

KNOWLEDGE REGARDING PERSONAL HYGIENE AMONG PRIMARY SCHOOL CHILDREN

Authors Name: ¹Abhilasha Saha, ²Chanak Trikhatri, ³Pinky Gain

¹Associate Prof. Pediatric Nursing, National Medical College & Teaching Hospital, Birgunj, Nepal

²Lecturer Advance Adult Health Nursing, National Medical College & Teaching Hospital, Birgunj, Nepal

³Registered Nurse, Norvic International Hospital, Thapathali, Kathmandu, Nepal

Corresponding E-Mail: mukeshabhilasha@yahoo.com

DOI Link: <http://doi-ds.org/doi/10.21961/2020.75977337/>

Abstract Proper knowledge and practices of personal hygiene plays critical role in avoiding communicable diseases and benefit primary school children to enjoy healthy and productive school life. The study was conducted with the objective to assess the knowledge level regarding Personal Hygiene among grade 5 students of GyanJyoti Higher Secondary School, Birgunj, Nepal.

A descriptive cross-sectional research design was executed among 60 students who were selected by using census method of grade 5 of GyanJyoti Higher Secondary School, Birgunj, Nepal. Structured questionnaire was to collect the data. The obtained data was analyzed by descriptive statistics (frequency, percentage median) and inferential statistics (Chi-square test). The findings of the study revealed that the highest percentage of the students (96.7%) had knowledge regarding the meaning and definition of Personal Hygiene. Likewise, most of the students (93.3%) were knowledge about the Nail Hygiene. Few students (13.3%) knew about the dental care. The findings of the study revealed that maximum number (73.3%) of children belonged to age group ≤ 11 years, more than half of the students (55.0%) were male and 45.0% were female. Most of the students (88.3%) belonged to Hindu religion and more than half of the students (73.3%) were from joint family. 30.0% of the student's father were educated up to higher secondary level and 28.3 % of the student's mother were educated up to secondary level. The study revealed that 53.3% of students had adequate knowledge regarding Personal Hygiene and 46.7% had inadequate knowledge. The study also revealed that there is a significant association between educational status of mother (p value=0.020) of the students and knowledge regarding Personal Hygiene. Parents and teachers were the most common source of knowledge providers about personal hygiene to the school children. Therefore, it is recommended that school based programmes should be organized regarding Personal Hygiene.

Keywords Knowledge, Personal hygiene, Primary School Children

BACKGROUND

Hygiene is a set of practices performed for the preservation of health. According to the World Health Organization (WHO), "Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases." Basic hygiene refers to practices that help to maintain health and prevent the spread of diseases (WHO, 2007).

It involves regular washing of body, washing the hands when necessary, cutting of nails, washing ones clothing, keeping the hair neat and brushing of teeth. School children are particularly vulnerable to neglect of basic personal hygiene (Enahoro&Orokj, 1986).

Children are our world's most valuable resources, without them there would be no tomorrow. There should be a motto to guide everyone to follow and practice that cleanliness is next to "Godliness" which is taught to a child even from primary school days (Rout,2009).

A child spends more time at school than anywhere else, except home. Schools are sacred since they provide an environment for acquiring skills and development of intelligence, which can be utilized by students to achieve their goals in life and develop as a good human being. A great deal of research tells us that schools can have a major effect on children's health, by teaching about health

and promoting healthy behaviours. Moreover, young children today have bigger dreams than ever before and they are willing to go the extra mile to achieve their dreams. However, we need to keep them healthy so that they can stretch their wings and fly high (Kishore, 2007).

School is the place where health education regarding important aspects of hygiene, environment and sanitation, as well as social customs is being imparted. The teacher is the guardian of the child in school and plays a pivotal role in the whole process of primordial prevention (Soumya et al., 2010).

Keeping body properly cleansed is a fundamental but not sole element of good personal hygiene. Good hygiene practices literally continue around the clock. Brushing teeth at least twice a day, washing hands at appropriate times and caring for appearance are all important components of personal hygiene, according to the Children's Youth and Women's Health Services, or CYWHS (Gaskell, 2017).

The consequences in terms of morbidity and mortality are also more severe in school children than adults. The increased burden of communicable diseases among school children due to poor personal hygiene practices and inadequate sanitary conditions remains concern on the public health agenda in developing countries and therefore has negative consequences for the child's long term overall development (Karl, 2017).

Diseases related to personal hygiene remain high. Diarrheal diseases have been the number one cause of morbidity attributed to poor personal hygiene. Skin diseases and worm infestations are the next most commonly associated with poor personal hygiene. Dental diseases and complications of other diseases like leprosy and elephantiasis can be prevented through proper personal hygiene. Worm infestations contribute to malnutrition and anemia among children leading to high child mortality rates (Rao, 2009).

According to joint study conducted by UNICEF and WHO, hand washing can help reduce respiratory problem by 25% and diarrhea by 42%. Washing hands with soap reduces the incidence of other diseases considerably as well, among them influenza, H1N1 flu, pneumonia, trachoma, scabies, malnutrition, eye and skin infection, cholera and dysentery (Postma et al, 2004).

RESEARCH METHODOLOGY

A descriptive cross sectional design was adapted to assess knowledge regarding personal hygiene among primary school children of selected school of Birgunj. This study setting was in GyanJyoti Higher Secondary school, Birgunj. The populations for this study were all the students of grade 5 studying in GyanJyoti Higher Secondary school, Birgunj. Census method was used as sampling technique and number of 60 sample was taken for the study. A self-administered structured questionnaire was prepared by the researcher. The tool comprised of two sections, section A included demographic information of the respondents i.e. age, gender, religion, type of family, education status of father and mother and section B Consisted of 22 multiple choice questions to assess the knowledge regarding personal hygiene.

Each correct response carries one (1) mark and incorrect response carries zero (0) mark. Above or equal to mean score is consider adequate knowledge whereas below mean score inadequate knowledge. Content validity used to valid the tool and reliability of the instrument was obtained by pre-testing the instrument. Participants were informed about the objectives of the study. Written informed consent was obtained from all the participants.

Approval was taken from Institution Review Committee. Formal permission was obtained from Principal of GyanJyoti Higher Secondary School. Data analysis was done using descriptive and inferential methods. Frequency, percentage, means, median and standard deviation was used to analyze the data descriptively. Chi square test was used to analyze the data inferentially.

RESULT

TABLE 1: Frequency and Percentage of School Children According to Socio-demographic Variable
 n=60

CHARACTERISTICS	FREQUENCY	PERCENTAGE
Age		
<11	44	73.3
>11	16	26.7
Mean Age \pm SD 11 \pm1.200		
Minimum 9, Maximum 15		
Gender		
Male	33	55.0
Female	27	45.0
Religion		
Hindu	53	88.3
Muslim	6	10.0
Christian	1	1.7
Types of Family		
Nuclear	15	25.0
Joint	44	73.3
Extended	1	1.7

TABLE 2: Frequency and Percentage of School Children According to Parent's Educational Level
 n=60

CHARACTERISTICS	FREQUENCY	PERCENTAGE
Educational Status of Father		
Illiterate	3	5.0
Primary or Informal	3	5.0
Education		
Lower Secondary Level	6	10.0
Secondary Level	17	28.3
Higher Secondary Level	18	30.0
Bachelors and Above	13	21.7
Educational Status of Mother		
Illiterate	5	8.3
Primary or Informal	6	10.0
Education		
Lower Secondary Level	14	23.3
Secondary Level	17	28.3
Higher Secondary Level	14	23.3
Bachelor and Above	4	6.7

TABLE 3: Children's Knowledge Regarding Definition of Personal Hygiene and Oral Care n=60

ITEMS	CORRECT RESPONSE	
	FREQUENCY	PERCENTAGE
Personal Hygiene means cleaning our body	58	96.7
Poor Personal hygiene may cause illness	34	56.7
Component of personal hygiene consists of oral, hand and nail hygiene	46	76.7
Oral hygiene means brushing, flossing the mouth and cleaning the teeth	42	70.0
We should brush our tooth two times in a day	55	91.7
We should go for dental check-ups twice in a year	8	13.3
The first sign of dental carries is formation of black spot	30	50.0
Early detection of the dental carries can be done by regular dental check-up	32	53.3
Best Practice to prevent dental carries is brushing in the morning and the night	50	83.3
Time we should spend on brushing teeth is two minutes	23	38.3
Tooth Brush should be changed at least three monthly	10	16.7

TABLE 4: Children’s Knowledge Regarding Bath, Hand Hygiene and Nail Care n=60

ITEM	CORRECT RESPONSE	
	FREQUENCY	PERCENTAGE
We should bath once a day	32	53.3
Things that should be used while bathing, shampoo, soaps and clean water	58	96.7
We can protect our skin by cleaning the body with soap and water	54	90.0
Hair hygiene means cleaning and grooming the hair	41	68.3
Poor hair hygiene means meticulous, hair well and dandruff	22	36.7
Hand hygiene refers to hand washing using soap and plain water	58	96.7
Hand washing should be done after going toilet, before and after eating	9	15.0
The best way to prevent the spreading of germs is washing hands regularly	53	88.3
Hand washing should be done for at least 20 seconds	9	15.0
Hand washing is done to prevent infection	36	60.0
Nail should be clean and short	56	93.3

TABLE 5: Mean Score of Children’s Knowledge Regarding Personal Hygiene n=60

VARIABLE	MAXIMUM POSSIBLE SCORE	MEAN	RANGE
Knowledge Score	22	14.23	20-7

TABLE 6: Distribution of Knowledge Level of School Children Regarding Personal Hygiene.

n=60

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE
Adequate > 14	32	53.3
Inadequate < 14	28	46.7

TABLE 7: Association between Knowledge Score and Selected Demographic Variable

n=60

Variable	Level of knowledge		X2 value	P value	Df
	Adequate knowledge	Inadequate knowledge			
Age in years					
< 11	19(43.2)	25(56.8)	0.805	0.307	1
> 11	9(56.2)	7(43.8)			
Gender					
Male	14(42.4)	19(57.6)	0.530	0.466	1
Female	14(51.9)	13(48.1)			
Religion					
Hinduism	23(43.4)	30(56.6)	2.269	0.132	2
Islamic	4(66.7)	2(33.3)			
Christianity	1(100)	0(0.00)			
Types of Family					
Nuclear	9(60)	6(40)	3.186	0.203	2
Extended	1(100)	0(0.00)			

df= degree of freedom Median= 15, χ^2 =chi-square, A p-value ≤ 0.05 is consider as significant.

= Linear by Linear chi-square

TABLE 8: Association between Knowledge Score and Selected Demographic Variable

n=60

VARIABLE	LEVEL OF KNOWLEDGE		X2 VALUE	P VALUE	DF
	ADEQUATE KNOWLEDGE	INADEQUATE KNOWLEDGE			
Educational Status of father					
Illiterate	3(100)	0(0.00)	2.225	0.136	5
Primary or Informal	2(66.7)	1(33.3)			
Education					
Lower	3(50.0)	3(50.0)			
Secondary Level	6(35.3)	11(64.7)			

Higher Level	9(50.0)	9(50.0)			
Bachelor and Above	5(38.5)	8(61.5)			
Educational Status of Mother					
Illiterate	5(100)	0(0.00)	5.437	0.020	5
Primary or Informal	4(66.7)	2(33.3)			
Education					
Lower	7(50.0)	7(50.0)			
Secondary level	5(29.4)	12(70.6)			
Higher Secondary level	5(35.7)	9(64.3)			
Bachelor and above	2(50.00)	2(50.0)			

Median= 15, χ^2 =chi-square, A p-value ≤ 0.05 is considered as significant.

= Linear by Linear chi-square, *= Significant

DISCUSSION

In this study more than half (73.3%) were in the age group ≤ 11 years and remaining (26.7%) were in the other age group. The mean age of students was 11. Among all of the students 55.0% were male and 45.0% were female. Similarly, most of the students (88.3%) belonged to Hindu religion, 10.0% were Muslim and only 1.7% was Christian. More than half of the students (73.3%) were from joint family, 25% from nuclear family and 1.7 % of the students were from extended family.

In this Study 5.0% of the students father were illiterate, 5.0% were educated up to primary level whereas 10.0% were educated up to lower secondary level. Similarly, 28.3 % of the student’s father were educated up to secondary level, 30.0% of the student’s father were educated up to higher secondary level and 21.7% of the student’s father were educated up to bachelor and above.

Mother of 8.3% of the students were illiterate, 10.0% were educated up to primary level whereas 23.3% were educated up to lower secondary level. Similarly, 28.3 % of the student’s mothers were educated up to secondary level. Similarly, 23.3% of the student’s mother were educated up to higher secondary level and only few (6.7%) of the student’s mother were educated up to bachelor and above.

The objective of the study was to assess the level of knowledge regarding personal hygiene among primary school children. The findings of the present study showed that more than half (53.3%) of students were having adequate knowledge level, and remaining 46.7% were having inadequate level of knowledge regarding personal hygiene.

Present study findings are congruent with the similar study conducted by Vivas, Gelaye, Kumie, Berhane and Williams (2010) that shows more than half of students 52% have adequate knowledge about personal hygiene.

The findings reveals that there is association between knowledge and educational status of mother whereas there is no association between knowledge and age, sex, religion, type of family and educational status of father.

CONCLUSION

On the basis of findings, it can be concluded that more than half of the students had adequate knowledge level regarding Personal Hygiene. The analysis of the study revealed that the highest percentage of the students (96.7%) had knowledge regarding the meaning and definition of Personal Hygiene. Likewise, most of the students (93.3%) had knowledge about the nail hygiene. Few students (13.3%) knew about the dental care. The analysis of the study revealed that knowledge score had association with socio-demographic variable such as educational status of mother. The result also showed that knowledge regarding Personal Hygiene is independent of age, gender, religion, type of family and educational status of father with Personal Hygiene.

REFERENCE

- Deb, S., Dutta, S., Dasgupta, A., & Misra, R. (2010). Relationship of personal hygiene with nutrition and morbidity profile: A study among primary school children in South Kolkata. *Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive & Social Medicine*, 35(2), 280. doi: [10.4103/0970-0218.66894](https://doi.org/10.4103/0970-0218.66894)
- Mara, D., Lane, J., Scott, B., & Trouba, D. (2010). Sanitation and health. *PLoS Med*, 7(11), e1000363.
- Ministry of Health and Population (MOHP) [Nepal]. (2011). New ERA, ICF International Inc: Nepal Demographic and Health Survey 2011. 2012, Kathmandu, Nepal: Ministry of Health and Population, New ERA, and ICF International, Calverton, Maryland.
- Sarkar, M. (2013). Personal hygiene among primary school children living in a slum of Kolkata, India. *Journal of preventive medicine and hygiene*, 54(3), 153. Retrieved from; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4718376/>
- Vivas, A., Gelaye, B., Aboset, N., Kumie, A., Berhane, Y., & Williams M. A. (2010). Knowledge, Attitudes, and Practices (KAP) of Hygiene among School Children in Angolela, Ethiopia. *Journal of Preventive Medicine and Hygiene*, 51(2): 73-79. Retrieved from; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3075961/>
- World Health Organization Better Health for Poor Children. (2009). Retrieved from; http://www.who.int/child_adolescent_health/documents/a91061/en/index.html.