

## Reviewer Comments:

### Reviewer 1

The study entitled “Geographic Inequalities and Determinants of Aneamia among Preeclamptic Women in Bangladesh” tries to identify the suitable predictors of Aneamia among Preeclamptic Women. The study lacks novelty and authors should also elaborate regression model-building approach for ease understanding. The authors should rewrite their Introduction and Discussion to reference the recent related literature. The objective also confuses that the determinants are for Aneamia or Preeclampsia.

1. The gap is not clear. An explanation of geographic inequalities is not mentioned in the introduction/literature review.

Response: Yes, you are right. We made it clear.

2. In addition, there are numerous articles on the same topic but only a few of them are mentioned in the literature review section.

Response: Yes, we added more articles.

3. The introduction section didn't follow logical sequences. Overall, there is a great deal of room for improvement in both writing and grammar. I advise the authors to work with a writing coach or copy editor to improve the flow and readability of the text.

Response: In the updated manuscript, we dealt with resolving grammatical mistakes and increased the readability.

4. Authors should explain the rationale behind the selection of independent variables, and their categories, such as any conceptual framework or prior research.

Response: Yes, we follow previous research.

5. “P values for comparing quantitative variables were determined using the chi-square test.” Please accurate this sentence. Chi-square test for categorical variable.

Response: As all of our independent variables were categorical, therefore, we conducted chi-square analysis to shortlist the significant variables ( $p$  value  $<0.05$ ) before conducting the regression analysis.

6. Authors should describe dependent and independent variables separately before the description of the model.

Response: In the updated manuscript, we explained it.

7. The authors just describe the model's name but it is unclear how the multinomial logistic regression model was established such as which method was followed (i.e.; forward entry, backward selection, enter method, etc.) or on what basis regressors were chosen to build the final model. Any model evaluation methods were applied like AUROC/AIC/BIC?

Response: We apologize for the previous mistake. In the current version, we changed the method and conducted a binary logistic regression using the enter method and we further performed AUC to check the model performance.

8. P-values are missing in all tables and results. Authors should provide them.

Response: For the Table 3, we provided all the p values. However, as we didn't illustrate the chi-square significance level for each variable, we just mentioned about those variables that were used for the final model.

9. "Geographical heterogeneity of the IR and cluster analysis" Cluster analysis is missing in whole manuscripts and also not explained in the methodology. Please change that title.

Response: We have changed the name of the title in the updated manuscript.

10. In the discussion section, the authors attempted to explain their findings from a broad standpoint in which anemia components are absent.

Response: In the undated manuscript, we developed the explanation of the key findings, and related our research with a broad spectrum in this field.

Reviewer 2

Major comments:

1. It is not clear to me from the article what is the population size. And how they validate their selected sample size (How they are confident their selected sample size is enough for conducting this study?). Have they used any kind of power test for conducting the study based on their sample size?

Response: Thank you so much. We add a sample size and validate the sample size by AUC test.

2. The questionnaire prepared by the authors for their study, have they validated it, I am not clear. Let me attach the questionnaire also.

Response: Yes, we validate the questionnaire prior start sampling. We also attached a questionnaire.

3. It is unclear to me from the introduction what the lack exists in the recent cited study. And what kind of scientific significance exists in their articles compared to existing studies?

Response: Yes, you are right. We make it clear.

4. It is not clear to me What is response variable and why the authors conduct multinomial logistic regression, explain please?

Response: We explained the variables this time and conducted binary logistic regression.

5. How the author measure the income categories Based on which reference, need to give a proper clarification with references. Also, need to explain how they categorize BMI in pregnancy?

Response: Thank you. We added the reference

6. It is necessary to rearrange the Result and Discussion part briefly with a more logical sequence according to their objective.

Response: Thank you for your comment. We rearrange result and discussion part.

Minor Comments:

1. Need to update the problem of solving grammatical issues such as articles, Voice, prepositions, and some sentence patterns.

Response: Definitely, we appreciate your kind suggestions.