June 3, 2024

Department of Statistics

Shahjalal University of Science & Technology

Sylhet-3114, Bangladesh

To:

Editor in Chief – to **Health Science Reports**

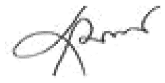
Subject: Submission of Manuscript

Dear Sir/Madam,

Please find enclosed our manuscript entitled “**Assessing Contributory Factors of Diarrhea among Under-Five Children in Bangladesh: A Comprehensive Analysis of Three Waves of Nationally Represent Data**”, which we hope you will consider for publication as a research article to Public Health. Child mortality in Bangladesh due to diarrhea remains significant, accounting for one-third of all child deaths. This study investigated changes and contributing factors of diarrheal diseases among children aged 0-5 years using data from three survey years: 2006, 2012, and 2019. Using the Multiple Indicator Cluster Survey (MICS) data, a total of 31,566, 23,402, and 24,686 children under five were included in the study for 2006, 2012, and 2019, respectively. Logistic regressions were employed to analyze factors influencing childhood diarrhea. The results revealed a decline in diarrhea prevalence from 7.1% in 2006 to 3.9% in 2012, but unfortunately, there was a subsequent increase to 6.9% in 2019. Children aged 12-23 months consistently had 2.22, 5.24-, and 3.36 times higher likelihood of experiencing diarrhea compared to older children (48-59 months) in 2006, 2012, and 2019, respectively. Moreover, children whose mothers had no or incomplete primary education had a higher risk of diarrhea compared to those with mothers who had completed secondary education or higher. Contributing factors of diarrhea among children aged 0-5 years included underweight status, geographical division, household wealth, and toilet facility type and its shared status. These findings underscore the importance of child nutrition, basic hygiene practices, and special care to reduce under-five mortality associated with diarrhea. Therefore, we think our study is relevant and timely for readers of **Health Science Reports**.

This manuscript represents original research, and it has not been published and is not being considered for publication elsewhere, in whole or in part, in any language. The authors believe this study is a key addition to the literature by demonstrating that the association between child stunting and associated factors using a recent nationally representative survey dataset. All authors have approved the manuscript and affirm contributing to the conception, design analysis, and interpretation of the data. None of the authors report a conflict of interest.

Any consideration you may be able to give this manuscript to the **Health Science Reports.** The Editorial Board will be much appreciated.



Sincerely,

Md Jamal Uddin

(Corresponding Author)