Reviewer’s report

Title: Reliability and validity of measuring scale for postoperative complications in third molar surgery

Version: 0 Date: 28 Feb 2017

Reviewer: Franz Josef Strauss

Reviewer’s report:

The manuscript submitted by Aravena et al assessed the reliability and validity of a scale designed to quantify and measure postoperative complications after third molar extraction. The paper is interesting, well written and deals with an interesting issue, relevant for oral surgery. However, there are some concerns, requiring a revision of the paper, therefore it is not acceptable for publication in its present form, unfortunately.

It seems that authors have chosen to report a cross-sectional (which need to follow the STROBE guidelines of reporting). Several items seem missing.

Introduction:

Line 60, empty space after (9).

Affiliation:

carlos.manterola @ufrontera.cl (there is an empty space between the last name and @)

Keywords:

Be consistent with typing, for example in Keywords: Postoperative Complications; Oral surgery, Third molar, etc...

Materials and methods:

Sample size calculation. Please provide additional info on subject selection. How many patients from each hospital were included? Please provide a table with sociodemographic characteristics of the subjects. Did the patients receive antibiotics or a rinse after surgery?

Results:
Please revise the format in Table 1, it is impossible to see all the scores. Also in Table 3, Observer 2, Media? n?. In the same table, authors state that suppuration and erythema do not show statistical significance, that statement is inconsistent with the table, for instance, Suppuration = 0.012, it is not statistically significant? Why not? Please justify. With regards to the structural equations model please provide more information, a table would be nice. In table 5 please include the p values and the statistical test. Please be consistent with the writing, for example, line 167 and 168 "mild complication" "moderate complication" "severe complication" and then in line 188-189 without complications or mild complications" (13- 4 points), "moderate complications" (14-18 points) and "severe complications" (19-40 points) and in the table "mild complication" "moderate complication" "severe complication".

Discussion:

The authors do not discuss about the small sample, risk of bias and external validity. However, they mention the paper of Terwee et al 2007, which states that 100 subjects is the minimum to ensure stability of the variance. Furthermore, just 9 patients with complications are sufficient to validate a questionnaire? This weakness should be addressed in the paper.

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

Unable to assess

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

Unable to assess

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

No

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.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable
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