Reviewer’s report

Title: The burden and correlates of childhood undernutrition in Tanzania according to composite index of anthropometric failure

Version: 1 Date: 12 Jul 2020

Reviewer: Zeinab Ghorbani

Reviewer's report:

The current manuscript is a well-written and interesting report on the burden and correlates of childhood undernutrition. However, I have some concerns.

1. The findings in the results section of the abstract should be presented with the corresponding statistics and p values, mainly when they are significant.
2. Since the authors mentioned CIAF is a binary 0/1 variable, the application of Poisson regression to identify the correlates of CIAF seems inappropriate.
3. Please mention the corresponding p values in case of significant findings throughout the results section.
4. In table 3, the results included mothers and children, that are better to be separated to avoid misunderstandings.
5. My major concern is the time frame of the included data in the study, which is confusing. In table 4, the prevalence of composite index of anthropometric failure in Tanzania from 1991 to 201 is presented, while in the methods, the authors pointed out that "in this study only recent TDHS surveys of 2004-05, 2010 and 2015-16 were used". On the other hand, in the methods within the abstract, the authors stated that "we retrieved and analyzed the data of mother-child pairs from the Tanzania Demographic and Health Surveys (TDHS) of 1991, 1996, 1999, 2004-05, 2009-10, and 2015-16".
6. Also, within the abstract, the authors stated that "About one in every three (38.2%) of the surveyed children had anthropometric failure in 2015 compared to half of them (50%) in 1991." If the data of 1991 was not included in the current analysis, why it is mentioned as the study results?
7. More details on statistical methods, particularly on the type of dependent variable in crude and adjusted models on anthropometric failure, are needed.
8. Be careful in using the abbreviations throughout the manuscript. Please mention the abbreviation expansion only for the first time.
9. The included citations need to be updated. Also, consider comparing the results of more updated references in discussion with the current findings.
10. Some grammatical errors need revising.

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Yes

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

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 recommend additional statistical review

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