Reviewer's report

Title: Factors associated with diarrheal morbidity among under-five children in Jigjiga town, Somali Regional State, eastern Ethiopia: A cross-sectional study

Version: 0 Date: 11 Jul 2016

Reviewer: Patricia Pavlinac

Reviewer's report:

This paper describes the prevalence and correlates of self-reported community diarrhea among children living in Ethiopia. The paper provides a good description of households but could use some improvements in the organization and conciseness as well as adding to the detail and discussion of the findings from the measures of association.

Background:

The organization of the background could be improved starting with the estimates of diarrhea morbidity and mortality worldwide, in Ethiopia specifically, and gaps in what's known about diarrhea in Ethiopia (aka the gap in the published literature that this study is addressing). The current background seems to provide a lot of data and evidence around childhood mortality and diarrhea mortality, but little rational for how this study moves the field forward since it's not addressing mortality.

Line 107-I would be cautious with using the term "causal" for the correlates that were evaluated in this study as none of the correlates actually "caused" diarrhea (causes of diarrhea include enteric infections, antibiotic use, etc. etc) however they could be considered "risk factors" or "predictors" of diarrhea.

Methods:

Methods section could be condensed substantially as it contains details that may not be necessary (for example ethical statement could be condensed into a single sentence that reads: All caregivers underwent informed consent for participation in the study and ethical approvals were obtained from Institutional Review Board of Jigjiga 206 University, Directorate of Research, Publication and Technology Transfer
Results:

Descriptive statistics could be combined into a single Table 1 which organizes the characteristics thematically (demographics, clinical history etc). The descriptive results could be described more concisely and more detail be given to the results of the modeling.

Table 6 only shows the results of the statistically significant results. Without showing the non-significant results, the reader does not know how many statistical tests were performed nor can the reader get a sense for magnitudes of association irrespective of the statistical significance. I would suggest consolidating a table 1 and then using a similar table for the crude and adjusted odds ratios. Also, the adjusted OR column does not indicate which variables were included in the model as confounders. Is it safe to assume that the model contained only those variables listed in the table? The earlier language around backwards stepwise regression suggests that this may not be the case.

Line 265-269 describe methods and thus should appear in the methods instead of the results.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal