

Title: Assessment of water, hygiene, and sanitation practice and associated factors among Bihari refugee camp in Bangladesh: A cross-sectional study.

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Abstract: Background and Aims The global significance of water, sanitation, and hygiene (WASH) cannot be overstated, extending far beyond the confines of developing nations and encompassing even the most developed ones. This study, rooted in the Bihari refugee camp in Bangladesh, seeks to underscore the universality of WASH concerns.

Methods Using a cross-sectional design and a structured questionnaire, we conducted a meticulous evaluation of WASH practices with 313 participants selected through random sampling.

Results Findings shows the water practice, among all of them, only 4.8% of the respondents were very happy with the water supply system and 16.0% of the respondents were happy with this. A total of 29.7% of the respondents were satisfied with safe drinking water and only 4.8% of the respondents were very satisfied with safe drinking water. Regarding the hygiene practice, among all respondents, 10.2% of them were satisfied with using the same bathroom by multiple people. Only 5.4% respondents were happy in their living environment. Regarding sanitation practice, only 31.3% had private toilet facilities. Among all of the respondents, 13.7% of the respondents were satisfied with using the same toilet by multiple people. Respondents who were illiterate ($p < 0.01$) and self-employed ($p < 0.04$) were satisfied with the water supply. Similarly, respondents who were illiterate ($p < 0.03$) and self-employed ($p < 0.00$) were satisfied with safe drinking water. Respondents who were illiterate ($p < 0.02$) and whose monthly income was below 8000 BDT ($p < 0.00$) were satisfied using same bathroom by multiple people. Respondents who were self-employed ($p < 0.01$), whose monthly income 8000–12,000 BDT ($p < 0.01$) and having single room ($p < 0.00$) were satisfied using the same toilet by multiple people.

Conclusion Enhanced access to safe WASH facilities, coupled with a comprehensive understanding of the study's findings, have the potential to serve as vital signposts for the development and implementation of policies and interventions.

Keywords: Bangladesh, Bihari refugee camp, hygiene, sanitation, water

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