Reviewer’s report

Title: Unintended Pregnancy and Future Use of Modern Contraceptive among Slum and Non-Slum women in Nairobi, Kenya

Version: 2 Date: 26 March 2014

Reviewer: Dereje Habte

Reviewer’s report:

General comment
1. Is the question posed by the authors well defined?
The question is well defined. One of the aims of the paper is to investigate the mechanisms through which experiencing unintended pregnancy hinders or leads to uptake of contraception. The study finding suggested that the likelihood of contraceptive use is higher among women with unintended pregnancy. I suggest removing “hinder” unless the authors justify its relevance.

2. Are the methods appropriate and well described?
Both the quantitative and qualitative methods are well described. The assumptions utilized to reach to the sample size for the quantitative component needs to be described. It was mentioned that random sampling method was used. It is worth describing the sampling frame, the method of random sampling used and the reason for allocating equal number to slum and non-slum groups.

Similarly, the qualitative component addressed 80 respondents and it appeared too much in the face of saturation of qualitative data with fewer interviews. The reason for larger sample size for the qualitative component needs to be described.

3. Are the data sound?
The data are sound and the use of mixed method augmented the soundness of the data.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
The discussion and conclusion are supported by the data but relevant informations that need emphasis like access to health information and service as well as stigma were overlooked (results in the qualitative component). The later are equally important to come up with evidence based recommendations.

6. Are limitations of the work clearly stated?
Yes. The fact that the study was done in a DSS site might be considered as a limitation. Residents in DSS site might have better exposure to health information
or service and hence might not represent the general population.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Yes

8. Do the title and abstract accurately convey what has been found?
Yes.

9. Is the writing acceptable?
The writing is acceptable except that it needs more editing grammatically and punctuation marks especially in the reference section.

Reviewer's report in the different sections

Title:
I suggest the word “future” in the title be changed to “subsequent” to avoid misunderstanding.

Abstract:
Background and method section can be reduced to give more space for the result section. More emphasis was given to those sections and the result is so brief that important informations were not included.

In the result section, the interaction model result for poor households was cited. It is good to also mention the finding among better off households to complete the picture.

Please let the final abstract include the relevant changes you will be making based on the reviewers’ comment.

Background:
Paragraph 1: “..women in developing countries have 75 million unintended pregnancies..” Please mention the time duration: annual…….

Paragraph 3: Re-phrase the second sentence to:
These studies have generally related disparities in unintended conception in relation to contraceptive behavior,.....

Last paragraph: Consider removing hinders from the second objective unless you have justification (See the general comment above).

Context:
Reference 14 and 15: their order needs to change. The earlier DHS report needs to come first: Reference 14.

Methods

Data:
Be consistent in using “Harambee and Jericho”. There is a place where you mentioned “Jericho and Harambee”
Assumptions for the sample size of the quantitative and qualitative methods need to be described. There is no information regarding the data collectors for both components. Please elaborate on the questionnaire, data collectors and data collection process.

Variables:

The dependent variable is women’s current use of a modern contraceptive method. Male condom use is among the list of contraceptives. I am suggesting if you could change “women’s current use” with “couples'/partners’ current use”.

It is mentioned that the variable fertility preference (key predictor) was not available in the data. Does it mean that the data was collected for another study and you used secondary data? Please describe it clearly if it is so. In addition, the background elaborated well that not only fertility preference but also knowledge about family planning, access to health information, discussion between couples on fertility issues, health service accessibility, cultural domains, etc are also key predictors. They also deserve to be mentioned if the idea is to let us know the missing critical variables.

Data analysis:

The section needs to be put in past tense rather than present tense. EG: The analysis “were carried out” in stead of “are carried out”, etc.

Poverty status is not a standard way of presenting socio-economic status. It is better to use the later as long as the interest is not only poverty status but the whole spectrum of socio-economic status.

If you have used any software for data management and analysis for the quantitative and qualitative methods, it has to be mentioned.

I suggest having a separate ethics sub-section at the end of methods section. You already included it in the data sub-section in relation to ethical approval and informed consent. In the ethics section, it is advised to mention about the arrangement made to provide information as well as service in case you encountered women in need of information or service.

Result:

There are certain places where the authors tried to discuss the result. It is wiser to move the discussion points to the discussion section. 

EG. Sample characteristics: the education level of the study finding was compared with the Kenya DHS report. In the next subsection dealing with patterns of unintended pregnancy, the authors were relating unintended pregnancy with unmet need for spacing/limitting and it needs to be done in the discussion section.

The narration for Table 2 has almost described all the result in Table 2. It is better to highlight the most important findings rather than re-writing the whole thing in the table.

In the multi-variate analysis, the authors were computing the Odds Ratio in the narration (1/0.39; 1/0.37; 1/0.40….). I suggest to re-do the multi-variate analysis
after changing the reference categories for those variables that demanded re-calculations.

There was a fear that parity and age might have had multi-collinearity. In such cases, one of the variables has to be dropped from the multi-variate analysis as it might affect the ultimate model due to multi-collinearity. You can also consult a statistician in that regard.

Table 3: The dependent variable is current contraceptive use and the title should not include “unintended pregnancy”. A main effect in Table 3 is referring to current contraceptive use and it is good to specify it.

Qualitative result:
It appears good if Table 1B comes here as it describes the background characteristics of qualitative respondents.

Mentioning respondents’ name in the manuscript does not add any more value and it appears wiser to remove names.

I appreciated that the marital status and age of respondents quoted in the report was mentioned. There are certain quotes where only the age of the respondent was cited. It is good to have a uniform approach of citing age and marital status for the quotations throughout the manuscript.

In the first paragraph, respondents were mentioning “not knowing who to talk to or where to seek help”. Knowledge, access to health information as well as service appeared critical gaps. It needs to be well discussed in the discussion section as well.

Discussion:
The limitations are well described.
The discussion started with the findings from multi-variate analysis, followed by qualitative and descriptive components. There needs to be a logical flow of discussion points.

I suggest that the final paragraph in the discussion section describing unintended pregnancy rate (descriptive data) precede the multivariate analysis findings.

The following discussion seemed incomplete: “For other women however, the unintended pregnancy may be a consequence of strong opposition to family planning, whether due to health concerns or other reasons, in which case experience of an unintended pregnancy might be associated with reduced subsequent use of contraception compared to women who experienced a wanted pregnancy.” You did not include the finding from your qualitative study that there were some women who discontinued contraceptives due to side effects, etc. Stigma, lack of knowledge as well as poor access to information/service are also critical for someone to seek family planning service irrespective of previous unintended pregnancies. Try to give a comprehensive picture as they were also mentioned in the qualitative study findings.

Conclusion:
The “predictable consequences” in the first sentence is worth revising. If it is adverse consequence, it is good to say so clearly.

Stigma and access to information/ service deserve mentioning in the conclusion.

Reference:
It needs editing for punctuation and few errors. There has to be uniformity all over the reference section.
Reference 15 should move to 14 and the vice versa.

**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' below.