Author's response to reviews

Title: Correlates of intimate partner violence among pregnant women in Rwanda

Authors:

Joseph Ntaganira (jntaganira@yahoo.com)
Adamson S Muula (muula@email.unc.edu)
Florence Masaisa (kabasius@yahoo.fr)
Fidens Dusabeyezu (dfidens@yahoo.fr)
Emmanuel Rudatsikira (erudatsikira@llu.edu)

Version: 2 Date: 26 May 2008

Author's response to reviews:

Dear Editor,

RE: Correlates of intimate partner violence among pregnant women in Rwanda

We are pleased to submit to you, a revised copy of the manuscript entitled: Correlates of intimate partner violence among pregnant women in Rwanda. We have attended to each of the concerns that the reviewers raised. Please find below the reviewers' concerns followed by our response.

Reviewer: Ann L Coker
Reviewer's report:

This is potentially an important manuscript which could influence efforts to address IPV in prenatal populations. However, several methodologic issues need to be addressed. In general there are several typos or incorrect words which need identified and corrected.

Our response: we have been able to have the manuscript edited for grammar and we believe the typos are no longer present.

In neither the abstract nor the methods do the authors clearly present, purpose for the study or provide the study hypotheses. I believe that the study’s main objective is to correlated partner violence prevalence by type (physical, sexual, verbal / psychologic abuse) with HIV status. I am guessing this is the primary goal because the “cross-sectional” study included a half sample of HIV+ women. If you are samplying on HIV status this suggests a case-control study design. Is the research question, for example, “is the incidence of partner violence greater in HIV+ pregnant women relative to HIV-women?” What attributes of partners influence HIV status as well as IPV status. The major problem with this
manuscript is the lack of clarity in the question being asked. In the introduction, provide a reference for the cost of partner violence. In the methods, include the study design and justify this design to address the study question. Depending on how the study design issue is resolved, justify the half sample as HIV+.

Our response: The study was a descriptive cross-sectional survey among women attending antenatal clinics. The sample size calculation was based on the proportion of women using antenatal services and HIV testing (86%) and adherence to the PMTCT program (8.7%). Using the formula $N > Z^2 (P) (1-P) / D^2$, we got $185 + 122 = 309$ but we decided for a convenient sample of 300 HIV positive women and 300 HIV negative women. The objective was to have a sufficient sample of HIV+ women in order to assess its effect on IPV. We had no idea of the prevalence of IPV in the country. We have also highlighted the objectives of the study in the text of the manuscript.

Include the measures of partner violence used and reference these.
Decide on terms. Either use intimate partner violence or domestic violence; do not both interchangeably.

Our response: we have used intimate partner violence all through manuscript now. Measures of violence have also been justified.

There is no discussion in the methods of what variables are included in models to result in adjusted ORs. How did you decide that factors were or were not confounders? Those variables included in multivariate models need to be listed in Table 2. I’d like to see a justification for including confounders because many of the factors identified are very correlated and may act synergistically to result in IPV in pg. For example, men who drink heavily and/or have multiple sex partner may be more likely to infect women with HIV. They may also be more likely to be abusive to their partners in ways beyond sexual abuse to include physical and psychologic abuse. I would encourage the authors to develop a working model to think through how the variables of interest may individually or in combination interact to affect risk of IPV in the past 12 month among pregnant women. Finally, the discussion must include specific ways in which these study findings may affect prenatal care in Rwanda. What are the implications of the high prevalence of IPV during pregnancy? We know that both IPV and HIV have significant implications for maternal and infant health. This needs to be
discussed. While calling for universal screening may address IPV in the long term, are there services to address IPV in Rwanda. Further, are there efforts to prevent IPV? What might these be? How might prenatal care providers use the data in this report?

Our response: Variables included in the multivariate model are listed in table 2 which presents results from both univariate and multivariate models. The selection of the variables included in the Univariate model was based on previous literature. The criterion for a variable to be an important confounder was a 15% change in OR when included in the model. We have also explained how the findings from this study may be used in screening for IPV among women attending prenatal care. We do also realize this may have been the first study ever in this setting to look at IPV. As such while we would like to make recommendations, another opinion that data remain preliminary may be justified.

Reviewer Fariyal F Fikree

Major Revisions:
A. The Methods sections needs extensive revisions. Main issues of concern and clarification include:

1. Sample size calculation. Please describe in detail. Was prevalence of IPV in the past 12 months the basis for sample size calculation. Why did the authors decided to recruit equal numbers of HIV+ and HIV- pregnant women. Will this affect the results regarding HIV status and IPV. If yes, why; if not why not.

The study had two objectives: Determinants of the PMTCT program and GBV. The study was a descriptive cross-sectional survey among women attending antenatal clinics. The sample size calculation was based on the proportion of women using antenatal services and HIV testing (86%) and adherence to the PMTCT program (8.7%). Using the formula \( N > Z^2 \frac{P}{1-P} / D^2 \), we got 185 + 122 = 309 but we decided for a convenient sample of 300 HIV positive women and 300 HIV negative women. The objective was to have a sufficient sample of HIV+ women in order to assess its effect on IPV. We had no idea of the prevalence of IPV in the country.

2. Pregnant women: Why did the researchers decide to recruit antenatal clinic attendees. A description of the rationale for such an approach in the methods section will collaborate well with the limitations discussed under the limitations section.

The decision to recruit antenatal clinic attendees was based to:
- Insufficient budget for a household/community survey (cheap, easy to conduct);
- The first objective: assessment of determinants of the PMTCT program.
- Participation of health clinic staff and future implementation of a service addressing IPV.

3. Recruitment: Please describe in detail. The authors mention that consecutive clinic patients were approached and that HIV status was known a priori. A step by step description of the recruitment process to achieve the 600 sample size including the #'s not recruited and reasons for not included in the final sample should be elaborated upon.

- In each clinic, there is a health education group session before the provision of the ANC services.
- Women were informed for the research during that session. Participation was voluntary and women were informed that there will be no consequence for those who decide not to participate in the study. They will receive ANC services as usual.
- HIV+ pregnant women have a “liaison card” that allow clinic staff to identify them. The card is presented during the registration phase at the ANC clinic.
- ANC services are provided 3 days per week. We decided to enrol maximum 25 HIV-women per day in order to have variability in our sample. All HIV+ women present were automatically enrolled as the prevalence is much lower.
- None of the recruited women refused to be interviewed (In Rwanda, it is rare that people refuse to participate in a study).

4. Questionnaire: Please describe how the questionnarie was formulated; pre-testing, language. For a sensitive topic like domestic violence it is extremely important that the questionnaire is well designed in the Rwanda cultural context. What processes did the reasearchers follow to address these concerns.

- A multiphase process was used to develop the research instrument to ensure that it was culturally and linguistically appropriate.
- The draft questionnaire in English was first translated into Kinyarwanda, the national language by two translators and was double checked.
- The instrument was refined after pre-testing with 50 pregnant women in one facility named CUSP, under the supervision of assistant lecturers of the Rwanda School of Public Health.
- A team of 10 trained data collectors under the direct supervision of the assistant lecturers conducted the fieldwork.
- Face-to-face interviews lasting 45min-1 hour were conducted in a private room in order to ensure confidentiality.
- Before starting any interview, informed consent was sought and each women respondent was informed of her right of not participating without penalty.
- A nurse was available to support victims of IPV.
With regards to the questions ... please describe how the questionnaire addressed issues of more than two partners in the past twelve months;
- There was no specific question regarding multiple partners in the past twelve months.
- Only demographic information was collected on the marital status, when married whether the husband has other wife (polygamy), and whether he has other known partners (mistresses)

What was the definition of sexual abuse:
- A women was considered sexually abused when she reported forced sexual intercourse by a partner.

Did the questionnaire elicit IPV (and its various forms as described) as lifetime and in the past twelve months or only in the past twelve months.

The questionnaire had two separate questions:
- lifetime experience of IPV (its various forms) and
- whether the woman has experienced any of the IPV forms during the last twelve months.

5. Conduct of the interview: where was the interview conducted. Issues of confidentiality are extremely important when talking to women who have been physically or and more for those who report being sexually abused.
- Face to face interview were conducted in a private room in order to ensure confidentiality;
- For victims of IPV, support by a nurse/social worker was every time proposed and the nurse was invited to take care of the women in need.

Thank you.

Adamson Muula
Corresponding author
26 May 2008