



Swachh Bharat Abhiyan: Through the Eyes of Slum Dwellers

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Received: 05-January-2023, Manuscript No. IJMRHS-23-85551; **Editor assigned:** 09-January-2023, Pre QC No. IJMRHS-23-85551 (PQ); **Reviewed:** 23-January-2023, QC No. IJMRHS-23-85551; **Revised:** 20-March-2023, Manuscript No. IJMRHS-23-85551 (R); **Published:** 27-March-2023

ABSTRACT

Introduction: Swachh Bharat Abhiyan (SBA) was launched on October 2, 2014. Sanitation is an important determinant of health. Sanitation and health related conditions like acute gastroenteritis cause about 13% under 5 mortality in India. As per 2015 wash watch report, only 44% of the population has access to basic sanitation services. Assessment of sanitary practices like hand washing, sewage/solid waste disposal etc. and continuous health education among slum dwellers will help to achieve the goal of SBA.

Objectives: To assess awareness of Swachh Bharat Abhiyan and evaluate practices of sanitation and hygiene in selected households of urban slums (Amravati city).

Methodology: A cross sectional, descriptive study was done over 2 months from May-June 2022. Simple random sampling was used to choose households from urban slums of Belpura (Amravati). Predesigned structured questionnaire was used to collect data from adults of selected households. A total of 162 households were surveyed.

Results: Out of 162 participants interviewed, 120 (74.1%) were found to be aware of Swachh Bharat Abhiyan. Educational status was found to be significantly associated with awareness of SBA and sanitary practices ($p < 0.05$).

Conclusion: Majority of the people were aware of the Swachh Bharat Abhiyan and educational status played a very significant role in sanitary practices (hand hygiene, water filtration, garbage disposal). Cleanliness should be made a way of life through continuous health education.

Keywords: Swachh Bharat Abhiyan (SBA), Slums, Hand washing, Sanitary practices, Cleanliness

INTRODUCTION

A slum is defined as a residential area where dwellings are unfit for human habitation due to overcrowding, faulty arrangements and designs of buildings, sanitation facilities or a combination of these factors which are detrimental to the safety and health. Sanitation and hygiene is critical to health, survival and development. The risk of spreading diarrheal and waterborne diseases gets compounded by the lack of regular hand washing and microbial contamination of water in the homes and communities [1].

Water, Sanitation and Hygiene (WASH) performance index 2015 developed by the water institute at the university of North Carolina, India was a bottom performer and was ranked 93 [2]. To accelerate the efforts to achieve universal sanitation coverage and to put focus on Swachh Bharat Abhiyan was launched on 2nd October 2014 [3]. It was a nationwide campaign for the period of 2014 to 2019 to achieve universal sanitation coverage and to put focus on sanitation and cleanliness of towns, cities and rural areas. Other activities included national real time monitoring and updates from non-governmental organizations such as the ugly Indian, waste warriors and SWACH Pune (Solid Waste Collection and Handling) [4]. As per the latest report of WHO/UNICEF Joint Monitoring Programme for water supply and sanitation (JMP), the SBM garnered \$25 billion from government, the private sector and civil society [5].

Objectives

- To assess the awareness of Swachh Bharat Abhiyan in selected households of urban slums of Amravati.
- To evaluate the practices of sanitation and hygiene amongst them.

MATERIALS AND METHODS

Study setting: Slum at Belpura (field practicing area of UHTC, Dr. PDMMC, Amravati).

Study design: Cross sectional, descriptive study.

Study duration: Two months (May-June 2022).

Sample size: 162 (considering SBA participation as 75.7%-95% CI and 7% precision with 10% non-response).

Sampling technique: Simple random sampling was used to collect data from households. One adult was randomly selected from each house.

Inclusion criteria: Age 18 years and above, both genders, residing in the slum for at least one year, willing to participate in study.

Exclusion criteria: House locked, unwilling to participate in the study.

Research tool: A pre-designed, pre-validated, structured questionnaire was used to collect the data and face to face interviews were conducted. The questionnaire consisted of questions on demographic details of the people, sanitary practices and awareness of Swachh Bharat Abhiyan.

Statistical analysis: Data was entered into MS Excel and analysis was done using Statistical Package for the Social Sciences software for Windows version 20.0 (SPSS Inc., Chicago, IL, USA).

Operational definition: A slum is defined as a residential area where dwellings are unfit for human habitation due to overcrowding, faulty arrangements and designs of buildings, sanitation facilities or a combination of these factors which are detrimental to the safety and health.

RESULTS

A total 162 patients were included in the current study. Table 1 shows the distribution of demographic variables in the study participants. Majority of the study population (56.2%) were of the ages 41 and above. It was a predominantly a male population (57%). Caste wise distribution shows that 32% belonged to other backward castes which formed the majority. Educational status of the participants reveals that 45.7% of them were between the ranges of class 6 to class 10 of education status while only 10.5% were illiterate (Table 2) [6].

Table 1 Distribution of demographic variables in study participants.

Study variables	Categories	Frequency N=162	Percentage
Age	18-40	71	43.8
	41 and above	91	56.2

Gender	Male	90	57.0
	Female	72	43.0
Caste	Open	46	28.4
	OBC	53	32.7
	SC	44	27.2
	ST	19	11.7
Educational status	Illiterate	17	10.5
	Up to class 5 th	59	36.4
	6 th to 10 th	74	45.7
	Above 10 th	10	7.4

Table 2 Distribution of sanitary practices.

Study variables	Categories	Frequency N=162	Percentage
Awareness of Swachh Bharat Abhiyan	Yes	115	71
	No	47	29
Participation in cleanliness drives	Yes	30	18.5
	No	132	81.5
Agents used for handwashing	Soil	10	6.2
	Ash	7	4.3
	Only water	24	14.8
	Soap and water	121	74.7
Toilet facility at home	Yes	141	87
	No	21	13
Disinfection of drinking water	Nothing	49	30.2
	Plastic/cloth straining	88	54.3
	Boiling	11	6.8
	Water filters	14	8.6

Table 2 depicts the awareness regarding Swachh Bharat Abhiyan (SBA) as well as the sanitary practices followed by the study participants. Awareness of SBA and its objectives was found in 115 out of the 162 study participants (71%) However when asked about the actual participation in cleanliness drives and activities, only 18.5 % participants had participated.

Hand washing habits of the participants were enquired which showed that 74.7% used soap and water for hand hygiene routine and the rest used non-conventional methods like ash, soil. Majority of participants (87%) had toilets at home and 54.3% used plastic or cloth straining for drinking water and 30.2% did not use any methods of water purification/filtration (Tables 3 and 4).

Table 3 Association between awareness of SBA and educational status.

Awareness of SBA	Educational status				
	Illiterate	Up to primary	Up to secondary	Above secondary	Total
Yes	8 (47.1)	35 (59)	63 (85.1)	9 (75)	115 (71)
No	9 (52.9)	24 (40)	11 (14.9)	3 (25)	47 (29)
Total	17 (100)	59 (100)	74 (100)	12 (100)	162 (100)

Table 4: Association between awareness of SBA and hand washing techniques.

Awareness of SBA	Hand washing techniques			
	Soil and ash	Only water	Soap and water	Total
Yes	14 (82.3)	13 (54.1)	88 (72.7)	115 (71)
No	3 (17.7)	11 (45.9)	33 (27.3)	47 (29)
Total	17 (100)	24 (100)	121 (100)	162 (100)

Table 3 depicts the association between awareness of SBA and hand washing techniques of the study participants.

The *chi square* value was found to be 0.042 which is <0.05 hence there is a significant association between awareness of SBA and hand washing techniques of the study participants.

The association of SBA awareness with toilets at home, participation in cleanliness drives, drinking water sanitation, caste and gender of the study population was found to be non-significant as the p value was >0.05 .

DISCUSSION

Current study shows that 71% of the study participants were aware of the Swachh Bharat Abhiyan. Proper hand hygiene was followed in 74.7% of the study participants and 87% had toilet facilities available to them. Sanitary waste disposal techniques were observed in 88% of the study participants.

In the study by Devika, et al. awareness of SBA was found to be 95% and proper hand hygiene was practiced in 92% of individuals. 84% had toilet facilities; sanitary disposal of waste was practiced by 84.4% individuals.

In the study by Desai, et al. awareness of SBA was found in 96.1% of individuals.

In the study by Kishore, et al., 62.2% people were aware of SBA and proper hand hygiene techniques were practiced in 69.81% individuals. Only 34.75% people practiced proper sanitary waste disposal techniques.

In a study by Bhattacharya poverty was found to have an inverse relationship with SBM score. Per capita availability of resources also determines individuals' voluntary investment towards preventive healthcare.

CONCLUSION

Awareness of Swachh Bharat Abhiyan and its objectives was found in most of the slum dwellers and the source of information was newspaper, television. Toilet facilities were available in the majority of the households; water supply was mostly through taps/pipelines. Hand hygiene was followed in most of the participants. Almost all individuals used sanitary garbage disposal techniques like garbage vans. Educational status played a significant role in SBA awareness. Awareness on SBA played a significant role in hand hygiene practices.

ETHICAL CONSIDERATION AND CONFIDENTIALITY

Institutional ethics committee approval was taken before commencing the study. Data was collected after permission and consent from patients along with willingness of participation in study. Data collected was kept confidential.

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