Author’s response to reviews

Title: Analysis of low birth weight and its co-variants in Bangladesh based on a sub-sample from nationally representative survey

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Author’s response to reviews:

Reviewer reports:
(Reviewer 1): Thank you for the opportunity to review this manuscript. The research addresses an important issue in neonatal health, especially in low and middle income countries. The article is well written, the methodology is clear, the results are well presented and the discussion is relevant. However, there are some required minor amendments:

Response: Thanks for your review and valuable comments and suggestions. This will surely improve the manuscript.

Page 3 Line 17-Use the term low and middle income countries in place of developing countries

Response: Page 3 Line 63, we have addressed this.

Page 3 Line 48 -add the definition of preterm (below 37 completed weeks)

Response: Page 4 Line 78, we have addressed this.
Page 4 Line 44 - don't use "it" - The Bangladesh MICS covers...

Response: Page 5 Line 101, we have addressed this.

Page 4 Line 56 - write out 5 in letters

Response: Page 5 Line 106, we have addressed this.

Page 6 - Line 39 71% of the children had no recorded birth weight. The low number of children with known weight impacts negatively on the results of the study and should be explained in more detail, although this is later listed as a limitation of the study, which is correct. It seems extraordinary that the majority of children have no known birth weight and it would strengthen the study to have additional information on this group of mothers/infants. It is suggested that these mothers could be older, live in rural areas and deliver at home, but actual data on this group of mothers/infants would be valuable. Surely most babies have immunisation cards? If not, how many and why not?

Response: Thanks for your comments. We have discussed this in Limitations section, Page 12. Moreover, there is no data on immunization card in MICS 2012-13 for children. That's why we cannot say about the percentage of immunization cards of children.

Page 8 Line 53-60. With the large number of missing data, it is not possible to comment accurately on the prevalence of low birth weight in the whole population. Either omit this, or emphasise that this is not an accurate assessment due to the large amount of missing information

Response: Page 9 Line 212-214, we have addressed this and gave explanation.

Page 11 - line 26 to 28 - the statement about even developing countries seems incorrect - don't you mean developed countries?
This paper analyzes data on a subset of women in Bangladesh who delivered a live birth in 2010-11. From this national survey, the authors selected a sample of 2319 records (from 55,200 respondents) that contained information about birth weight. Using logistic regression to adjust for maternal age, parity, and cluster level variation, the authors found that the following factors increased the odds of having a low birth weight infant: 1) not completing secondary school; 2) not having an antenatal care visit; 3) not having the birth attended by a doctor or midwife; and; 4) delivering at home. The authors also report three unexpected findings: 1) women who underwent cesarean section had lower odds of having a low birth infant than women delivered vaginally; 2) there was no difference between urban and rural areas in prevalence of low birth; and 3) the prevalence of low birth weight declined sixteen percentage points in Bangladesh since the previous survey ten years earlier in
2003. To continue improvement in this important public health indicator, the authors recommend furthering the education of women.

Response: Thanks for your comments and suggestions. As per suggestions, we have given detail explanation in discussion section in paragraphs 1, 5, and 6.

This paper's findings will be familiar to anyone who studies the epidemiology of low birth weight. That said, it remains important to receive reports from developing nations of strategies that are successful in reducing low birth weight rates (especially since in many nations of the developed world progress on that indicator has stalled). So that worldwide readers of BMC Pediatrics can better assess this progress report, it will be necessary for the authors to cite papers from journals or government reports that are available on line. Though I work at a large research university in the U.S., I was unable to retrieve numerous citations in the References. I think readers would also welcome more details about multi-sector early interventions and public health policies being implemented in Bangladesh that are likely responsible for the nation's success in lowering its low birth rate.

Response: We have tried to give the explanation and intervention policies in conclusion section. We have also revised the references and provided the web-links for most of the references.