Author’s response to reviews

Title: Adherence to antidiabetic medication and factors associated with non-adherence among patients with type-2 diabetes mellitus in two regional hospitals in Cameroon

Authors:

Leopold Aminde (amindeln@gmail.com)

Maxime Tindong (maximetindong@gmail.com)

Calypse Ngwasiri (ngwasiricalypse@gmail.com)

Jeannine Aminde (jeannineatemanyingu@rocketmail.com)

Tsi Njim (tsinjim@gmail.com)

Azingala Fondong (azingala@gmail.com)

Noah Takah (takahnoah@yahoo.com)

Version: 2 Date: 17 Feb 2019

Author’s response to reviews:

Dear Editor,

Thank you for the opportunity to revise our manuscript further. We have addressed the reviewer's comments which we appreciate has improved the quality of the paper. All changes in the manuscript are highlighted in yellow and we provide a point-by-point response to the queries below.

Comments: There have been significant improvements in the manuscript. However, I have some minor corrections and comments for the author to clarify as highlighted below:

Background

Line 19-27: The sentences does not still flow very well, author should closely look at it again and consider rephrasing it. Especially, the way it reads towards the end of that sentence ---------------

-i.e. with still large burden in these countries-----

Response: Thank you for this suggestion. This has been rephrased as requested. This now reads:
“The LMICs are faced with the challenge of tackling the growing burden of diabetes (including other non-communicable diseases) as well as the existing large burden of communicable and nutritional diseases (3).”

Method

Under sampling and study participants: Line 32, authors should use only "consecutive sampling" and not convenience consecutive sampling -------------------

Response: Thank you for the observation. The phrase has been reworded as requested.

Under assessment of non-adherence: Line 15/16: ------- after Morisky Medication Adherence Scale ------------ reference is required. Also, Line 18/19: ---- previous published studies 21 ------- - there should be more than a single reference. In addition, sentences from Lines 15 to 21 can be better adjusted

Response: Thank you. The references have now been included.

Results

The results are better presented now except some issues with the Tables which will be pointed out under comments on Tables below

Discussion: There is significant improvement

Response: Thanks for this positive feedback.

Tables

Table 1: Line 38, 46, 51, 57 etc the columns labelled with the word "Missing" are not supposed to be included in such a manner rather the valid responses for each variable to be indicated by "n" should be inserted in front of each variable e.g. for variable tagged "Number of diabetes complication (n = ?), ditto for others. With this the percent response will be easily captured by the reader

Response: Thank you. This has now been corrected.
Table 2: In this table, the total number of response is 133 i.e. n total. Ideally, number for each option should be n/n total multiply by 100 e.g. if n = 59, then the calculation should read 59 divided by 133 multiply by 100%. With this, the total percentage will add up to 100% rather than 68.1% in the table. I suggest that the author redo the table in this manner.

Response: Thank you for the recommendation. This has now been adjusted accordingly.

Table 3: The author should create a column for the scoring and the categorization with appropriate remarks e.g score ≥ 27, remark = Adherence; score < 27 , remark = non-adherence. However, the scores assigned to each likert option should be inserted as footnote to the table, the same way it is reflected and stated in the method. I noticed that the Likert scale options in Table 3 are quite different from what was described in the method under assessment of adherence. Author needs to reconcile this and use the options that were exactly used to elicit response from the patients during data collection

Response: Thank you for this remark. In our interpretation of the first statement of this remark, and in line with previous review round, we have provided (in Table 1) two columns that present the categorization of adherent (score ≥27) and non-adherent (score <27) populations explicitly overall (new addition), and by participant characteristics as initially presented for Table 1. We believe this more clearly presents the medication adherence/non-adherence distribution of the study participants. For transparency, we additionally present descriptively in Table 3 the participant responses to each of the questions contained in the adherence questionnaire. This again was in line with the reviewers’ comment in the previous review round following an inadvertent omission by the authors. As suggested, we have now included a foot note to the table with the scores assigned to each likert response option, and have similarly presented these responses in the methods section of the paper for consistency with the text and table 3.

There are two Tables labelled as table 3. The table with the title "Factors associated with non-adherence ------------------------------- should be captured as Table 4

Response: Thank you. This has been adjusted.

Table 4 seems confusing, however, it will be more appealing if the author can represent it in a clearer way. See the table below as a guide

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (%)</th>
<th>OR (95% CI)</th>
<th>Adjusted OR (95% CI)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The author should remove "ref" from the table, I don't think it will be useful anymore if the CI is well presented as in the sample above.

Once the author address all these shortcomings, the manuscript will be much better.

Thank you for the opportunity to review the revised manuscript.

Response: Thank you for the proposed adjustments to the table. The “ref” (meant to denote the reference category), has been removed as suggested. However, we have not included the column “frequency (%))” in table 4. This has been more explicitly presented in table 1 as adherent vs. non-adherent frequencies and percentages. Indicating frequencies here will lead to duplication of information already presented, especially given that we use exactly the same socio-demographic and clinical characteristics (with same categorization where appropriate) in the table 4 for factors associated with non-adherence to antidiabetic medication. We appreciate the reviewer’s effort in improving the presentation of the table, and given the above clarification, we have updated the table as currently presented while avoiding duplication of material.

Thank you for considering our manuscript.

Best regards,

Leopold Aminde, M.D.

(On behalf of the authors)