

## Original Article

## Awareness regarding personal hygiene and sanitation practices among adult population in Dhamrai, Dhaka

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### Abstract

The current descriptive type of cross sectional study was conducted during 16<sup>th</sup> May to 31<sup>st</sup> May 2018 to assess awareness regarding personal hygiene and sanitation practices in Dhamrai, Dhaka with a sample size of 120 using interviewer administered semi-structured questionnaire employing convenience sampling technique. More than one third (35.9%) of the respondents were in age group 25-35 years and about 65% were female, 32.5% were housewives and 35.8% were found illiterate. source of drinking water was from 71.67% tube well and 78.3% used sanitary latrine. More than half of the respondents (61.67%) were taking daily bath with soap and water, 61.66% cut their nails at leisure time and 51.67% wash hair with shampoo and water; while 59.67% washed their hands before meal and 76.67% after defecation with soap and water. It is revealed that 43.3% were aware about the transmission of diarrhoea through dirty nail and 73.3% were aware not to defecate on barefoot. Health education and comprehensive knowledge of proper personal hygiene and sanitation is essential in daily life and should be used to prevent the spread of infectious diseases.

**Keywords:** Awareness, Personal hygiene, Sanitation, Transmissible Diseases.

### Introduction

Health awareness and practices is an essential part of human life in the process of active learning process. Inadequate hygiene and sanitation has direct effect on health of an individual, family, communities and nation as a whole. Toilet is considered as an essential and basic indicator of health and sanitation worldwide.<sup>1</sup> Proper sanitation is a necessary prerequisite for improvement in general health standards, productivity of labor force and good quality of life.<sup>2</sup> It is just alarming that in every 20 seconds, a child around the world dies as a result of poor sanitation.<sup>3</sup> About 80% of all diseases of the developing world is related to drinking unsafe water and inadequate sanitation.<sup>4</sup> Worldwide, 5.3% of all deaths and 6.8% of all disability are caused by poor sanitation, poor hygiene and unsafe water. Nearly two-thirds (67%) of the total population go for open-air defecation and only one-third (33%) having access to a latrine.<sup>5</sup>

In a developing country like Bangladesh, almost one-third of the population lives below the poverty line. Various diseases are rampant due to lack of safe drinking water and sanitation.<sup>6</sup> Among the poorest, nearly one-third defecate in the open, making the everyday environment unsafe.<sup>7</sup> According to a World Health Organization

(WHO) estimate, 1.5 million children die from diarrhoeal diseases each year worldwide, with 88% of these deaths occurring due to inadequate sanitation, hygiene, and safe drinking water.<sup>8</sup> So, hygiene practice becomes difficult in many parts of the world, including Bangladesh, due to lack of awareness about using safe water, soap and disinfectants.<sup>9</sup> Only 26.7% people wash their hands with soap or ashes after defecation.<sup>10</sup> The main barrier to success of sanitation coverage is lack of awareness about the benefits of a safe latrine, poverty, lack of adequate space, and attitude for open defecation.<sup>11</sup> In this regard, Government of Bangladesh initiated a program to achieve 100% sanitation by 2013.

### Materials and Methods

This descriptive type of cross sectional study conducted to assess awareness regarding personal hygiene and sanitation practices in Dhamrai, Dhaka during 16<sup>th</sup> May to 31<sup>st</sup> May 2018 with a sample size of 120 using interviewer administered semi-structured questionnaire employing convenience sampling technique. After collection, the data were checked, verified and edited. Compilation and tabulation of data according to key variables was done by using calculator and computer. Data were presented by tables and diagrams based on nature of data.

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**Results**

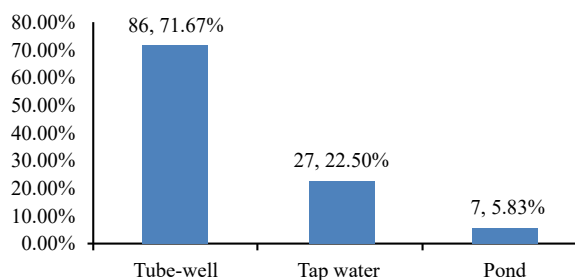
This descriptive type of cross sectional study conducted to assess awareness regarding personal hygiene and sanitation practices in Dhamrai, Dhaka. While examining the socio-demographics characteristics, it was found that 35.9% were from 25 to 35 years age group, 65% were female and 35% male; 35.8% was found illiterate. House wives were 32.5%, 45% of the respondents had monthly income of 5000 to 10,000 taka. The current study revealed that 71.67% respondents used tube well as a source of drinking water and 78.33% of the respondents used sanitary latrine.

**Table No. 1: Distribution of respondents regarding socio-demographic characteristics (n = 120)**

Variables	Frequency	Percentage (%)
<b>Age Group (year)</b>		
15-25	41	34.1
25-35	43	35.9
35-45	14	11.7
45-55	16	13.3
> 55	6	5
<b>Sex</b>		
Male	42	35
Female	78	65
<b>Religion</b>		
Islam	112	93.3
Hindu	8	6.7
<b>Educational Level</b>		
Illiterate	43	35.8
Class I-IV	18	15
Class V – X	19	15.8
SSC	16	13.4
HSC	10	8.3
Graduation	8	6.7
Masters	6	5
<b>Occupation</b>		
Housewife	39	32.5
Service holder	14	11.67
Day labourers	6	5
Domestic helper	13	10.83
Business	8	6.67
Agriculture	7	5.83
Driver	5	4.17

Rickshaw puller	13	10.83
Carpenter	1	0.83
Masonry	1	0.83
Student	14	10.84
<b>Monthly Family Income(Tk)</b>		
<5000	7	5.84
5000 – 10,000	54	45.0
10,000 – 15,000	43	35.83
>15,000	16	13.13

**Source of drinking water**

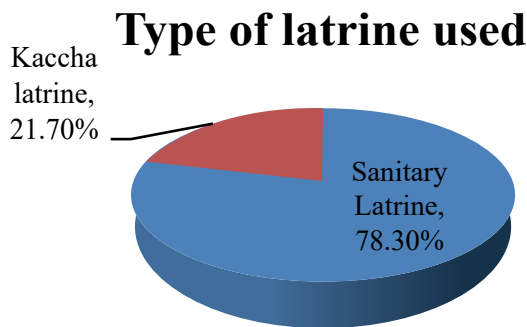


**Figure 1: Bar-diagram showing distribution of respondents according to sources of drinking water.**

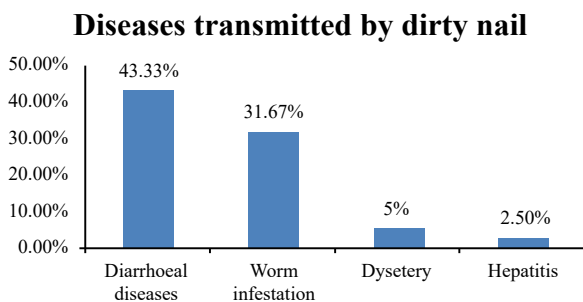
**Table No. 2: Distribution of respondents regarding personal hygiene (n = 120)**

Habit of bathing	Frequency	Percentage (%)
Daily	89	74.17
At interval	31	25.83
<b>Method of taking bath</b>		
With water only	34	28.33
With soap & water daily	74	61.67
With soap & water at interval	12	10
<b>Habit of brushing teeth</b>		
Daily	87	72.5
At interval	33	27.5
<b>Habit of Cutting nails</b>		
Weekly	37	30.34
Fortnight	16	13.33
At only leisure time	62	61.66
Not at all	5	4.17
<b>Method of washing hair</b>		
With soap & water	34	28.33
With shampoo & water	62	51.67
With shampoo, soap & water	18	15

Others	6	5
<b>Method of Washing hands after meal</b>		
Only water	41	34.67
Soap & water	71	59.67
Ash & water	2	1.67
Nothing	4	3.33
Other	2	1.67
<b>Method of Washing hands after defecation</b>		
Only water	19	15.83
Soap & water	90	75
Mud & water	7	5.83
Ash & water	4	33.33

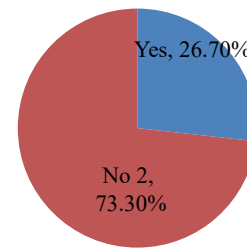


**Figure 2: Pie diagram showing distribution of respondents according to type of latrine used.**



**Figure 3: Bar-diagram showing distribution of respondents by knowledge on Transmission of worm infestation through dirty nail.**

### Defecation barefoot



**Figure 4: Pie diagram showing distribution of respondents who defecates barefoot.**

### Discussion

In this study, 60% respondents had good personal hygiene practice and 40% did not practice adequate hygiene and 78.33% of the houses showed good sanitary condition. Slightly different picture was observed in Nepal by Rajiv Ranjan Karn, Buna Bhandari, and Nilambar Jha where they found the sanitary knowledge had 90% respondents and hand washing with soap water of 65% of the community people was high.<sup>12</sup>

In this study, 78.3% of the houses had sanitary latrine and the respondents had toilet facilities and they do not use open air defecation. Almost similar data was presented in a study conducted in Dhaka in 2014.<sup>13</sup> Overall, the majority 59.67% reported washing hands with soap and water; 34.67% washing hands with only water before taking meals. These findings are almost similar in the studies carried out in Jahangirnagar University in 2012 by Mashura Shammi and Mahedi Morshed.<sup>14</sup>

In this study, 75% of the respondents reported washing hands with soap and water after defecation, and 34.67% washing hands with water after defecation. Slightly different findings were observed in Bangladesh National Hygiene Baseline Survey 2014.<sup>15</sup> Approximately 74% of the respondents reported daily bathing practices and 72% reported tooth brushing practices. These findings are dissimilar with the findings of a study conducted in Qatar which showed that 35% of respondent reported poor bathing.<sup>16</sup>

This current study shows that 72% of the respondents used tube well as a source of drinking water,<sup>17</sup> 43.3% of the respondents were aware about the transmission of diarrhoea through dirty nails and majority 73.3% of the respondents do not defecate barefoot.<sup>16</sup>

### Conclusion and Recommendations:

Hygienic practice is important when people get adequate education and information. Mass media can play an important role in dissemination of hygienic education to the rural people. There should be extensive health

education program for the people about the personal hygiene and sanitation.

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