Reviewer's report

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

Version: 2 Date: 3 January 2012

Reviewer: Heidi Jones

Reviewer's report:

The authors have done a nice job with the revisions of the manuscript. The manuscript could be further strengthened by including more references to what others have found in terms of similarities/differences in FP knowledge and use by HIV-status in the introduction and discussion sections (with perhaps slightly less emphasis on contraception as PMTCT).

Minor Essential Revisions

1. The abstract needs to be reworded so that it is clear that the paper is a paper comparing HIV-positive to HIV-negative women (the way it is currently written, this is not clear). I would recommend making the following changes to the abstract:

   a. Change the last sentence of the background section of the abstract to read, "This study aimed to COMPARE factors that... female sterilization BY HIV-status, in a high HIV prevalence...".

   b. Include the sample size in the methods section of the abstract, "amongst 265 HIV-positive and 273 HIV-negative women...."

   c. Reword the methods section to be about comparisons, "Contraceptive use.... were compared by HIV-status using chi-squared tests.", etc.

   d. I would highlight in the conclusions and results - that very few differences were seen by HIV status (unintended preg/current use), but that LAPM knowledge and use was low (for everyone), and that improving information/services for these methods is warranted for all women, regardless of HIV status, with possibly more uptake of IUD among HIV+ (given more favorable to IUD - really one main difference seen).

2. The dates that the data were collected needs to be added to the methods section of the main paper.

Discretionary Revisions:

1. Should the title include 'knowledge' - e.g. 'Factors impacting knowledge and use of....'?
2. Should "IUD" and "female sterilization" be key words?

3. While the introduction section is strong, I wonder if it would be helpful to include one or two paragraphs about the extent to which there is evidence that the needs, knowledge and use of CP differs by HIV status in South Africa?

4. It would strengthen the methods section if there was some type of sample size calculation/justification for enrolling 250 women in each arm.

5. In the 'Data analysis" section, I wouldn't say 'associations were calculated..." This suggests calculations like ORs. I would rephrase this to say, "Descriptive results were compared by HIV status using chi-squared or Fisher's exact tests for categorical outcomes and Wilcoxon rank-sum tests for continuous outcomes". In general, given the small sample size, I would have used Fisher's exact tests for all comparisons of categorical measures.

6. I would reduce the paragraph on page 10 about small differences in common reasons given for hormonal method choice versus sterilization - as the reader can see this in the table, and it's not really clear what the recommendations are based on these findings in the discussion.

6. To me the most interesting results are:

   a. that unintended pregnancy was the same for both arms, and that current contraceptive use was the same for both arms (suggesting broad, more than targeted approaches)

   b. similar to point a, that knowledge of sterilization and IUD was equally bad - again suggesting broad changes to post-partum FP services for all women

   c. that sterilization was equally discussed by HIV-status (given previous human rights concerns that providers may point HIV-positive women more toward sterilization) - to me this is a very exciting finding that warrants more discussion.

   d. that HIV positive women were more likely to report IUD use being favorable, suggesting that uptake in this group could be quite high were it to be routinely offered.

I would highlight these findings more in the abstract as well as in the discussion section. So contrary to some previous studies, many needs are the same (re; unintended pregnancy, current emphasis on Depo, poor knowledge of IUDs) for HIV-positive and negative women, but some may be different (uptake of IUD for HIV+).

I hope these comments are useful. Good luck with the next version! I look forward to reading the final manuscript.

**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 have no competing interests to declare.