

Maternal & Child Nutrition

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Evaluation of Contributory Factors of Diarrhea among Under-Five Children in Bangladesh based on Three Waves of Nationally Represent Data

Manuscript Files

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Name	Type of File	Size
Main Text File.docx	Anonymized Main Document - MS Word	116.6 KB
Title Page.docx	Title Page	24.8 KB
Figures.docx	Figure	1.2 MB
Tables.docx	Table	43.8 KB
Supplementary Appendix.docx	Supplementary Material Not for Review	32.4 KB

Abstract

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Introduction: One-third of all child deaths in Bangladesh are caused by diarrhea. Little is known about the trends in the incidence of diarrheal diseases. We aimed to investigate trends and contributory factors of diarrheal diseases among children 0-5 years old in three different years, 2006, 2012, and 2019.


Methods: In this study, 31,566, 23,402, and 24,686 children under five were included in Multiple Indicator Cluster Survey (MICS) 2006, 2012-13, and 2019 respectively. We used "diarrhea" as the outcome variable, which has two categories: "Yes" for having diarrhea and "No" for not having diarrhea. Univariate and multivariate logistic regressions were applied to analyze the changes of factors influencing childhood diarrhea.

Results: The diarrheal status decreased from 2006 (7.1%) to 2012 (3.9%). However, it increased to 6.9% in 2019. We discovered that children aged 12-23 months were 2.22 times (adjusted odds ratio (AOR) = 2.22, 95 confidence interval (CI: 1.86 – 2.65), 5.24 times (AOR = 5.24, CI: 2.51 – 10.95) and 3.36 times (AOR = 3.36, CI: 2.67 – 4.22) more likely to experience diarrhea than a higher age group (48-59 months) in MICS data of 2006, 2012 and 2019, respectively. Moreover, for MICS 2006, 2012, and 2019, children from the mother with no educational background or primary incomplete had 1.48 (CI: 1.18 - 1.86), 1.07 (CI: 0.76 - 1.50), and 1.34 (1.06 – 1.69) times higher chances of having diarrhea than children from secondary complete or higher educational status mothers' group according to crude odds ratio.

Conclusion: Being underweight, division, household wealth status, and toilet facility type and its shared status were contributory factors of diarrhea among 0-5 years old children. To decrease the under-five mortality rate due to diarrhea, child nutrition, basic hygiene practice, and special care for under-five children during the rainy season have chances to be fruitful.

Authors

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Name	Email	Country/Location
Mohammad Nayeem Hasan ⁶  0000-0002-2383-0459	nayeem5847@gmail.com	Bangladesh

M. Noor-e-alam Siddiqui ¹	swaponsust2004@gmail.com	Bangladesh
Mst. Farzana Akter ²	farzanajui11@gmail.com	Canada
Sabikunnaher Mitu ³	mitusabikunnaher.sust@gmail.com	Bangladesh
Muhammad Abdul Baker Chowdhury ^{1,4}	bakerchowdhury@gmail.com	United States
Md Jamal Uddin ^{1,5} Corresponding Author	jamal-sta@sust.edu	Bangladesh

Affiliations

[Edit](#)

1. Department of Statistics, Shahjalal University of Science & Technology, Sylhet-3114, Bangladesh
2. Department of Community Health Sciences, University of Manitoba, Winnipeg, Manitoba, Canada
3. Department of Sociology, Shahjalal University of Science & Technology, Sylhet-3114, Bangladesh
4. Department of Neurosurgery, University of Florida College of Medicine, Gainesville, FL, USA
5. Department of General Educational and Development, Daffodil International University, Dhaka, Bangladesh
6. Department of Statistics, Shahjalal University of Science and Technology, Sylhet-3114, Bangladesh

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Country/Location	Bangladesh
State/Province	Cox's Bazar
City	Cox's Bazar Sadar
Postal Code	4700

Additional Information

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No, this is not for a special issue

Has this manuscript been submitted previously to this journal?

No, it wasn't submitted previously

Suggested Reviewers

Mohammad Meshbahur Rahman
meshbah037@gmail.com

National Institute of Preventive and Social Medicine Department of Community Medicine

Opposed Reviewers*No response provided***Cover Letter / Comments**

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