectional'. A closer look at the way data was collected doesn't clearly specify what was considered as the EXPOSURE and the NON EXPOSED which are key variables in analytical studies, it rather explains subjects who all were in labour, how they were managed and the outcomes of that management.
4. No need in pre-emptying results as yet, ...involving 500 low risk women....
5. I don't see the rationale behind seeking consent from women in labour for this study as it appears that the key entry point was after delivery. Similarly I don't see how the researcher could have influenced the practice as described further in the last sentence on the Methodology section in the main article.

Results
6. The phrase 'Rates of interventions like..' probably do not carry intended meaning. Suggestion: Key interventions including augmentation with Oxytocin, artificial rupture of membranes and caesarean section were significantly higher in the latent phase group than the active phase group. The statistics could be more
comparable if p values were stated as below 0.05, or 0.01, or 0.001 etc rather than ‘= actual figures’.

7. The statement … Most of the caesarean sections … is better deleted as it blunts the focus of the study. It could be an important finding but does not help to pull together the message.

Conclusion

8. Rephrase paragraph to make it more concise. The key message should be very clear in this case whether or not the increased tendency towards interventions in the latent phase group can be rationalized.

MAIN ARTICLE:

BACKGROUND

9. Sentences 4 and 5 are not clear. The message do not correlate with findings reported in reference no. 2
10. It may be important to include key findings from similar studies done in Tanzania or to state that none exists
11. It is quite vital that the definition of ‘low risk pregnant women’ as referred to in this study is made clear early in the background. This may obviate the need to do so later in the methods section.

METHODS

12. If found sound, change the study type as suggested earlier
13. It is stated that the Centre primarily caters for high-risk pregnancies, it will be useful to explain how the low-risk pregnancies came about
14. Third paragraph: To delete the first statement if the concept of ‘low risk pregnancy’ is made clear in the background.
15. Was being positive for HIV regarded as high risk? It would have influence decisions for invasive interventions
16. The term ‘case note’ rather than ‘file’ is probably more universal.
17. Last sentence, not clear how this was done considering that case notes were reviewed after delivery.

RESULTS:

18. No need for the first statement, it is a repetition
19. Second sentence: delete, … and consented… if comments given above are considered useful
20. Make results more concise and state p values in a standard format.

DISCUSSION

21. The first three sentences are part of results therefore should better be deleted.
22. It is advisable to start the discussion with a more general perspective on the
subject matter rather than going into specific items straight away. For example a start with description of the concept of naturality of labour and that it shouldn’t be unnecessarily medicalized as claimed by some scholars could be a good jolt.

23. First paragraph sixth sentence: Lack of comparability between this study and those referred to in references 8 and 9, could be more than the two stated. In addition in reference 9 the study involved multiparous women as well. It may be worth noting that in reference 9, the cut off point for latent Vs active phase was 4cm for all women, this might have affected the categorization and hence the difference in the outcome from this study.

24. At the end of the second paragraph it could be important to explain that fetal distress is diagnosed by listening to the fetal heart rate using a fetoscope and by examining the state of the liquor. Confirmation of the distress by fetal scalp ph estimation is not a practice at the BMC thus a large window of validity for the diagnosis may exist. This fact together with the fact that labour dystocia is also a vaguely defined terminology and diagnosis, inherently affects precision of decisions made in both this and the study done in Iraq.

25. Third paragraph first sentence: I think it may be better to start with own findings rather than discussing findings from a Bangladesh study up front. …In this study there was no difference in the proportion of women who had assisted vaginal delivery …..

26. Looking at point 24 and 25 above and considering that there were more women among those who presented in latent phase who had a caesarean section done compared to those who had augmentation with Oxytocin (34.8% Vs 33.6%), and the fact that there was no difference in fetal outcomes between the two groups then one may argue that a sub set of women received unnecessary interventions. This could come towards the end of the third paragraph.

27. Could the differences/similarities of the findings of the various studies presented in the fourth paragraph be discussed further?

28. The last paragraph needs revision. The message from the last statement is somewhat confusing. The statement suggests that close monitoring and other interventions observed in this study and those in the USA and Iraq could have influenced fetal outcome positively. However in this study there was no difference in fetal outcomes in both groups. One could probably infer that there was no advantage of the excessive interventions in the latent phase group.

CONCLUSION:
None

MINOR ESSENTIAL REVISIONS

ABSTRACT:

Background
First sentence could read: Labour is a dynamic physiological process by which regular painful uterine contractions result in progressive effacement, dilatation of the cervix and descent of the presenting part of the fetus that ultimately leads to
delivery of the baby through the birth canal.

2. Suggestion; Last statement on the background to read: Labour management, and maternal and fetal outcomes among low risk women presenting both in latent phase and active phase of labour in Tanzania have not recently been explored.

Methodology

3. Suggestion:
This was a descriptive cross sectional study. It was done from February to April 2013. Five hundred case notes of low risk pregnant women were collected, half of those who presented in latent phase of labour while the other half in active phase. Case notes were collected serially until the sample size was reached. A structured checklist was used to extract data. Data was analysed using SPSS version 17. A p<0.05 was considered significant at 95% Confidence Interval.

Results

4. First sentence: Probably better use range was from 18 to 40, rather than minimum and maximum.

5. Fourth sentence: Correct term would be spontaneous vertex delivery, to mean cephalic presented fetuses because spontaneous vaginal deliveries could occur with other presentations as well... and in the same sentence there was no difference... Probably make another sentence that reads: With regard to Assisted Vaginal Delivery (AVD) there was no difference between the two groups.

6. Correct spp. of the word Caesarean, not caesarian, this has to be corrected throughout the article.

7. The last two sentences to read:
There were more women in the active phase group who developed post partum haemorrhage (PPH) and sustained genital tract tear than in the latent phase group, followed by the statistics …

However, there was no significant difference in fetal outcomes in terms of APGAR score and admission to Neonatal Intensive Care Unit among newborns delivered by women in the two groups.

Conclusion

8. Suggestion:
Low risk pregnant women admitted at BMC in latent phase of labour are subjected to more obstetric interventions than those admitted in the active phase. However the obstetric outcomes between the two groups are similar.

There is need to review or produce guidelines on management of women admitted in labour at BMC to reduce the risk of unnecessary interventions.

MAIN ARTICLE:

BACKGROUND

1. Last word first sentence should be plural

2. Third sentence: the word ‘to’ is missing. To read: …
3. In sentence n. 6 replace ‘had delayed admission until’ with ‘are admitted during’.
4. Sentence no. 7 replace ‘patient’ with ‘pregnant woman’.
5. Sentence no. 8 the word intervention should be in plural, and a full stop after reference (3).
6. Sentence no. 9 ‘Evidence’ and later in the same sentence ‘research findings’ mean the same thing, the sentence can therefore be rephrased.
7. Sentence no. 9 word ‘at’ is missing before 4cms. Delete ‘...and regular uterine contractions...’ in the same sentence, and add the word ‘with’ before 3cms.

**METHODS**

8. Suggestion:
   This was a descriptive cross sectional study conducted at Bugando Medical Centre, which is on the northwest side of Tanzania in the city of Mwanza from February to April 2013. The Centre serves both as a referral consultant hospital and as a University teaching hospital. The average number of deliveries is 600 per month and it caters primarily for high risk pregnant women.

9. Suggestion for the second, sentence second paragraph:
   Women with the following conditions were considered high risk and were excluded, ……
   Same sentence: .. abnormal placentation recorded during antenatal care by ultrasonography …

10. Third sentence: to add the word ‘was’ between size and reached

11. Third paragraph suggestion:
   Latent phase of labour was defined as the interval from when a woman perceives mild regular uterine contractions up to when the cervical dilatation was 3cm in nulliparous and 4cm in multiparous women. The active phase of labour was defined as the interval after the latent phase to full cervical dilatation.

12. Fourth paragraph suggestion:
   Case notes of all eligible women were reviewed and the information extracted using structured checklist. Each case note and checklist was assigned an identification number. Information collected included socio-demographic characteristics and obstetric history such as gravidity, parity and gestational age; interventions such as artificial rupture of membranes, augmentation with Oxytocin and caesarean section; maternal and neonatal outcomes including birth weight, APGAR score and admission to Neonatal Care Intensive Unit.

13. Data ‘was’ ….Numerical data ‘was’

14. Last paragraph, suggestion: Odds ratio was calculated as a measure of strength of associations between variables. Then delete the following two statements staring with ‘…, Confidence interval… and A confidence …’ as that is part of a routine statistical analysis for any study.

15. Last paragraph suggestion: delete sentence starting with: Identification
RESULTS

16. First paragraph: ...living in urban plus data included doesn't provide any helpful information. The category could also be deleted from Table 1.

17. First statement second paragraph to read: Majority of women who presented in the first stage were nulliparous 234(93.6%) against 130 (52.0%) who were parous.

18. Delete the next sentence that starts with... Approximately half of the... as it doesn't add any value to the key message of the study

19. Third paragraph: Avoid using the term 'rates' in this context. Suggestion: Proportion of pregnant women who received selected(or key) interventions including augmentation with Oxytocin, artificial rupture of membranes and caesarean section were significantly higher in the latent phase group than in the active phase group 84(33.6%) versus 52 (20.8%), p<0.05; 96(38.6%) versus 56(22.4%) p<0.001 and 87(34.8%) versus 52(20.8%) p<0.05 respectively.

20. Suggestion: In both groups the most frequent indication for caesarean section was fetal distress however this intervention was done more among the latent phase group 61(24.4%) versus 25 (10%). Please delete the last sentence in this paragraph.

21. Suggestion for the last but one paragraph:
Spontaneous vertex delivery was significantly higher in the active phase group than the latent phase group, 180(72.0%) against 153(61.2%) p<0.01. There was no difference with regard to proportions of women who had assisted vaginal delivery between the two groups. Another suggestion: In terms of maternal complications, there was more genital tract injury and PPH in the active phase than in the latent phase group.

22. Last paragraph, suggestion: There was no significant difference in fetal outcomes with regard to APGAR score and admission to the NICU between the two groups.

DISCUSSION

23. Spp. Second paragraph third sentence: …other studies, fourth sentence: …findings. Fifth sentence: Better to start; In this study …. Sixth sentence, use latent and active rather than pre-active and active to maintain consistency. Eight sentence to start with a capital letter.

Ninth sentence: better delete CPD and obstructed labour, and the full stop to come after the reference in brackets. The sentence to read: The main indication for caesarean section in this study was fetal distress whereas dystocia was the leading indication in a study done in Iraq (8).

24. Fouth paragraph, first sentence to read: On assessment of maternal complications, this study showed that more women had perineal tear and PPH in the active phase group than those in the latent phase group, but contrary to this …
25. Delete the word ‘this’ after group as it is redundant

CONCLUSION:
26. Please refer to comment no. 8 in the abstract above.

CONSENT
27. I would suggest that the whole paragraph is deleted because it is already explained in the methodology

ACKNOWLEDGEMENTS:
28. It may be more appealing to state the affiliation of Dr Dena and Dr Jeremiah

REFERENCES:
29. Revise quotation of reference no. 10. The citation suggested in the article could be used.

TABLES:
30. Table 1; probably delete Residence and Occupation variables. Table 2; maybe delete CPD and Obstructed labour variables.

DISCRETIONARY REVISIONS
None

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