Author's response to reviews

Title: Multi-dimensional factors associated with unprotected anal intercourse with regular partners among Chinese men who have sex with men in Hong Kong: a respondent-driven sampling survey

Authors:

   Yong Cai (caiyong202028@163.com)
   Joseph Lau (jlau2013@163.com)

Version: 2 Date: 9 April 2014

Author's response to reviews: see over
Cover letter

Dear Editor

Thank you very much for your attention and the reviewers’ evaluation and comments on our manuscript-- “Multi-dimensional factors associated with unprotected anal intercourse with regular partners among Chinese men who have sex with men in Hong Kong: a respondent-driven sampling survey”.

We have revised the manuscript according to your kind advices and reviewers’ detailed suggestions.

Enclosed please find the responses to the reviewers. We sincerely hope this manuscript will be finally acceptable to be published on BMC Infectious Disease.

Thank you very much for all your help and looking forward to hearing from you soon.

Best regards

Sincerely yours

Joseph T. F. Lau

Centre for Health Behaviors Research, School of Public Health and Primary Care, Faculty of Medicine, The Chinese University of Hong Kong.

Responses to the reviewers

Point to Point Reply To Reviewer:

Reviewer 1’s report

Title: Multi-dimensional factors associated with unprotected anal intercourse with regular partners among Chinese men who have sex with men in Hong Kong: a respondent-driven sampling survey

Version: 1 Date: 9 December 2013
Reviewer: Limin Mao

Reviewer’s report:

This paper reports a range of factors associated with unprotected anal intercourse (UAI) among gay and other homosexually active men who were in a regular relationship with a male partner in Hong Kong.
Instead of conventional time-location sampling (TLS), the authors used respondent driving sampling (RDS) to generate more robust population estimates such as the prevalence rates of UAI with a regular male partner, co-occurrence of UAI with regular and other male partners outside of the relationship.

Major Compulsory Revisions

1. The authors claimed that they used RDS and reported weighted/population prevalence rates in the paper. However, the authors did not report important statistics related to key features of a sample reaching equilibrium (i.e. homophily) through RDS. For example, what is the average network size? After how many waves did the sample reach equilibrium? Whether RDSTAT or Netdraw programs were used before exporting to SPSS? If the sample did reach equilibrium, the authors need to further address the limitations of RDS recruitment, although it can be superior to a simple TLS. If the sample did not reach equilibrium, it is not these weighted rates are not unbiased and should be treated as a TLS.

A: Thank you for your suggestions. We have elaborated that equilibrium was reached at Wave 5 and the average network size was 21. Furthermore, RDSTAT was used for this part of analysis and SPSS was used for the rest of the analysis. We have also addressed some limitations of RDS in the discussion section.

2. The authors did not address the issue of UAI in the context of HIV-negative sero-concordance between regular male partners. That is, if both partners were tested and known as HIV-negative, which is found be a key non-condom-based risk reduction strategy more precisely known as negotiated safety, their risk of HIV infection is not as high as UAI in other contexts. If the authors did not collect such data, this should be addressed in the discussion section as a major limitation of the study design.

A: The study did not involve HIV antibody testing and we acknowledged that it is a limitation that we did not ask about HIV sero-status of the participants and their male regular sex partners. One of the reasons is that such data may not be reliable due to strong social desirability and may hence be subjected to reporting bias. We have added discussion on this limitation to the revised text. The HIV prevalence was about 4% in the study population, HIV testing rate (last six months) was rather low (about 33.5%) and we don’t have data about disclosure of HIV status to male regular sex partners. We therefore do not know about the prevalence of sero-discordant couples among our participants but we contend that it may make up a relatively small proportion of the sample.

3. The authors should comment in the discussion the psychological concept of “impulsivity” as measured in the study and sexual adventurism proposed originally by Seth Kalichman.

A: Thanks, a good question. We have made some elaborations in the revised text accordingly. We totally agree with you that sexual adventurism should be discussed because they are all related to sexual behavior (such as condom use) among MSM or other population. We also think sexual compulsivity is an important factor related to sexual behavior and we are now preparing another study among MSM including this scale.

Minor Essential Revisions

Results section paragraph 3: last sentence they did not perceived (should be perceive) high risk of
contracting HIV via their RP (79.3%). The percentage should be 20.7%.

A: Thanks. We have corrected the typo accordingly.

Discretionary Revisions
The authors should comment on the similarities in prevalence rates of UAI with a regular male partner in a previous paper of Hong Kong MSM in Shenzhen by one of the co-authors (as a parameter in sample size calculation, which is odd as RDS does not need sample size calculation, which requires some explanation itself) and that in this study.

A: Thank you very much. We have removed the part on sample size planning. We hence do not discuss about the study mentioned by the reviewer as the sample of that study was a special group of Hong Kong MSM who traveled to have sex in Shenzhen, mainland China, and are not comparable with this sample. Furthermore, sexual activities in that study referred to those took place in Shenzhen.

Level of interest: An article of limited interest
Quality of written English: Needs some language corrections before being published
A: We have edited the paper further.
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.

Reviewer 2's report

Title: Multi-dimensional factors associated with unprotected anal intercourse with regular partners among Chinese men who have sex with men in Hong Kong: a respondent-driven sampling survey
Version: 1 Date: 11 February 2014
Reviewer: Yuhua Ruan
Reviewer's report:

Unprotected anal intercourse (UAI) with male regular partners (RP) among MSM has a significant impact on HIV infection. This study was to test new hypotheses that multi-dimensional factors could be associated with condom use with RP among MSM. Those factors included individual background factors, contextual factors, interpersonal factors, personality factors.

1. The verbal informed consent was used, please explain why written informed consent was not used?
A: The study was anonymous. We tried to maintain anonymity by not requesting written consent, which may lead to identification of participants. Instead, the interviewers had to sign a form that he has explained information about the study clearly to the participants and let the participants asked any question about the study. The procedure has been used in a number of HIV-related studies in Hong Kong and in China (references).

References:

2. How many subjects did not participate in the survey? How many subjects were screened?
   A: All those who were referred to us completed the questionnaire. We did not record number of refusals among invitations made by individual participants. Such invitations were not random and response rate may not be very meaningful in this context. Furthermore, such data were not reported in a number of RDS studies for MSM (references).

References:

3. The discuss section is too long. It should be focused on your finding.
   A: We have trimmed down the discussion part.

Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:
I declare that I have no competing interests.