August 15, 2022

Department of Statistics

Shahjalal University of Science & Technology

Sylhet-3114, Bangladesh

To:

Editor in Chief –Clinical Epidemiology and Global Health

Subject: Submission of Manuscript

Dear Sir/Madam,

Please find enclosed our manuscript entitled “Trends in the prevalence and association between Escherichia coli (E. coli) contamination in household drinking water and the risk of childhood diarrheal disease in Bangladesh”, which we hope you will consider for publication as a research article to Clinical Epidemiology and Global Health.

Escherichia coli (E. coli) is one of the most prevalent agents causing moderate-to-severe diarrhea. We aimed was to ascertain whether E. coli contamination of the household drinking water and childhood under five years of age diarrheal illnesses. In this study, data from the 2012 and 2019 waves of the Multiple Indicator Cluster Survey (MICS) were used. Data were analyzed using logistic regression model with considering complex survey design. We discovered that children who were exposed to moderate levels of E. coli infection were 1.46 times (adjusted odds ratio (AOR) = 1.46, 95% confidence interval (CI: 0.71 - 3.01) and 1.29 times (AOR = 1.29, CI: 0.54 - 3.10) more likely to experience diarrhea than those exposed to low levels of E. coli contamination in MICS data of 2019 and 2012, respectively. Moreover, for MICS 2019 and 2012, high risk of E. coli contamination household children was 1.96 (CI: 1.06-3.63) and 1.29 (0.62-2.69) times more likely to suffer diarrhea than children from low risk of E. coli contamination group.

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 that this study makes obvious policy insinuations and advises minimizing E. coli contamination in drinking water and developing proper hygiene practices to prevent childhood diarrhea using two recent nationally representative survey datasets. 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 in Clinical Epidemiology and Global Health will be much appreciated.

Sincerely,



Md Jamal Uddin

(Corresponding Author)