Reviewer's report

Title: Association of household food insecurity and mental distress among pregnant women attending antenatal care in Jimma Zone, Southwest Ethiopia

Version: 2
Date: 8 September 2014

Reviewer: Barbara Piperata

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The following review follows the outline provided by the journal - thus the review is in the form of a series of questions posed by the journal. The numbers refer to those questions.

1. Is the question posed by the authors well defined?
Compulsory.
The authors do not state any clear questions or hypotheses. Their interest is looking at the prevalence of food security and mental health, as well as links between food security and mental health in a sample of pregnant women. The introduction of the paper would be greatly improved if specific hypotheses or questions were stated. In addition, the authors should provide a clear argument for why studying food security and mental health among pregnant women is new (what do we not know?) and why it is important. The absence of this argument makes the meaning of the findings unclear and less compelling. The article needs to be more theoretically grounded and articulated as part of a broader literature in a more compelling way.

2. Are the methods appropriate and well described?
Compulsory.
The methods are sound for the type of study the authors conducted but, not for getting at the more interesting question they seem to hint at which is the idea that food security and mental health have some causal relationship (the direction unknown). This has been a struggle in the broader literature on this topic. While it is not necessary for the authors to re-design the study to address that more compelling question, this limitation and the fact that the paper lacks grounding in a theoretical framework severely limits the usefulness of the work. I strongly urge the authors to better ground what they are trying to accomplish through a richer theoretical discussion of the topic in the introduction. Then, in the method section, they can better explain theirmethodological approach and more clearly demonstrate how their approach is appropriate for answering their research questions (which as noted above need to be better articulated in the introduction).

Compulsory

Other concerns in the methods section include: (1) the lack of explanation for the
cut-offs for each of the validated questionnaires, (2) unclear categories of women’s union status, the number do not add up to 100%, so there is some overlap between categories and this should be clarified, (3) in the Sample Size and Sampling section – (1) How were women selected, was age a factor? (2) How do the facilities chosen compare to those not? In the section on Tools and Measurements – (1) where were the instruments pretested and with whom, how many people participated in the pretest, were the women surveyed in the pretest also pregnant? (2) also greater information on training and supervision is needed to demonstrate the quality of the data. In the section on Questionnaires and Mental Distress – it was unclear why the authors used a postnatal mental health test among pregnant women. Some insight into the reasoning of the design is needed – the authors’ logic should be made clear so the reader can understand the instrument choices.

Minor essential

Can the authors provide some context on understanding the income data? They report raw incomes but this tells us nothing of the poverty level.

In the section of food insecurity – the cutoffs for food secure vs. insecure could be stated more clearly.

Compulsory

The authors mention a number of control variables. These need to be explained. In other words, why were these controls included? Each should be described and the authors should discuss how each control variable could potentially affect the outcome variables. This will also provide better information on the context of the study. We currently have no idea who these women are making it hard to appreciate the research findings.

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3. Are the data sound?
   The soundness of the data will be clearer when the above issues are addressed.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   This was unclear.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
   The discussion is extraordinarily brief and limited. No context for this study is presented and the data are never explained in terms of their meaning in this specific population. I found this section to be very weak. It could be greatly improved if the specific findings were tied to the local context and then used to
discuss the broader literature.

6. Are limitations of the work clearly stated?  
Yes.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?  
Yes.

8. Do the title and abstract accurately convey what has been found?  
Yes.

9. Is the writing acceptable?  
Yes, overall it is clear. There are few places where there are English problems and a careful edit should be conducted to catch these minor, but significant issues. In addition there are a few places where the sentences are not clear. 

Example:
(1) “For example, longitudinal studies showed that poor mental health may put low income women at risk for household food insecurity i.e. she may experience psychological distress as a result of lack of access to nutritious, affordable, culturally appropriate food”.

The reasoning of the second half of this sentence does not match with the first. The second part indicates that lack of access to food my cause mental distress while the first part indicates that mental illness causes food insecurity.

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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.