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Original Research Article

Knowledge, attitude and practices related to prevention of parasitic infestations among school children in an urban area of Kancheepuram district

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ABSTRACT

Background: Poor hygiene practices and inadequate sanitary conditions play an important role in the increased burden of communicable diseases in developing countries. The aim and objectives of the present study was to assess the knowledge, attitude and practices related to prevention of parasitic infestations among school children in an urban area of Kancheepuram district. Formulation of suitable preventive measures based on the inferences derived from the study.
Methods: A cross-sectional study was done on school children belonging to standard sixth to eighth of Sree Lakshmi Ammal school, Chrompet. The study period was from August 1st to 4th 2018. The sample size obtained was 210. Convenient sampling method was used to collect the sample. A pre-tested structured questionnaire was used to collect the data regarding knowledge, attitude and practices related to prevention of parasitic infestations among school children. Assessment of personal hygiene was done by scoring system. Data entry was done in Microsoft Office Excel 2007 and data was analysed by SPSS version 22.
Results: Total number of children participated in the present study were 210. Among the children participated in the present study, 92.4% of children had a good knowledge of personal hygiene, 96.7% of children had a positive attitude towards personal hygiene and 81.4% of children had a good practice of personal hygiene.
Conclusions: Nearly half of the children involved in the study practised open defecation, so they should be given proper health education regarding usage of sanitary latrines.

Keywords: Personal hygiene, Open air defecation, Hand washing, Worm infestation

INTRODUCTION

Personal hygiene is very important for leading a healthy life free from diseases. The definition of hygiene according to Oxford dictionary is "conditions or practices conducive to maintaining health and preventing disease, especially through cleanliness".[1] Poor hygiene practices and inadequate sanitary conditions play an important role in the increased burden of communicable diseases in developing countries. Proper personal hygiene practices are important in preventing parasitic infestations among children.[2] Parasitic infestations cause significant morbidity in children especially in developing and under-developed countries. Majority of the health problems which affects the school children are preventable by promotion of hygienic practices through proper health education by the teachers, who are the first contacts. Hygiene plays an important role in the prevention of

common communicable diseases which are spread predominantly through water, food, personal contact and surrounding environment. Many diseases spreading from virus, bacteria, and protozoa microorganisms can be prevented, if we practice good hygiene. Teaching children the importance of good hygiene can install habits, which will improve their health for a lifetime.

Beginning healthy hygiene habits at a young age will help your older children transition into adult hygiene routines.

Aim of the study was to assess the knowledge, attitude and practices related to prevention of parasitic infestations among school children in an urban area of Kancheepuram district.

Objectives of the study were to assess the personal hygiene status among the school children and formulation of suitable preventive measures based on the inferences derived from the study.

METHODS

Study population: School children belonging to standard sixth to eighth of Sree Lakshmi Ammal school, Chrompet.

Study period: August 1st to 4th 2018.

Study area: Chrompet.

Sample size: 210

***Sampling method*:** Convenient Sampling method was used. From each standard seventy students were selected and the sampling process was continued till the desired sample size was reached.

Inclusion criteria: Children belonging to the standard sixth to eighth who are willing to participate in this study and who are mentally sound.

Exclusion criteria: Children not willing to participate in the study and those who suffer from any mental ailments and children who were absent on the day of the study.

Data collection: A pre-tested structured questionnaire was used. Assessment of personal hygiene was done by scoring system.

Data entry was done in Microsoft Office Excel 2007 and data was analysed by SPSS version 22.

Table 1: Scoring system for KAP.

Criteria	No. of questions	Good >75%	Moderate 50-75%	Poor <50%
Knowledge	11	> 8	6-8	<6
Attitude	7	6-7	4-5	<4
Practice	12	>9	6-9	<6

RESULTS

Total number of children participated in the present study was 210. Table 2 shows that among the study participants, 97.6% of children knew about the importance of hand washing with soap, 93.3% of children knew about the importance of drinking boiled water, 97.1% of children knew about the importance of cleaning and covering drinking water containers regularly, 96.7% knew about the importance of properly covering the cooked food and 81.9% of children knew about the ill-effects of doing open air defecation.

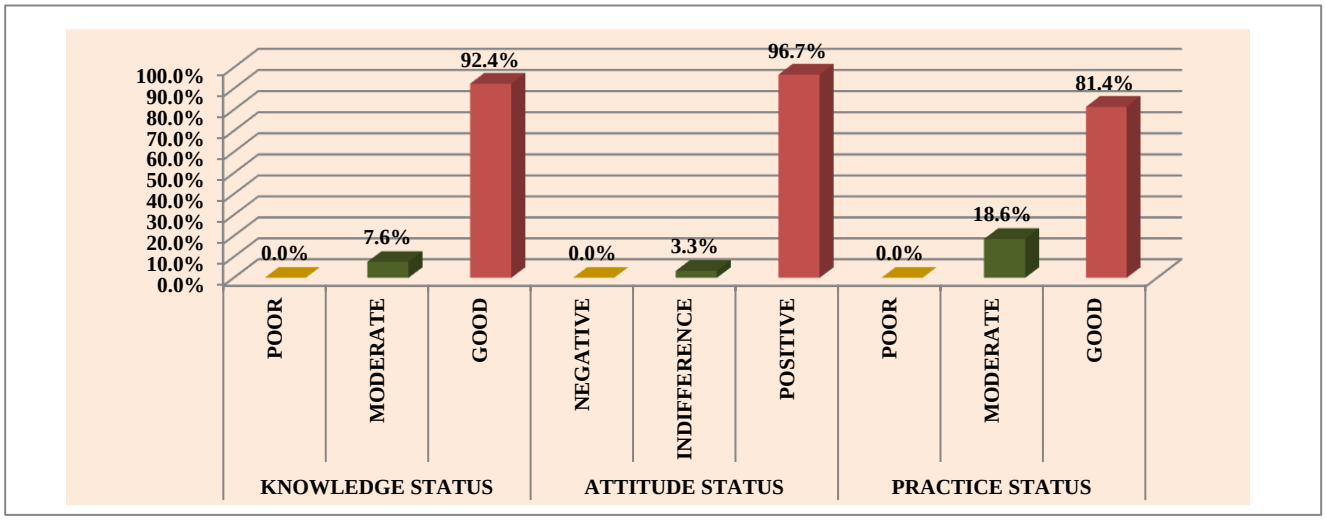

Figure 1: Distribution of children according to their level of KAP (N=210).

Table 2: Frequency distribution of the study subjects according to their knowledge towards personal hygiene (N=210).

Si no.	Knowledge questions	Know		Don't know	
		Number	%	Number	%
1.	Do you know the importance of hand washing with soap?	205	97.6	5	2.4
2.	Do you know the importance of washing your feet?	203	96.7	7	3.3
3.	Do you know the importance of brushing teeth?	200	95.2	10	4.8
4.	Do you know the harm of nail biting, on health?	191	91	19	9
5.	Do you know that you have to brush your teeth twice daily?(morning and night)	195	92.9	15	7.1
6.	Do you know that you should comb your hair regularly?	200	95.2	10	4.8
7.	Is the towel a personal hygiene instrument?	194	92.4	16	7.6
8.	Do you know the importance of drinking boiled water?	196	93.3	14	6.7
9.	Do you know the importance of cleaning and covering drinking water containers regularly?	204	97.1	6	2.9
10.	Do you know the importance of properly covering the cooked food?	203	96.7	7	3.3
11.	Do you know the ill-effects of doing open defecation?	172	81.9	38	18.1

Table 3: Frequency distribution of the study subjects according to their attitude towards personal hygiene (N=210).

Si no.	Attitude questions	Agree		Don't Agree	
		Number	%	Number	%
1.	Using tooth paste is important in cleaning teeth	195	92.9	15	7.1
2.	The towel is a personal hygiene instrument	202	96.2	8	3.8
3.	Washing hands with soap and water is important after going to toilet	204	97.1	6	2.9
4.	Washing hands with soap and water kills germs	206	98.1	4	1.9
5.	Open defecation causes diseases	203	96.7	7	3.3
6.	Body cleanliness is important	201	95.7	9	4.3
7.	Washing hands with soap and water is important before meals	210	100	0	0

Table 4: Frequency distribution of the study subjects according to their practice of personal hygiene (N=210).

Si no.	Practice questions	Practice		Don't practice	
		Number	%	Number	%
1.	Do you wash your hands with soap and water before meals?	206	98.1	4	1.9
2.	Do you wash your hands with soap and water after going to toilet?	205	97.6	5	2.4
3.	Do you wash your feet after returning from outside?	189	90	11	10
4.	Do you wear slippers/shoes while going outside?	205	97.6	5	2.4
5.	Do you brush your teeth twice daily (morning and night)?	191	91	19	9
6.	Do you trim your nails once a week?	204	97.1	6	2.9
7.	Do you comb your hair regularly?	203	96.7	7	3.3
8.	Do you use a separate towel for your own use?	188	90	22	10
9.	Do your elders clean and cover the water container in your home regularly?	205	97.6	5	2.4
10.	Do your elders properly cover the cooked food in your home?	207	98.6	3	1.4
11.	Do you practice open defecation?	96	45.7	114	54.3
12.	Have you seen any worms in your stool?	91	43.3	119	56.7

Table 3 shows that all the study participants agreed that washing hands with soap and water is important before having meals, 98.1% of participants agreed that washing hands with soap and water killed germs and 96.7% of participants agreed that open air defecation causes diseases.

Table 4 shows that among the study participants, 98.1% of children responded that they wash their hands with soap and water before having their meals and 97.6% of children responded that they wash their hands with soap and water after going to toilet. Nearly half of the children practised (45.7%) open air defecation and 43.3% of children responded that they have seen worms in their stool which is an indicator of worm infestation.

Figure 1 shows that among the children participated in the present study, 92.4% of children had a good knowledge of personal hygiene, 96.7% of children had a positive attitude towards personal hygiene and 81.4% of children had a good practice of personal hygiene.

DISCUSSION

In the present study , majority of children, that is, 92.4% of them had a good knowledge of personal hygiene which is higher when compared to the study done by Sarkar in the year 2013 titled, "personal hygiene among primary school children living in a slum of Kolkata, India", which showed that three-fourth of children (75%) had a good knowledge of personal hygiene.[3] Similarly in the present study more than three fourth of children (81.4%) had a good practice of personal hygiene which is higher when compared to the study done by Sarkar titled, "personal hygiene among primary school children living in a slum of Kolkata, India", which showed that only 47.1% of children had a good practice of personal hygiene.[3] The presence of better knowledge regarding personal hygiene and the presence of better practice of personal hygiene among the children participated in the present study when compared to the study done by Sarkar in Kolkata , could be due to the following reasons; study settings: the present study was conducted in an urban area while the other study was conducted in a slum area; study period- the present was conducted in 2018 five years later than the study that was conducted by Sarkar in Kolkata during 2013.

In the present study, nearly half of the children practised (45.7%) open air defecation which is higher when compared to the findings of the study done by Anuradha in Tamilnadu which showed the prevalence of open air defecation to be 33.1% and to the findings of the study done by Panda in Raipur which showed the prevalence of open air defecation to be 23.2%.[4,5] The presence of higher prevalence of open air defection in the present study indicates that there is a gap between the knowledge level of participants regarding open air defecation and their practice of the same.

In the present study, majority of the study participants (91%) responded that they brush their teeth twice daily which is higher when compared to the findings of the study done by Kumar in Udaipur which showed that 30.5% of children brushed their teeth twice daily.[6] This positive finding could be due to better reach of health education programmes and subsequent awareness regarding oral hygiene among the study participants.

CONCLUSION

Nearly half of the children involved in the study practised open defecation, so they should be given proper health education regarding usage of sanitary latrines and since 43.3% children reported that they have seen worms in their stool, school health camp with screening for parasitic infestations in stool through stool examination and periodic deworming is advised.

Recommendations

It is interesting to note that even though majority of the participants had a good knowledge and positive attitude towards personal hygiene, their practice of personal hygiene was lower when compared to their knowledge level and their level of positive attitude. In the present study, even though majority of participants (81.9%) knew about the ill-effects of doing open-air defecation and majority of participants 96.7% agreed that open air defecation causes diseases still nearly half of the children (45.7%) practised open air defecation. Therefore there is a gap between the knowledge level and practice status of children. In order to address these lacunae, regular health education programmes should be conducted reinforcing the practice of proper personal hygiene among students and measures should be taken to strengthen the swach bharath mission in order to make it reach each and every corner of the country.

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