Reviewer’s report

Title: A comprehensive analysis on child mortality and its determinants in Bangladesh using frailty models

Version: 0 Date: 04 Jun 2017

Reviewer: K Khatlani

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This article is relevant and is of great importance in its area of study. Following are my comments:

Introduction:

Page 2

Line 26: "With the growing emphasis….." need to give a reference here.

Line 27: replace word 'implication' with 'implementation'.

Line 37: "Children of very young mothers are at greater risk of death and rate of mortality is higher for older women". The authors are talking about the association of child mortality with extremes of maternal age. It will be a good idea to mention the maternal age-range/cut-off for which higher mortality rates have been reported in literature.

Line 44: Need a reference here.

Line 46: replace 'Child mortality levels' with 'Child mortality rate'.

Page 3:

Line 17: a cluster are dependent [add 'on']

Line 18: are correlated [add 'with'] sampling design.

Line 19: This kind of dependency is frequently found [replace 'in' with 'at'] family (mother) level…

Line 28: Frailty model are also important [replace 'because of' with 'in'] estimating…..
The authors did a good job in explaining the importance of using frailty model to assess the determinants of child mortality. However, they haven't explained why they think the determinants of child mortality would have changed in all these years making this study inevitable since the determinants of mortality of children-under five are well-known and have been extensively studies in the past.

Materials and Methods:

Page 3:

Line 42: Our study is based on the most….

Line 43: Health Survey's…..

Results:

Page 6

Line 24-25: Maternal age 25-34 and paternal age 26-35 had lower risk of dying but as compared to what age group? Give reference age group in text.

Discussion:

Page 7:

The authors discuss that one of the mechanisms through which mothers' education decreases child mortality is through empowerment. Why is it that they observed a higher risk of death among mothers who were working, when mothers' employment is also known to contribute towards empowerment? The study population included women from both urban and rural areas. So was the study population predominantly involved in some specific kind of work that lead to higher child mortality? I suggest that the authors throw some light on this area.

Page 8

Line 9: ……children with two or higher birth order who were born with…..
Can the authors briefly touch upon the probable unobserved community level factors involved in child mortality? This could be important for future research.

**Level of interest**
Please indicate how interesting you found the manuscript:

- An article of importance in its field

**Quality of written English**
Please indicate the quality of language in the manuscript:

- Needs some language corrections before being published

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