01 June 1007

Anita Makri MA, MPH
Assistant Editor
BMC-series Journals

Re: MS: 5068626691256032 - Alcohol use and extramarital sex among men in Cameroon

Dear Anita,

Thank you for the opportunity to re-submit a revised manuscript for consideration. We are happy that one reviewer has recommended acceptance of our manuscript after minor revisions.

We have addressed the reviewers’ comments, edited language, and formatted the revised manuscript to conform to BMC medicine journals’ style.

In the following pages we provide a point-by-point response to the reviewers. We have put the comments in bold and inside quotation marks, with our response below each comment.

The comments have helped to improve our manuscript, for which we are grateful. We trust that the revisions meet the requirements for publication.

Yours sincerely,

Eugene
Reviewer: Ron Stall

General comment

1. “This is an interesting secondary analysis of an important data set from Cameroon. As such, it counts as one of the few attempts from within sub-Saharan Africa to test the relationship between alcohol and high risk behaviour”

This is a compliment. Thanks.

Major Compulsory Revisions

2. “The problematic areas of the analysis have to do with the measure of unsafe sex as well as the inclusion criteria for entry into analysis. The measure of unsafe sex with secondary partner by married men. While such sex may be risky from the point of view of marital stability or happiness, it is not a generally-used measure of high risk sex for HIV transmission. The analysis would be improved by the addition of a measure of condom use while having secondary partners. Similarly, the inclusion criteria of married men only is odd in that single men have multiple sex partners, too, and so are at equivalent risk for HIV transmission to married men with multiple partners. The analysis would be improved by the use of a measure of high risk sex with is based on non-condom use with secondary partners by married and non-married men alike.”

Thanks for these pertinent comments. Having multiple concurrent sex partners is a known risk factor for HIV infection, and extramarital sex is a sign of multiple concurrent sexual partnerships among married men. We have now analysed the association between extramarital sex and condom use analysed. The measure of condom use with a secondary partner has enabled us to assess whether men who have extramarital sex are more likely to use condom or not.

We acknowledge the fact that single men are equally at risk of HIV as married men. We wanted to focus on married men because this group has largely been ignored as most studies have focused on women and adolescents. We have now added a sentence to make it clear that although the study focuses on married men, single men who have multiple (concurrent) sex partners are at equivalent risk for HIV transmission to married men with multiple (concurrent) sex partners; i.e. the last sentence of “Introduction.”

3. “The alcohol measure is similarly flawed: the measure asked about drinking before sex. The analysis would have been strengthened further by comparison of sex risk between sex under the influence compared to last sober sexual even within the same men. The comparison as conducted here amounts to a comparison of sexual risk between men who drink as part of sex and men who don’t. This comparison cannot weigh the independent effects of alcohol, as it may be the preference for inebriated sex that drives risk, not just the alcohol itself.”

We appreciate theses comments, and have added the flaw in the measurement of alcohol use as a limitation of this study. As we have also noted in the section on limitations of the study, secondary analysis of data collected for a different purpose is limited by the data available and some useful information may not be available. Thank you for pointing out this limitation.
4. “It would be interesting to know if data set has additional measures of condom use during sex and a comparative measures of sex while drinking and not within the same men to know best how to review this paper.”

We have now added the variable “condom use during the last intercourse” in Tables 2 and 3, and presented the correlation between condom use and drinking of alcohol before the last sex in Table 4. Thanks.
Reviewer: Lance Weinhardt

Major Compulsory Revisions

1. “Justify why you are focusing on extramarital sex without regard to condom use. Ideally, you would restrict your focus to extramarital sex during which condoms were used, instead of all extramarital sex.”

“Condom use during the last sexual intercourse” has been added as a predictor variable and the data re-analysed (and presented in Tables 2, 3 and 4). Thanks for pointing this out.

“2. Include a table showing intercorrelations between predictor variables in multivariate model, and test for multicollinearity.”

Table 4 has been added to show correlations between predictor variables. Thanks.

“3. Include a paragraph on the limitations of your approach: cross-sectional survey, the inability from analyze one episode of behaviour to rule out personality factors since you are conducting a between-subject analysis. Men who had extramarital sex when drinking in your survey may also have lots of extramarital sex when not drinking.”

Thank you for the remarks. We have now added a paragraph (last paragraph of the “Discussion” section ) on the limitations of the study.

Minor Essential Revisions

1. “Replace extramarital “life” with extramarital “sex” everywhere it is included”

Thanks. Extramarital “life” has been replaced with extramarital “sex” everywhere

2. “Page 3, 3rd paragraph, “difficulty” should be “difficult””

We have done that. Thanks.

3. “Page 3, 4th paragraph, “solidarity” should be “solitary””

We have removed the sentence. Thanks.
Reviewer: Ulla Larsen

Major Compulsory Revisions

1. “The authors state on p.4 that the study is limited to married men. On p. 5 and p. 6 the authors define extramarital sex as the act of having sexual intercourse with partner other than the spouse or a cohabiting sexual partner. I would like to see a definition of men used, i.e married men include all married and cohabiting men.”

Thanks. We have now added this definition under “Variables” in the “Methods” section of the manuscript.

2. “This study does not provide a model for extramarital sex. It appears to be data driven, e.g. it uses step wise regression in the multivariate analysis. I wonder why some variables are included and others are omitted? For instance, variables about children ever born e.g. (0, 1-4, 5 and above), times married (e.g. 1, 2 or higher), type of married (e.g. cohabiting, monogamous, polygamous), tribe (I am not sure if the survey gives this variable) and region are not included.”

Indeed, the use of data for secondary analysis is always limited by the existing data, and this is certainly one of the limitations of this study (as we have now indicated in the last paragraph of “Discussion”). Some variables like region and tribe were not included in the Demographic and Health Survey, because it was not feasible to include them. Cameroon has 10 regions (provinces) and 210 tribes which makes analyses by region or tribe difficult. Many thanks for the observation.

3. “Further theory and review of literature may be in order.”

Thanks. We have done a further review of the literature and developed the theory linking alcohol use to unsafe sex.

4. “The multivariate model appears to include dichotomous variables, but there is no description of how or why the variables are merged.”

We have now included a description of the dichotomous variables under “Methods”, i.e. the last sentence under “Statistical analyses”) and in Table 3.

5. “Table three is not clear and needs to be modified.”

Table 3 has been modified and cut-off points for dichotomous variables included. Thanks.

6. “A more detailed discussion of the implications of the findings would be appreciated.”

We have done this. Thanks.

7. “It is not clear how author E.J. Kongnyuy could have contributed to the data collection on the basis that the data were collected by the demographic and Health Surveys.”
We have changed “data collection” to “data extraction” as EJ Kongnyuy was not involved in the field survey but extracted the data analysed in the study from the survey database. Thanks!

8. “Accept after minor essential revisions.”

Many thanks for this recommendation.