Author’s response to reviews

Title: MUAC-for-age more useful than absolute MUAC for nutritional surveillance in Somalia: results from nineteen cross-sectional surveys (2007-2016)

Authors:

Estefania Custodio (estefania.custodio@ec.europa.eu)
Rocio Martin-Cañavate (rociomartincanavate@gmail.com)
Federica Di Marcantonio (Federica.di-marcantonio@jrc.ec.europa.eu)
Daniel Molla (daniel.molla@fao.org)
Abukar Yusuf (abukar.yusuf@fao.org)
Francois Kayitakire (francois.kayikatire@ec.europa.eu)

Version: 2 Date: 22 Nov 2017

Author’s response to reviews:

Dear Editor:

We thank you for the issues raised in your last review. We have addressed them to the best of our knowledge and we believe the manuscript has improved substantially in terms of clarity. We hope you agree.

Please find our detailed answers to the points raised below:

a. It seems to me that the same results have been presented as pie charts in Figures 2 and 3 and as tables in Table 2 and 3, respectively. This should not be the case, and I would suggest that the pie charts, which look quite confusing to me, be deleted.

Yes, the results given in Table 2 and Table 3 are the same that are graphed in Figure 2 and Figure 3 respectively (except for the total numbers, which are only reflected in the table).

Although we agree with the general idea of not repeating results in two different formats there were two reasons why we included them:
1. This article aims to supplement the results provided by Grellety & Golden in the article published in BMC Nutrition (2016) 2:10. That article was a breakthrough in our field by presenting the results of comparing WHZ measurements with MUAC measurements in 47 countries. One of the limitations stated in that article was that subnational/livelihood surveys to be compared were not included. Our results are part of that type of surveys, thus completing the overall picture provided by Grellety & Golden, in Somalia at least.

Moreover, we propose to bring into the light another indicator (MUACAZ) which converges better with WHZ than the absolute MUAC indicator in our study population. In order to make comparisons straightforward and ensure an optimal complementarity between the two articles, tables and graphs (pie charts) have been constructed the same way Grellety and Golden did in the 2016 article.

2. As the pie charts may not be self-explanatory we thought including the tables could help in the interpretation (emulating Grellety and Golden's representation).

However, and agreeing with the editor's point of view, we propose to move Table 2 and Table 3 to the Supplementary material section (Table S1 and Table S2 in the reviewed version) and to organize the information contained in the pie chart figures differently to be clearer. Please see the Results section in new manuscript provided.

b. The authors’ way of creating tables within tables (eg. Tables 2.1 and 2.2 within Table 2) seems awkward to me. I suggest that the tables (Tables 1-4) be made more simple or easy to read, somehow. For Tables 1-3, authors may consider transposing the tables, so that the livelihood categories become the columns.

We have simplified Table 1 and Table 4 (Table 2 in the reviewed version), although they may need a landscape page formatting now.

For Table 2 and Table 3 (Table S1 and Table S2 respectively in the new version) we are proposing a layout combining the contents from the two tables according to indicators and not to severity of malnutrition as it was before. Furthermore, the tables have been transposed following the editor's suggestion.

Please let us know if there is any further issue to be addressed.

Many thanks.
With kind regards,

Estefania Custodio, PhD.

Joint Research Center, European Commission