Reviewer's report

Title: Validation of the Spanish version of the Oral Health Impact Profile (OHIP-14Sp) in elderly Chileans.

Version: 4  Date: 11 June 2014

Reviewer: Simon Stone

Reviewer's report:

1. Is the question posed by the authors well defined?
   The study aim is outlined at the end of the “Background” paragraph. The authors should clarify if this is a prospective study or retrospective analysis of previously obtained data. In the aim it is unclear if the instrument will be developed as well as validated as part of this study.

2. Are the methods appropriate and well described?
   Inclusion and exclusion criteria should be clearly stated.
   The terminology used “elder” can mean different things in different parts of the world depending on social normal values, consider using “older adult” throughout.
   The details of the sample size calculation are unclear. How have you arrived at the total of 490 subjects? 10 subjects per question is stated but it is unclear why. Is this based on previous work, if so please reference or did you carry out a formal sample size calculation to detect a particular difference in the population? The convenience sample provided a 70:30 ratio of females:males, is this representative of the adult Chilean population? How will you make sure that the findings are transferable?
   Later in the methods you select a further 85 adults for correlation analysis. How did you arrive at this number, how did you choose these participants? If based on previous studies then please reference appropriately. How did you make sure that they were representative of the overall sample?
   The methods do not state how the OHIP-49sp was administered. Was it carried out verbally or written? If written then were the participants able to read and understand the questionnaires (inclusion criteria)? If verbal then please clarify.
   Did the authors consider any form of test re-test reliability of the newly developed questionnaire?
   Further clarification of where the clinical and socio-demographic data has been obtained from is required, was this from the 490 in the OHIP-49Sp validation study or from your additional cohort of 85? It does not appear that it is from the same cohort of patients. Again is this study a retrospective analysis of the data from a previous study? Much of the results and discussion focuses upon the correlation between these data and the OHIP data, please be transparent where it has been obtained from.
3. Are the data sound?

Noting the above, the OHIP data appears to have been obtained and managed appropriately. The authors have described their findings appropriately. The response rate is remarkably good (100% complete). How was this quality of response rate ensured? If there were any missing data points how were these managed?

Throughout the results the authors refer to OHIP “dimensions” in the original publication these should be described as “domains”.

Tables:

There are 7 tables within this paper. The following were noted:

T1: Could be simplified by removing IQR columns.

T2: Is there a reason that the a dimension items are clearly listed in the left hand column but those denoted s are not?

T5: Consider simplifying.

T7: Would this be more appropriately written in the main text?

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

5. Are the discussion and conclusions well balanced and adequately supported by the data?

The discussion clearly links to the previous work and is appropriately referenced, conclusion is succinct and proposes potential future uses of the developed instrument.

6. Are limitations of the work clearly stated?

The limitations of sample size estimation are stated. The authors should consider the limitations of the statistical tests used.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes. There is clear evidence here of building on previous work, the authors should be transparent from which sources the data is being used from as there are two distinct data sets being used. One is from previously published OHIP-49Sp and the other from a smaller cohort of 85 participants.

8. Do the title and abstract accurately convey what has been found?

The abstract is appropriate but should clarify the aim of the study to include development as well as validation of a short form OHIP-14Sp tool for use in an older adult population.

Note the terminology “elder” will have different meaning depending on the social norms of a particular region. Consider using “older adult” (60 + years) as a more appropriate term.

9. Is the writing acceptable?

Yes the language used is appropriate and understandable; there are some minor
typographical and grammatical errors which will no doubt be managed by the editorial team.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests