Reviewer’s report

Title: The Estimated Incidence of Induced Abortion in Kenya: a cross-sectional study

Version: 1 Date: 7 May 2015

Reviewer: tamara fetters

Reviewer’s report:

6 May, 2015
Dear Authors of The Estimated Incidence of Induced Abortion in Kenya: a cross-sectional study,

Thank you for taking my comments and suggestions so seriously. I find this revised version of your paper to be much clearer than the last version. I have a few comments and suggestions, none of which are too laborious, that I think will make your messages just a bit clearer. I will refer to them by line number.

Key words (line 63): The PMS does not really use indirect estimation. That could either be prospective morbidity survey or abortion morbidity.

Line 87: Please clarify that the MMR you are referring to is specific to the Nairobi slums.

Line 89: Please clarify that the 2002 study was conducted before the Constitutional reform.

Lines 93-104: Maybe it would be good to add that the revised Constitution was purposefully vague and difficult to interpret regarding abortion rights because it was created to try and appease many different, and often oppositional interests, that were vocal during the review process. The result is a compromise that is difficult for providers to trust and even more difficult for individuals to understand and interpret. You could cite several things but one reference might be Dr. Joachim Osur’s book, The Great Controversy: A Story of Abortion, the Church and Constitution-Making in Kenya.

Line 108: It would be good to stay here that that study used the PMS and AICM methods as well and also that it did not (or did it?) include private sector facilities.

Data and methods: I think it would be clearer to start the data and methods section with the section on “Sampling of health facilities”. It makes more sense to me to start with the facilities, the larger and first piece of your multi-stage sampling, and then describe the more detailed surveys.

Line 144-5: I felt that this last sentence does not really do justice to the breadth of the HFS, could you try to make this a bit broader and better describe the content?

Line 147-9: Can you please state the specific inclusion criteria for women (eg., gestational age, presenting conditions, etc).
Line 151: Type on “volumes”.
Line 153: Please add “morbid symptoms” to your list.
Line 176-81: I don’t think you need to describe this standard process. IF you did not do any of these things, then that should be described.
Line 204: Add the words “from levels 2-6” after health facilities.
Lines 204-208: Isn’t this aggregation exactly like what the DHS does? If so, you might state that and there is no need to be apologetic for that.
Line 216: End the paragraph with, “..of all facilities in that level and geopolitical region.”
Lines 228-30: I definitely want to know which variables were imputed, how many cases were imputed and more about your imputation techniques in this analysis section.
Line 246: “..best estimate of monthly postabortion cases provided in each facility using both retrospective (HFS) and prospective (PDS) data.”
Line 266: IT is not only about access, women may choose not to seek care out of fear, cultural beliefs or many other reasons, as we know from the quest to improve skilled birth attendance.
Line 268-9: This sentence is rather awkward. Could you try to rewrite it to make it a bit clearer?
Line 273: You mention “two other groups”, could you follow this statement with their exact percentages?
Line 276: I think you mean – “The calculated estimate for the percentage of women accessing care..”
Line 307: “..country is considered more comparable in..”
Line 337: Is the incidence of induced abortion morbidity you are referring to treated morbidity or all morbidity? I think it might be treated morbidity. Can you clarify?
Line 371-4: I think you stated these limitations before, what I really wanted to know though was a summary of the earlier results to that I could use this paragraph to compare. I also think this paragraph should mention that these results show that legal reforms regarding safer legal abortion services have yet to be well-established throughout the country.
Line 384: Despite increased legal abortion provision in some areas, the provisions in the Constitution...
Line 387-9: This was really a qualitative study and our findings are not really generalizable, however it is safe to say that women in these FGDs were confused about the legality and most were convinced that abortion was illegal in all circumstances.
Line 446: “..second trimester which could vary by access, ethnicity or geography.”
Line 449-51: I am not sure you need to mention this limitation. You have
corrected this bias somewhat by including the PDS data. Otherwise, this is a larger debate about the direction of the bias since HFS data are usually higher, not lower, than PDS figures.

Conclusion: I think somewhere in here you need to also recommend continuing to expand safe abortion services with clear information for women in order to replace unsafe clandestine abortion procedures with safe and legal procedures for women who need them.

Table 3: I can’t understand this table yet and a reader who only looks at the tables will definitely stumble here. In the title you refer to “unsafe abortions” but your row headings are for “all abortions” and “induced abortions”. Maybe you could make these headings more consistent or clarify with footnotes.

Table 4: It seems to me like the number of women treated should come after the multiplier estimates since the treated numbers are a subset of all abortions? It also seems like you should state which multiplier (the medium) the treated numbers are based on.

Figure 1: I don’t think you need this figure. You have done a very good job describing these calculations.

Thank you and good luck!

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare I have no competing interests.