# Practice of Personal Hygiene among Rural women of a Selected Community in Bangladesh

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## **Abstract**

**Background**: Good health is a marker of good economic status of a nation. Personal hygiene should be maintained first for obtaining great accuracy in work, low suffering from diseases and to reduce possibility of diseases.

**Objective:** This study was undertaken to assess practice of personal hygiene among rural women of a selected community in Bangladesh.

Materials & Methods: A descriptive type of cross sectional study was conducted during March—June 2012. 150 women of various ages selected from Garibpur and Tangurpur villages of Jessore District to assess two basic components of personal hygiene, hand washing and safe drinking water. Non probability convenient sampling technique was followed and data were collected by face to face interview using pre tested, self administered, semi structured questionnaire.

Results: The mean age of the respondents was 33 years. Regarding educational qualification, 87.33% were educated in different levels and 12.67% were illiterate. Occupational status revealed majority (74.67%) of them were housewives. Regarding economic condition, most (60%) of the respondents had family income < 10,000 Taka. In this study, majority (87.34%) had practiced hand washing before eating. Among them on taking different types of food (86.26%) practiced hand washing before taking breakfast and none of the respondents washed hands before taking any dry food. Majority (95.34%) practiced hand washing after defecation, among them (82%) used soap, 16% used ash and 2% used soil after defecation. In this study, majority (90.67%) used tube well which was not marked red, 6% used pond and 3.33% used river as their source of drinking water.

**Conclusion**: Good practice of personal hygiene and use of safe drinking water has significant importance to lead a healthy life, the villagers of Bangladesh should be well motivated regarding this aspect by regular health education programmes.

**Key words**: Personal hygiene, Hand washing practice, Safe drinking water.

# Introduction

The word "Hygiene" is derived from Hygeia, the goddess of health in Greek mythology. Hygiene is defined as "The science of health and embraces all factors which contribute to healthful living." The term personal hygiene includes all those factors, which influence the health and wellbeing of an individual which comprises a broad range of day to day activities such as bathing, clothing, hand washing, toilet, care of nails, feet & teeth, spitting, coughing, sneezing, personal appearance, inculcation of clean habits along with drinking safe water. Some regular hygiene

practices may be considered good habits by a society while neglect of hygiene can be considered as a source of various diseases threatening to health. To reduce the exposure to all the diseases and conditions spreads through unclean hands, we have to develop the habit of good personal hygiene such as washing of hands before taking food and after defecation. A survey report revealed that overall 54% of world's population maintains good personal hygiene, which is higher among women (59.5%) than men (44.5%).2 According to World Health Organization<sup>3</sup>, 1.8 million people die every year from diarrhoeal diseases including cholera; 90% are children under 5 years of ages, mostly in developing countries. Of diarrhoeal diseases, 88% is attributed to unsafe water supply, inadequate sanitation and hygiene.

Among all hygiene practices, the basic and first step is hand washing and hand hygiene is central in preventing spread of infectious diseases in home and everyday life settings.4 An average of 65% of death caused by diarrheal diseases could be reduced if good hygiene practice accompanies the provision of water and sanitation.5 Diarrheal disease has been considered as a serious global problem<sup>6</sup> and leading cause of child mortality around the world.<sup>7</sup> Around 2.4 million deaths could be prevented annually by good hygiene practice, reliable sanitation and drinking water.<sup>8</sup> Evidence showed that hand washing can reduce the occurrence of diarrheal diseases by 14-40%.9 Different studies showed that hand washing can decontaminate hands and prevent crosstransmission.10 Hand washing with soap can also reduce the risk of endemic diarrhea and skin infections. 11 Recent research 12 also suggests that hand washing is an important preventive measure to reduce the incidence of acute respiratory tract infection also. The effectiveness of hand washing with soap can reduce diarrheal risk up to 47%. 13 Hand washing is best done with soap and enough water for rinsing. However if soap is not available or affordable, clear mud or ashes are also preferable. Use safe drinking water is another important part of good and healthier life. To reduce water borne diseases, safe water should be used for drinking, cooking and all other domestic needs. Now a days, access to safe drinking water is 85.2%.14 Through many research15 it is well established that only hand washing and drinking safe water can reduce 82% risk of food and

water borne diseases. By practicing good personal hygiene people would be able to lead a healthy life.

### Methodology

The study was a descriptive type of cross sectional study conducted during March–June 2012 to assess two basic components of personal hygiene, hand washing and safe drinking water. 150 women of various age groups ranging from 18-45 years residing in two selected villages, namely Garibpur and Tangurpur of Chougasa Upazilla of Jessore district were selected for the study. Non probability convenient sampling technique was followed. A pre-tested semi structured questionnaire was used for face to face data collection, which contained 18 questions regarding socieo-demographic, hand washing and safe drinking water status of the respondents. After collection data were checked, verified, compiled and analyzed by using SPSS software.

#### Results

Socio demographic character showed that majority 75(50%) of the respondents ws >30 years of age, 38(25.33%) belonged to between 26-30 years of age and only 13(8.67%) was < 20 years of age. The mean age of the respondents was 33 years. Among 150 respondents, majority 56(37.33%) completed primary education, 39(26%) secondary education, 32(21.33%) higher secondary education, 4(2.67%) were graduate and 19(12.67%) were illiterate. Majority 112(74.67%) of the respondents was housewife followed by 14(9.33%) was involved in business, 11(7.33%) was service holder and 13(8.67%) was involved with other profession.

Table I: Socio demographic status of respondents (no. 150)

20 13 8.67 21-25 24 16.00 26-30 38 25.33 >30 75 50.00  Educational Qualification  Illiterate 19 12.67 Primary 56 37.33 Secondary 39 26.00 HSC 32 21.33 Graduate 4 2.67  Occupation  Housewife 112 74.67 Service 11 7.33	Age (Years) of respondent	Frequency	Percentage (%)
26-30     38     25.33       >30     75     50.00       Educational Qualification       Illiterate     19     12.67       Primary     56     37.33       Secondary     39     26.00       HSC     32     21.33       Graduate     4     2.67       Occupation       Housewife     112     74.67	20	13	8.67
>30 75 50.00  Educational Qualification  Illiterate 19 12.67  Primary 56 37.33  Secondary 39 26.00  HSC 32 21.33  Graduate 4 2.67  Occupation  Housewife 112 74.67	21-25	24	16.00
Educational Qualification           Illiterate         19         12.67           Primary         56         37.33           Secondary         39         26.00           HSC         32         21.33           Graduate         4         2.67           Occupation         Housewife         112         74.67	26-30	38	25.33
Illiterate   19   12.67     Primary   56   37.33     Secondary   39   26.00     HSC   32   21.33     Graduate   4   2.67     Occupation     Housewife   112   74.67	>30	75	50.00
Primary         56         37.33           Secondary         39         26.00           HSC         32         21.33           Graduate         4         2.67           Occupation         Housewife         112         74.67	Educational Qualification		
Secondary   39   26.00   HSC   32   21.33   Graduate   4   2.67   Occupation   Housewife   112   74.67	Illiterate	19	12.67
HSC 32 21.33 Graduate 4 2.67 Occupation Housewife 112 74.67	Primary	56	37.33
Graduate 4 2.67 Occupation Housewife 112 74.67	Secondary	39	26.00
Occupation Housewife 112 74.67	HSC	32	21.33
Housewife 112 74.67	Graduate	4	2.67
	Occupation		
Service 11 7.33	Housewife	112	74.67
	Service	11	7.33
<b>Business</b> 14 9.33	Business	14	9.33
Others 13 8.67	Others	13	8.67

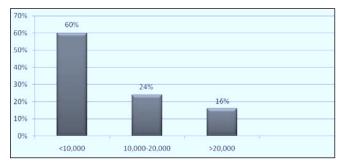


Figure 1: Distribution of respondents according to monthly family income (In taka)

In the Figure 1, most 90 (60%) of the respondents had less than 10,000 taka monthly family income, 36(24%) had between 10,000-20,000 taka and only 24(16%) had more than 20,000 taka.

Table II: Hand washing practice of respondents before eating

Hand washing practice before eating	Frequency	Percentage (%)
Yes	131	87.34
No	19	12.66
Total	150	100

In the Table II, among 150 respondents majority 131(87.34%) practiced hand washing before eating, while 19(12.66%) do not had practice regarding this matter.

Table III: Hand washing practice of respondents before taking different types of food

Hand washing practice before taking different types of food	Frequency	Percentage (%)
Meal	113	86.26
Breakfast	18	13.74
Dry food	0	0
Total	131	100

Table III showed, majority 113(86.26%) of the respondents practiced hand washing before taking meal and 18(13.74%) before taking breakfast. In this study, no respondents practiced hand washing before taking dry food.

Table IV: Hand washing practice of respondents after defecation

Hand washing practice after defecation	Frequency	Percentage (%)
Yes	143	95.34
No	7	4.66
Total	150	100

As shown in the Table IV, among 150 respondents most 143 (95.34%) practiced hand washing after defecation, while 7(4.66%) did not practice.

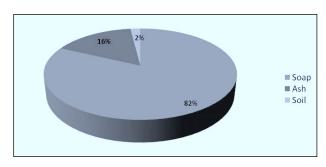


Figure 2 : Distribution of respondents according to using different types of hand washes after defection

As shown in the Figure 2, among 143 respondents who practiced hand washing after defecation, majority 118 (82%) of the respondents used soap, 23(16%) used ash and 9(2%) used soil after defecation.

Table V: Source of drinking water of respondents

Source of drinking water	Frequency	Percentage (%)
<b>Tube well</b>		
(not marked red)	136	90.67
Pond	9	6.00
River	5	3.33
Total	150	100

As shown in the Table V, among 150 respondents, majority 136 (90.67%) used tube well (not marked red), 9(6%) used pond and 5(3.33%) used river as their source of drinking water.

#### Discussion

In this study, out of 150 respondents majority 75(50%) of the respondents was >30 years of age, The mean age of the respondents was 33 years. Regarding educational qualification, majority (87.33%) of the respondents were educated in different levels and only 19(12.67%) were illiterate. Majority 112(74.67%) of the respondents was housewife. Economic status revealed that 90~(60%) of the respondents had less than 10,000 taka monthly family income, 36(24%) had between 10,000- 20,000 taka and only 24(16%) had more than 20,000 taka. It showed the overall socioeconomic condition of the respondents was better than most of the rural people of Bangladesh.

The study showed that, among 150 respondents majority 131(87.34%) practiced hand washing before eating, while 19(12.66%) did not practice. Among those who practiced hand washing before eating, majority 113(86.26%) of them practiced hand washing before taking meal and 18(13.74%) before taking breakfast & no respondents practiced hand washing before taking dry food. In this study, most 143 (95.34%) practiced hand washing after defecation, while 7(4.66%) do not had practice regarding this matter. Among those who practiced hand washing after defecation, majority 118 (82%) of them used soap, 23(16%) used ash and 9(2%) used soil after defecation. With the same objective, ICDDR,B regularly conduct survey regarding hand washing practice in rural areas of Bangladesh. A study<sup>16</sup> done among villagers of randomly selected 100 villages from 36 districts in rural Bangladesh showed that, 14% of respondents washed both hands with soap after defecation. Less than 1% used soap & water for hand washing before eating and/or feeding a child. More commonly people washed their hands only with water, 23% after defecation & 5% before eating. A minority of respondents washed their hands with soap after defecation. This is the actual scenario of majority villagers of Bangladesh. But as our study was done with 150 respondents of better socioeconomic condition, the study result did not reflect the actual scenario about hand washing practice of rural people of Bangladesh.

In this study, it was showed that among 150 respondents, majority 136 (90.67%) used tube well, 9(6%) used pond and 5(3.33%) used river as their source of drinking water. A bulletin report<sup>17</sup> revealed that, tube well water is used primarily as a source of drinking water by the vast majority (90%) of rural people in Bangladesh. So this report is similar with the result of our study regarding source of drinking water. In this study no tube well was found arsenic contaminated (marking with red colour). Although at present prevalence of arsenic in drinking water had been identified in 61 out of 64 districts of Bangladesh (except hilly districts) and degree of contamination varies from 1% to over 90% with an average contamination of 29%. As arsenic contamination in drinking water is a major issue in Bangladesh, tube wells should be regularly examined and the villagers must be aware about this concern.

#### Conclusion

From study result and discussion it is concluded that practice of personal hygiene in relation to hand washing before meal was satisfactory but during eating snacks and other dry foods, the practice of hand washing was very poor. Women were conscious about washing after defecation and used soap mostly. There is no alternative of good personal hygiene practice for leading a healthy life. Therefore, the people of should be well motivated regarding practices of good personal hygiene by regular health education programmes.

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