

Study of Knowledge, Attitude and Practise (KAP) Regarding Swachh Bharat Mission Among High School Students in Field Practise Area of Medical College in Dakshina Kannada, Karnataka

Nanjesh Kumar S.¹, Jithin², Harshitha², Rashmi Kundapur³, Sanjeev Badiger⁴, Pavan Kumar⁵

¹Associate Professor, ²Postgraduate, ³Professor, ⁴Professor and HOD, ⁵Assistant Professor, Department of Community Medicine, K.S. Hegde Medical Academy, NITTE Deemed to be University, Mangalore, Karnataka

Abstract

Background: India generates about 60 million tonnes of garbage every day, of this around 45 to 50 million tonnes is left untreated. Wastes are thrown on the streets. Open defecation is still a problem in rural India. All these actions cause health hazards among population.

Objective: To assess the knowledge, attitude and practices regarding Swachh Bharat among 8th to 10th standard students.

Methodology: This cross-sectional study was carried out in seven government high schools in the field practice area of a medical college in Mangalore. A total of 441 government high school students from 8th to 10th standard were included in the study. Collection of data was done by interview method using pretested semi structured questionnaire.

Results: Total of 441 students were included in the study. 55.32% were boys and 44.68% were girls. According to scoring done for students, 84.35% had good knowledge, 95.23% had good attitude but only 50.34% had good practice about environmental cleanliness and personal hygiene.

Conclusion: To improve the good practice various health educations and practical demonstrations about the cleanliness and benefits of practicing them can be conducted as school-based initiatives to create awareness among students.

Keywords: Knowledge, School students, Environment, Sanitation, Awareness, India.

Introduction

India generates about 60 million tonnes of garbage every day, of this around 45 to 50 million tonnes is left untreated. In 2040, Urban India alone would generate

10 million tonnes waste daily. India's sewage system is among the poorest in the world. Wastes are thrown on the streets. Open defecation is still a problem in rural India. All these actions cause illness, makes the country sicker¹.

Government of India initiated the Central Rural Sanitation Programme (CRSP) in 1986 primarily with the objective of improving the quality of life of the rural people and also to provide privacy and dignity to women. From 1999, a "demand driven" approach under the "Total Sanitation Campaign" (TSC) emphasized more on Information, Education and Communication (IEC), Human Resource Development (HRD), Capacity

Correspondence Address:

Dr. Nanjesh Kumar S.

Associate Professor, Flat G3, Sai-Paradise, Chilimbi, Urwa Store, Ashokanagara post, Mangalore 575006, Karnataka, India

e-mail: kumarnanjesh@gmail.com

Development activities to increase awareness among the rural masses and generation of demand for sanitary facilities. Later “Nirmal Bharat Abhiyan” (NBA) was launched on 1.4.2012 to accelerate the sanitation coverage in the rural areas. Under NBA, the incentives for IHHLs were increased and further focused support was obtained from MNREGA. However, there were implementation difficulties in convergence of NBA with MNREGA as funding from different sources created delays at the implementation mechanism. To accelerate the efforts to achieve universal sanitation coverage and to put focus on sanitation, the Prime Minister of India Shri Narendra Modi launched the Swachh Bharat Mission on 2nd October, 2014. The Mission shall remove the difficulties that were hindering the progress, including partial funding for Individual Household Latrines from MNREGS, and focusing on critical issues affecting outcomes.²

Shri Narendra Modi urged people to devote 100 hours every year towards cleanliness. Union Ministry of Rural Development and Drinking Water and Sanitation announced 20 lakhs to be given to every village per year to achieve the goal of Swachh Bharat.³

School provides an excellent opportunity for children to learn about healthy hygienic practices and also identified as powerful channel of communicating sanitation messages to homes and communities. Through our study we aim to assess the knowledge, attitude and practices of students about Swachh Bharat and educate them in this regard.

METHODOLOGY: - This cross-sectional study was carried out in seven government high schools in the field practice area of a medical college, in Dakshina Kannada district, Karnataka. The study subjects were selected by Cluster sampling method. A total of 441 government high school students from 8th to 10th standard were included in the study. The purpose of the study and procedure were explained to the students in the local language and oral informed consent was obtained from them. Collection of data was done by interview method using pretested semi structured questionnaire which had questions to assess the Knowledge, attitude and practice amongst the students on Swachh Bharath Mission.

Statistical analysis was done using SPSS software. Data was expressed in tables and graphs. Knowledge was scored, +1 was given for the correct answer and 0 for the incorrect answer. Scoring was done. Score 0-2

was considered as poor knowledge, 2-5 considered as average knowledge and >5 as good knowledge. Attitude was also scored, +1 was awarded for positive attitude and 0 was awarded for negative attitude. Score less than 0-2 was termed as poor attitude, 2-5 as average and more than 5 was taken as good attitude. Practice was also scored the similar way. Inclusion criteria: All the students between 8th to 10th standard who were willing to participate in the study were included. Exclusion criteria: Students who were absent during the time of study, were excluded from the study

Results

Table 1: Socio-demographic distribution of the study subjects (N=441)

Age	No. of Students	Percentage
13	133	30.3%
14	137	31.2%
15	171	38.5%
Place of School		
Sashitulu	48	10.8%
Faringepete	48	10.8%
Hejmady	29	6.5%
Subramanya	65	14.7%
Nitte	121	27.4%
Bailur	100	22.6%
Natekal	30	6.8%
Standard		
8th	128	29.04%
9th	115	26.07%
10th	198	44.89%
Sex		
Boys	244	55.32%
Girls	197	44.68%

Table 1 shows that majority of students were belongs to age 15. Boys (55.32%) were more than the Girls (44.68%). More students were belonging to Government high school (27.4%) of Nitte village.

Table No.2 Knowledge and Attitude about Swachh Bharat Abhayan among study subjects

	Yes	No
Do we require separate toilet for Boys and Girls in school	100%	0
Solid waste disposal should be taught in school	87.98%	12.02%
Proper waste removal and disposal is important	97.95%	2.05%

Any member of household has heard about Swachh Bharat	90.02%	9.98%
Do you feel street should be clean and free of solid waste	94.78%	5.22%
Does improper waste removal and disposal affect environment	90.02%	9.98%
Is water made available for use in toilets	87.98%	12.02%
Soap is available in school toilets for washing hands	57.59%	42.41%
Does your household have a toilet	97.27	2.73%
Did any member of the household defecate in the open in the last three months or after gaining access to toilet	14.06%	85.94
Is there any garbage or litter piled up or dumped within 10 feet perimeter of the house, outside the premises of the household being canvassed	41.04%	58.96%
Does anyone go out and defecate in open in your village	20.1%	79.9%

In table two 57.59% of students told that soap was present in school toilet for washing hand. 41.04% students told that Garbage disposal near the houses still persist in their village. 20.1% students told open air defecation was still present in their village.

Table No. 3 Practice of Swachh Bharat Abhyanam among study subjects

	Yes	No	
Washing hands with soap after defecation	80.72%	19.28%	
Use of dustbin at school for dumping waste	89.56%	10.44%	
Use of Toilet in the household	97.27	2.73%	
Availability of the water in/for the toilet	92.06	7.94%	
Do the family members segregation of waste as dry waste and wet waste	53.96%	46.04%	
Place of dumping the food waste at school	Dustbin	Compost	Other
	71.42%	28.11%	0.47%
Site of human waste disposal from the toilet	Drain pit	River	Open Drain
	87.52%	1.2%	11.3%

In table three 80.72% of the subjects use soap for washing hands after defecation and 89.56% of subjects use dustbin to dumping waste in school. 97.27% of subjects use toilet for defecation. 53.96% of subjects told that the family segregate the waste into dry and wet separately. 71.42% subjects dump the food waste in dust bin and 28.11% into composting. Human waste disposal

from toilet mainly to drain pit (87.52%) followed by open drain (11.3%) and to river (1.2%).

Table No 4 Scoring of the Study Subjects Under Knowledge, Attitude And Practice in Swachh Bharat Abhyan

Knowledge	Poor	Average	Good
	0	69(15.64%)	372(84.35%)
Attitude	Poor	Average	Good
	0	21(4.76%)	420(95.23%)
Practice	Poor	Average	Good
	0	219(49.65%)	222(50.34%)

Table four knowledge score was good in 84.35% and average among 15.64% of study subjects. Attitude was good in 95.23% and average among 4.76% of the study subjects. Practice was good in 50.34% and average among 49.65% of study subjects responding to Swachh Bharath Abhiyan.

Discussion

Total of 441 students were included in the study. In that 55.32% were boys and 44.68% were girls with 30.3%, 31.2% and 38.5% belonging to age group of 13, 14 and 15 years respectively.

97.27% said their household had a toilet but only 87.98% had water available in the toilet due to limited supply of water with majority of them stating that human waste was disposed in drain pits rather than river or open drain indicating unsanitary practices and they were educated regarding proper waste disposal. All of them agreed that the schools had separate toilets for boys and girl which were kept clean.

In the present study 80.72% of the subjects use soap for washing hands after defecation and 97.27% of subjects use toilet for defecation. Study done by Swain P et al showed that only 54% of the individuals were defecating in the toilets and 8% of the respondents didn't wash their hands after defecation.⁴

Hand washing after defecation with soap was practiced by 80.72% of students which was way higher than a study conducted by Shrestha A et al among primary school going children of urban Karnataka.⁵

20.1% students noticed that residents from their area practiced open defecation and most of them had family member who still continues the same even after gaining access to toilet because of their developed as routine

and unawareness about its effect on their health and environment.

Majority of them thought proper waste disposal is important in the house but only 53.96% practiced segregation of waste as they had lack of knowledge and 87.98% asked for education on the subject in schools. For general waste disposal, 89.56% of them used dustbin in school for dumping and only 28.11% used compost for food waste and we educated them the benefits of compost over dustbins.

Almost all of them (99.3%) have good perception of the cleanliness of their school compound but 41.05% noticed garbage near their houses and opinionated that it should be cleaned as improper waste disposal affects the environment. This shows their knowledge towards Swachh Bharat and their willingness to take initiatives for the same. Study conducted by Tiwari S K showed that all students were aware of the mission Swachh Bharat: Swachh Vidyalaya and the level of awareness of the students from public school and private schools was equally good.⁶

Knowledge about the Swachh Bharat Abhayan in the household of these students was about 90.02% which shows the effectiveness of various means promoting this mission. According to scoring done for students, 84.35% had good knowledge, 95.23% had good attitude but only 50.34% had good practice about environmental cleanliness and personal hygiene which was either due to their acclimatization to existing old habits and mindset.

Conclusion

The study conducted showed that study subjects had good knowledge and good attitude towards Swachh Bharat Abhayan but a lack of practice was seen among them. So, various health educations and practical demonstrations about the cleanliness whether

environmental or personal and benefits of practicing them can be conducted as school-based initiatives to create awareness among students.

Conflict of Interest: Nil

Source Of Funding: Nil

Ethical Clearance: Taken

References

1. Pradhan P. Swachh Bharat Abhiyan and the Indian Media. *Journal of Content, Community & Communication Amity School of Communication*. 2017;(5),2395-7514.
2. De, Singh LC, Suman Thapa DR and Gurun. Swachh Bharat Abhiyan-an overview. *International Journal of Information Research and Review* 2016;11(3): 3066-73.
3. Chaudary A. Swachh Bharat Mission-Need, Objective and Impact. *International Journal for research in Management and Pharmacy*. 2017;6, 2320-0901.
4. Swain P, Pathela S. Status of sanitation and hygiene practices in the context of “Swachh Bharat Abhiyan” in two districts of India. *International Journal of Community Medicine and Public Health* 2016 Nov; 3(11):3140-3146
5. Shrestha A, Angolkar M. Impact of Health Education on the Knowledge and Practice Regarding Personal Hygiene among Primary School Children in Urban Area of Karnataka, India. *IOSR J Dental and Medical Sciences*. 2014;13(4):86-9.
6. Tiwari SK. To study awareness of a national mission: Swachh Bharat: Swachh Vidyalaya in the middle school students of private and public schools. *Indian Journal of Research* 2014 Dec;3(12):23-24.