Reviewer’s report

Title: High Magnitude of under nutrition among HIV infected adults who have not started ART in Tanzania--A call to include nutrition care and treatment in the test and treat model

Version: 0 Date: 28 Mar 2017

Reviewer: Ramadhani Mwiru

Reviewer’s report:

I was very pleased to read a well-written paper on magnitude of undernutrition in a population of HIV-infected people in Dar es Salaam, Tanzania. This is very relevant paper on this very relevant topic. Despite this being a very relevant and well-written paper, I have few comments below that the authors may wish to consider to improve the paper.

Title page

1. Please cross-check the names of co-authors
   * Siril vs. Sirili
   * Ferdinand vs. Fedinand

2. Please cross-check the names of the institutions
   * African Academy of Public Health vs. African Academy for Public Health

Study settings, population and sampling

3. More details about the study setting and sampling strategy would be helpful. E.g. how were these 7 CTCs selected? Out of how many CTCs?

4. Measurements
   * Severity of undernutrition - the moderate and mild categories cut-offs are confusing, please revise
   * Show cut-offs for age quintiles and wealth index quintiles

5. Page 5; data analysis
   * How did you handle missing variables?
Results

6. General characteristics/table 1:

* Second sentence talks about mean age of males vs. females, however, mean age is not shown in table 1
* Line 38/39, correct the p value, p=9 may be incorrect

7. Descriptive characteristics/table 1

* First paragraph talks about prevalence of undernutrition referring to table 2. The information is actually in table 1. Please revise and make reference to appropriate tables.
* Paragraph 2; line 8 magnitude of undernutrition comparing women to men should be done by row percents - 30% vs. 26.6% not 30.7% vs. 34.4%
* Para 3; line 26, p value =0.381 not 381
* Paragraph 4; HIV disease stage; should be 6% undernutrition for those in stage 1 vs. 48% undernutrition among those in stage 4 not 1.2% vs 28.3%. Please revise the para.
* You did not talk about variable - any starchy, alcohol dependency, and social support

8. Factors associated with undernutrition/table 3

* Para 1; please show multivariate results for emotional distress, just replace the depression variable with emotional distress and get results for emotional distress
* Line 51; 36% should be 37%
* Page 7; be consistent in the use of undernutrition vs. underweight

Discussion

9. Line 21/22 - remove the ? mark

10. Para 2: why is it especially important in the era of test and start when your study population was pre-ART patients?

11. Para 3 - what are some examples of those nutrition specific and sensitive interventions that should be integrated within ART services?
12. Page 8; line 16/17. It may not true that individuals with depression were more likely to be undernourished in this study. Of course table 2 is suggestive but in multivariate model (table 3) depression is not associated with low BMI, p=0.138

Tables

13. Table 2
* Why is N=3,999?
* Move the variable age (mean years) to table 1 or revise the text referencing this variable
* For appropriate comparisons use row percents for variables - age (quintiles), sex, wealth index, depression, alcohol dependency, clinical stage, dietary diversity (binary), and any starchy (24 hours)

14. Table 3
* Show multivariate results for emotional distress variable

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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