Reviewer's report

Title: Factors impacting use of long acting and permanent contraceptive methods by postpartum HIV positive women in Cape Town, South Africa: a cross-sectional study

Version: 1 Date: 23 November 2011

Reviewer: Heidi Jones

Reviewer's report:

The authors present data on current use, knowledge and attitudes on contraception among postpartum HIV-positive women in Cape Town both prior to and after an intervention aimed to increase knowledge of the IUD and female sterilization. While the results are interesting and will be an important addition to the literature, I recommend the following revisions to the manuscript.

Major Compulsory Revision

1. The paper goes back and forth between presenting the study results as two independent cross-sectional surveys and as a pre/post evaluation of an intervention. Given that the study was clearly implemented to evaluate an intervention, and given that the intervention should have had an impact on the outcomes of interest, the authors should reframe the paper to either: 1. truly be about the success/failure of the intervention itself (with some broader discussion about what it says about HIV-positive women's knowledge and attitudes in general), or 2. present only the pre-intervention data as a descriptive cross-sectional study.

In either scenario, the paper would be strengthened by including the results from the HIV-negative women in the same study. If the authors choose to focus on the intervention itself, including HIV-negative women would give a more complete picture of the successes and failures of the intervention. If the authors choose to present this as a cross-sectional study using pre-intervention data, again, the manuscript would be strengthened by comparing the results to HIV-negative women pre-intervention. It is quite possible, that HIV-negative postpartum women had similar rates of unintended pregnancy, similar reasons for choosing the contraceptive method they chose, and similar knowledge and attitudes about the IUD and sterilization. It would provide a more interesting narrative with more practical implications for considering tailoring of interventions to note the similarities and differences between these two populations using the pre-intervention population.

Minor Essential Revisions

2. Whichever approach the authors choose to use, the discussion section needs to be fully derived from the study results. While many of the points in the current discussion section do follow the results, others do not. For example, beginning at
the end of page 13, "To encourage contraceptive use among all postpartum women, including PMTCT clients, innovative solutions are needed ... no obvious leader assuming responsibility for coordination." This entire section, while presenting interesting ideas, is not derived from the results from this study. This is especially true, as provider training in this intervention did not work. It is difficult, based on this result, to justify promoting an increased role of the provider in promoting contraceptive uptake.

3. One additional minor point, I find presenting the result that women rarely mentioned contraception as a method to prevent HIV transmission to a newborn, a bit strange. Clearly on the programmatic level, we can talk about contraception as a way to prevent MTCT, but this concept does not seem relevant at the individual level (depending on how the question was posed).

4. Finally, depending on the approach the authors decide to take, I would recommend aiming for at most 3 tables and 1 figure. Tables 1 & 2 could, for example, easily be combined into one table, as could tables 3 and 4.

5. The authors may also want to consider, depending on which approach they use, including multivariable analyses. For example, if they choose to use measures of success/failure of the intervention as outcomes, they could include HIV-status and other demographics or site specific/provider variables as predictors. If they choose, current contraceptive use, or unintended pregnancy at baseline (pre-intervention) as outcomes, they could look to see if HIV-status among other demographics is an important predictor using logistic regression models.

It is difficult to provide much additional feedback on the current manuscript, as, again, I think it needs to be re-framed to include HIV-negative women, and either present only pre-intervention data as a cross-sectional survey, or present the results as comprehensive evaluation of an intervention. I do think the study results are important and valuable, and that the manuscript is well-written. I encourage the authors to revise and resubmit.

**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 that I have no competing interests.