Reviewer's report

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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Reviewer: Jeffrey Roth

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Review of BPED-D-16-00594: Analysis of low birth weight and its co-variants in Bangladesh based on a sub-sample from nationally representative survey

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.

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.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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Unable to assess

Are the conclusions drawn adequately supported by the data shown?
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Yes

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