Author’s response to reviews

Title: Factors Associated with Adherence to Antiretroviral Therapy (ART) among adult people living with HIV and attending their clinical care, Eastern Ethiopia

Authors:

Shiferaw - Letta (samishife2006@yahoo.com)
Asrat - Demissie (asrat_dem@yahoo.com)
Lemessa - Oljira (Olemessa@yahoo.com)
Yadeta - Dessie (yad_de2005@yahoo.com)

Version: 5 Date: 20 August 2015

Author’s response to reviews:

Factors Associated with Adherence to Antiretroviral Therapy (ART) among adult people living with HIV and attending their clinical care, Eastern Ethiopia

Authors
Shiferaw Letta
Asrat Demissie
Lemessa Oljira
Yadeta Dessie

Authors reply to the reviewers’ and editor’s comments

Dear Editor

Thank you for the comments on our submitted article. We are thankful to both the reviewers and the editor for their valuable comments that helped us to make the manuscript clearer.

We have revised the manuscript as per the comments. Below please find the point by point response to the concerns raised by the reviews/Editor.

Kindest regards,

Authors

Responses to reviewers

Reviewer-1

Some of the associations between the investigated predictors of adherence seem to be inconsistently- and/or incorrectly reported.

Response: Thank you very much for this observation, we have made some miss coding for certain variables you have mentioned, they are now all corrected both
within the result and the table

The categorization of “age in years” and “income” seems not appropriately chosen: only age 35-44 years is associated with a better adherence than age older than 45 years, but not the other categories. Therefore, this does not seem a meaningful finding but just due to chance. Also, only the middle category of the income variable gives a higher likelihood of good adherence than the lowest category, but not the highest income category. The meaning of this association is therefore unclear.

Response: As to this concept, we would not expect the findings related age and the income solely happened by chance. Importantly, related to adherence the influence is not linearly decreasing or increasing. The possible explanations are presented in the discussion part of the revised document.

3. The study is cross sectional. No causal inferences can therefore be made. To be able to investigate “predictors”, a longitudinal study design is required. I therefore suggest that the authors change all references to “predictors of good adherence” into “factors associated with good adherence”.

Response: Thank you, the comment is well accepted, and correction is made in the revised version

In the introduction, the authors mention that a rational for a study on adherence in Eastern Ethiopia is that Khat chewing is common (line 76). Did they investigate the association between Khat chewing and adherence? Was Khat chewing one of the categories of the ‘substance use’ variable? Please clarify.

Response: We tried to see this variable association with the adherence because it is so prevalent in the community. However, the finding was not as strong as we expected when analyzed both as alone and combined with other use of substance.

The authors mention that in their definition of good adherence they also considered taking ART according to dietary prescriptions (line 43, 112). What dietary prescriptions for which ARVs did they take into account? It seems to me that for none of the ARVs prescribed to these patients dietary prescriptions were applicable. Please clarify.

Response: In current recommendation, the drugs need to be taken with diets, and the intention was to indicate this concept.

5. The authors mention they assessed depression using a 20 item scale (line118). Which instrument did they use?

Response: Thank you, Center for Epidemiological Studies-Depression scale which has 20-items w used. This is now explained under the measurements in the revised.


Response: Thank you it is corrected in the revised version

Reviewer -2
Line 88: clarify inclusion criteria, any co-morbidity?
Response: Thank you and it is now clarified

Line 93: selection criteria need further explanation, and kindly list the stages.
Response: Thank you the selection criteria are further elaborated. The two stages; the selections made at facility level and at patient level are now explained.

Line 93. Did the study respondents representitive of the people on care in the ARV clinic?
Response: As far as we followed a probability selection, we believe the sample is representative

What is the protocol for commencing HAART in the ARV clinic?
Response: The time to commence the HAART depends on the level of CD4 count in our case CD4 count of less than 250 was the cut point. But such guideline are under continues revisions from time to time.

How was the adherence measured/calculated for each participant?
Responses: Adherence was measured based on the patient report of missing their treatment dose in the week right before the study.

How was the factors affecting adherence determined? Was the instrument used? validated? What was the content of the questionnaire? Can the authors be specific on how they analysed the questionnaire? The authors said they measured depression using the 20 item scale but did not state its content and how it was analysed. How was ‘access and treatment complexity’ measured?
Responses: For the socio-demographic characteristics and some of the behavioral and social issues, direct questions were asked in order to measure the factors. These specific questions were pretested and modified accordingly prior to the main data collection implementation. To measure the depression we applied a 20 item scale taken Center of Epidemiological Study which has been used for similar studies. In this study we have as well checked the internal consistency and it has acceptable level of internal consistency. The mean was used to classify in depressed and non-depressed during the analysis.

How the authors did achieved very high response rate?
Response: We employed strict supervision and follow during the study implementation that helped us to achieve this level.

Over 50% were males, can the findings been generalized to other PLWHA in the study area?
Response: The sample constitutes almost the same proportion of male and female, and there was no significance difference among the two. We believe the finding can be generalized to the other as we have applied probabilistic sampling.

What is the effect of counseling, herbal drug intake and presence of OIs on drug adherence?
Response: Table-3 of the multivariate analysis presented the association of these factors. Their result are also described and presented in the result when found statistically significant.