Reviewer's report

Title: Rural residence and Limited Caretakers’ Knowledge of Integrated Management of Childhood Illnesses associated with poor Children’s Nutritional Status: A Community-Based Cross-Sectional Survey Northern Uganda

Version: 1 Date: 22 October 2013

Reviewer: Ingunn Engebretsen

Reviewer’s report:

To the authors:

I appreciate the authors’ effort to further understand the IMCI and undernutrition situation in Northern Uganda. I fully appreciate their effort to study the population in the post-conflict area in Northern Uganda that deserves wider somatic and mental health priorities in the years to come.

Major revision: The plan of analysis is not well presented or easy to understand. I have addressed my major concerns below. In my mind we should have had the 4 pillars of IMCI well presented from this population. The regression multivariable analysis is jumping in many directions which is confusing. I would have appreciated a scientific argument for the final models.

Further: Literature review in the background needs revision as well as the discussion needs to be coherent with the result presentation. Lastly, the method section is not written well enough to fully understand what the authors have been doing.

Chronologic description of my comments:

Title: The title is too long and cumbersome. I would prefer if the authors could present “what they do/study” rather than what they find in the title

Language: The language is not up do date for publication and needs language editing. For example, it is a frequent loss of a/an/the. “with high burden of stunting” instead of “with a high burden of stunting.”

Capital letters in “funny” places: caretaker-Child paris

Not readable sentences like: “We therefore results…..(background)”

“Space” missing or in excess….

Abstract:

Background: This paragraph lacks some type of coherence. You bring in a) C-IMCI (National) and b) stunting prevalences (SSA). This you want to address, but in a place recovering from civil strife (North Uganda). I would like to see the paragraph being built up stronger telling a) what you will study and b) where you will study it. Please argue on a national scale and not the whole SSA-scale.

Methods: Give growth reference system in abstract, not only cut-off values. Give age range of the included children. You also have to define what type of
knowledge and practices you are analyzing, and how you got the information.

Results: Prevalences meaningless not knowing age-span of these children. Something is very wrong with your results cause the OR goes in complete opposite directions – so it seems like the same lack of knowledge should go in favor or complete disfavor of two related growth deficiencies. The 95% CI is extremely wide – is the knowledge variable constructed in a meaningful way? We do not need both these 95% CIs and p values. Drop the p-values.

Introduction:
Some references a bit old – and not up to date (e.g. no. 2). The reference to MDG seems old.

Introduction needs to be ended by a clear aim. You say something about what you will “result” or similar – I do not understand the aim and objectives here. I also would like to have more relevant background from the actual site you are doing this in the background. Any literature review telling us why you think it is important to study anthropometry as an important health indicator in this particular area – what are other publications from this area indicating?

Further, IMCI- is loosely covered: why do you study IMCI in Northern Uganda? What do you expect with regard to implementation/sustainability of such a programme in this area? When you present education as important – please provide information about how the educational level is in Northern Uganda – even DHS has mad such overviews.

Methodology:
Info on when the study was done is missing.
The design information lacks references, Kish and Leslie…. And advised by WHO is not specific enough.

I wonder why the authors mash the knowledge together in such a way ¾. I would assume the 4 scales would individually provide interesting data on specific knowledge that could be looked at.

I do not find the description of the covariates and analysis specific enough to understand what the authors have been doing.

It is a description of sample size calculation, but not of sampling.

Results:
The para on nutritional status is confusing to read. You present prevalences and give OR. I do not get a grip on what the ORs are.

The authors could avoid “interpretation” in the result section – “worrying” etc even if they are right.

The associated factors para is confusing: I mention the main problem in the abstract.

The authors present a well known age-relationship. Further – they present younger age and no knowledge about complementary feeding as protective: the latter substantially more protective than the other. Further up they have
demonstrated how the same lack of knowledge (merged variable) is a risk. I find the result section at best unfinished. It is very hard to get a grip of this analysis and result presentation.

Discussion:
The discussion is not really reflecting the results and difficulties in the results – the knowledge part of it. It is bringing in new items not studied (the socio-economic situations). However, it has some relevant literature, but there are also many non-cited opinions.
The contribution list does not say anything about implementation issues and wonder if nobody from this big team joined the data collection.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests.