Reviewer’s report

Title: ATTITUDES TOWARDS TOOTH FILLINGS IN TANZANIAN ADULTS AND ITS ASSOCIATION WITH PREVIOUS FILLING EXPERIENCE

Version: 0 Date: 20 Nov 2016

Reviewer: Ankur Singh

Reviewer's report:

General comment - Given that there is a considerable burden of oral diseases in lower middle income countries and the first choice of extraction over restorative treatment option leads to a pre-mature loss of teeth, and consequently poorer quality of life; this study addresses an important research question. The study is well designed. The main concern of this reviewer is the first the key emphasis placed upon attitudes towards a tooth filling, and second the emphasis on the previous experience of tooth filling in predicting the positive attitude. These two pieces form an integral part of this research. The Knowledge - Attitude -Behaviour model has its reasonable flaws which are well documented in the literature.Second, having a previous experience or choice of tooth filling over extraction can reflect multiple underlying factors: availability of resources, clinical condition and prognosis of tooth, dentist's preference of treatment, a positive experience etc. It is not clear which particular factors do the authors think are key to a favourable attitude and what are the policy/clinical implications of this finding. In addition, attitude is an individual characteristic, while a clinical decision is made through more complex and myriad circumstances under which a treatment choice is made ranging from time, the clinical condition of tooth affecting the prognosis, affordability, and most importantly the access and availability of resources. The reviewer is hesitant that the central message coming out of this research is that a change in individual attitude can address multiple societal and social circumstances which underpin a decision of extraction over a restoration in a lower middle income country. Some specific comments across the manuscript are mentioned below for authors' consideration:

Specific comments:

Background:

Apart from the lack of resources in health systems in LMICs for restorative treatment and individual attitudes towards making a treatment choice, the clinical condition of tooth, the prognosis of a filling over extraction, the role of individual social position, and out of pocket expenditure in the utilization of health care should be mentioned. Currently, the argument made within the background is that the relative weight of 'individual attitude' is much larger than the other factors mentioned earlier.
Page 3 Line 26: "the influence of patient background and previous filling in it within a developing country". This needs to be rephrased for clarity.

Methods:

Page 4 Line 16: How were these referral hospitals recognized as 'top' in the regions? Did authors form a criteria?

Page 6 Line 16: Why was age group of 38 - 82 were categorized in one group? Compared to the other groups, some of these individuals are likely to be retired while others may be working. Similarly, the vulnerability to tooth loss may also be different according to life time exposure. The authors can justify this categorization.

Page 7 Line 8: The authors need to justify why linear regression was a preferred model and if the assumptions for linear regression (particularly normal distribution of outcome) was observed.

Page 7 Line 11: Why was age not included in the regression model while sex was adjusted in the first block.

Page 7 Line 16: Do the authors mean 'All analyses were conducted using SPSS…….'

Results:

Be consistent with the choice of word to describe participants (patients, subjects….)

Tables: Avoid vertical lines in tables

Table 2: The authors can also add a column with absolute numbers and percentages for sample description

Table 4: Need to provide 95% Confidence Intervals with Beta coefficients. The modelling strategy seems to be consistent with evaluating predictors of attitude towards tooth filling, while the title, as well as the crux of the article is the associations between previous tooth filling and the attitude scores. Authors need to clarify how the current modelling strategy fits in with the objectives of the study. What is the hypothesis?

Discussion:

The authors make a statement: "current findings suggest that even in areas with limited resources and availability of services, utilization of tooth filling treatment leads to better attitudes towards tooth filling treatment". The policy implication coming out from this finding can be of two types. First, provision of more fillings within limited resources can be a promoting factor for attitude favouring having tooth filling in future. Second, individuals who have undergone tooth filling within a resource restrained setting, automatically develop favourable attitudes. It is not clear
whether changes are required at the provision level or the uptake level. This dilemma is key to
the arguments which the authors are making.

The authors did not have an objective to investigate socioeconomic gradients in utilization of
tooth filling services, however have discussed this finding. If this was an additional objective,
then the modelling strategy to address this objective is likely to be different.

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.

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.

I am able to assess the statistics

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Needs some language corrections before being published

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