PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Exploring the association between adverse maternal circumstances and low birth weight in neonates: a nationwide population-based study in Bangladesh
AUTHORS	Khan, Md. Mostaured Ali; Mustagir, Md. Golam; Islam, Md Rafiqul; Kaikobad, Md. Sharif; Khan, Hafiz T.A.

VERSION 1 – REVIEW

REVIEWER	Monjura Nisha
	The University of Sydney, Australia
REVIEW RETURNED	03-Jan-2020

GENERAL COMMENTS	This is an important topic; however, the paper requires considerable editing with several inconsistencies and some grammatical errors. Please see comments below -
	Abstract:
	1. Page 2, line 40-41: Please add the proportion and number of the LBW.
	2. Page 2, Results: Please add the 95% confidence interval (CI) while presenting aOR.
	Methodology:
	 Page 7, line 20: I suggest using the word "analyse" or "use" instead of "utilise" in this context. Page 7, line 30-31: Authors stated in this line that mother's report was 90% correct in terms of the baby who was born with LBW. This statement needs to be checked. The papers (23, 24) referred here are wrong. The studies referred here (23, 24) did not validate the maternal report of birth size with the actual estimates of birthweight. Please check and revise accordingly. Page 8, line 50: What do the authors mean by "international guidelines" here? Please elaborate. Page 9, line 34: Please elaborate a bit on the weighting procedure used in this study.
	Results:
	 Page 10, Line 19-23: These lines lack consistencies. I suggest mentioning the comparator for each of the indicators while presenting the findings using "vs". Influence of adverse maternal characteristics on LBW: Writing only CI does not allow the readers to interpret the findings properly. Please write 95% CI instead of writing only CI.

3. Page 11, line 20-26: Not clear. Please revise this line.

Discussion:

- 1. Page 11, line 43: Did you mention the hypothesis before (in methods?)? If not, please revise this term in this line.
- 2. Page 11, line 57: "It admits no doubt that continued effort is very urgent to lessen the LBW rate in Bangladesh" This line should be put in the "conclusion".
- 3. It is mentioned several times "women who were not taken ANC". This is grammatically incorrect. It could be written like "women who did not have ANC" or "women who did not utilise ANC".
- 4. Page 12, line 46-47: A key challenge......: Is it also a finding of the study by Assefa and colleagues? Not clear. Please make it clear and put a reference at the end of this line.
- 5. BDHS data has several limitations. Please discuss these limitations at the end of the discussion. For instance, authors have used birth size data for their analysis instead of birthweight data due to unavailability of birthweight data in the BDHS. This should be mentioned as a limitation.

VERSION 1 – AUTHOR RESPONSE

> Response to Reviewers' Comments:

Thanks to Monjura Nisha for reviewing our manuscript and her important suggestions. In response to amendments are clarified below:

Abstract

Comment 1: "Page 2, line 40-41: Please add the proportion and number of the LBW."

Response: It is revised. Now we have added "(199 per 1000 live birth)"

Comment 2: "Page 2, Results: Please add the 95% confidence interval (CI) while presenting aOR."

Response: Revised in the abstract sections

Methodology

Comment 1: "Page 7, line 20: I suggest using the word "analyse" or "use" instead of "utilise" in this context."

Response: Corrected according to advice.

Comment 2: "Page 7, line 30-31: Authors stated in this line that mother's report was 90% correct in terms of the baby who was born with LBW. This statement needs to be checked. The papers (23, 24) referred here are wrong. The studies referred here (23, 24) did not validate the maternal report of birth size with the actual estimates of birthweight. Please check and revise accordingly."

Response: We have reviewed those papers again, and revised the manuscript accordingly.

Comment 3: "Page 8, line 50: What do the authors mean by "international guidelines" here? Please elaborate."

Response: We mainly followed the guideline of Bangladesh demographic and health survey (BDHS). The demographic and health surveys (DHS) are conducted in several developing countries, worldwide by following an international core methodology. We have revised the line in the manuscript.

Comment 4: "Page 9, line 34: Please elaborate a bit on the weighting procedure used in this study.

Response: The survey provides a sample weights in their dataset. We have weighted the dataset using those weight by considering specific primary sampling unit and strata. We used *svy:* command in Stata to consider complex survey design on the dataset as well as sample weights.

Results

Comment 1: "Page 10, Line 19-23: These lines lack consistencies. I suggest mentioning the comparator for each of the indicators while presenting the findings using "vs"."

Response: Revised accordingly

Comment 2: "Influence of adverse maternal characteristics on LBW: Writing only CI does not allow the readers to interpret the findings properly. Please write 95% CI instead of writing only CI"

Response: Corrected accordingly.

Comment 3: "Page 11, line 20-26: Not clear. Please revise this line."

Response: Revised these lines in the revised manuscript.

Discussion

Comment 1: "Page 11, line 43: Did you mention the hypothesis before (in methods?)? If not, please revise this term in this line."

Response: No, we didn't. We have revised the term in the line.

Comment 2: "Page 11, line 57: "It admits no doubt that continued effort is very urgent to lessen the LBW rate in Bangladesh" – This line should be put in the "conclusion"."

Response: Revised.

Comment 3: "It is mentioned several times - "women who were not taken ANC". This is grammatically incorrect. It could be written like - "women who did not have ANC" or "women who did not utilise ANC""

Response: Corrected in the revised manuscript according to suggestion.

Comment 4: "Page 12, line 46-47: A key challenge......: Is it also a finding of the study by Assefa and colleagues? Not clear. Please make it clear and put a reference at the end of this line."

Response: We have gone through the study of Assefa and colleagues again. Yes, they found the resultmentioned in the discussion section. We have revised the line and also put a reference at the end of the sentence.

Comment 5: "BDHS data has several limitations. Please discuss these limitations at the end of the discussion. For instance, authors have used birth size data for their analysis instead of birthweight data due to unavailability of birthweight data in the BDHS. This should be mentioned as a limitation."

Response: According to the suggestions, we have discussed the strengths and limitations of the study in details at the end of the discussion section in revised manuscript.

Thank you