Author’s response to reviews

Title: Factors associated with maternal anaemia among pregnant women in Dhaka city

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Version:Version: 7
Date: 10 September 2014

Author’s response to reviews:

07th September 2014
To
The Editor
BMC Women’s Health

Subject: Submission of Modified Article

Dear Sir,

We undersigned the authors of the article entitled ‘Factors associated with Haemoglobin levels among Bangladeshi pregnant women’ modified the title and article according to reviewer comments and submitting for your kind consideration and necessary action. In this regard, we also prepared reply which is given below.

Kind regards
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Reviewer’s report -1
Title: Factors associated with Haemoglobin levels among Bangladeshi pregnant Women

Version:5 Date:24 July 2014
Reviewer: Rakesh ps

Reviewer's report:

major compulsory revision

1. Wrong interpretation of findings.
Reply: One of the reviewer has recommended to add logistic regression analysis in this manuscript

2. Wrongly done analysis (logistic regression)
Reply: We think, it is the appropriate regression model to use for evaluating risk of this dichotomous outcome.
Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report

Reviewer's report -2
Title: Factors associated with Haemoglobin levels among Bangladeshi pregnant women
Version: 5 Date:28 July 2014
Reviewer: Nuwan D Wickramasinghe

Reviewer's report:

- Major Compulsory Revisions

1. In this revised version, authors have done regression analysis. Thus, in results section (both in abstract as well as in the main text) the results of the regression analysis have to be mentioned (not the results of the Chi squared tests). And the associations can be described together with the direction of association (as Odds Ratios have been calculated) rather than just mentioning the raw variables such as age, education, living area etc. However, should make sure to mention the significant values of the regression analysis (not the results of the Chi squared test).

Reply: Significant values of the regression analysis has mentioned in abstract and result section of the manuscript according to your suggestion.
2. While interpreting the results (ie. The OR values), the correct terminology to use is “likelihood”, not “risk”.

Reply: Corrected according to your suggestions.

3. In the reference section, there are inconsistencies. Authors should adhere to one referencing style as per the journal guidelines.

Reply: Corrected according to journal guidelines.

- Minor Essential Revisions

Overall

1. Despite highlighted in the previous review, throughout the article the authors have used different spellings for the most important variables of the study, viz “anaemia” and “Haemoglobin”, which have to be corrected promptly.

Reply: Corrected according to your suggestions.

2. There are grammatical as well as spelling errors throughout the article which have to be promptly addressed.

Reply: Corrected according to your suggestions.

Methods

3. Study population - It’s not correct to mention, “The study population consisted of 224 pregnant women”. Because, 224 is the sample size, not the total number of subjects in the population.

Reply: Corrected according to your suggestions.

4. Sample size – The formula has to be corrected as, \( n = \frac{Z^2 \cdot p \cdot q}{r^2} \). And also mention the prevalence value which was used for the calculation. (Though 32% was mentioned in the reply to reviews, it wasn’t mentioned in the main text)

Reply: The selection criteria of pregnant women were described in main text and the sample size formula was given.

The sample size was determined based on the available information of the published literatures (Hyder SMZ et al, 2004). The prevalence of anaemia was 19% to 50% among pregnant women and the sample size were calculated using the following formula: \( n = \frac{Z^2 \cdot p \cdot q}{r^2} \). Thus, the sample size was 206. Considering the 9% non-response, the final sample size for this study was approximately 224.

Sample calculated by following formula

\[ n = \frac{Z^2 \cdot p \cdot q}{r^2} \]

Where,

\( n = \) desired sample size

\( z = 1.96 \) (95% confidence interval)
P = prevalence of anaemia among pregnant mother = 35%, \[ (\text{Considering prevalence} = \text{Lowest P} + \text{Height P})/2 \] [13]

q = 1-p

r = \text{relative precision} = 6.5\% = 0.065

r^2 = 0.004225

n = \frac{(1.96)^2 * 0.35 * 0.65}{0.004225}

n = 206 (approx.)

Considering non response of the 9\% the total sample size will be, n=224.

5. Sampling technique – Is it purposive or consecutive?

Reply: Thanks for your suggestions. Rewrite according to your suggestions in the main text.

6. Statistical Analysis – “A significance level of 0.05 was considered as proper”

This is not a valid statement.

Reply: Corrected according to your suggestions.

Results

7. When presenting the results in some instances only the absolute number or the mere percentage was mentioned. (both the absolute number and the percentage should be given)

Reply: Corrected according to your suggestions.

8. “Mean (+/-SD)” should be corrected as “Mean (SD)”, both in the text as well as in numerical values.

Reply: Revised in the main text according to your suggestion.

9. In the tables, the p value for each variable has to be mentioned rather than just mentioning that it is not significant. Together with the p values the Chi values could have been provided. Though the authors have mentioned they have corrected this, they have not done that in the text.

Reply: Revised in the main text according to your suggestion.

10. As a limitation of the study, the inability to generalize the findings has to be highlighted (as a non probability sampling technique has been used).

Reply: Corrected in the main text.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests.

Reviewer's report -3
Title: Factors associated with Haemoglobin levels among Bangladeshi pregnant women
Version: 5 Date: 29 July 2014
Reviewer: Judith Stephens

Reviewer's report:
Most issues raised have been resolved except:

2.3 Blood sample collection is addressed but not satisfactory. The method used to determine is not appropriate. Whole blood is used for Hb. Glysated Hb is used to determine the A1c as pertains to blood glucose levels. Needs to be rewritten.
(MCR)

Reply: Rewritten in the main text according to your suggestion.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.