Reviewer’s report

Title: Factors determining success of VBAC, a case control study in three teaching Hospitals, Ethiopia

Version: 1 Date: 29 May 2012

Reviewer: Tigistu Adamu Ashengo

Reviewer’s report:

1. Major Compulsory Revisions

Inconsistencies and confusions between the findings and interpretation described in the abstract, results, discussions and conclusions should be addressed.

A Factors responsible for success at one place (e.g. Stillbirth in the abstract) are mentioned as responsible for failures in others (e.g. stillbirth in discussion section). The abstract and the discussion section need to clearly communicate the key findings in a way that is not confusing and based on the data collected.

B. Variables described as unknown such as position of presenting part, represent the majority of the cases and controls making the conclusions extremely weak. Although missing data elements is described as a limitation, the authors did not consider this in making major conclusions based on data that are substantially incomplete, that warrants removal of any discussion related to that variable.

C. Similar to findings in other studies on the same topic, Individual factors related to VBAC can overlap and interact with each other such that a factor found to have statistically significant influence no longer may be significant when other key factors are taken into account. While this study tried to show using the regression analysis, the interpretation hasn’t come out in a way that clearly communicates the factors. For example, co-morbidities and medical illnesses were removed as variables of interest because of poor documentation and lack of data (Page 7 – 1st Paragraph) but in the analysis section there is a description that states “…medical illness was not a statistically significant factor …”. Therefore a clear description of variable categories, inclusion and exclusion criteria are critical to improve the flow and strengthen the analysis of the available data. Most studies in VBAC categorize the factors of interest i.e. predictors and outcome into the following that the authors can consider using to reorganize their findings:

- Demographic e.g. age, ethnicity, marital status, …
- Non-clinical factors: e.g. Socio economic status, place of delivery, place of ANC follow up
- Pre-existing maternal conditions: e.g. Diabetes, HIV, Hypertension
- Past obstetric history: e.g. Previous vaginal delivery, previous indications for cesarean delivery
o Current obstetric factors: e.g. fetal sex, estimated gestational age, birth weight
o Maternal and neonatal outcome: e.g. obstetric complications, perinatal death…

2. Minor Essential Revisions

- References 11 and above are missing
- Given the question the authors plan to answer, it is important to describe the hospital protocols used by the three hospitals for Trial of Labor (ToL)
- Please clarify whether you collected the ‘cervical dilatation during admission as 3cm and above OR 4 cm and above… there is reference to both and need to be consistent.
- The discussion around HIV and mother to child transmission doesn’t see to relate to any particular finding in this study. Either remove that part of the discussion or provide more information around the HIV prevalence amongst cases and controls.
- Spell out NRFHRP – Non Reassuring Fetal Heart Rate pattern

3. Discretionary Revisions

- Why it is necessary to study/assess VBAC in this context is described in the first paragraph of the background section. It will be helpful if the description can be elaborated a bit more by using existing data estimates. E.g. The contribution of not having VBAC in increasing maternal complications, and the economic burden as well
- Reference to the Brazil study (ref # 10) in the background doesn’t seem to directly relate to the topic of interest. The description in paper gives the impression that vaginal delivery is for those who can’t afford cesarean section and not necessarily those screened for VBAC by health criteria- Authors can either elaborate the importance of the study and its relationship with what they want to communicate or remove it.
- Is the IRB described sufficient?
- In the data collection section please explain the type of client charts considered incomplete and removed vs those incomplete but acceptable and included.
- Is it possible to perform the analysis and comparison of ‘first time VBAC successes and failures’? i.e. those ToLs immediately after a previous C/S?
- Unknown indications for cesarean section is a bit concerning as it indicates a poor quality documentation or service provision. Are you willing to put this as part of the studies recommendations? The importance of improved documentation.
- The authors make references to augmentation in few places without providing any accompanying data or rationale. For the reader it gives an impression that the authors seem to believe augmentation is justifiable in ToL with poor labor progression. Do you want to clarify this at some point?
Level of interest: An article of importance in its field

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

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