Reviewer's report

Title: Association among oral symptoms, oral health-related quality of life, and health-related quality of life in a sample of adults living with HIV/AIDS in Malaysia

Version: 0 Date: 02 Oct 2016

Reviewer: Bethy Turton

Reviewer's report:

This is an interesting study that aims to determine the impact of perceived oral health problems on OHRQoL and HRQoL and the association between OHRQoL. In other words, the relationship between two instruments and relationship of each instrument to perceived oral health. This is an interesting topic and if the writers could communicate it in a more succinct way then it would be a valuable addition to the body of literature.

There are a number of major issues with the way that the data are presented and discussed. As a reader it is hard to follow whether the relationship being discussed is the relationship between the number of perceived problems or OHRQoL. Consistent terminology and adding some specific details into the results that are presented would be helpful.

A series of specific comments are listed below.

Abstract - The paper states that there was a "negative linear relationship between the number of oral health problems and the mean score of all SF-36 domains" It is not clear about where this data is presented?

Introduction - It is good that the authors set the context for Oral Health and health for patients across the globe and it would be good if the context for Malaysia could be introduced at this stage.

Methods –

It would be good if the multivariate modelling could be explained a little more clearly. It is not clear to the reader about which variables were tested and which were excluded?

It would be good to describe the clinic setting so that the readers can understand the demographic of participant. Although there are a good number of sociodemographic characteristics, understanding the clinic setting would be useful to interpret the context of the results.
Results  - If the figures are shown the tables then it is not necessary to repeat the figures in the text.

Page 9 line 2 - do you mean that more than half of respondents have lived with HIV for more than 6-years?

Need a descriptive data of the mean number of perceived oral health problems as this variable is referred to later in the discussion.

Hard to really understand the population in the study in terms of disease experience because there was no bivariate analysis looking at socio-demographics by clinical characteristics.

Items in perceived oral health were the same as that in physical/functional domains, this could lead to some cross over in terminology and the way that things are described.

Table 3 - What is the prevalence of impacts among domains not just by item?

Table 5 - Do you mean to display the relationship between mean OHRQoL scores and self perceived oral health? Please make the title clearer? Which variables were included in the multivariate model?

Table 6 - appears to show a series of models predicting the severity of scores in the SF36 domains by clinical indicators. It is not clear why there were no oral health indicators or why a model wasn't build for overall HRQoL (SF36) scores?

Table 7 - why not comment on the size of the correlations - small-medium-large? This is just as interesting as p-values. Why wasn't there a column for total SF36? Also why just mean score correlations. Did the authors consider looking at Spearman’s rho for the relationship between prevalence of impacts and SF36?

Discussion - The prevalence of oral impact in this study is reported in Line 14, page 12 but that is a new number not in the results section line 16 mean severity score - do you mean overall OIDP score? That number is not in the results section. Also please ensure that terminology is consistent.
It is best to avoid repeating numbers in the text that are already in both table and text of results section.

There are not sufficient data presented to state that those sociodemographic characteristics were not influencing OHRQoL.

It would be useful if the authors could discuss the reasons why no clinical measurement of oral health was conducted and how that might influence the interpretation of results.

**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.

**Yes**

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

**No**

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If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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