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Awareness and Practices of Personal Hygiene among Selected Rural School Children

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Abstract

Introduction: Poor hygiene practices and inadequate sanitary conditions play major roles in the increased burden of communicable diseases within developing countries.

Objective: To assess the status of awareness and practice about personal hygiene among the rural school children.

Materials and Methods: This cross sectional descriptive study was conducted from March 2015 to June 2015 among children of class IX and X of a high school of Hemayetpur union of Savar area under Dhaka district. A total of 109 children were selected through purposive sampling and data were collected through face to face interview with a pretested semi-structured questionnaire.

Results: Students' mean age was 14.65±1.93 years and 53.21% was boy. Majority (57.80%) of the respondents' parents' monthly income was below 5000 taka and 42.20% were living in kacha house. Maximum 98.2% respondents had good knowledge that washing hand before meal and after defecation prevent transmission of disease and 62.21% had good hygiene practice habit. The association of type of residence with hand washing habit and wearing shoes in toilet was significant ($P<0.05$). Significant ($p<0.01$) association was also found among monthly family income and parents education status with daily bathing practice.

Conclusion: Almost all the students had agreed that washing hand before meal and after defaecation prevents the spread of diseases. Proper knowledge and practice on personal hygiene keep them away from many diseases. So, effort should be made to aware every school going children about the benefits of regular practice of personal hygiene for a bright and healthy life.

Key-words: Awareness, Personal hygiene, Rural school children.

Introduction

The word "hygiene" is derived from Hygeia, the goddess of health of Greek mythology. Hygiene is defined as "the science of health and embraces all factors which contribute to healthful living"[1]. Personal hygiene means health care which are the measures responsible for improving the health of the individual. Personal hygiene comprises a broad range of day to day activities, such as care of the body regarding bathing and washing, care of the clothing, care of teeth, nails, hair, posture etc. Personal hygiene includes all those personal factors which influence the health and well being of an individual[2].

Poor knowledge and practice of and attitudes to personal hygiene such as hand washing play major roles in the high incidence of communicable diseases and therefore has negative consequences for a child's long term overall development[1]. Studies have revealed a strong and consistent causal link between poor hand hygiene and gastrointestinal infection[2]. Good hand hygienic practices encouraged through health education has been reported to be associated with low prevalence of communicable diseases in school children[3]. Personal hygienic practices therefore plays an important role in preventing spread of respiratory infections, helminthiasis, skin infections, eye infections, food borne diseases, spread of new pathogens as in epidemics[3]. Infectious disease causes 62% and 31% of all deaths in Africa and Southeast Asia respectively[4].

The health of school children is a common concern of the school, parents and the community. A child has to be healthy to learn and the school is an important place, next to home, where a child learns to be healthy[5]. The relationship between health, education and development is very important, as a healthy child is the major input for human resources development[6]. Health and education are interrelated means of development. The schools are particularly important because these institutions represent gathering places for a population of age 5-17 years[7]. They are susceptible to many communicable diseases and vulnerable to physical and mental hazards. Moreover, a considerable proportion of school children, particularly in the underdeveloped and developing countries, suffer from malnutrition and deficiency diseases and as such they naturally desire special attention for their physical and intellectual development[5,8].

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It is generally recognized that childhood is the best time to learn hygiene behaviors. Children are future parents and what they learn is likely to be applied in the rest of their lives. They have important roles in the household, taking care of younger brothers and sisters, and depending on the culture, they may also question existing practices in the household. They are eager to learn and help, and if they consider environmental care and their role in this as important, they will take care of their own health and the health of others[6]. Hand washing with soap behaviour under water and sanitation program" by UNICEF found that washing hands with soap at the right times can reduce instances of diarrhoea by 45-50 percent[9]. Knowledge and practices on basic personal hygiene among school children have shown that although a sizeable number of the children studied had adequate knowledge related to basic personal hygiene, their practices related to same was poor[3].

Maximum research works have been conducted on personal hygiene of various professionals. Very few have been done to assess awareness of school children. This study was conducted to get the information about awareness and practice status of rural students about their personal hygiene. This might give the guidelines for policymaker for planning and preparation of curriculum to conduct intervention program for students.

Materials and Methods

This descriptive cross sectional study was conducted among 109 children of class IX and X of a high school of Hemayetpur Union of Savar area under Dhaka District during March to June in 2015. Respondents were selected through purposive sampling irrespective of age, sex and religion who were responsive and agreed to participate were included in the study and data were collected through face to face interview with a pretested semi-structured questionnaire. Permission was obtained from the school authority and verbal consent from the participant. Data obtained were collated and analyzed by using the SPSS version 20.0. The data was presented in the form of frequency and percentage. Chi-square test was done to see association where and whenever required and $p<0.05$ considered as significant.

Results

Children's mean age was 14.65±1.93 years and more than half (53.2%) of the respondents belonged to the age of 14 years. More than half (53.2%) were boys and majority were Muslim (89.9%), 42.2% were resident of kacha house. Around 68.8% of the respondents had the family size of 5-8 members with a mean family size 4.9±1.89 (Table-I).

Table-I: Distribution of socio-demographic characteristics of the respondents (n=109)

Characteristics of the respondents		Frequency	%
Age	14 years	58	53.2
	15 years	31	28.4
	16 years	20	18.3
Sex	Boys	58	53.2
	Girls	51	46.8
Religion	Islam	98	89.9
	Hindu	11	10.1
Residence type	Pucca	33	30.3
	Semi Pucca	30	27.5
	Kacha	46	42.2
Family size	≤ 4	26	26.6
	5-8	75	68.8
	≥ 9	5	4.60

Majority (80.7%) of the respondents have the habit of washing hand before taking meal, whereas 94.5% have the habit of washing hand after defecation and 77.1% respondents wear shoes during use of toilet and 64.2% had the habit of taking daily bath (Table-II).

Table-II: Distribution of respondents by their hygiene practices (n=109)

Category	Response	n	%
Hand washing habit before taking meal	Yes	88	80.7
	No	21	19.3
Washing habit after defecation	Yes	103	94.5
	No	06	5.5
Wearing shoes during use of toilet	Yes	84	77.1
	No	25	22.9
Habit of taking daily bath	Yes	70	64.2
	No	39	35.8
Source of information regarding personal hygiene	Teacher	15	13.8
	Family	61	56.0
	Health worker	22	20.2
	Others	11	9.0
Habit of regular nail cutting	After 7 days	101	92.7
	After 15 days	6	5.5
	After 1 month	2	1.8
Timing of Cleaning teeth	Early morning	98	89.9
	After every meal	6	5.5
	Before sleep	5	4.6
Habit of cleaning cloth	Everyday	38	34.9
	Twice in a week	47	43.1
	Once in a week	24	22.0

Students having kacha residence had significantly ($p<0.01$) less hand washing practice than other types of residence (Table-III).

Table-III: Association between hand washing practice before taking food and type of residence

Type of Residence	Hand Washing Practice before Food			Statistics
	Yes	No	Total	
Pucca	31	2	33	$X2 = 9.64$ df = 2 $p < 0.01$
Semi Pucca	26	4	30	
Kacha	31	25	46	
Total	88	31	109	

Students having less monthly family income had significantly (p< 0.001) low habit of taking daily bath (Table-IV).

Table-IV: Association between habit of daily bath and monthly family income

Monthly Income (Taka)	Habit of Daily Bath			Statistics
	Yes	No	Total	
< 5000	31	32	63	$X^2 = 14.95$ df = 2 p < 0.001
5000 - 10000	22	5	27	
>10000	17	2	19	
Total	70	39	109	

Students' parents having secondary or higher education had significantly (p<0.001) high habit of taking daily bath (Table-V).

Table-V: Association between habit of daily bath and parent's education

Parents Education	Habit of Daily Bath			Statistics
	Yes	No	Total	
Up to Primary	28	33	61	$X^2 = 20.24$ df = 2 p < 0.001
Secondary	34	5	39	
HSC & above	8	1	9	
Total	70	39	109	

Students having Pucca and semi pucca type of residence had significantly (p<0.05) high habit of wearing shoes in toilet (Table-VI).

Table-VI: Association between habit of wearing shoes in toilet and type of residence

Type of Residence	Habit of Wearing Shoes in Toilet			Statistics
	Yes	No	Total	
Pucca	28	5	33	$X^2 = 6.35$ df = 2 p < 0.05
Semi Pucca	26	4	30	
Kacha	30	16	46	
Total	84	25	109	

Discussion

In this study mean age of the students was 14.65±1.93 years. Majority of the respondents were male (53.21%) which is disimilar with the findings of the study conducted by Rahman A[10] where 63.33 % were female this might be due to less number of rural girls studying higher class of school. Most of the respondents (68.8%) family size was 5-8 persons which is similar to the study by Rahman A[10]. It was evident from the study that 42.2% respondents were living in kacha house. The finding is dissimilar to the study findings conducted by Chowdhury FA[11] where found 24.2% respondents were living in kacha house. This is because of the rural people are still living in kacha houses. Almost all the respondents had the habit of washing hand before meals and after defecation and daily teeth brushing which is similar with study findings conducted by Chowdhury FA[11] among the food handlers of Dhaka University hostel messes. This result is also similar to the result found by Vivas AP et al[4].

Most the respondents (77.1%) had habit of wearing shoes during use of toilet which was similar to the findings of the study conducted by Chowdhury FA[11] but dissimilar to the finding of the study conducted by Nahar A and Alam ATM[12] in 1999 among the children attending an urban clinic of Dhaka City where they found 15.9% children had habit of wearing shoes during use of toilet respectively. This may be due to increased awareness of the children about personal hygiene as they come to know about it through various sources in recent years. Almost all the respondents (94.5%) had habit of washing hand after defecation which does not coincide with the study findings conducted by Nahar A and Alam ATM[12] in 1999 who found only 11.1% children had habit of washing their hands after defecation. This may be due to increase awareness among the students as well as their parents regarding food borne diseases. This study reveals that 92.7% students had nail cutting habit weekly, 38.5% had hair cleaning habit twice weekly and 43.1% had cloth cleaning habit twice weekly. These findings were more or less similar to the findings of the studies conducted by Dhar S[13] in Bangladesh where they found that clean nails and clean clothes among the respondents were 93.2% and 42.14% respectively but clean hair is dissimilar (73.74%).

Only 4.6% had the habit of brushing teeth twice a day which is dissimilar with the study conducted by Rahman A[10] and Harikiran AG et al[7] where the findings were 38.5% and 42% respectively. Poor hygiene practice was more among the respondents living in kacha house in case of hand washing before meal (30.43%), taking daily bath (52.17%) and wearing shoe during use of toilet (32.61%) whereas 96.97%, 87.88% and 90.90% respondents living in pucca house were maintaining good personal hygiene respectively. The association between personal hygiene practice and accommodation status was found statistically significant. The study conducted by Chowdhury FA[11] where he found that most (52.8%) of the respondents living in semi pucca house were maintaining good hygiene practice whereas most of the respondents living in kacha house were maintaining poor hygiene practice (78.9%). This is probably due to good housing and accommodation is important aid in maintaining good personal hygiene.

Conclusion

Awareness on personal hygiene is required for living a healthy life. Students' parents' educational qualification, monthly family income and accommodation status had significant impact on personal hygiene practice. Almost all the students had agreed that washing hand before meal and after defaecation prevents the spread of diseases. Proper knowledge on personal hygiene and regular practice keep them away from many diseases. So, effort should be made to aware every school going children about the benefits of regular practice of personal hygiene for a bright and healthy life.

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