Reviewer's report

Title: Risky Sexual Networks Based on Different Anal Sex, Oral Sex with Men and Vaginal Sex with Women, and Concentrated HIV Epidemic among Men Who Have Sex with Men in Wenzhou, China: A Respondent Driving Sampling Study

Version: 2
Date: 18 September 2015
Reviewer: David Templeton

Reviewer's report:

Major compulsory revisions

I think the key findings of this study are (a) the high HIV prevalence, despite participants not believing they are at risk, (b) the transmission risks to heterosexual females due to high numbers of MSM who are also having sex with female partners and (c) that almost half of the participants had not received any HIV prevention education or resources. These issues could be more fully discussed in the discussion section – and perhaps the paragraphs regarding oral sex especially, and those regarding anal and vaginal sex could be substantially cut down?

I have concerns about some of the statistical analyses and interpretation. For example the ordinal variables with >2 categories in Table 4 should have a p-trend value. In the abstract and text – some of the statistical interpretation is misleading – for example associations with HIV were aged >45 (compared to age <25, but 25-34 & 35-44 age groups were not significantly different from age <25 (the referent category). It would be more appropriate to report a p-trend and see if increasing age group was statistically associated with HIV) Also - earning a monthly income of 3001-4000 Yuan (compared with less than that amount, but the highest income bracket was not significantly associated with HIV compared with the lowest).

While I appreciate the difficulty of scientific writing in a 2nd language, the grammar is poor and difficult to follow in much of the manuscript. This needs to be edited to improve readability and understanding of the manuscript. I strongly suggest the authors have the entire manuscript edited by a native English speaker with expertise in this field.

The title is too long and difficult to understand

The 1st 2 paragraphs of Page 5 require re-writing – as it’s written it’s very difficult to follow. Perhaps simply saying HIV prevalence and incidence among MSM is increasing, referencing the reports, and including numbers /percentages for only one or two of the most important studies would improve the reader’s understanding.

Minor essential revisions
Line 165 – 2 public parks – I’m presuming these are “beats” and not formal gay meeting places such as bars and bathhouses? If so – his should be clarified

Please put US dollar equivalents after all mentions of a Yuan amount

Throughout (e.g. line 262) please replace “commercial partner” with “sex worker” if this is what the authors mean

Line 303 onwards – please change OR to AOR (adjusted odds ratio) when presenting the results for multivariate analysis

Line 310 “after adjusting for [the] possible confounding” – what adjustments were made? And what confounders are the authors referring to?

Lines 321-325 – these are results and should be moved to the results section and a test of significance applied to support the authors’ assertion that characteristics were more or less likely


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

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

'I declare that I have no competing interests'