Reviewer’s report

Title: The Dutch version of the Oral Health Impact Profile (OHIP-NL): Translation, reliability and construct validity

Version: 1 Date: 22 December 2007

Reviewer: Cinzia Brunelli

Reviewer’s report:

This is a well written paper on the cultural adaptation and validation in Dutch language of the Oral Health Impact Profile, but while the study is well designed and reported, I have a substantial concern about the way followed by the authors to analyze construct validity.

Major Compulsory Revisions

1) two different aspects of validity (convergent and group validity) are declared to be examined in the method section (pag 5) but the analysis is practically the same for both. While the correlation analysis performed is adequate for convergent validity, ANOVA (or an non parametric test) shoul be used to test group validity; ANOVA is aimed at testing if differences on the outcome variables (scales scores or total score from the OHIP in this case) emerge among groups defined by a (usually single) variable which is clinically expected to be associated with the outcome variables.

2) In the discussion section the authors speak of a priory hypothesized associations (pag 13 second line) but I couldn’t find any hypotheses in the methods.

3) the method of gathering data on a number of different variables, summing them up, categorizing the scores on tertiles (which is considered not to be a good method by statisticians) and then examining the association with the OHIP scale, can be criticized because it introduces too many arbitrary choices to obtain the final variable, which in turn results very different from the well established and validated (someone says golden standard) measure which is to be used to assess correlation with a new instrument in order to test its convergent validity.

I advice the authors to:

a) detail in the methods section which are the variables to be used to test convergent validity and which ones are used to test group validity (I advice to use single variables and not creative combinations unless they are previously validated);

b) to declare in the methods section the expectation they want to verify with the tests.

c) to use ANOVA (of if they prefer an non parametric tecnique such as Kruskall-Wallis test) to verify group validity.
Minor Essential Revisions

page 6 point 6, second line : there is a duplicate word "negativen" that should be deleted.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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'