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Original Article

A Study on Environmental Sanitation in Some Selected Villages of Bhanga, Faridpur

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Abstract

This descriptive type of cross sectional study was conducted during the period of September 2017-February2018 to assess the status of environmental sanitation and the level of literacy and practices of hygiene of rural mothers in selected villages of Bhanga, Faridpur. Sample size was 190 and the respondents were rural mothers. Data were collected from 190 rural mothers through convenient sampling. After taking verbal consent, a face to face interview was conducted through a pre-tested semi-structural questionnaire. The study revealed that majority of the respondents (56.32%) was illiterate. The study showed that all most all (97.36%) respondents used tube well water for drinking purpose. The study also showed that majority (91.57%) had knowledge about safe water. It was also revealed from the study that majority of the respondents had the idea about water borne diseases caused by consumption of unsafe water. Majority 73.68% respondents lived in Kacha house and only 18.95% respondents had sanitary latrines. It is concluded from the study that there is inadequate knowledge about environmental sanitation particularly housing and disposal of human excreta and also the rate of illiteracy is significantly high amongst respondents.

Keyword: Environmental sanitation, rural mothers.

Introduction

The world Health Organization defines environmental sanitation as "the control of all those factors in man's physical environment which exercise or may exercise a deleterious effect on his physical development, health and survival". Of the three ecological factors (agent, host and environment) responsible for disease, the disease agent is usually identified with the help of the laboratory, the host is available for study but the environment from which the patient comes is largely unknown. Yet frequently, the key to the nature, occurrence, prevention and control of disease lies in the environment. Without this knowledge, this key may not be available to the physician who desires to cure disease, prevent or control it. The United Nations conference on the Human Environment, held in Stockholm in 1972 stressed the need to improve health by improving environmental sanitation[1].

Our Country is still lagging far behind many countries in the field of environmental sanitation. The basic problems of safe water supply end sanitary disposal of human excreta are yet to be solved. Much of the ill-health in the country is due to defective environment. Since more than 80 percent of the population live in rural areas the problem is one of rural sanitation.

Studies in Matlob have shown that safe drinking water alone was not enough to control cholera and even water use for other domestic purpose was also important[2]. Improvements in both water supply and sanitation are necessary if health in developing countries is to be improved[3].

Adverse environmental conditions affect health status of its inhabitants. In order to find out the status of environmental sanitation in rural areas the present study was under taken.

Methodology

This cross sectional study was conducted at two purposively selected villages (namely RASIBPUR and SHARIFABAD) of GHARUA Union of BHANGA Upazila, Faridpur. Study period was from 10.09.2017 to 12.02.2018 to assess the status of environmental sanitation, level of literacy and practices of hygiene of rural mothers. All the 778 households of the two selected villages constituted the study population. During the survey, data were collected from the rural mothers of 190 households through convenient sampling after taking a verbal consent. So the total sample size was 190. Data were collected through a pretested questionnaire by face to face interview. At first the interview questionnaire were checked and rechecked to reduce the errors if any. Then necessary corrections were made. Thirdly the responses were coded properly. Finally a master sheet was prepared based on variables used in the study. Finally necessary calculations were made from the master sheet and data were presented by tables and charts.

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Observations and Results

The observations and results are collated and accumulated as tables and figures shown below. The observations were recorded as per monthly income, level of education, sources of water for different purpose of usage, knowledge about safe water, diseases related to unsafe water, types of housing and types of latrines available.

Table 1: Distribution of respondents by Monthly Income

Income (Tk)	Number	Percentage
0-3000	18	9.48
3000-8000	106	55.78
8000 and above	66	34.74
Total	190	100.00

Table 1 Shows that majority of the respondents had family income within the 3000-8000 Taka per month.

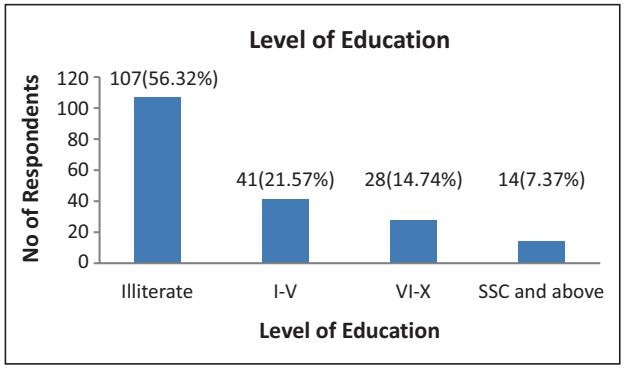

Fig. 1: Distribution of respondents by level of education (n=190)

Figure 1 shows that majority (56.32%) of the respondents were illiterate. Whereas 21.57% had education up to class V, 14,7% were up to class X and only 7.37% had SSC and above.

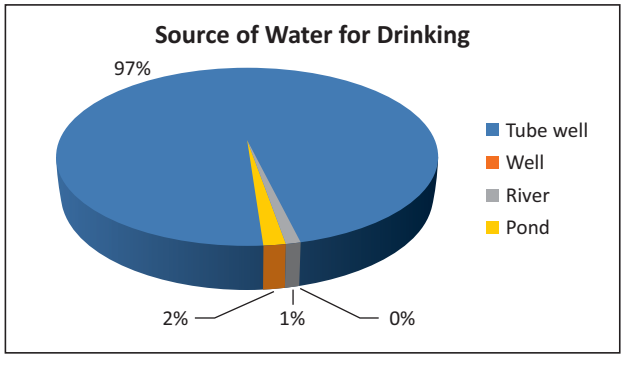

Fig. 2: Distribution of respondents by use of water source for drinking (n=190)

Figure 2 shows that almost all (97%) respondents use tube-well water for drinking purpose followed by river water(2%) and pond(1%).

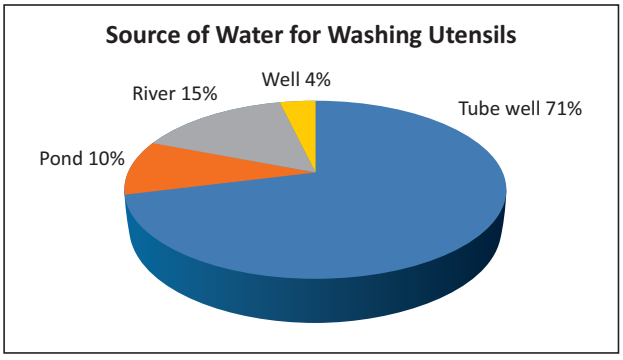

Fig. 3: Distribution of respondents by use of water source for washing utensils (n=190)

Figure 3 shows that 71.07% respondents used Tube-well water, 9.99% pond, 3.68% well and 15.26% use river water for washing utensils respectively.

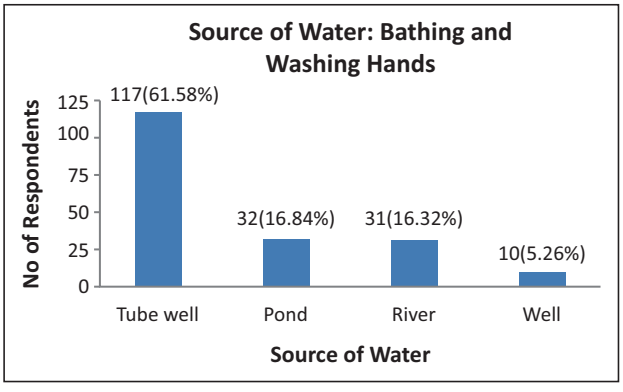

Fig. 4: Distribution of respondents by use of water source for bathing and washing hands (n=190)

Figure 4 shows that 61.58% respondents use Tube-well water and rest 38.42% used pond & well water for washing face hands and bathing purpose.

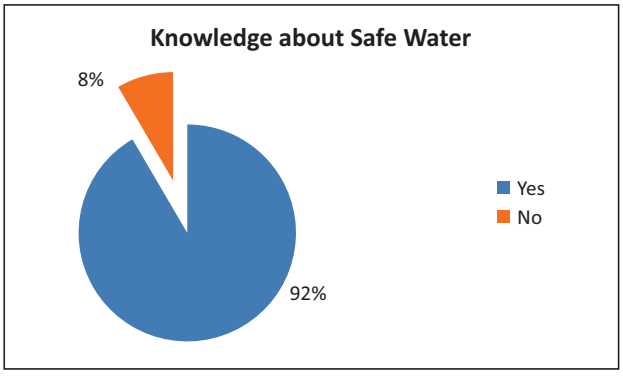

Fig. 5: Distribution of respondents by knowledge of safe water (n=190)

Figure-5 shows that majority (91.57%) of the respondents had idea about safe water.

Table 2: Diseases Related to Unsafe Water

Disease	Number	Percentage
Helminthiasis	2	1.05
Cholera	3	1.57
Diarrhoea	46	24.21
Dysentery	12	6.32
Jaundice	3	1.58
More than one	124	65.27
	190	100.00

Table 2 shows that majority of the respondents had idea about water borne diseases caused by consumption of unsafe water.

Table 3: Distribution of respondents according to types of housing

Dwelling	Number	Percentage
Building	6	3.16
Tinshed	74	38.95
Kacha	110	57.89
Total	190	100.00

Table 3 shows that 57.89 % respondent lived in Kacha house, 38.95% in Tínshed and only 3.16% in Buildings.

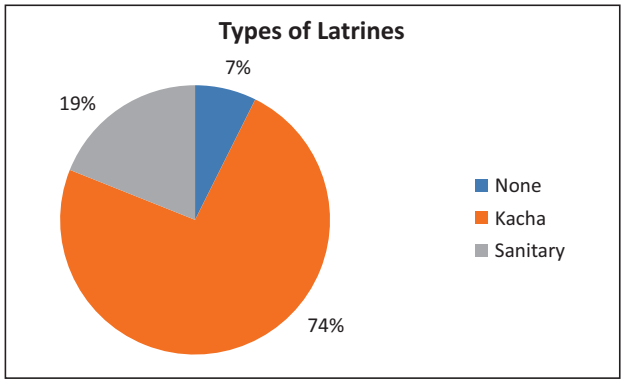

Fig. 6: Distribution of respondents by types of latrines used (n=190)

Figure 6 shows that 18.95% respondents had sanitary latrine, while the majority (73.68%) had kacha latrines and few (7.37%) have no fixed place to defecate.

Discussion and Conclusion

The study was designed to know the status of environmental sanitation in rural areas of Bangladesh. For this purpose the study was conducted at two selected villages of BHANGA Upazila, Faridpur.

In this study, the majority of the respondents about 56.32% were found illiterate (Table-2). In a similar study at DHAMRAI Thana[4] in 1991, it was showed that 67.74% of the respondents were illiterate, which is almost similar with the study.

This study showed that about 97.36% of the respondents use tube-well water for drinking purpose (Table-3). But it showed that for washing utensils, bathing and washing hands & face, the uses of tube-well water was less71.07% and 61.58% respectively(Table-4&Table-5).

In 1991, a study about pattern of consumption of water for domestic purpose at some villages of PABNA district found that 90% of rural people used tube-well water for drinking purpose and 60% of people used tube-well water for washing utensils[5]. In another similar study by Salauddin and Wadud[6], it was found that 98.6% of the respondents use tube-well & tap water for drinking purpose but only 57% of the respondents use the same water for other domestic purposes.

In this study, it was also observed that 91.57% of the respondents have knowledge of association of diseases with consumption of unsafe water (Table-6).

Regarding the dwelling conditions, it was found that about 57.89% live in kacha house, 38.95% in Tin Shed and only 3.16% in Buildings (Table-8). In this study the most surprising finding was the unsatisfactory disposal of human excreta. Only 18.95% respondents have sanitary latrine, while majority (73.68%) have kacha latrines and few (7.37%) have no fixed place to defecate (Table-9).

From the study it is seen that the rural people have some limitations in getting the health related knowledge. But the majority of people in the two villages have knowledge about safe water and water related diseases. It appears from the study that there is inadequate knowledge about basic sanitation which was projected through the majority (73.68%) of kacha latrine user along with 7.37% households having no latrines. Probably the women of the population are being influenced by both socio-economic condition and education. Therefore, public health engineering department have a wide scope of development works through providing of basic sanitation knowledge and distribution of sanitary equipment among the deprived population to ensure better basic sanitation arrangements.

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