The Pharma Innovation Journal 2020; 9(4): 253-257

www.ThePharmaJournal.com

The Pharma Innovation

ISSN (E): 2277- 7695
ISSN (P): 2349-8242
NAAS Rating: 5.03
TPI 2020; 9(4): 253-257

www.thepharmajournal.com
Received: 23-02-2020
Accepted: 25-03-2020

Monika Sharma
Ph.D Scholar, Department of Agricultural Communicssation, College of Agriculture, GBPUA&T, Pantnagar, Uttarakhand, India

Dr. Vandana Verma
Assistant Professor, Department of Extension Education and Communication Management, I.C College of Home Science, CCSHAU, Hisar, Haryana, India

Corresponding Author:
Monika Sharma
Ph.D Scholar, Department of Agricultural Communicssation, College of Agriculture, GBPUA&T, Pantnagar, Uttarakhand, India

Knowledge regarding Swachh Bharat Mission in rural areas of Hisar: A training approach

Monika Sharma and Dr. Vandana Verma

Abstract
Universal sanitation and the dream of clean India is not a distinct one as "Swachh Bharat Mission" has been introduced on 2nd of October 2014 (145th birth anniversary of Bapu) by Prime Minister, Shri Narendra Modi at Rajghat, New Delhi. The present study was conducted in Hisar district of Haryana state (country-India). Two villages; Mangali and Aryanagar from Hisar I and Hisar II (respectively) were selected randomly. Twenty females, 20 males and 10 field functionaries from each village which made total sample to be 100. Knowledge of respondents regarding Swachh Bharat Mission was assessed. Low knowledge about the mission was reported among rural respondents. Further a training session of three days was organized in each village to impart knowledge on various aspects of the mission. 10 males and 10 females from each village were selected who had lowest knowledge scores. Respondents selected for training showed highly significant gain in knowledge at post-exposure stage ('t' value; 19.21** for females and 17.50** for males) regarding Swachh Bharat Mission. Hence a high need for campaigning and awareness generation programmes to improve the conditions in village areas was heartily felt.

Keywords: Swachh Bharat Mission, knowledge, training, awareness

Introduction
Cleanliness (Swachhta) is defined as the absence of dirt, dust, foul smell along with solid and liquid waste properly disposed off. Littering is the major cause which destroys the aesthetics of the environment. Inadequate sanitation facilities are still prevalent, mostly in developing country like India. The problem is prominently severe in rural areas; according to WHO/UNICEF's Joint Monitoring Programme on sanitation, fifty nine percent (626 million) Indians do not access toilets when nature call visits and practice open defecation and that majority of them reside in rural areas [1]. To achieve universal sanitation and the dream of clean India "Swachh Bharat Mission" was introduced on 2nd October 2014 (145th birth anniversary of Mahatma Gandhi) by Prime Minister, Shri Narendra Modi at Rajghat, New Delhi who himself picking up broom, swept roads and streets, making Swachh Bharat Mission largest ever cleanliness drive in the country [2]. Mission aims to provide adequate sanitation facilities i.e individual toilets in households, proper solid and liquid waste disposal system, cleanliness in rural as well as in urban areas along with safe drinking water supply by 2nd October, 2019. The current investigation was carried out with the following objectives:

1. To assess the knowledge about Swachh Bharat Mission (SBM)
2. To impart knowledge on Swachh Bharat Mission through training
3. To analyze the impact in terms of knowledge gain about Swachh Bharat Mission.

Research Methodology
Hisar district from Haryana state (country-India) was purposively selected for the present study. Two blocks Hisar I and Hisar II were randomly selected from nine blocks of Hisar district. Two villages; Mangali from Hisar I and Aryanagar from Hisar II were selected at random respectively to assess the knowledge and attitude about Swachh Bharat Mission. A total of 100 respondents were randomly selected which comprised of 50 rural respondents (20 females, 20 males and 10 field functionaries including panchayat members, school teachers, health workers, anganwadi works) from each village. Data was collected personally using well structured interview schedule. Out of 40 female and male respondents selected for the study from both the villages at pre-exposure stage, knowledge was imparted through three days training to 20 respondents (10 females and 10 males-who's knowledge scores were the lowest). Selected respondents for training were exposed to lectures along with print (posters and leaflet) and electronic media (CD-ROM) already developed by the Department of Extension Education & Communication Management, I.C. College of Home Science, C.C.S. HAU, Hisar, Haryana.

The gain in knowledge of respondents selected for training was assessed through post data collection after fifteen days of training. The collected data was quantified, classified, analysed and interpreted to gain meaningful inferences. Statistical tools such as percentage, frequency, and paired t-test were used as per the objectives of the study.

Results

General Knowledge: Majority of the respondents (91.00%) had heard about Swachh Bharat Mission. As regard the year in which SBM was started, only 10.00 percent respondents cited the correct year in which the mission was launched. Sixty five percent of the respondents knew that the mission was started by Bhartiya Janta Party government. The logo of SBM was recognized correct by 58.00 percent respondents.

Regarding the objective "Clean India by 2nd Oct 2019", only 49.0 percent respondents knew about it. For the objectives "eradicate system of open defecation in India" and "convert insanitary toilets into flush toilets" equal number of respondents (48.0% in each) and for other objectives as "scientific disposal, reuse & recycling of Municipal Solid Waste" only 26.0 percent respondents had knowledge.

Less than half of the respondents (37.0%) knew about the Nirmal Puraskar that is given by the government to clean cities and villages. Only 26.0 percent respondents knew that Shri Narendra Modi has advised people to donate 100 hours every year to cleanliness.

About one third proportion (32.0%) knew that the bollywood film recently released to support SBM was Toilet: Ek Prem Katha.

Data in Table No. 1 to 5 reveals the knowledge of the respondents regarding Swachh Bharat Mission.

Table 1: General Knowledge of the respondents regarding SBM

Statements	Female F(%) (n=40)	Male F(%) (n=40)	F.F F(%) (n=20)	Total F(%) (N=100)
Heard about SBM	35(87.5)	36(90.0)	20(100.0)	91(91.0)
Year in which mission started	2(5.0)	4(10.0)	4(20.0)	10(10.0)
Mission started by	20(50.0)	25(62.5)	20(100.0)	65(65.0)
Logo of SBM Tick the correct:	17(42.5)	23(57.5)	18(90.0)	58(58.0)
Objectives of SBM? a. Clean India by 2nd Oct. 2019	15(37.5)	16(40.0)	18(90.0)	49(49.0)
b. Eradicate system of open defecation in India	16(40.0)	14(35.0)	18(90.0)	48(48.0)
c. Convert insanitary toilets into flush toilets	16(40.0)	14(35.0)	18(90.0)	48(48.0)
d. Scientific processing, disposal, reuse and recycling of Municipal Solid Waste.	3(7.5)	5(12.5)	18(90.0)	26(26.0)
Award given by Government to cities and villages for cleanliness	8(20.0)	12(30.0)	17(85.0)	37(37.0)
Minimum hours/ year to cleanliness	7(17.5)	8(20.0)	11(55.0)	26(26.0)
Film recently released supporting SBM	8(20.0)	13(32.5)	11(55.0)	32(32.0)

F=Frequency, values in parenthesis include percentage and F.F=Field Functionaries

Regarding open defecation: Table 2 reveal that majority of respondents (81.0%) had heard about open defecation but only 14.0 percent respondents were able to name an open defecation free state. Most of the respondents (i.e. 69.0 percent) knew that open defecation pollute the environment and cause diseases. More than half (59.0%) of respondents were aware that disease such as diarrhea, typhoid and cholera are caused by open defecation.

Table 2: Knowledge about open defecation

Statements	Females F(%) (n=40)	Males F(%) (n=40)	F.F F(%) (n=20)	Total F(%) (N=100)
Heard of open defecation	30(75.0)	31(77.5)	20(100.0)	81(81.0)
Open defecation free state	2(5.0)	1(2.5)	11(55.0)	14(14.0)
Open defecation pollute the environment and cause diseases	25(62.5)	24(60.0)	20(100.0)	69(69.0)
Diseases caused by open defecation	21(52.5)	20(50.0)	18(90.0)	59(59.0)

Regarding Solid Waste Management: Table 3 highlights that fifty-nine percent of the respondents know the difference between degradable & non-degradable waste and vegetables, fruit peels, and cow dung are degradable waste whereas plastic bags, rubber tires and metal cans are non-biodegradable waste.

Table 3: Knowledge about Solid Waste Management

Statements	Female F(%) (n=40)	Male F(%) (n=40)	F.F F(%)(n=20)	Total F(%)(N=100)
Difference between degradable and non- degradable waste	21(52.5)	20(50.0)	18(90.0)	59(59.0)
Degradable waste	21(52.5)	19(47.5)	18(90.0)	59(59.0)
Non-degradable waste	21(52.5)	20(50.0)	18(90.0)	59(59.0)

Knowledge regarding Water and Sanitation: Table 4 show that more than half of the respondents (54.0%) were aware about direct and indirect water borne diseases. A high proportion of respondents (78.0%) believed that washing hands kills germs. It is apparent from the table that 78.0 percent respondents had heard about soak pits whereas only 61.0 percent knew about the functions of soak-pits.

Table 4: Knowledge about Water and Sanitation

Statements	Female (%) (n=40)	Male (%) (n=40)	F.F (%) (n=20)	Total (%) (N=100)
Direct and indirect water borne diseases	20(50.0)	17(42.5)	17(85.0)	54(54.0)
Washing hands kill germs	30(75.0)	28(70.0)	20(100.0)	78(78.0)
Heard about soak-pits	32(80.0)	26(65.0)	20(100.0)	78(78.0)
Functions of soak-pit	20(50.0)	22(55.0)	19(95.0)	61(61.0)

Knowledge regarding Swachh Bharat: Swach Vidhyalaya: Table 5 depictes that more than forty percent (41.0%) had heard about Swachh Bharat: Swachh Vidhyalaya Campaign, whereas only 8.0 percent respondents were able to tell the launching year of the campaign. Data regarding the objectives of campaign revealed that 37.0 percent respondents were aware that "every school in India should have well maintained toilet facilities" is the objective of the campaign. Indeed 32.0 percent respondents were aware that "availability of safe drinking water in school", "hand washing and soap facilities for children and teachers" and "separate toilets for girls" are the objectives of Swachh Bharat: Swachh Vidhyalaya Campaign.

Table 5: Knowledge about Swachh Bharat: Swachh Vidhyalaya Campaign

Statements	Female F(%) (n=40)	Male F(%) (n=40)	F.F F(%) (n=20)	Total F(%) (N=100)
Heard about Swachh Bharat: Swachh Vidhyalaya	9(45.0)	14(35.0)	18(90.0)	41(41.0)
Launch year	1(2.5)	3(7.5)	5(25.0)	8(8.0)
Objectives of Swachh Bharat: Swachh Vidhayalaya:				
a. Well maintained toilet facilities in each school	7(17.5)	12(30.0)	18(90.0)	37(37.0)
b. Availability of safe drinking water in schools	6(15.0)	8(20.0)	18(90.0)	32(32.0)
c. Hand washing and soap facilities	6(15.0)	8(20.0)	18(90.0)	32(32.0)
d. Separate toilets for girls	6(15.0)	8(20.0)	18(90.0)	32(32.0)

Gain in knowledge of respondents regarding SBM (Pre and Post knowledge of the respondents)

Twenty respondents from each village who had low knowledge scores at pre-exposure stage were randomly selected for three days training and post-exposure data was collected. Data indicated that there was change in knowledge of the respondents at post-exposure stage.

Regarding general knowledge: At the pre-exposure stage only 77.5 percent respondents had heard of SBM, while at post-exposure stage, cent percent respondents were familiar about SBM. Regarding the launching year none of the respondent knew about the year of launch of SBM while at post exposure, 75.00 percent respondents cited the year. Only 17.50 percent respondents knew that Prime minister started SBM at the pre-exposure, however at post-exposure stage, 97.50 percent respondents knew about it.

Regarding the objectives, only 7.50 percent respondents knew that "Clean India by 2nd" Oct. 2019, "Eradicate system of open defecation in India", " Convert insanitary toilets into flush toilets" and "Scientific processing, disposal, reuse and recycling of Municipal Solid Waste" are the objectives of SBM. A sharp increase in knowledge level of 92.5 percent respondents had taken place after the training.

At the pre-exposure only 5.0 percent knew about Nirmal Puraskar, while after post- exposure, rise took place in 75.0 percent respondents. A high number of respondents (82.0%) at post-exposure knew that Shri. Narendra Modi advised people to donate a minimum of 100 hours every year for cleanliness. Similar number (82.0%) of respondents at post-exposure knew film recently released supporting SBM was Toilet: Ek Prem Katha.

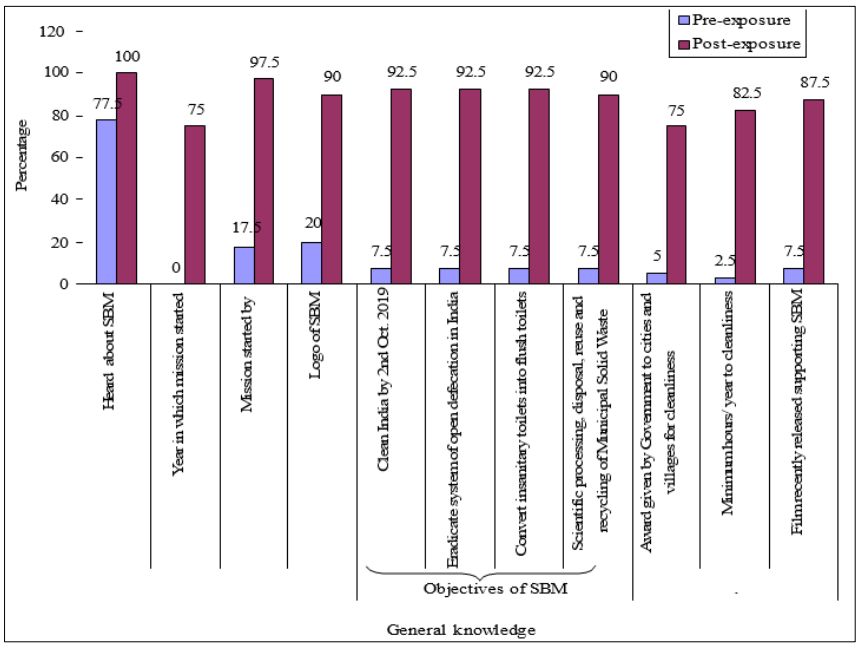

Fig 1: Pre and Post general knowledge of respondents regarding SBM

Knowledge About open defecation: At the pre-exposure stage more than half (55.0%) respondents had heard about SBM, none of the respondent was able to name an open defecation free state, only 27.50 percent where aware about the harm caused to environment due to open defecation and only 22.50 percent had knowledge about diseases caused by open defecation. Data revealed that at the post exposure stage cent percent respondents had knowledge about all the statements of open defecation.

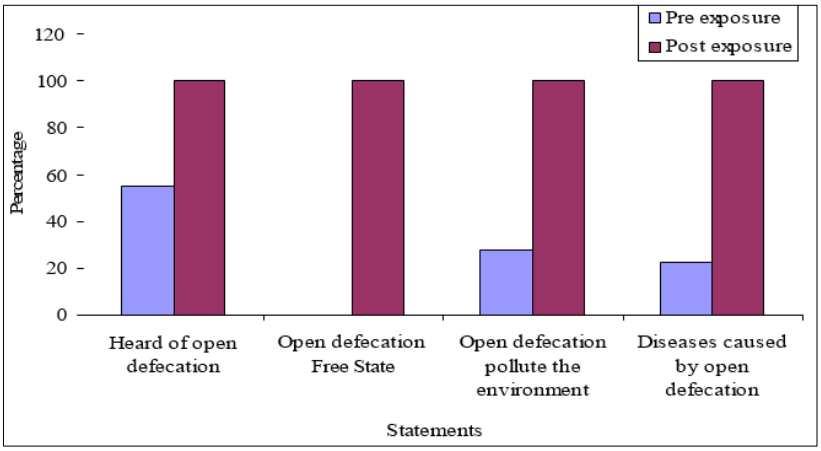

Fig 2: Pre and Post-Exposure knowledge of respondents regarding open defecation

Regarding solid waste management: investigation revealed a sharp rise in knowledge level of respondents regarding difference between degradable and non-degradable waste (97.5%) at the post exposure stage which was only 22.5% at pre-exposure. Majority of respondents (92.5%) were able to identify that vegetable and fruit peels are degradable waste and cent percent recognized that metal cans and plastic were included under the category of non-degradable waste.

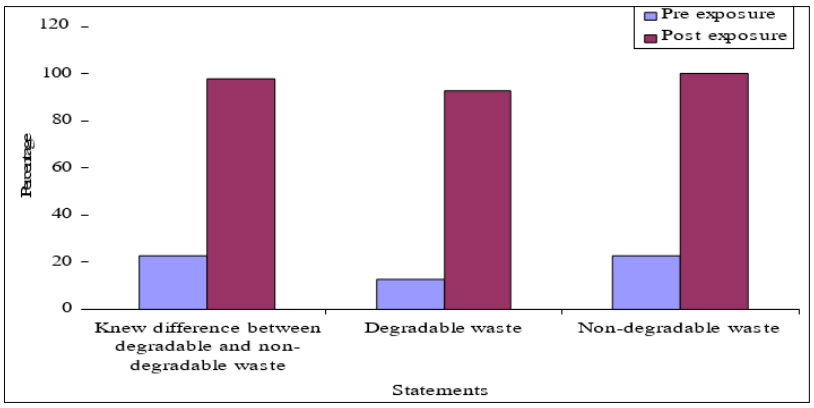

Fig 3: Pre and Post knowledge of respondents regarding solid waste management

Knowledge about Water and Sanitation: Gain in knowledge was reported as 90.00% of the respondents knew about direct and indirect water borne diseases at the post-exposure stage. Cent percent respondents at post-exposure knew that washing hands after using toilet and before meals kills germs. It was cited at the post-exposure stage that cent percent respondents had knowledge about soak-pits and its functions.

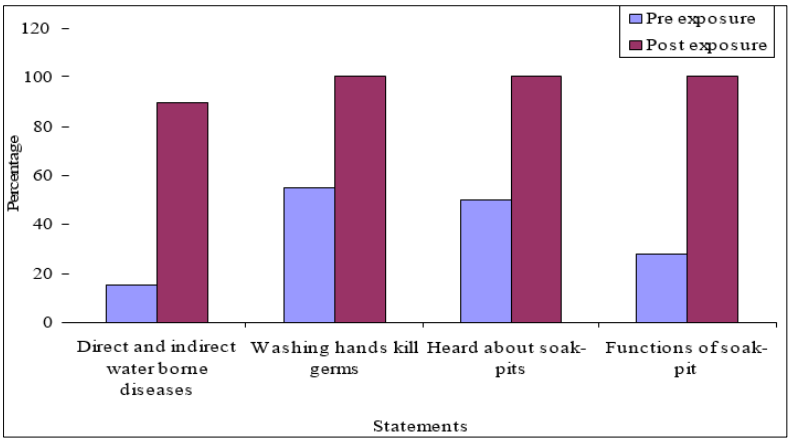

Fig 4: Pre and Post knowledge of respondents regarding water and sanitation

Regarding Swachh Bharat: Swachh Vidhyalaya: study reported that a very small proportion of respondents (7.50%) had heard about Swachh Bharat: Swachh Vidhyalaya Campaign at the pre- exposure however, cent percent respondents selected for the training had heard about Swachh Bharat: Swachh Vidhyalaya at the post-exposure stage. Regarding the year of launch of the campaign only 5.0 percent respondents knew campaign was launched in 2015 while at the post- exposure 85.0 percent respondents cited the year of launch of the campaign. A high proportion of the respondents (87.5%) were aware about the objectives of the campaign at the post-exposure which were only 7.5 percent before the training was imparted.

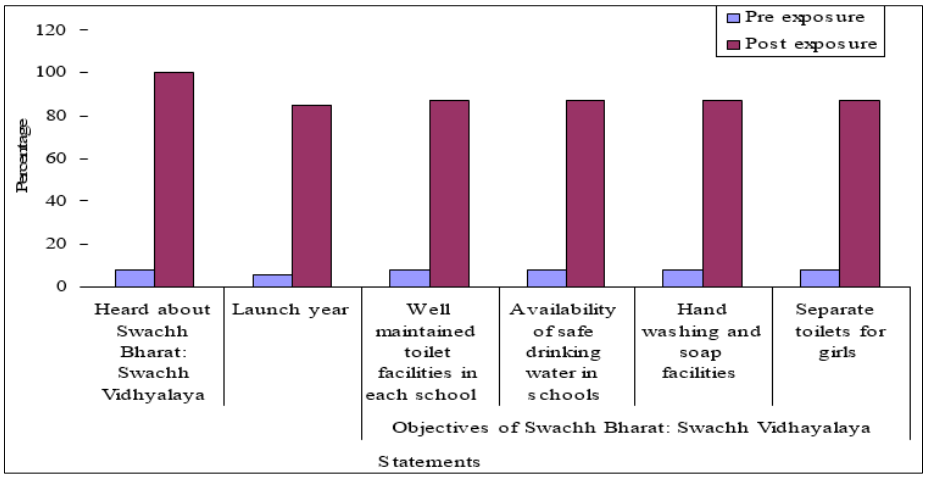

Fig 5: Pre and Post-exposure knowledge of respondents regarding Swachh Bharat: Swachh Vidhyalaya

Gain in Knowledge of Respondents

High knowledge level was reported among respondents regarding general knowledge, regarding open defecation, water and sanitation, regarding solid waste management and Swachh Bharat: Swachh Vidhyalaya (90.0%).

The significant difference between the pre-exposure and post-exposure mean scores of gain in knowledge that is indicated by the 't' value ; 19.21** for females and 17.50** for the males which confirmed the fact that the respondents were able to gain sufficient knowledge. (** indicates significance at 1% level)

Discussion

The current study reported that a large proportion of sample (91.0%) was familiar with SBM. A similar study was conducted by Karan (2017) which reported that 98.0 percent respondents were familiar with the name SBM. High knowledge level was reported regarding water and sanitation practices (direct, indirect water borne diseases and hand washing practices). Similarly Karan (2017) found that cent percent respondents were aware of water borne diseases and its cause of contamination [3].

High knowledge level was reported regarding general knowledge (92.5%), regarding open defecation and water and sanitation (100.0%), and regarding solid waste management and Swachh Bharat: Swachh Vidhyalaya (90.0%).

Significant difference was found between the mean scores of pre-exposure and pos-exposure data which indicated that respondents were able to gain sufficient knowledge.

Conclusion

- Effective trainings, workshops and campaigns are needed to engage and motivate people towards better hygiene and sanitation conditions.
- Separate curriculum for students in schools, colleges, universities, and other educational institutions might be included on personal hygiene, sanitation and environmental cleanliness.
- Collection and disposal of garbage regularly in a green way and more of awareness generation programmes and their promotion by public private partnership can be a great solution in favor of nation.
- Strict policy interventions by the government on toilet use and making environment clean with implementations and monitoring both strongly and forcefully (if necessary) with lawful ways.

References

1. UNICEF Data: Monitoring the Situation of Children and Women, 2017. Retrieved from https://data.unicef.org/country/ind/#
2. Ministiry of Drinking Water and Sanitation, 2018. Retrived from http://sbm.gov.in
3. Aran RK. Impact Assessment of Swachh Bharat Abhiyan Project by Aarogya Foundation India in blocks of Jharakhand State. Asian Development Research Institute, Ranchi, 2017.