Author’s response to reviews

Title: Anemia in People on Second Line Antiretroviral Treatment in Lilongwe, Malawi: a Cross-Sectional Study

Authors:

McNeil Ngongondo (mngongondo@unclilongwe.org)
Nora Rosenberg (nrosenbe@email.unc.edu)
Christopher Stanley (stanleychristopher1@yahoo.com)
Robertino Lim (robertinolim@gmail.com)
Dennis Ongubo (dongubo@tulane.edu)
Richard Broadhurst (richard_broadhurst@med.unc.edu)
Colin Speight (colinspeight88@yahoo.co.uk)
Robert Flick (robbie.flick@gmail.com)
Petros Tembo (ptembo@lighthouse.org.mw)
Mina Hosseinipour (mina_hosseinipour@med.unc.edu)

Version: 1 Date: 11 Nov 2017

Author’s response to reviews:

10 November 2017

Dear Editor,

I am responding to the reviewers’ points raised during their assessment of the manuscript “Anemia in People on Second Line Antiretroviral Treatment in Lilongwe, Malawi: a Cross-Sectional Study”. I have included a point by point response below and have tracked changes made to the manuscript in the revised version submitted.

Here is the point by point response:

Vicente Estrada (Reviewer 1)

• The study would improve if is not purely descriptive of a general, unspecific, medical problem. Anemia is a multifactorial problem, but the most frequent causes include deficiency
causes (especially iron) and in the context of HIV, infections, drugs and renal failure. The manuscript does not go far beyond that the point that anemia is frequent. If most patients with anemia show an iron deficiency, the problem cannot be directly attributable to HIV infection or the line of antiretroviral therapy.

- We have added text to the manuscript describing the HIV-related and HIV-unrelated causes of anemia and their importance in the study context. We have also discussed the occurrence of iron deficiency anemia in the study population.

- It is also missing some comparative data with a population of similar characteristics to know the severity of the problem; for example, anemia is prevalent in general population, and it can be as high as 28% in non-pregnant women. The population studied was selected by their HIV therapy status (second line). What is the prevalence of anemia in first-line patients?

- We have added the prevalence in first line ART and discussed it in relation to this population which was on second line ART.

S Saravanan (Reviewer 2)

- In Abstract, background section. The sentence 'However there limited information on anemia' is to be changed to 'However there is limited information on anemia'.

- The sentence has been corrected.

- Abstract, background section. 'our objective was describe...' is to be changed to 'our objective was to describe...'

- The sentence has been corrected.

- Abstract, Result section '17.5%, 13.8, and 1.9%...' should be replaced to '17.5%, 13.8%, and 1.9%...

- The sentence has been corrected.

- In methods section, split up on second-line ART regimen has to be given in numbers and details on first-line ART regimen is not required

- This section has been revised accordingly.

- In results section, 2nd paragraph. The author has mentioned, 'anemic participants were significantly younger and had been on second-line ART.....'

- This section has been revised accordingly.

- There is no need to mention the mean of hemoglobin in one statement and range in the other statement, can be clubbed together.
• Male participants had high Hb level than female participants, this information is repeated twice in results.

• Severe anemia was only seen in female participants - this information is repeated twice in results.

• In results section, percentages should accompany with number. eg. Prevalence of anemia in male participants is 15.7% and female is 43.6%, where are the numbers?

• The author have concluded that, being underweight is the risk factor for anemia. This is not there in the result. Having BMI >=30 may be the reduced risk for anemia, as your result suggested. But this doesn't mean people who are underweight have more risk for anemia.

Thank you for considering our manuscript.

Sincerely

McNeil Ngongondo, MBBS
UNC-Project, Tidziwe House
100 Mzimba Road, Kamuzu Central Hospital
Private Bag A-104
Lilongwe, Malawi
mngongondo@unclilongwe.org
+265999 782 183