Reviewer's report

Title: Alcohol, tobacco and illicit drug use amongst same-sex attracted women: results from the Western Australian Lesbian and Bisexual Women's Health and Well-Being Survey

Version: 2 Date: 18 June 2009

Reviewer: Helga Sif Fridjonsdottir

Minor essential revisions.

- In the Conclusions section in the Abstract the first sentence states that "LBW appear to use alcohol, tobacco and illicit drugs are at higher rates than women generally..." However, in the results section for illicit drug use this comparison of findings for LBW to a general group is not made.

The research question/s is/are not clearly presented in the text. There seams to be two things that are explored, frequencies of use as well as relationships. However, it is unclear which relationships will be explored (i.e. violence or harassment, depression and anxiety etc.). This and the research questions need to be clearly stated in the background section.

The methods are appropriate and well described. Nonetheless, my recommendations are that the "measures" section be moved to "instrument design" section as this is the same topic. Furthermore, it is not clear if the 74 questions were tested for reliability and validity. Then it is unclear what is the purpose of the text in "measures" that starts "Australian national alcohol....". It is more relevant here to describe the items used to measure alcohol frequencies and quantity.

The third essential revision comment covers the multivariate models throughout the manuscript. First as stated above it is not clear in the background section which variables (various stressors) are thought to influence substance use and why these variables are most important contributors. The methods sections, more specifically instrument design and measures does not discuss operational definitions or measurements of these variables. Then in the discussion section it is stated: "no factors relating to stress or experiences of prejudice were associated with harmful drinking"...Here the reader wonders if the variable measured and introduced in tables 5-7 as "violence and harassment" is the same as experiences of prejudice. This can be corrected with a clear stated operational definition in the methods section.

Level of interest: An article of importance in its field

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.