Reviewer’s report

Title: Survival Status and Predictors of Mortality in Severely Malnourished Children Admitted to Jimma University Specialized Hospital from 2010-2012, Jimma, Ethiopia: A Retrospective Longitudinal Study

Version: 2
Date: 3 June 2014
Reviewer: Kelsey Jones

Reviewer’s report:

The manuscript describes a retrospective record-based analysis of one year’s admission to a nutritional rehabilitation unit. In general the research question is an important one (namely, what are the risk factors for mortality amongst children with severe acute malnutrition), the statistical analysis appears to be appropriate to address these questions, and the standard of written English is acceptable. However, there are some major issues with the way the study is reported that make it very difficult to assess at present, and these should be addressed by Major Compulsory Revisions:

1. The authors should reformat the work in accordance with the STROBE guidelines on reporting observational studies. Particular considerations should be given to i) clearly defining inclusion criteria for the study (if these are admission criteria for the ward, then they should be stated - are all admissions to the hospital routinely screened for acute malnutrition? Are HDU or ICU-level admissions taken to the ward or elsewhere? Lack of clarity on this impacts on external validity), ii) providing a clear table of demographic/medical features at admission stratified by outcome. (At the moment although some of the features are mentioned in the text, this is incomplete and not the easiest way to extract the information.

2. I am finding it difficult to reconcile the presented data in the text with the graphical figures provided. Of note, all graphs 5-10 are very similar, and in fact appear to have the same lower limb of the survival curve, which is unusual. I am wondering if there may have been some kind of transcription error, because some of the data doesn't quite make sense to me. For example, in the txt it is quoted "1.8% [of 947 children] were hypothermic". This is equivalent to 17 children. However, in the lower arm of Figure 6, there are many more than 17 downward steps. How has this graph been drawn? Also, although 50% of the deaths occur within the first week (Figure 3), in Figures 5-10 about half of the deaths seem to occur after 20 days.

3. The fact that results and discussion items are presented together means that the discussion items are presented as multiple short ‘bursts’, which are repetitive and sometimes less than enlightening (at points whole sentences are repeated verbatim). The content would make much more sense if results and discussion were separated.
Without more precise information on the inclusion criteria and patient characteristics, it is not possible to judge the likely impact of the paper, though I suspect that the impact for this kind of analysis (several of which have been published previously) and at this scale is likely to be small.

The submission needs to be rewritten and reformatted to bring the data out more clearly, and I believe that possible inconsistencies need to be addressed (ideally by an independent statistical advisor with access to the dataset) prior to further review.

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests