**Association between type of delivery and childhood disease: evidence from multiple indicator cluster survey, Bangladesh**

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**Abstract**

The rate of cesarean delivery (C-section) has increased worldwide including Bangladesh over the past decades. As the C-section is major surgery, it has a negative impact on mother and child health. However, research on this area in Bangladesh is sparse. Our objective was to inspect the association between C-section delivery and infantile disease (e.g. cough, diarrhea, difficulty in breathing). We used a multiple indicator cluster survey (MICS) data (2012-13). There were 7921 children under 2 years, of which the information about the mode of delivery (C-section vs. normal) was available for 2138 children. Important factors were considered as age of child, child ever been breastfed, child had diarrhea, child ill with cough, child's weight, child's length or height, division, sex(child), mother's education, religion of household head, wealth index quintile, age of woman, weight at birth. Models were fitted using logistic regression and Poisson regression. We found 38% of children were born in normally and 62% of children were born in C-section. Moreover, we observed 16.90% of cesarean section babies are at risk of having more diseases whereas normally delivered babies have 6.89% risk. The Poisson regression analysis showed that the expected log count for the C-section is 0.04 times higher than the expected log count for normal delivery. Our analysis shows that cesarean delivery is associated with an increased rate of disease among children less than 2 years of age. We recommend increasing public awareness for the negative impact of the cesarean delivery in Bangladesh.

***Keywords:*** Caesarean section; delivery type; disease; public awareness; cough; diarrhea