Reviewer’s report

Title: Adolescent pregnancy and linear growth of infants: A birth cohort study in rural Ethiopia

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Reviewer: Melese Endalifer Linger

Reviewer's report:

Reviewer 1

Generally the paper is significant to the scientific community but there is great methodological issues.

See comments which is mentioned below

Title
Since your research only done in single region, so avoid Ethiopia from your title and put appropriate

Abstract
Background :Line 23 & 24: grammar error

Result :non response rate/loss to follow up were not explained

Conclusion (line 45-50) : the recommendation are not in line with the finding rewrite it

What does maternal youth mean?

Line 52: how adolescent pregnancy could be a key word?

Methods and materials
There is no sample size determination and sampling procedure why? Show clear justification

The researches have no inclusion and exclusion criteria, source and study population, so how the research could be generalizable?

Assume that you got women who have twin/triple infant, which infants included in the study?
How can measure MUAC for those mother who faces physical disabilities specifically upper arm?

Measurement (line 107): the statement is not clear

How can you validate data collection tool like MDDW, maternal depression and wealth index, clearly show all procedure for validation?

Since you are using birth cohort study what is the importance of studying other variable like maternal depression, MDDW and wealth index?

For MUAC, you use 23 cm as cut off point, I saw the reference cited for this, this not right reference, show the root reference? And also why you use 21 cm as cut off point?

What is the national cut off point for Women regarding with MUAC?

What is the rationality for preferring MUAC over the other method like BMI?

As you described in line 174 you include 1370 infants, but in your STROBE guideline you measured at baseline 1423 infants, what are the reason for inconsistencies?

Table 1: Illness in the previous 2 weeks? this subjective? how could you measure?

Table 1: family size, infant sex, HFIAS, antenatal depression and low birth weight were presented singly, why you miss their concordants?

What is the importance of table 1 regarding with your objective?

Line 243-248: there is inconsistencies "Linear growth did not vary significantly by maternal age among the infants during the follow up period. Maternal youth, through its effect on nutritional, socio economic and behavioral factors could impair fetal development and hence impair linear growth of infants". this two sentences are not consistent. clarify it again

Line 254: The mothers involved in the present study were not significantly different by most of their socio-economic and nutritional characteristics irrespective of their age. How can measure statistically, I did not see statistical output?

Line 266: not clear?

Line 282-298, what is the importance of the paragraph, it seems background better to shift it.

Ethical approval: not explained in detail

the paper ethical issues regarding to the mother?

What about for infant?

What benefit get the infant from this study? if you get infants who have health problem, what would be your management?
**Level of interest**
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

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

Needs some language corrections before being published

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