Author's response to reviews

Title: Factors Associated with Utilization of Long Acting and Permanent Contraceptive Methods among Married Women of Reproductive Age in Mekelle Town, Tigray Region North Ethiopia.

Authors:

Mussie Alemayhu (mossalex75@gmail.com)
Tefera Belachew (tefera_belachew@yahoo.com)
Tizta Tilahun Degfie (tiztatilahun@yahoo.com)

Version: 4 Date: 15 November 2011

Author's response to reviews: see over
Response to the Reviewer:

Reviewer's report
Reviewer: Sia Msuya

Comments:
Abstract:
The main conclusion that was reached i.e. that more than half of the participants had negative attitudes towards LAPMs, yet this was not supported by the statistical analysis.

Response: we have made correction and put figures in bracket.

Major Compulsory Revisions
Background:
The introduction needs to be brief and focused.

Response: Now we have corrected and made rigorous work to be brief and focused. Thank you.

Methods:
1. Sampling sub-section is not clear. There is lack of flow and poor use of language so the author is lost on multistage sampling was done. The authors should start the sampling section by describing the administrative structure of districts in Ethiopia, then it will be easy to understand when they are referring to ‘Kifle Kitema’, ‘Ketena’ or ‘Quiha’. The letters K1, k2 etc what do they mean? These terms just spring out and the reader is lost.

Response: After comment given we have tried to put number of households on different levels to make it clear. We rewrite like;

A multi stage sampling technique was used to select the study participant by considering a design effect of two. The town is divided into seven districts or kifle ketema (largest administrative part of the Town). These districts have 72 sub-districts or ketena and 54,073 households. Of the seven districts, four (Quiha, Ayder, Hadnet and Hawelti) were selected on random. Using simple random sampling, 17 sub-districts (smallest administrative part of the Town) were selected from the 34 sub districts. These sampled sub-districts consist of 2,162 households with married women. These households were shared on proportion to size allocation to the sampled sub-districts.

3. The authors need to explain FGD in details. How did they sample the participants? How did they gain entrance into the community to select them? Where were the FGDs conducted? Which topics were addressed in the FGD?

Response: we have included detail explanation about FGD, on page 6 paragraph 3.

4. The tool for quantitative data collection is not well described. Which variables were collected?

Response: We corrected accordingly and it is on page 6 paragraph 4.
5. How do the authors differentiate beliefs and attitude? Looking at Table number 5 and 6 the questions are the similar and they do not address attitude or beliefs.

Response: We incorporated all the comment and tried to merge it the attitude and belief in one table under attitude categories.

6. Table number 5: Implant is one of hormonal contraceptive and one of the side effects just like COC is irregular bleeding. That is fact and side effect which is known. How can it then be a belief???? Similarly question number 2 address pain and sometimes inexperienced provider may influence this, so how can this be a belief? I think beliefs addresses broader issues than raised here and the tool used doesn’t collect the information is intended to collect. There are tools which address beliefs on contraceptives, authors should try to read these.

Response: We accepted the comment and prefer to stick on attitude rather than belief. So we merged the two tables together. Regards to provider side influence we have mentioned in limitation part.

7. Likewise the tool to assess attitudes seemed insufficiency. The authors also say they used a mean value to classify attitudes. Wasn’t there a priori cut off point based on literature? Mean can be pulled by extreme values.

Response: We used mean because it is popular measure in different fields. Actually it has drawbacks which can be easily affected by outliers but we checked our data that is not skewed to one side.

Results
1. Like in the methods section there is a problem of flow and language.
Response: we tried to properly edit the flow and language.

2. There is a mismatch in what is presented in the Table For example the authors said the mean monthly income is 69 in the text and it is 1103 in Table 1.
Response: Thank you we have accepted it.

3. Lots of repetition of what is presented in the text and tables.
Response: Yes we have incorporated this important comment and modified tables and changed to texts as suitable to decrease redundancies.

4. Presentation of the knowledge regarding IUCD and implant can be shortened in the text because the authors are repeating everything that is written in the table.
Response: Yes we appreciate your genuine comments and tried to do it shorten.

5. Why did the authors calculate the mean score in knowledge? That is not the way it was elaborated in the methods section. Which method did they use to classify the women using mean score or percentages?
Response: We used and it is shown up on page 7 paragraph 3.

6. The results in Table number 5 and 6 are addressing knowledge rather than beliefs or attitudes towards long acting contraceptives. Actually what came out in FGD e.g. in page 11, the last paragraph, the participant came up with the attitude that ‘he is discouraging use of permanent methods and in his opinion nobody should use it, because men will tend to divorce their wives if they cannot have more children’ In page 11 there is a repetition about attitudes on long acting contraceptive methods and beliefs on LAPM is not addressed.

Response: We incorporated all the comment

7. The main aim of this study was to assess factors that influence the use of LAPMs among married women in Mekelle town. However there is no table which is showing in the bivariate analysis of important factors associated with LAPMs which the authors flagged e.g. comparing a group of women with positive vs. negative attitudes towards long acting methods.

Response: Thanks it was great to inform us what we lack, but we have done multivariate but attitude was not showing any association that is why we did not put it in the table.

8. There are too many Tables and most of the information has been repeated in the text. Some of the data presented in the tables can be presented in the text e.g. Table 3, Table 7

Response: We incorporate comments well. Table 3 and 7 was presented only by text and figures also removed and try to expresses only by text.

Discussion
1. The authors mixed results in the discussion part e.g. paragraph number two in the discussion section

Response: we revised it and particularly removed result from focus group discussion. We also tried to adjust results to review with the other studies.

2. Long and not focused

Response: We have accepted the comment and done to correct it.

3. The authors just mention the percentages and fail to bring scientific arguments in the discussion.

Response: we have stated explanation and arguments as per comments given.

4. No discussion about the implication of the findings to the policy makers

Response: Interesting and important comment. We put implication side with results in discussion section.
Conclusion
Does not match with the results and there are unclear sentences e.g. 1st sentence in the conclusion

Response: We have stated the following sentence for clarification like;
A huge number of married women had high knowledge on contraceptive (implants and IUCD) however low knowledge on permanent contraceptive methods specifically vasectomy is low.

Recommendations
Do not reflect the results and the discussion
Response: Now we have revised and concentrated according to the result and discussion.

Limitations
Need to elaborate in detail the study limitations
Response: Now we put it in detail.

Minor Revisions
Background:
1. Use recent estimates and references when giving figures for maternal and neonatal deaths
Response: Now we have tried to use recent figures on the first paragraph of introduction.

2. Is family planning use in Mekelle town (37%) higher than the national prevalence? Is that figure correct because the prevalence of use of long acting methods is similar i.e. less than 1%
Response: Yes it has been 37% the overall prevalence including short and long acting contraceptive of Mekelle town where the data found from health office of the region. It could be higher because the area is typically urban. In the country contraceptive prevalence is higher in urban areas with a large difference from rural parts. Yes it was less than 1% according to report from Ethiopian Demographic Health survey 2005 and 2007 health and health related indicators.

Methods:
1. Translation and back translation is not measurement
Response: We have corrected it.

2. The authors measured knowledge by using 10 questions which I presume are shown in Table number 4. In Table number 3 they are also referring to knowledge of long acting and permanent methods. Why separate the two?
Response: We have accepted it and merged the two merge table 3 and 4.

Looking at question number 3 in the knowledge category, that is a subjective and not objective question.
Response: Yes the question seems like subjective too but it is objective as well because it shows some information about IUCD.
Results
1. The authors need to start the paragraph by explaining how many participants were approached and how many participated in the study.
Response: We have rephrased the sentence as follows;
The total sample of the study was 460 married women in the age group 15-49 years. With the total response rate of 95.6% (440) the married women had the mean age of 29.42 (SD = 6.94) years.

2. Please explain what does ± mean?
Response: We used ± in place of Standard deviation (SD) but now we substituted SD.

3. Please put a subsection on prevalence of women using long acting contraceptive methods just after the demographic characteristics
Response: We have accepted the comment and incorporated it.

4. In general awareness calculate the percentage out of the total number of participants e.g. 227/440
Response: Yes we have used over all awareness from all that is 63.9% means 281/440. But for other type of contraception and purpose questions we have calculated 281 as denominator because if they have no any information heard before we could not ask them further questions.

5. Table 3 it is misleading to say knowledge about purpose of LAPM. That is overall advantage of all methods of contraceptives. There is mixing on general awareness of different methods of long acting and permanent methods and knowledge. When participants can mention the method is it knowledge or awareness?
Response: Yes we agree with the idea but it is common characteristics and can be taken as awareness as long acting and permanent methods too.

6. The authors could also address knowledge components in one Table.
Response: We have incorporated the comment.

7. Overall the authors have failed to use qualitative methods to complement the quantitative aspect.
Response: Now we have tried to triangulate findings from both data.

8. Information in Table number 7 should have come earlier because it is giving the reader the proportion of women who are using long acting contraceptive methods and types which they are using. The authors could put this information right after describing briefly the socio-demographic characteristic of their participants.
Response: We have modified it according to comment.

9. When the authors are referring to IUCD they should specify which type of IUCD they are talking about Copper T or Mirena?
Response: In addition the study aim is to assess IUCD in general and we put at limitation part not including specific type of IUCD and implant.
10. Figures should be removed and incorporated in the text  
**Response:** We have put in the text.

**References**  
1. Typo mistakes e.g. in reference number 17?  
**Response:** We have edited for spelling errors.

2. Why some references underlined and others are not?  
**Response:** We accepted it and revised for correction

**Tables**  
There are typo mistakes in nearly all the tables  
1. Table 1:  
2.1. Compress the age range.  
**Response:** Yes we have shortened the age range.  
2.2. Put SD after the mean income  
**Response:** Now we put Standard deviation  
2.3. Put an explanation of ETB equivalent in US dollars  
**Response:** Now we have put in US dollar and its equivalent to Ethiopia Birr.

2. Table 2:  
2.1. The title of this Table is not clear  
**Response:** We accept the comment and revised it.  
2.2. There are some variables where the totals do not add to 440, yet there is no explanation given for the missing values.  
**Response:** Thanks we have checked for consistency and for some we have given reasons.  
2.3. What do the authors mean by the following sentences; number of abortion face? responsible for making the number of children? Or face child death? It is not clear what the authors are trying to convey.  
**Response:** Here are some explanations  
Number of abortion faced: Number of abortion faced by women in her life span.  
Responsible for making the number of children: decision maker on number of children  
Face child death: number of child death faced by women. It is also corrected accordingly we remove the word face  
We put these to look on how long and permanent contraception use has a link with the above variables.  
2.4. What does ± means? Explanation in the brackets after mean?  
**Response:** We used ± in place of Standard deviation (SD) but now we substituted SD.
3. Table 3:
3.1. It would be better to calculate proportion of women who could mention different types of long acting/ or permanent methods out of the total participants.
**Response:** We calculate proportion from women who ever heard of about LAPMs total women heard were 28, because, if they do not have an awareness it will be difficult to ask them about types of contraception.

3.2. Knowledge on purpose of LAPM is not quite true because that question is addressing advantages of modern contraceptive methods in general.
**Response:** We accept it and we removed from the table.

4. Table 5 and 6: What is the difference between belief and attitude? It is not clear Titles are not clear for both tables
**Response:** We incorporated the comment and tried to merge it.

5. Table number 7: Change into text
**Response:** We have corrected it

6. Table number 8:
6.1. What is COR or AOR? Please explain what they mean.
**Response:**
COR is crude odds ratio, which is computed using bivariate analysis/association only one independent and dependent variable/.

AOR is adjusted odds ratio which is computed from multivariate analysis /All independent variables and dependent variable/.
We now put only adjusted odds ratio because it can more explain association with the dependent variable.
6.2. *What does this symbol mean?*
**Response:** * This is used to explain for variables which are significant at p-value <0.05. However, now we observed the interval can imply association so we have removed it from the table.

6.3. Age at delivery?? Categories???
**Response:** we have corrected it.

**General comments:**
1. The authors need to have the manuscript edited by a native English speaker.
**Response:** now we have tried to edit spelling and grammar errors.

2. In general the paper is difficult to read and follow.
**Response:** we have corrected accordingly.

3. The conclusion and recommendations given are not supported by the results
**Response:** now we have included recommendations base on findings of the study.