**Summary:** The paper investigates the various determinants of LBW and its effect on adverse health and nutritional outcomes of children aged 0-23 months in Bangladesh, which is evidenced by the Bangladesh Demographic and Health Survey.  Despite being a significant public health concern for Bangladesh, this topic has already received considerable attention from numerous earlier and recently published studies. The purpose of the study has also been used in the past to explore comparable issues utilizing earlier data on Bangladesh. As a result, the paper's main original addition appears to be its exposure variables like nutritional status. Please make them another section and focus on discussions.

The paper needs to be thoroughly proofread by a professional or expert. Numerous times, the way that statistical analysis is expressed is also wrong. The paper also neglected to mention or cite comparable but equally significant published studies from Bangladesh.

Below are some comments with more information:  
  
**Abstract**  
  
Need to be re-written after resolving all comments from the main body (manuscript).

**Introduction**

Page 4 lines 95-98: “However, the current understanding of the determinants of LBW and its association with adverse health and nutritional outcomes has not been adequately studied using the estimated weight of birth from a more recent nationally representative sample of Bangladesh.”. Adverse health and nutritional status are not outcome variables. Please recheck this sentence.

Page 4 lines 100-103: “Hence, the current study aimed to identify various determinants, related to maternal factors, children characteristics, contextual factors and home environmental factors, of LBW and their effect on adverse health and nutritional outcomes of children months using a nationally representative cross-sectional survey.”. Please rewrite your objectives by aligning your analysis and results.

**Methods**

**Data and sampling**

Page 5 lines 118-119: I will suggest to re-write the sentence “A total of 20,127 women aged 15-49 years were interviewed from 19,457 households with a response rate of 99% [25].” The response rate of households was 99%. But, the response rate of eligible women was 98.8%.

Explain how you get the final dataset. As we lost many observations in different stages, explain them. Please, Keep the flow chart of data selection in the main manuscript (exclusion/inclusion criteria)

**Outcome variables**

Page 6 lines 132-134 and 139-141: Please recheck those definitions, I think “received advice or treatment from health facilities or qualified health providers” is not mandatory here. Please remove it to avoid confusion.

**Independent variables**

Page 8 lines 170-175: Please explain the measurement criteria/categories with reference to wealth index, drinking water, type of toilet facility, solid waste for cooking, and the rest of all. Reviewers request you to check the variables used in the wealth index and remove them if you again use them in your model like floor, wall, roof variables, etc.

**Statistical analysis**

Please present some advanced model selection/evaluation criteria. For example, present some multicollinearity tests or model evaluation analyses like ROC/AIC, etc.

**Results**

Page 9 lines 204-207: “The prevalence of LBW was significantly higher among children of mothers with no formal education (fathers were educated) (41.5%), children from the poorest socioeconomic status (22.4%), mothers who had more than 3 living children (18.8%), wanted child later (19.8%), and children were born by normal delivery (18.6%) “. Please assign Table 2.

Please merge all tables into one table as dependent and independent variables are the same. Use one regression model for all independent variables. Table 1 can merge with Table 2/3/4 by using an extra column. Also, add the “No” category to the table. Prevalence should be explained more. Please add them.

Also, merge all tables in an additional file.

Table 3 is confusing, follow the same table formats in the full manuscript.

Reviewers found the implementation of only one outcome variable “LBW”. Please rename the exposure variable to other variables that you keep in the outcome variables section.

**Discussion**

The references used by authors for identifying similar studies seem sporadic and low evidence from Bangladeshi papers. There are numerous studies on this topic in Bangladesh which established several results similar to this paper, but these papers were hardly cited. Please rewrite the discussion by considering the above suggestions.