Reviewer's report

Title: Sexual behavior and drug consumption among young adults in a Latin American shantytown

Version: 1 Date: 22 August 2008

Reviewer: Sheri Lippman

Reviewer's report:

This paper describes reported sexual behavior and explores the association between illicit drug use and sexual risk behaviors among young adults in a shantytown population in Lima, Peru. The paper does contribute to general knowledge about sexual behavior and drug use in an understudied population. However, this manuscript does not provide any novel findings and the discussion of the findings in the manuscript do not translate clearly into recommendations for prevention programming.

Major Compulsory Revisions:

1. It is unclear which of the many sexual risk behaviors listed in Table 2 are the behaviors that were hypothesized to be related to the exposure of interest (illicit drug use) when this analysis was planned. In the methods section, condom use at last intercourse; number of partners in various time frames; and sex with a high-risk partner in the last year were listed as sexual behavior questions of interest. However, in the multivariate models in Table 3, data is provided on intercourse with a casual partner in the last year and sex a with a high risk partner while under the influence in the past 3 months (for men only). Condom use results are in the text but not the tables: if condom use was the behavior of interest (as is understood in the abstract and methods) why isn’t this presented in table 3? It would help the reader if the authors can identify which of the many sexual risk behaviors is(are) the focus of this analysis and to include those variables consistently throughout the paper and the tables. Overall there is a bit of a disconnect between the objectives, as understood in the introduction, the variables highlighted in the methods section, and the tables.

2. There is no discussion regarding whether the sociodemographic variables that are controlled for in the analysis were, in fact, confounding variables. If these variables were not associated with illicit drug use and the sexual risk factors of interest in this data, then they should not be included in multivariable analyses unless there is ample literature to indicate otherwise. For example, both lower and higher education and income levels have been associated with various sexual risk behaviors and drug consumption; I do not believe that there is a consistent pattern concerning education or perhaps employment and behaviors or drug use, and thus, they are not necessarily confounders of the relationship of interest. Confounding in this data set should be fully explored and described in the text.
3. There is no information regarding the presence of effect modification in this data set. Was analysis to identify potential effect modifiers performed? If so, this should be stated. If not, this must be included. Most importantly, was effect modification of alcohol use explored? It might be interesting to look at four user groups: no alcohol/no drugs, alcohol and drugs, etc, as opposed to looking at the association of one while controlling for the other (i.e. looking at the effects of illicit drug use only among non drinkers).

4. In the introduction, please discuss why controlling for alcohol use is of particular interest; there should be some justification for this emphasis.

5. At present, the conclusions are very vague. The authors state that the results “provide useful information for the development of more appropriate prevention programs...” The authors mention a wide array of general approaches to prevention, i.e. delaying debut, education and information, access to condoms, and negotiation skills – these are old tools that prevention programmers will include in most programs. What specific contribution is this study making to prevention programming? I hope the authors can be more explicit in their offerings of how these findings can be translated into recommendations.

Minor Essential Revisions:

6. Please state that the study took place in Lima, Peru in both the title and the abstract. “Latin America” is a broad category and the reader will want to know the location studied before the end of the introduction.

7. Introduction: the end of the second paragraph in the background section includes a vague statement about cultural and environmental factors influencing sexual behaviors and drug consumption. I agree that context plays a role in consumption patterns. Addressing this issue requires more specifics (i.e. what factors are the authors referring to and how does that shape this analysis).

8. Methods – the last sentence of the “study site” section needs clarification. The authors mention the Peruvian non-governmental organization and A.B. PRISMA – neither of these groups (or is it only 1 entity?) has been sufficiently described. (I recognize that in the following paragraph A.B. PRISMA is defined as a local nonprofit).

9. Methods – the authors refer to “casual” partners in the methods section and “occasional” partners in table 2 and in the results section, and then again “casual” partners in table 3. Please be consistent about references to this partner group in the text and tables and define this term in the methods (i.e. what makes a casual partner, is it anyone who isn’t a boyfriend/girlfriend or spouse?).

10. Methods – please describe how “any STI symptom” is defined? Was a check list of potential symptoms provided or was interpretation of “any symptom” left up to the respondent? Additionally, please indicate the time frame used on the STI symptom questions in the methods section and on table 2.
11. Please be specific about what information was gathered by self-administered questionnaires and what information was gathered by interviewer. This has implications for the discussion section where it is stated that training of interviewers should have reduced bias in reporting of sexual behaviors: this is only the case if the sensitive questions were administered by the interviewers as opposed to self-administered.

12. Methods (analysis): Please state that models were run controlling only for Sociodemographic confounders and for Sociodemographic confounders plus heavy episodic alcohol consumption. Additionally, please state plainly why you present your data in this way.

13. Methods (or discussion) – please state why injection drugs were not included in this study.

14. Table 1 has more than sociodemographic data. Please change the title of the table to “Sociodemographic, behavioral, and reproductive characteristics of the study sample by gender,” or a title which is more inclusive.

15. Results: please revise the statements about the number of sex partners among men and women in the sexual behavior section to indicate that these are mean numbers. The standard deviations are quite large and statements like “men had more than four times the lifetime number of sexual partners than women” are misleading when there is so much variation in responses (i.e. the standard deviation is very large).

16. Results: in the last sentence “no found” should be “not found.”

17. Results: I am uncomfortable with the analysis where the authors control for heavy drinking with the outcome of “sex with a risky partner under the influence of alcohol.” Who are the people included and excluded from this model (i.e. what is your denominator here?)

18. Discussion: please provide a citation for the National Survey of STI and HIV Prevalence in Peru when referring to data from that study.

19. Discussion: The sample is a random sample of young adults from a census of the area; having a representative sample is a strength. However, 152 of 968 selected subjects were not available for interviews. While not particularly high, 16% non-response can still bias estimates. The authors should address this issue in the limitations section. At the same time, I disagree that an important limitation in this study is that results cannot be generalized to wealthy populations. Because participants were randomly selected, results may be representative of this resource poor population, about whom (the authors argue) there is too little information. I do not think the authors need to apologize for not being able to generalize results to other regions or SES groups.

Discretionary Revisions:

20. Generally, the paper can be shortened and the writing can be tightened up, in
terms of grammar, flow, and repetition. There is no word count on the document, but I believe these findings can be presented easily with 3,000 words or less. For example, in the “Data Analysis” section the first two sentences repeat what was already stated and should be deleted. Also, there is a fair amount of text comparing behavioral characteristics between men and women in this study, much of which is already included in Table 2 – a good portion of this text can be deleted.

21. Introduction – the authors state that risky sexual behaviors of young adults have received increasing attention during the last decade. I would argue that adolescent and young adult sexual behaviors have been a research priority for much more than a decade. I would modify this statement.

22. The discussion is somewhat disjointed because there are so many findings the authors want to discuss. This approach to touching on all of the findings in the discussion prevents a more nuanced and deep discussion of any one finding. I would suggest that instead of touching on a number of issues that could be explored more profoundly (like machismo and gender norms in Latin America, underlying personality traits that predict both sexual behaviors and drug use, the intersection of alcohol and drug use), that the authors focus on the findings they find most poignant and discuss those in depth.

Level of interest: An article whose findings are important to those with closely related research interests

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.