Author's response to reviews

Title: Knowledge of integrated management of childhood illnesses community and family practices (C-IMCI) and association with child under nutrition in Northern Uganda: a cross-sectional study

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Author's response to reviews: see over
Dear Sir,

Re: Response to Third Reviewer’s Comments: Manuscript No: MS: 3200679471026039

Thank you for the communication dated May 29th, 2014 concerning reviewers’ comments. We would like to thank the reviewer for the excellent comments that have enabled us improve the manuscript. Please find below a point-by-point response to the comments

Reviewers’ Comments:

Dr Inguun Engebretsen

Major

1. “It still appears unclear which reference that is used to calculate the z-scores. In the abstract they say something about WHO and NCHS, however, in the manuscript I do not see that fully explained.”

We used WHO standard charts as per reference 7. This has also been clarified in the manuscript as stated below in answering comment number 3.

2. “Further, from the answer to me – it looks like they use a type of “pre-categorisation” on the charts. If the latter is the case that must be very clear so the reader more easily follow what is done in the field and what is done “at the desk.” If they did that in the field – how have you “redone” that to new charts?”

We did pre-categorisation at the desk, after collecting the children’s weight and height in the field we used WHO 2006 growth charts to categories children as wasted(<-2sd wt for ht) or not
or stunted (< -2 sd ht for age ). This was double checked by the individual double entrants at the point of double entry. We then fed this information into our statistical software.

3. “A better explanation harmonizing the abstract and the manuscript on issues regarding recording and transforming the growth information is needed. The normal thing to do would be to have the weight, length/height, gender and age information entered into a system (WHO Anthro) or use one of the macros to calculate the z-scores: From there the team could have provided the descriptive statistics for growth and of course also the “tail” statistics which are the undernutrition categories wasting, stunting and underweight at z-score <-2 level. The authors may feel free to contact me if they want further clarifications. However, if it is a simple categorization made from growth charts for the undernutrition categories, from a theoretical perspective, that should not introduce errors – it’s just a ‘cumbersome’ way to do it and you reduce the flexibility of the data. Sorry, from the different versions and description to me now I still do not understand fully what is done. I might have overlooked something.”

We used simple categorization from WHO 2006 growth reference charts. We did not use software like WHO Anthro or Nutristat. This is elaborated in the manuscript and stated as “Using WHO 2006 growth charts, the adequately trained data collectors would compute and record the nutritional status of children between 6 to 60 months at the end of each field day. These were recorded as wasted, not wasted, stunted or not stunted. These computed nutritional status was double checked at the time of data entry using each data entrant with the same growth reference charts.”

4. “It looks like the abstract has not been re-polished…. Errors with spaces and dots all over the place. In fact this happens quite a bit in the manuscript as well. This might be a result of too much sending and re-sending in-between authors – especially if someone use the align text left and someone else “justify” by default or if you have different text programmes. Please check carefully the version which you uploaded to BMC. There are also and some errors with presentation.”

This has been corrected and adjustments made.

Minor Corrections.

5. “Please indicate what the 33% and 5% are referring to. Prevalence? E.g. “With a stunting “prevalence” at/of ...”

“with the stunting and wasting prevalence at 33% and 5% respectively”

6. “Full stop end of sentence in Background”
This has been put.

7. “Either write: children between 6 and 60 months or children aged 6 to 60 months” By the way that information is repeated twice in the abstract!

This has been replaced.

8. “Bracket ( ) missing end of results.”

This has been added.

9. “You could comment on how age influenced stunting too since you follow that for The Knowledge C-IMCI and rural status.”

Children less than 25 months were more likely to be stunted in this study. Though this was not statistically significant, it correlates with the low level of breastfeeding knowledge found in this particular population

Background.

10. “Stunting information varies from the introduction in the abstract to the background section. Get terminology right: “… of under-fives”? We have corrected the terminology. In the abstract we only put the local (Ugandan) stunting prevalence i.e 33% however in the main text we included both the regional and local and have clearly stated that.

Methods

11. “The description of MUAC is confusing “tip of the shoulder blade and the tip of the elbow and dividing the distance by two.” Please indicate if you do it according to e.g. Unicef http://www.unicef.org/nutrition/training/3.1.3/2.html It would also be key to understand why you report this when we do not get any results from this investigation”.

What we did entirely agrees with the UNICEF recommendations, however since the MUAC values were not included in this manuscript, we agree with the reviewer to take them out.

12. “Please indicate which digital scale you used and how you used it in the field”

This has been done. It now reads “Weight measurements were taken using a digital seca scale sensitive to ± 0.1 kg with thin or no clothes and no shoes. The scale would be put on a flat
surface, recalibrated to zero and children who could stand made to stand on the scale on their own. The younger children would have their mothers stand on the scale, with the caretaker on the scale, we would recalibrate the scale to zero, then hand him/her the child and record the reading. Two readings would be taken and the average recorded.”

Height/Length section was also expanded to read “Measurements of supine or recumbent length of children who are shorter or equal to 87 cm (or less than 2 years) would be measured while lying down; taller children would be measured while standing.

children would be measured barefooted and with no head gear. We would

Make sure shoulder blades, buttocks and heels touch the vertical service of the height/length board; knees fully straight and arms stretched on the sides; and the neck would be straight with eyes looking straight ahead with the headpiece placed firmly in position. The measurement would be read on to the nearest 0.1 cm using the Short Infant/Child Height Measuring Board (Short Productions, Woonsocket, RI).”

13. “Household vs household”

This has been replaced.

Results

14. “I disagree that it looks ok to use 2 digits when presenting, e.g. proportions “

51.60 percent females.”

We have changed to 1 decimal place throughout the text as requested.

15. “Please do not give p-values without “size-estimates” – in the text, it is enough to say if it was significant or not.”

We have corrected this where it had appeared.

16. “They say they measured the kids, but we get very little info on the distribution of WLZ, HAZ and WAZ. That would be very interesting from this region.”

In this particular study our interest as regards nutritional status was mainly wasting and stunting and hence we did not venture into other nutritional indices as mentioned. We did
manual computation using WHO 2006 growth charts and fed that information into our software. This makes our data less flexible to calculated other parameters.

17. “Table 1: what is the time unit for the income is it per month? Give a little note by the end of the table for the readers to convert the unit into USD/E or similar.”

The income is per month and this has been included in the table. We have also put a note at the bottom of the table for conversion to USD/E.

18. “I see 1 * after the head of household income – but not what the * is referring to. Maybe put the income information next to each other.”

We have put the income information next to each other and deleted the *.

19. “Do not need ” : “ in all boxes in the table”

These have been removed.

20. “Present wasting and stunting information in the same order both in the manuscript and for the tables”

This has been done. We have interchanged table 4 and 5 to achieve this flow.

21. “Table 1 is clear, Table 2 is ok, please look at other templates. Can be reduced in size. (Totals not needed)

We have removed totals from table 2.

22. “The headings have moved”

We think this was an upload error and we have endeavored to align them to the best of our ability.

Discussion

23. “You say you used an adequate sample size. You have extremely wide confidence intervals. Which arguments do you have for your statement?”

We totally agree that this shows a sample size gap, this is a limitation in our study and future studies should consider this.

We hope you will find our responses adequate.
Yours faithfully,

Mukunya David.