Reviewer’s report

Title: Nutritional Status of In-School Children and its associated factors in Denkyembour District, Eastern Region, Ghana: Comparing Schools with Feeding and Non-School Feeding Policies

Version: 0 Date: 08 May 2017

Reviewer: Fatma Huffman

Reviewer's report:

REVIEW: for Nutrition Journal manuscript: NUTJ-D-17-00114

Prevalence of Malnutrition and its associated risk factors among School Aged Children in Denkyembour District, Ghana; comparison of feeding and non-feeding schools

Strength of Study

- This study adds on existing knowledge on school feeding programs for a district in Ghana that limited information on school feeding is available.
- The design of the study comparing feeding and non-feeding schools was perfect. Additionally the use of multi-stage sampling technique and yes and no ballots was ideal in reducing bias associated with sample selection

Issues Relating to Study

Design

- Authors use a proportionate sampling to identify exact numbers for each school. Did they have a sample size calculation, the paper does not mention it? Authors should elaborate on how many participants they needed in total and how they arrived at that number?
- Where the any information collected on dietary intakes? Can you include them in the logistic regression for determinants of nutritional status.

It is not ideal to look at risk factors for nutritional status of school age children enrolled in feeding programs without looking at their dietary intakes. Dietary intakes when considering nutritional status of school age children.
Statistics

- In table 4, there is comparison of overweight (3) against non-overweight participants. This seems not to be right statistically considering the numbers involved three (3) in overweight category against three hundred and fifty six (356) in non-overweight category is an unbalanced comparison with insufficient power to determine a difference.

Data Presentation

- Table 4 looks confusing. The first row in table 4 reads Attribute, 'Not overweight overweight' - Pearson chi square, AOR(95% CI) please clarify.

This label suggests that all the statistics in the table are on overweight and non-overweight. Yet, measurements of attributes such as stunting and thinness are present.

* Revised first row in table 4 to read Attribute, N (%), N (%), Pearson chi square, AOR(95% CI).

* Overweight versus non-overweight can be in a different row

* N=(%) notation in row 2 of table 4 is so confusing as well should read N (%)

Discussion

Owusu, et al (2016) and (2017) compared two types of school feeding programs in Ghana - private and public. Please use these finding in your discussion.


Interpretation

"Furthermore, a more worrying findings in this study was the high prevalence of thinness found among children on feeding programs which may conclude that the feeding programme is not
having any positive influence on the nutritional status of the children involved as far as thinness is concern."

I think the scope of the research design does not allow for such a statement to be made, the study is a cross sectional design, if there was a baseline assessment prior to feeding program implementation and compared both time points, then it could have said that the feeding did not make a positive impact on thinness. That is if the schools in the district had a prevalence of thinness of 5% and now you are seeing 9.3%, the above quoted statement from the paper can be made. Here is the case the paper does not provide information about thinness in the district prior to implementation of the feeding program

Level of interest
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Quality of written English
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