

A Study of Hygienic Practices in Secondary Level Students of the Quetta City

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ABSTRACT

Objective: To investigate the standards of personal hygiene in secondary level students.

Study Design: Observational / descriptive / cross sectional study

Place and duration of study: This study was conducted at Government Sardar Essa Khan Girls High School, Quetta from July 2014 to December 2014.

Materials and Methods: The study was conducted on grade 7th & 8th students of Government Girls High School Quetta with the help of questionnaire. Health status of students was also examined by performing physical examination.

Results: Amongst the target population 40.31% students were 11 to 13 years old, 57.65% were 13-16 years old while 2.04% students belonged to the 16.1 to 19 age group. Parents of the majority of the participants were literate. Family income of 52.65% students was above Rs. 15000/month. All the students had closed sewage system and community water supply in their houses. More than 80% of students were found neat, clean and healthy according to the criteria of health score designed for this study.

Conclusion: This study indicates satisfactory personal hygienic conditions amongst target students but still there was a room for improvement. However, awareness campaigns should be conducted in schools to increase understanding about good hygiene practices.

Key Words: Hygiene Practices, Personal Hygiene, Hand Washing, Oral Hygiene, Sanitation

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INTRODUCTION

Personal Hygiene is taking care of one's own self in terms of cleanliness and is related to an individual's adjustment to the physiological needs of the body and helps in attainment of the maximum level of health. Personal hygiene involves practices that promote mental, emotional, and physical health, as well as the social well-being of the individual¹.

Sanitation is hygienic means of promoting health through prevention of human contact with wastes. Motivations for personal hygiene practice include reduction of personal illness, healing from personal illness, optimal health and sense of well-being, social acceptance and prevention of spread of illness to others. Good Hygiene practices (such as hand washing and oral hygiene) need to be followed to get best results. Good

personal hygiene can make individuals less likely to become sick. Self-care is the first step to personal hygiene and maintains sound health while proper personal hygiene can be culture-specific and may change over time. Other practices which are generally considered in acquiring proper hygiene include bathing and washing hands regularly especially before handling food. Washing scalp hair, wearing clean clothing, brushing one's teeth, trimming finger nails regularly, are some other practices which are considered necessary for promoting health. These practices can be more effective if they are followed in daily life routine. Maintenance of hygienic conditions in home and everyday life settings plays an important part in preventing spread of infectious diseases². Main sources of contamination in homes are hands, as germs are transmitted through handling of food and contaminated surfaces like dirty cloths and utensils³. Safe disposal of human waste is a fundamental need as poor sanitation is a primary cause of diarrheal diseases, especially in low income communities.

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MATERIALS AND METHODS

An observational / descriptive / cross-sectional study was conducted in Government Sardar Essa Khan Girls High School, Quetta from July 2014 to December 2014. This school is situated in Hazara Housing Society on an area of 31,625 sq. feet. The total number of students

was 1056 out of which 521 were enrolled in primary level whereas 535 were in secondary and high level. There were 4 toilets for students, 2 for teachers and 1 for peon. There were 3 electric water purifiers. In addition there were also large sized water storage coolers in every class which were filled with water every morning by peons of the school.

Sample size: All students (196), enrolled in class 7 & 8 were included in the study.

Data collection Tool: Semi structured Questionnaire was used to collect data from students. It was distributed among the students after the salient features were explained to them. After completion of the questionnaires, all the students were examined physically by the interviewer.

Statistical analysis: Data was entered in EPI-INFO 6 program and was analyzed with same statistical package. Chi square test was used to find out the p value.

RESULTS

A total of 196 students of class 7th & 8th were included in this study. 79 students (40.31%) of students were 11-13 years old whereas 113 (57.65%) students were 13.1-16 years and 4 students (2.04%) were 16.1-19 years of age. More mothers were illiterate than fathers and is evident from the finding that a total of 51 (26.02%) fathers were illiterate as compared to mothers (85 in number) whoes illiteracy rate was 43.37%. The literacy rate in fathers ranging from matric to graduation was more as compared to mothers. About 119 students (60.71%) were living in nuclear type family; whereas 77 (39.29%) students lived in joint family system.

Table No.1: Frequency Distribution of living conditions of student's houses

Variables		Frequency	%age
Water Supply	Tube Well	196	100%
	Others	0	0%
Toilet	Closed Sewage	196	100%
	Conservancy	0	0%
	Others	0	0%
House Type	Bricks	124	73.26%
	Mixed- bricks and mud	72	36.74%
Crowding Index	2-4	115	58.67%
	5-7	62	31.63%
	8-10	19	9.70%

As far as family size of students was concerned, 66 (33.67%) had family size of 3-6 people, 105 (53.57%) had 7-10 people, 12(6.12%) had 8-14 people, 6(3.07%) had 15-17 and 7(3.57%) had 18-22 people. Regarding family income, 21(10.71%) had a monthly family earning of more than Rs 8000, 72(36.73%) students had family income of Rs 8001-15000/month, 45(22.96%)

students had Rs 15001-22000 family income whereas 58 (29.60%) students had Rs 22001-50000 family income per month. All the students had closed sewage toilets and tube well water supply in their homes (Table 1).

Table 2: Frequency Distribution of student's personal hygiene practices

Sr. No.	Variables	Description	Frequency	%age
1.	Clothing	Clean	171	87.24%
		Dirty	25	12.76%
2.	Hands	Clean	150	76.53%
		Dirty	46	23.47%
3.	Nails	Cut & Trimmed	134	68.37%
		Uncut & Untrimmed	62	31.63%
4.	Face	Clean	164	83.67%
		Dirty	32	16.33%
5.	Hair	Clean	164	83.67%
		Dirty	32	16.33%
		Combed	168	85.71%
		Uncombed	28	14.29%
6.	Teeth	No Caries	141	71.90%
		Caries	55	28.10%
	Gums	Healthy	147	75%
		Unhealthy	49	25%
	Breath Smell	No	153	78.10%
Yes		43	21.90%	

Table No.3: Relationship between Socio Demographic Characteristics of students with habits of Brushing Teeth

Characteristics	Daily brushing teeth Once Twice (88) (108)		Total	Chi square χ^2	P value	
Age	11-13	29	50	79	3.59	0.05
	14 and above	59	58	117		
Family Size	3-6	19	47	66	16.0	<0.001
	7-10	61	44	105		
	>10	08	17	25		
Family Type	Nuclear	67	52	119	15.92	<0.001
	Extended	21	56	77		
Mother's Education	Illiterate	39	36	75	4.18	0.12
	Under Matric	35	43	78		
	Matric and above	14	29	43		
Family Income (Rs)	Less than 8000	11	10	21	29.15	<0.001
	8000-15000	49	23	72		
	>15000	28	75	103		
Crowding Index	2-4	23	83	106	53.21	<0.001
	5-7	41	21	62		
	8-10	24	04	28		

Most of the students bathed daily, brushed their teeth twice a day and had sleep of an approximately 8 hours/day as shown in Table 2. Relationship between Socio Demographic Characteristics with Brushing Teeth is shown Table 3.

DISCUSSION

Teaching the basics of proper personal hygiene is important for keeping children healthy and clean. It is especially important for school children to practice good hygiene, particularly hand washing because they spend lot of their time being in close contact with each other in the classroom, sharing everything from food, drinks to desks and chairs, so the chances of germ transmission from one person to other is also high. Education of parents plays a significant role in grooming of their children. It was observed that children of literate parents were well aware of personal hygienic practices. Moreover, family income had an important impact on living standards.

On the basis of physical examination of children, score was assigned to each category of hygiene practice, being followed by students. Following rating for health status was given to students:

- 1---3 Poor
- 4---6 Average
- 7---9 Good

Cleanliness of clothing is not only of aesthetic importance, but also provides a hygienic barrier, limiting transmission of germs and harmful radiations. In this study students (87.24%) were observed to be wearing clean and tidy uniforms and this habit is included in good category practice.

Physical examination of gums, caries of teeth and smell of breath revealed that 70-78% students in this study had normal gums, no caries of teeth and no smell in their breath. Similarly nails were clean and cut (trimmed) in more than 70% of students. In comparison, about 78 % of Americans have at least one cavity by age 17⁴ and about 80% of the U.S. population has some form of periodontal gum disease⁵. Hand washing plays a pivotal role in disease prevention. The present study showed that more than 70% students had a habit of washing hands with soap and water after using toilet while only small number (23.74%) washed their hands with water only. In comparison, a study conducted by UNICEF in 2012 reported that globally 34 % of the people wash their hands with soap⁶. Similarly, a study conducted by the Global Public-Private Partnership for Hand Washing (PPPHW) which included several sub-Saharan African countries (Kenya, Senegal, Tanzania, and Uganda) reported that 17% of participants washed their hands with soap after using the toilet, while 45% used only water⁷. The main reason for not using soap for hand

washing is due to financial constraints and inadequate sanitation facilities^{8,9}.

The community in the neighborhood of the school observed a culture of hygiene and cleanliness. In addition to having proper resources and facilities, hygiene practices were influenced by students' knowledge and attitudes towards hygiene. In a study conducted in Senegal, reasons given for not washing hands included stubbornness (reluctance to follow what adults say), laziness and hastiness to go for play in breaks along with dirt and smell of the toilets¹⁰.

CONCLUSION

Home and school environment plays an important role in creating awareness amongst children regarding their health and personal hygiene. Usually there is a perception that children in Government schools belong to a low socio-economic class and are not clean and healthy. It is generally observed that their parents are illiterate, but results of this study revealed that this is a rather false impression. Majority of students were well aware of hand washing with soap and knew its importance in prevention of diseases. One of the major reasons for this good behavior might be that majority of students the school included in this study belonged to a special community where level of education and living was much higher than other areas.

Conflict of Interest: The study has no conflict of interest to declare by any author.

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