Reviewer’s report

Title: Determinants of skilled birth attendance for delivery in Northwest Ethiopia - A community based nested case control study.

Version: 1 Date: 30 October 2012

Reviewer: Fekadu Mazengia M Alemu

Reviewer’s report:

Major Compulsory Revisions:

Major determinate factors are missing

Eg. - Access to health facility by distance (major determinant factor from the study in Tanzania)
- Economic status (major risk factor from study in Ethiopia)
- Parity (Tanzania & Ethiopia studies)
- Knowledge of risk factors (danger signs in preg)
- Availability of Attitude to health professionals (many studies)
- Husbands approval & involvement (many Studies)
- What are the factor for non Utilization of skilled care e.g. Cultural influence.. lack of knowledge etc... should at least be descriptively stated (which are the main variables to be targeted by Policy makers
- Etc

Minor Essential Revisions

1. Abstract:

Well written but few areas need to be reinforced. Eg:

Introduction: It should be clear that the MMR for Ethiopia which is 676 and the skilled attendant rate which is 10% is according to EDHS 2011

Methods: It should be clearly stated that the nested case control study is conducted as part of a prospective cohort study to determine....... Because the scientific community wants to the objective of the original study. If the objective of the original study is entirely different from the current case control study the idea of publishing this article will be questionable (Hence if the purposes are different the quality of data may be questionable...

Results: Some statements need to be qualified: Eg What was the response rate? As response rate is related to validity (was it less than 80%)

The authors directly go to mentioning results of Logistic regression. Readers want see some descriptive statistics for example from the cohort data what was
the skilled birth attendance rate?

Conclusion & Recommendation: The main recommendation give by authors is Encouraging women to complete at least secondary school. This is a far reaching objective for Ethiopia. We are left with less than 3 years to 2015 (MDG). Achieving at least secondary education for requires more than nine years. The authors need to prioritize their recommendation concentrate on other feasible and timely recommendations from their result.

2. Background:
Well written but should be reinforced with information about maternal health services in Ethiopia. How is the Health System in Ethiopia like? According to the policy, who is allowed to conduct deliveries? Who is skilled attendant? At what level of health facilities can women get delivery care services? What is the targeted skilled attendant rate according Ethiopian RH strategy target? What is MDG evaluation report about skilled attendant in Ethiopia?

3. Study Design and period:
The information on the study area is good
But add health indicators from the study area? eg accessibility to the health facilities, prevalence of FP etc.

How many midwives are there in Dabat District? How is Access to health service? Etc...

Methods Paragraph 3
States the study population consisted of sampled cases and controls of reproductive age women... If so what was the sampling technique and sample size? The sampling techniques with the assumption should be stated
In the same paragraph line 4. Its states cases and controls were identified with the help of local guide people

If it is case control nested on cohort study the cases and controls are already identified (Including the House number according to my assumption) before the interview. What was the purpose of local Guides? Did local guides know about skilled care attendance so that they will guide the data collector>... it’s confusing for the reader.

Methods Paragraph 3
It was not clear weather a new data collection has been conducted or analysis is made from a new data. If there is new data collection and as stated in paragraph 3 if new sampling method was employed there is no point to say nested it will be rather a new study. The authors has to be clear on this issue. What makes it nested....

Minor editorial comments on the same paragraph
Line 8: it states Odds ratio and 95% CI was used to assess the strength of association it seems two tests are used OR & CI because of the conjunction and its better to say OR at 95% CI

Line 9: better to say P value result of less than 0.05 was used to declare statistical significant association

5. Data processing and Analysis:
In data analysis you used both binary and multiple Logistic regression. This should be mentioned in this section
What variables did you consider to be confounding which you therefore controlled for? Show also in the bottom of each table ( table 2& 3 the variables controlled during analysis)
What type of regression ( back ward or forward was )?

Results

Paragraph One
Socio demographic characteristics its better to describe cases and controls differently once we divide cases and controls there should not be a mix up. For example the reader may wish to know how much of the cases and how much of the controls are illiterate.

Paragraph 5:

It states Women Having 4 ANC visits were 2.8 times more likely to use ANC than No ANC users it doesn’t Give meaning and its not fair to compare those who utilize 4 times ANC with Non utilizers. The authors may compare No with at least one...in addition From paragraph 2 it seems clear that 71% of cases were ANC attendants while only 18 % of the controls had ANC. Does The authors do any matching . is it fair to do association while there is a clear discrepancy even at the descriptive stage

Discussion: Too much repetition of results in the discussion & too much details on education as its known by scientific community that its main determinant factor

Reference
Authors need to strictly follow Vancouver style ( author, Title,.....
For example Ref 1. Who is the author , The same for no 15

Table 1 : Skilled birth attendance
Its not clear (It should be skilled birth attendance utilization then Case controls)
Discretionary Revisions
1. The manuscript title is too long and this is because of the same words skilled birth attendant utilization for delivery. As it's clear that skilled birth attendant is for delivery many words used for the study area.

Table 3 Long Title for the table: no need to say OR and 95% CI
Repeated use of unfamiliar acronyms eg. Dabat DSS (people will not remember DSS is for demographic and social survey CI etc

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'