Title: Factors Affecting the Incidence of Diarrhoeal Disease Among Children Under 2 Years in Remote Village Area of Bangladesh

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Abstract: Background: Diarrhoeal disease remains a major public health concern for children under 2 years of age, particularly in rural and remote areas of Bangladesh. This study aimed to determine the incidence of diarrhoea and identify associated risk and protective factors among children under 2 years old in Hanarchar Union, Chandpur District.

Methods: A cross-sectional study was conducted from May 2021 to May 2022. Using systematic random sampling, 400 families with children under 2 years were interviewed using a structured questionnaire. Data on socio-demographic characteristics, sanitation practices, feeding habits and diarrhoeal episodes were collected and analysed.

Results: Over 30% of the respondents were illiterate, while 86.8% used sanitary latrines. All respondents reported practicing handwashing after disposing of child stool, before meals and after defecation. The monthly incidence of watery diarrhoea among children was 54.1%, with 98.2% of the affected families using oral rehydration solution (ORS) for treatment. Diarrhoeal incidence was 37.5% among children whose feeding bottles were cleaned with boiled water and soap, and 32.1% among those whose mothers used soap and water for handwashing after stool disposal and defecation. Higher maternal education was linked to improved stool disposal practices. Although all respondents used sanitary latrines, most lacked awareness of their health benefits. All children were exclusively breastfed and began bottle-feeding after 5 months of age.

Conclusion: Proper hygiene practices, including handwashing with soap and cleaning feeding bottles with boiled water, are associated with reduced diarrhoeal incidence. Maternal education and awareness on sanitation also play a crucial role in disease prevention. Community-based health education programmes could enhance understanding and further reduce diarrhoeal burden in remote areas.

Keywords: Hanarchar; diarrhoea; hygiene; sanitation; water.

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