Reviewer’s report

Title: Consistent condom use with regular, paying and casual male partners and associated factors among men who have sex with men in Tamil Nadu, India: Findings from an assessment of a large-scale HIV prevention program

Version: 2 Date: 6 June 2013

Reviewer: Michael Woodford

Reviewer’s report:

Minor Essential Revisions

Abstract – background – no reference to India. Acknowledge country.

Abstract – introduce the acronym (CCU) for consistent condom use when the term is used the first time in the Background (not in the results, as is currently done). Then use the acronym throughout the abstract and do not use the full term again (as you did on the Conclusion).

Abstract and manuscript – the readers’ ability to follow the paper would be greatly improved if the authors used a consistent order of partner types throughout both the abstract and manuscript.

Abstract – is it necessary to include the statistical results (maybe a requirement of the journal). Why no reference to the covariates significant with regular partner group? All other groups are discussed. If there are no unique predictors with this group, that should be stated.

Introduction – paragraph 2, sentence 2 – can you say something about same-sex sexuality being against dominant social norms in India before this second sentence? Such an addition will help to set up “socio-cultural” in the current sentence 2.

Term – “all three partner types”, “all types of partners” – throughout the manuscript I have continued to stumble over this term. See suggestion below.

Introduction – last paragraph (before Methods) – last sentence – “so that interventions can be optimized” – the use of the word “optimized” here is awkward. Isn’t your goal to inform the development of effective interventions? May be a sentence to that effect would be best.

Data Source – “model as collected” – insert “it” between “as” and “collected”

Acronym MSM – upon first usage of “men who sex men” in the Introduction, the acronym MSM is appropriately introduced. Use the acronym throughout the body of manuscript and do not use the full term again (as you did in the Data Source, for example).
Data Source – first paragraph – insert a new paragraph after [32, 33]. “For cash or kind” – should be “for cash or in kind”.

Reviewing this sentence raised a question/issue for me about the sample. Based on the provided description, the sample only consists of those involved in sex work (in exchange for cash or in kind) possibly both workers and customers? This is a very limited operationalization of MSM (although admittedly sex workers and their customers are a hard-to-reach population). Is this correct? If so, then I assume a large percentage of the sample self-identified as sex workers (one of the demographic categories provided). This requires clarification.

Writing – always use comma between paying and casual male partners for clarity and readability for the reader; the comma clearly indicates to the reader that you are talking about two separate categories of partners.

Writing/language – in the Measures section, you use “all three types of partners combined.” This is very clear and I suggest you use this phrase throughout the manuscript, including the abstract.

Dependent variables – page 8 – “clubbed,” awkward word choice, try grouped.

Socio-demographic variables – occupation – was this primary occupation? Would it not be possible for a respondent to be in more than one category? Sexual identity – please list all available options; I suspect some identified as heterosexual given that the population is MSM.

Sexual Behavior – “other measures” is awkward. Try “We assessed frequency of …” For the listing of the response categories, list in a logical order (daily, more than twice a week, twice a week…).

Risk perception, knowledge of STIs... - “These variables” Insert the word variable. Knowledge of STI symptoms – how many were listed?

Same section - The composite measure on program exposure has a theoretical range of 0 – 3, I assume. However in the model you examine exposure to any (no/yes). This is confusing; delete the idea of a composite measure. “Condoms distribution” – should be “condom distribution”.

Data Analyses – Weighting – please add explanation of this process.

Chi-square – “assess the associations” – add “bivariate associations”. However, given that you actually conducted and reported binary logistic regression results, this should be stated in addition to the multiple logistic regressions. You could delete reference to running chi-square, however chi-square distributions are useful for ensuring adequate cell size.

Table 1 reports both unadjusted and adjusted logistic regressions; acknowledge this in the narrative. Change “multivariate” to “multiple.” Next paragraph – “distribution” should be plural. <= and >= use the proper symbols # and #; delete “and above”

The rationale for dichotomizing employment is not clear. On page 8, occupation
includes unemployed, student self-employed/professional, non-agricultural labor, business/trade, service, agricultural labor, masseur, sex work, transit workers. In Table 1, the first group consists of student/unemployed/business/service/others – and the “others” would include masseur and sex work. The rationale for such a grouping is unclear. In fact, from a sexual behavior risk perspective, wouldn’t certain occupational groups, such as masseur and sex worker, be more appropriately grouped together? I encourage the authors to rethink the grouping of this variable.

How were “number of sex acts with male paying partner in the past week” and “number of male casual partners in the past month” dichotomized? State this in the narrative.

Results – one-fourths should be one-fourth.

Results – throughout this section - Be consistent with the use of points after decimals in percentages. Either round up or not; be consistent.

Results – paragraph 2 “…having regular or pay or casual…” delete first “or” and replace with a comma.

Para 3 – change multivariate to multiple.

Discussion of results – for clarity and readability, how the results are discussed – using the variable above as an example, the significant variable is age and what the results indicate is that compared to MSM who never or infrequently engage in receptive anal sex, those who do so frequently are at increased risk for inconsistent condom use. Since the independent variables are dichotomous, the reference group should be noted when presenting the results. All of the results should be reviewed to ensure they are written correctly.

Also, in the narrative on page 12, concerning this variable the authors write “daily basis,” but that is not a category for receptive anal sex.

Page 12 – above 25 years should be written as 26 years or older (throughout the results).

Page 12 – Casual partners – the direction of the association for HIV prevention intervention is not stated.

Page 12 – 13 – “We did not find....” I assume this sentence applies to all partner types; please revise the sentence to acknowledge this.

Discussion – the authors are only discussing the results of the multiple regression or controlled regression. This should be made clear to the reader by using phrases such as “in controlled analysis, X was significant..” Again, Table 2 also presents the bivariate logistic regression results, thus some of the variables the authors discuss as insignificant in select multivariate models were significant at the bivariate level. Again, another option, the authors could consider removing the bivariate results from the study since they are not discussed.

Page 13 – last paragraph – reference to daily anal sex – but this is not a variable
“frequent” was your variable. I find discussion of access to both free and subsided condoms to be as a possible explanation to be problematic since exposure to any HIV prevention intervention was not significant in all models. I realize that prevention interventions may not involve distribution of free condoms. Can the authors acknowledge this issue and suggest future research examining the use of free condoms be conducted?

Study Limitations – the authors may wish to acknowledge some strengths of their study, such as engaging a hard-to-reach population. To the limitations, the authors should add that the categorization of variables, such as occupation and sexual identity, may mean that important differences between groups are not identified. Also, concerns about the HIV intervention exposure model should be acknowledged.

Table 2 – remove all of the 1.00 for the reference categories. These are not necessary and should not be presented.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

'I declare that I have no competing interests'