

Prevalence and determinants of the gender differentials risk factors of child deaths in Bangladesh: evidence from Bangladesh demographic and health survey 2011

ABSTRACT

Background: The number of child deaths is a potential indicator to assess the health condition of a country, and represents a major health challenge in Bangladesh. Although the country has performed exceptionally well in decreasing the mortality rate among children under five over the last few decades, mortality still remains relatively high. The main objective of this study is to identify the prevalence and determinants of the risk factors of child mortality in Bangladesh. **Methods:** The data were based on a cross-sectional study collected from the Bangladesh Demographic and Health Survey (BDHS), 2011. The women participants numbered 16,025 from seven divisions of Bangladesh – Rajshahi, Dhaka, Chittagong, Barisal, Khulna, Rangpur and Sylhet. The χ^2 test and logistic regression model were applied to determine the prevalence and factors associated with child deaths in Bangladesh. **Results:** In 2011, the prevalence of child deaths in Bangladesh for boys and girls was 13.0% and 11.6%, respectively. The results showed that birth interval and birth order were the most important factors associated with child death risks; mothers' education and socioeconomic status were also significant (males and females). The results also indicated that a higher birth order (7 & more) of child (OR=21.421 & 95%CI=16.879-27.186) with a short birth interval 2 years was more risky for child mortality, and lower birth order with longer birth interval >2 were significantly associated with child deaths. Other risk factors that affected child deaths in Bangladesh included young mothers of less than 25 years (mothers' median age (26-36 years): OR=0.670, 95%CI=0.551-0.815), women without education compared to those with secondary and higher education (OR =0.711 & .628, 95%CI=0.606-0.833 & 0.437-0.903), mothers who perceived their child body size to be larger than average and small size (OR= 1.525 & 1.068, 95%CI=1.221-1.905 & 0.913-1.249), and mothers who delivered their child by non-caesarean (OR= 1.687, 95%CI=1.253-2.272). **Conclusion:** Community-based educational programs or awareness programs are required to reduce the child death in Bangladesh, especially for younger women should be increase the birth interval and decrease the birth order. The government should apply the strategies to enhance the socioeconomic conditions, especially in rural areas, increase the awareness program through media and expand schooling, particularly for girls.

Keyword: Gender differentials; Child deaths; Bangladesh; Health survey