Reviewer's report

Title: Work-related violence and inconsistent condom use with non-paying partners among female sex workers in Adama City, Ethiopia

Version: 1 Date: 13 December 2012

Reviewer: Julio Montaner

Reviewer's report:

General comments

The authors have written an interesting article that explores condom use with non-paying partners of sex workers, which is an under-researched area; thus, this paper makes some important contributions.

Major Compulsory Revisions

n/a

Minor Essential Revisions

Abstract

-Please include adjusted odds ratios and 95% confidence intervals for the associations, and note the associations that were statistically significant.

Main manuscript

Page 7, Paragraph 1: Please clarify why this sampling scheme was chosen (e.g., why 23 bars, why nine FSWs at night clubs and five FSWs at bars/hotel). “Of the list’s 10 night clubs, all were included, while approximately half of the list’s 23 bars and 59 hotels were included by random selection. Using a convenience sample, nine FSWs were surveyed at each night club, and five FSWs at each bar and hotel.

Page 9, Paragraph 2: “Of the 350 respondents, 39 were excluded from the analysis because of missing data.” Please clarify if this is missing data on the outcome.

Page 9, Paragraph 2: “A multivariate logistic regression model was developed which included the following independent variables as factors associated with inconsistent condom use with regular, non-paying partners: alcohol abuse, experiences of work-related violence, age, income, education and total number of partners of any type in the past week.” It is not clear how variables were chosen to be included in the multivariable model. Please give details on how this was done (e.g., based on p-values, a priori).

Page 10, Paragraph 1: Increasingly, odds ratios and 95% confidence intervals
are being used instead of p-values to detect statistical significance. Suggest you do the same here ("P values of less than .05 were considered statistically significant.")

Page 16, Paragraph 2: “Cross-sectional analysis showed that work-related violence, higher income and no education were associated with inconsistent condom use with regular, non-paying partners among establishment-based FSWs in Ethiopia.” It’s not so much that results showed that no education was associated with inconsistent condom use, from what I read of the results above – more that higher education was associated with reduced inconsistent condom use. It could be beneficial to switch the reference category on education so that ‘no education’ would have increased odds of inconsistent condom use (easier to report), but this would be at the authors’ discretion.

Discretionary Revisions

Abstract

-Clarify what ‘income’ means (e.g., sex work income, overall income, etc.)

-Given that the current paper is a simple logistic regression analysis, the statement in the conclusion: “Findings suggest violence against establishment-based female sex workers is a significant contributor to HIV risk within this population” is too strong. Suggest toning down the wording somewhat to better reflect results from current study (i.e., cross-sectional design cannot assess causality, which the authors note in the discussion).

Main manuscript

Page 5, Paragraph 2: Suggest changing gender based to gender-based

Page 5, Paragraph 2: In general, it would be helpful if the authors could clarify which studies examine different types of violence and the type of partner with whom condoms are (not) used, if this information is available. In other words, as I’m sure the authors are aware, there are important distinctions between the relationships between type of violence and perpetrator.

Page 5, Paragraph 3: Suggest comparing FSW HIV prevalence to prevalence in the general population of women rather than of women and men combined (as the description suggests).

Page 7, Paragraph 1: Suggest breaking up this sentence into two for clarity: “Unlicensed venues were not included because FSWs generally did not drink at these establishments, where the ability to serve alcohol was limited; often, only one to two FSWs were employed at these venues; and they were typically new to sex work and reluctant to participate in the study.”

Page 8, Paragraph 2: Are there any other details on what constitutes ‘work-related’ violence? E.g., were sex workers given options of who the perpetrators were? If so, it would be helpful to include this for comparison with other violence measures. If not, it should be clarified here.
Page 9, Paragraph 1: Please provide citations for the following sentence: “Although previous studies have controlled for marital status and sex work as participants’ main occupation.”

Page 12, Paragraph 1: Technically, these self-reported measures underestimate inconsistent condom use: “In our survey, 38% of FSWs reported inconsistent condom use with regular, non-paying partners, 0.3% with regular clients and 1% with new clients, although these self-reported measures likely overestimate condom use due to social desirability bias.”

Page 13, Paragraph 2: Please clarify if inconsistent condom use is with clients, non-paying partners, etc. “This result is consistent with previous research in China which found that violence perpetrated by non-paying partners was associated with inconsistent condom use, but abuse by clients was not [22].”

Page 14, Paragraph 2: A limitation of using the income variable as constructed is that it does not distinguish between types of income (e.g., from sex work, other jobs). While the authors state that the vast majority of sex workers report sex work as their main source of income, interpretation of results may be confounded by income gained through other work. Suggest noting this.

Discussion, general:

The authors’ main finding is that occupational violence is associated with inconsistent condom use with non-paying partners, but the nature of this relationship and why this relationship would be observed is not immediately clear. Violence by intimate partners has been associated with HIV risk (including inconsistent condom use) in non-sex worker populations, and violence by clients/other occupational violence has been associated with condom use with clients of sex workers; these associations are a bit more intuitive. The authors do go into some detailed and valid explanations for their results in the Discussion, which is very helpful, but it would also be helpful to note these distinctions in the Introduction and note where there is a lack of data (and how this paper contributes to that).

Suggest recommending for the use of standardized violence measures among sex worker populations (contextualized for different populations), that take into account type of violence (i.e., physical, sexual) and perpetrator (i.e., non-paying partner, occupational violence). This follows this difficulties described in this study in assessing what ‘work-related’ violence means, how sex workers interpret the question. Hopefully, this could help delineate the relationship between violence and inconsistent condom use.

Suggest describing a limitation of not being able to assess partner or partnership-level characteristics (or other missing variables that could be identified through the detailed analysis done by the authors when they interpret the results of their associations) and how these are associated with inconsistent condom use (e.g., type of partner, if partner was a former client, duration of relationship).
Suggest including a section on 'Implications of research'. Most of the Discussion surrounds interpretation of results, which is useful in this context. However, it would also be helpful to know how these results could be put to use. In the Conclusion, the authors allude briefly to structural interventions – this could be expanded on. Very little research exists on non-paying partners of FSWs and thus this paper could have more of an influence on influencing future research.

**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