Reviewer’s report

Title: Mental Health, Sexual Identity, and Interpersonal Violence: Findings from the Australian Longitudinal Women's Health Study

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Reviewer: Anna Bowring

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This paper looks at experience and correlates of interpersonal violence among women from a large national cohort. Its point of difference is looking at sexual identity with multiple categories, allowing for a more nuanced view of the relationship between sexual identity, interpersonal violence and mental health. Although I'm not convinced by its ability to answer the second study aim, it is nonetheless a well written paper and a contributes strongly to the literature base.

GENERAL COMMENTS

The in-text referencing throughout the paper often unnecessarily employs both numbering and author name systems. Based on the journal referencing guidelines, the author names should not be needed in text.

There is nothing to be done about this, but it may be worth noting that I associate 'IPV' with intimate partner violence, and it took me a while to realise that that is not what the paper was measuring. To my knowledge there is no way of differentiating these acronyms though. It was helpful that the acronyms were written out in full in the subheadings of the results, which quickly alerted me to my mistake.

ABSTRACT

It would be worth including the age range in brackets after 'young women' in the abstract.

BACKGROUND

The background is substantive, and while all relevant, could be written more tightly to avoid repetition.

Currently the paragraph structure essentially reads:

1 Prevalence of violence against women; 2 Relationship between violence and mental health; 3 Violence among sexual minority women; 4 Health disparities among sexual minority women; 5
Different patterns within subgroups of sexual minority women; 6 Different patterns within subgroups of sexual minority women; 7 Mental health disparities among sexual minority women; 8 Link between violence and mental health in sexual minority; 9 Study aims.

For example, paragraphs 2 & 8 linking violence and mental health could be consolidated; paragraph 7 on mental health disparities could be combined with Para 4; Para 6 could more directly lead into the study aims, emphasising the literature gaps this study fills.

These are not prescriptive but may help with the flow of the background.

METHODS

The age range of the analysis sample could be more clearly stated. The analysis is based on the youngest cohort group (18-23yo at first survey) at the third survey, which are completed every three years. The resulting age of sample is 25-30 years, but this is only mentioned near the end of the methods. It would be easier for the reader if this was stated upfront (e.g. pg. 7, line 54).

Is the measure of sexual identity based off a validated tool? It appears to be a modification of the Kinsey scale, and should probably be referenced as such if so.

Pg. 10 line 46 - clarify annual income

Pg. 10 lines 48-53 - I think this method of relationship classification, why standard, is particularly problematic when looking at a younger population. Many young women will be in a relationship that does not classify as de facto, but equally may object to the official classification of being 'single'. While obviously this cannot be changed now, I think it should be acknowledged as a limitation of the paper.

As I refer to later, I am a bit concerned that the analysis is too limited, without enough variables other than basic sociodemographic background, to truly answer the second aim of to what extent the association between sexual identity and poorer mental health is accounted for by experiences of IPV.

RESULTS

Pg. 14 line 43 - the sentence on the weakest predictor reads strangely to me. It may not be worth highlighting this finding in the text, given it can be inferred from table 3.

Is it possible to assess and control for other potential mediators of mental health, such as alcohol and drug use? Research demonstrates a higher prevalence of problematic alcohol and drug use in sexual minorities, and these behavioural factors may also explain/mediate the relationships between sexual identity, IPV and mental health.
DISCUSSION

The discussion describes the major findings well and puts them into context with existing literature. Caveats around the findings and interpretation are included. The limitations - and particularly that the study only looked at sexual identity and not other dimensions of sexual orientation, are addressed. However, I have drawn attention to a few other issues which limit the analysis, such as the limited range of variables controlled for. This is referred to in the final sentence of the conclusion, but should be highlighted more clearly.

Pg. 17 lines 51-56 - I don't think it's necessary to repeat these stats in discussion

A sentence or two clearly articulating the implications of the findings on ongoing research and services could be added to the discussion.

While the main discussion nicely explains the results, I find the emphasis in the conclusion that mental health outcomes are more closely associated with IPV than sexual identity somewhat problematic from a research translation point of view, as it detracts from these groups of women having increased need of support and services. I am not sure why one would assume that sexual identity is in itself causative of poor mental health. The IPV was more closely associated with mental health problems than sexual identity is true in this analysis, but I'd argue that not enough variables have been examined to extrapolate these findings and say definitively that violence explains the mental health disparities experienced by sexual minority women. Sexual minority women remain at higher risk of IPV and resulting mental health outcomes, and both violence prevention and mental health services targeting women with diverse sexual identities are strongly called for.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
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