Reviewer’s report

Title: Maternal depression and Malnutrition in children in south west Uganda: a case control study

Version: 1; Date: 18 August 2015

Reviewer: Letícia Marques dos Santos

Reviewer’s report:

The authors have carried out an important study for understanding the role of maternal depression on the development of malnutrition in children. This study provides insight into this issue and substantiates the health provider to assess all of the social/individual variables that potentially adversely affect upon a child’s health and development. However, I have some comments and suggestions for revision regarding, mainly, on methodological aspects.

Major compulsory revisions

The question posed by the authors are well justified, but it is not clear. The authors made some methodological explanations into the sentence where they stated the study main goal, which has compromised the clarity of the sentence. I suggest that they review the main goal.

A case-control study should always be described in details, especially concerning the criteria of inclusion and exclusion for cases and controls. The authors describe the criteria of inclusion, but they do not mention the exclusion criteria. Furthermore, there is lack of information in some important questions: The cases are included in the study only with the diagnosis of undernourishment or they had some other illness that lead to undernutrition? What are the health condition of children included in control group? Are they sick too?

I suggest that the authors address their analysis model clearer. They inform that “Logistic regression analysis was used to estimate OR for each variable, controlling for potential confounding by all other variables.” However, what are the potentially confounding variable? What does it means “controlling” for those variables? Does it means that all confounding variables are included in a multivariate regression model?

The authors do not mention in what extent the groups of case and control are similar or different. It should be well described since some of the findings could be a result of selection bias. This is the first step when you carry out an unmatched casa-control study.

Furthermore, they describe that “Overall 71.7% of the children were malnourished and of those malnourished 78.1% were underweight, 79.8 % were stunted while 84.0% % had wasting.” It seems that in both group there are malnourished children. In what way the inclusion of malnourished children in both case and control group can weaken the association founded?
I would like to understand how the non-adjusted association of 1.68 jumps to 11.02 after adjusting. Why do the data losses accuracy with an adjustment? What does it means? In addition, I suggest review the analysis model, since it, conceptually, implies a hypothesis, which is not contemplated in the analysis.

Minor Essential Revisions

The authors should revise the quality of typing, especially too much space between words and the use of parenthesis.

The tables should be revised. The table header should express clearly what each number means, in other words, if they are frequency or proportion. In addition, they should include in the table title, all the information that the reader needs to understand that table. Lastly, the table should not be “closed” as a frame, with vertical lines in the ends.

Level of interest: An article of importance in its field

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

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

Declaration of competing interests:

I declare that I have no competing interests.