Author's response to reviews

Title: Are women with complications of an incomplete abortion more likely to be HIV infected than women without complications?

Authors:

Carolyn Othieno (cothieno@uw.edu)
Joseph B Babigumira (babijo@u.washington.edu)
Barbra Richardson (barbrar@uw.edu)

Version: 3 Date: 31 May 2015

Author's response to reviews: see over
Dear Editor,

We would like to thank you for your review of our manuscript entitled “Do women with complications of an incomplete abortion have different HIV infection status than women without complications?” We would also like to thank you and the reviewers for the highly insightful and thoughtful comments which we believe will greatly improve the quality of our manuscript.

Please find below our point-by-point responses to each of the comments. The comments are in regular font and the responses appear in italics. Revisions in the manuscript text appear as track changes.

We hope that the revisions in the manuscript will improve the manuscript substantially and look forward to your continued review.

Yours sincerely,

Carolyn Othieno, MPH
Address: P. O. Box 111679, Tacoma WA 98409
Ph: 253-320-3690
E-mail: cothieno@uw.edu
Reviewer #1 (Moses Bateganya)

1. Title: Could simply be stated as “Are women with complications of an incomplete abortion at a higher risk of HIV infection than women without complications?” or “Are women with complications of an incomplete abortion more likely to be HIV infected than women without complications?”

Response: We thank the reviewer for this suggestion. We revised the title of our study to read “Are women with complication of an incomplete abortion more likely to be HIV infected than women without complications”.

Abstract
2. Page 2/28- Seems to be a big statement. I am not sure it is supported by existing evidence or justified from the literature review.

Response: We thank the reviewer for this comment. In addition to generally strengthening the background, we revised this statement to read “There is limited published evidence about the status of HIV among women who have had abortions or suffered from abortion complications.

3. Page 2/44; the results sections should present some data on how many women were in each group. How many were in the different status (Positive, negative and status unknown). The abstract should be able to stand on its own and present relevant data.

Response: We thank the reviewer for this suggestion. We have added information to the results section of the abstract to include how many women were in each group. How many were in the different status (Positive, negative and status unknown) as follows:

“Of 139 women enrolled in this study. Seventy (50.4%) women had abortion complications and 69 (49.6%) did not. Of the total study population, 18 (12.9%) were HIV positive, 50 (36.0 %) were HIV negative, and the HIV status of 71 women (51.1%) was unknown.”

4. Page 3/59- In some ways the conclusion is written like the results section. Please use similar language to that used in the main paper. Avoiding words such as “three folds higher odds

Response: We thank the reviewer for this suggestion. We have revised the conclusion section of the abstract to exclude the sentences describing study results.

Background
4. Page 5/104-114. Consider adding some information on access to testing for women seeking health care especially as many resource limited settings are implementing provider initiated testing and counselling. Please mention whether this is a gap in Uganda or not
Response: We agree with the reviewer’s suggestion and we have added to the background information on access to testing for women seeking healthcare. We also mention existing gaps in access to testing in Uganda.

5. Page 6/125: Referring to the study design as “Cross sectional case control analysis of ...” is confusing. Consider re-stating/rewording as. “We analyzed secondary data from a study assessing the economic impact of ...... [15]. we compared x to y.

Response: We thank the reviewer for this suggestion. We agree and have revised that narrative in the study design Page 6/125 to reflect your suggestion.

Responses to the comments of Reviewer #2 (Eliud Wekesa)

1. The authors have not presented any literature that directly links HIV status with (unsafe) abortion to justify their hypothesis. This manuscript will benefit immensely from this body of work that is beginning to emerge. The authors should read the following article as a starting point: Akinrinola Bankole, Sarah Keogh, Odunayo Akinyemii, Kumbutoso Dzekedzeke, Olutosin Awolude and Isaac Adewole (2014) “Differences in Unintended Pregnancy, contraceptive Use and Abortion by HIV Status Among Women In Nigeria and Zambia” International perspectives on sexual and reproductive health, Volume 40, Number 1.

Response: We thank the reviewer for this comment and for pointing out this recently published study. We read the article and found it to be insightful and useful. We used insights from the article to improve our manuscript in general and the background in particular.

2. The main explanatory variable is HIV status and so the reader would expect some substantial discussion on HIV prevalence levels, HIV testing rates and HIV status knowledge levels in Uganda. These should be included in the background/introduction section of the manuscript.

Response: We thank the reviewer for this comment. We agree and have included a section on HIV in the background, in which we discuss HIV prevalence, testing, status knowledge levels in Uganda.

3. I found the discussion regarding the unexpected findings to be quite underdeveloped. I would have liked to have seen more on this. The authors need to discuss the counter-intuitive finding of lack association between HIV-positive status and unsafe abortion. This is very important and warrants more attention. They should provide a plausible explanation/ hypothesis. In the absence of a plausible explanation, the reader will intuitively ascribe your finding to the sampling error, which essentially kills your paper.

Response: We thank the reviewer for this comment. We agree and have acknowledged the unexpected finding in the discussion.
**Response:** We agree that the result indicating lack of an association between HIV positive status and unsafe abortion was surprising. We however do not agree that a lack of a plausible explanation would make the reader ascribe the finding to sampling error or that this makes the study and the results less of a contribution. We revised our discussion to include our thoughts on why we found this result but we find no evidence to support our explanation. We believe that given our results, this question requires further study to assess differences in risky behavior in women who demand abortions and women who do not.

4. The major weakness is the sample size; you only have 18 HIV positive cases and you need to convince the reader that your important finding is not a function of the sampling error/sample selection bias. *Your discussion of why people are hesitant to test is tangential to the crucial point.*

**Response:** We thank the reviewer for this comment and we tried to incorporate this concern in our revised discussion. We agree with the reviewer that the sample size is a limitation of this study and we point this out in the limitations section of our discussion. We cannot rule out sampling error or selection bias and we clearly state that our results should be interpenetrated with caution and that our findings are hypothesis-generation and indicate the need for further study of this problem. We feel that hesitancy to test is important in this population hence our discussion of this point.

**Abstract**

5. The objective of the study should be a separate component of the abstract and clearly stated.

**Response:** We have included the objective of this study as a separate component of the abstract.

6. The primary outcome variable and explanatory variable should be incorporated and clearly stated in the methods section of the abstract.

**Response:** We have incorporated information on the primary outcome variable and explanatory variables in the methods section of the abstract.

7. The sample size should be clearly stated in the methods section of the Abstract.

**Response:** We have clearly stated the sample size in the methods section of the Abstract.

8. The hypotheses that you are testing should be clearly stated in the methods section of the Abstract.

**Response:** We have stated the hypothesis we are testing in the methods section of the Abstract.

9. Conclusion: Your conclusion section contains some recommendations; Could you rework on the conclusions and recommendation?

**Response:** We have reworked the conclusion.
Background
10. The first paragraph needs a citation. Which WHO report are you relying on?

Response: We have included a citation for the first paragraph.

11. Unsafe abortion: Line 74; please correct the citation for 4 and 5.

Response: We have corrected the citation for unsafe abortion, line 74. We have deleted citation 4 and maintained citation 5.

12. Please have one referencing style in the whole document. Some are numbered while others author –date.

Response: We have edited the manuscript to reflect one referencing style.

13. Line 92: please correct the references for 7 and 12.

Response: We have corrected references for Line 92 to “Singh, S. Hospital admissions resulting from unsafe abortion: estimates from 13 developing countries”

Methods
14. The sampling method is not entirely clear to me. The methods section is silent on the sampling/sample selection procedure of the initial study (your data source). The reader needs to know your sampling procedure i.e probabilistic/non-probablistic and how you ended up with a small number of HIV positive cases. Are standard means of statistical inference appropriate for this kind of sample design?

Response: We thank the reviewer for your comments. We added a note on sampling in the initial study as follows: “The initial study used a continuous sampling strategy and included all women who met the inclusion criteria until the sample size was reached.” The initial study was performed for an applied economic evaluation and was powered for this purpose. We feel that standard statistical inference is appropriate. We clearly point out the sample size limitation in our discussion.

15. Tables & figures: There are no titles for tables and figures in the appendix. It would be helpful to state titles and accompanying notes.

Response: We have included titles and accompanying notes on our tables and figures.

Limitations
16. One major limitation is that this is not a probabilistic sample, which suffers from selection bias and limits its generalizability. This must be acknowledged as a limitation.
Response: We have included your comments as a major limitation of our study.

Title
17. There is a grammatical error in the title. Replace “than” with “from/with”?

Response: We have revised the study title per the suggestion of reviewer 1. Our title now reads, “Are women with complications of an incomplete abortion more likely to be HIV infected than women without complications?” With this revised title, we feel that using “than” is more grammatically correct.

Editorial Requirement

Consent: Please state in the Methods section whether "written informed" consent for participation in the study was obtained from participants or, where participants are children, a parent or guardian.

Response: We thank you for your comment. The Institutional Review Board (IRB) of University of Washington waived the need for IRB approval for this study. The Institutional Review Board determined that informed consent was not required. Since this study was a secondary data research, information for our analysis could not be linked back to individual subjects. Participants from the original study could not be individually identified or recognized.