Reviewer’s report

Title: Predictors of anemia in pregnant women residing in rural areas of the Oromiya region of Ethiopia

Version: 0 Date: 09 Feb 2017

Reviewer: Kris Mogensen

Reviewer’s report:

This was a very interesting study and I appreciate the opportunity to provide a review. The methods were very clear and you certainly had a large sample size which is a major strength of this study. Some of your results were exactly as expected (e.g. low MUAC correlated with anemia), other results were surprising to me (and to your group, as per the discussion). A few minor things that I hope will strengthen this already-excellent study and manuscript:

Page 8, lines 168-170: the scoring system for the MAHFP was a bit unclear to me; is a high score reflective of an abundance of food, or is a high score reflective of the "lean" season which I assume means limited or inadequate food supply because of poor growing conditions

Page 9, line 209: in this sentence, you note that women in Wiliso were mostly Christian; in the methods on page 7, you mention two predominant religions: Muslim and Orthodox. Is Orthodox the same as Christian? Since this was confusing, you might want to consider using uniform terminology when you discuss religion.

Page 12, line 261: if the women consume other green leafy vegetables other than kale, would change i.e. to e.g.

Page 12, lines 270-272: you make an interesting point about multiple pregnancies and spacing of pregnancies. Would you be able to look at differences among women who space their pregnancies differently? For example, compare anemia prevalence of those with pregnancies spaced < 1 year, 1.5 yrs, 2 yrs etc between pregnancies? If you don't have that data relatively available, might be an interesting study for another project (I realize it may not be feasible to do this analysis, of course).

Page 12, lines 27-276: I am fascinated about numeracy being associated with decreased odds of anemia - do you have any thoughts on why that might be? I was wondering if those women with higher numeracy scores have higher adherence to oral iron supplementation, or might there be another factor at play? I would love to see more discussion about this, if you think it is worth exploring.

Page 13, lines 283-285: Another fascinating point about the frequency of malaria testing, with essentially no prevalence. Should that screening be directed to something else? I know that was just a minor comment, but my thought immediately went to where the resources should be
directed instead. It may be beyond the scope of this paper, but it seems that there is an opportunity to make a statement about screening here.

Page 13 lines 285-294: do you think that fasting also reduces exposure to contaminated foods? Are good handwashers who fast at lower risk of anemia?

Throughout: there were some instances where an abbreviation was used but not defined before the first use so I found myself going back to try to find the abbreviation; would consider carefully reading the manuscript and define all abbreviations before first use

Thank you for the opportunity to review your manuscript and I hope my comments are helpful in the revision process.

**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 recommend additional statistical review

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Acceptable

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