Reviewer’s report

Title: Determinants of Stunting among children aged 6 to 59 months in pastoral community, Afar Region, North East Ethiopia: Unmatched Case Control Study

Version: 1 Date: 19 Aug 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?
Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?
Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?
No - there are major issues

STATISTICS - Is the use of statistics in the manuscript appropriate?
No - there are issues with the statistics in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?
Yes - the author's interpretation is reasonable

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?
Maybe - with major revisions

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: This case-control study identified the determinants of stunting among children aged 6 to 59 months in a low-resource setting. The manuscript addressed an important public health issue, particularly in low-resource settings. However, this manuscript will benefit from a major review before considering it for publication.

REQUESTED REVISIONS:
Abstract
1) The authors should rephrase this statement properly "In Ethiopia, Nationally the prevalence of stunting in under five years children was 38.4% and in Afar it is above the national average (41.1%)"
2) The authors should replace the keywords with "stunting, determinants, children, Ethiopia"
Introduction
3) The authors should decide if they want to use the word "predictor" or "determinant" 
4) In page 3, line 24-26, the authors should reference this statement "Evidence revealed that the problems responsible for child under-nutrition are numerous and basic problems like political instability, slow economic growth and lack of education are among them"
5) In page 4, line 4-6, the authors stated that "Despite of the reduction in stunting prevalence by 19.6 % from 58% in 2000 to 38.4% 2016 in Ethiopia, the progress is still stagnant at National and regional level [3]". The authors should rephrase this statement clearly.

Methods
6) The authors should justify how they arrived at the independent variables considered in this study 
7) The authors should provide information on how they selected the required sample size from the population of under-five children assessed for stunting
8) The authors should explain how they handled multiple gestation (Twins).
9) The authors should explain how they addressed missing data
10) The authors should explain how they assessed the underlying assumptions of the regression model
11) The authors should explain how they checked the fitness of their regression model
12) Regarding the integrity of the data, the authors should clarify if verification and validation of the data was performed
13) The authors should explain why they obtained oral informed consent instead of asking the participants to sign informed consent forms.
14) Income is always difficult to measure in low-resource settings, the authors should explain how they were able to assess income among the participants including those who are not educated and petty traders who cannot distinguish between profit and capital.
15) The authors to justify why they omitted some important determinants of stunting. For example prematurity/low birth weight, maternal comorbidity, postnatal service, under-fives children in the family, family type, and child comorbidity (measles and HIV infection)

Results
16) The authors should check table 1 as the percentages did not add up to 100% e.g. maternal occupation
17) The authors should change "binary logistic regression" to "bivariable logistic regression"
18) The authors should note that the results presented in table 2 included the results from bivariable and multivariable logistic regression. Thus, the authors need to amend the title.
19) In page 8, line 32-46, the authors should present the OR, P-value and 95%CI of the significant findings.

Discussion
20) In page 9, line 6, the authors should replace "multivariable analysis" with "this study"
21) The authors will need to reference some statements in the discussion e.g. "This might be probably colostrum provides protective effect to the newborns"
22) The authors do not need to present "result values" in the discussion.
23) The authors have over-used some phrases such as "This is consistence with" and "The odd of". The authors should replace it with other phrases.
24) The authors should dwell more on the inherent limitations of this type of study. For example, only participants who were still alive will be identified as cases/controls. Stunted children are more likely to die than those who are not. Also, it is difficult to know if some of the determinants preceded stunting.
The authors should provide policy implications of their findings.
The authors should proofread this manuscript carefully and correct the grammatical errors

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

No

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

No

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

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