

A Study to Assess the Knowledge of the Utility of Toilets and Hazards of Open Air Defecation Practice among Rural Adults of Muchakandi Village

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Abstract

➤ Introduction

Various factors influence people's attitudes. Education and media have become prominent in these days. In recent years particularly TV advertisements by government on spreading the concept of cleanliness and its relation to health have made tremendous impact.

➤ Objective

To assess the knowledge of the utility of toilets and hazards of open air defecation

➤ Method

The present study was conducted on a sample of 50 rural adults. Survey research design was used. Interview schedule was used to collect the data.

➤ Results

The Chi-square value (5.1282) and P value (0.02354) was computed and it was found that there is significant association between the educational status and home with attached toilets. Seventy per cent of the families are nuclear and only thirty per cent are joint families. Eighty two per cent of the families earn more than Rs. 5000 per month and eighteen per cent earn less than Rs. 5000 per month. Fifty two per cent are illiterates and forty eight per cent are literates. Eighty per cent of the rural adults say they do not have toilets; only twenty per cent have toilets in their houses. Six per cent of the rural adults got knowledge about using toilet through TV, six per cent got through radio and eight per cent got through all the sources. Sixty two per cent of the rural adults reported that diarrhoea is the main hazard of open air defecation, twenty per cent reported gastrointestinal infection, ten per cent reported malnutrition and eight per cent reported skin diseases.

Keywords:- Open Air Defecation, Mass Media, Health Hazards, Toilets, and Rural Adults.

I. INTRODUCTION

Over the last 50 years, the general health of Indians has improved significantly and life expectancy has also increased. However, myriad health and sanitation problems still continue to bother people. The most hazardous one is the practice of open air defecation which is the mother of

all infection and morbidity. Regarding the necessity of sanitation the WHO almost a decade ago declared the year 2008 as International Year of Sanitation. It made all efforts to discourage 'Open Defecation'. Community Led Total Sanitation (CLTS) programs helped spread the term all around the globe.

It's a known fact both in cities and villages there were no toilets, people were using open yards. It is shaking to note that people had no idea to use of toilet. Modern hygiene practices were unknown to them. This was causing health hazards like fatal diarrhoea, communicable diseases.

The author of this paper hails from Amingad village in Bagalkot district and has a fair knowledge of rural life. During the last four years tremendous changes have taken place which the author has observed. This prompted him to take up a study to examine the causal factors responsible for population of the concept of Swachh Bharath and the utility of toilets.

Muchakandi is a small village having 250 houses with a population of 1300. Majority are depending on agriculture and only a moderate population are literates. This village was selected as a sample to assess the knowledge of the utility of toilets and hazards of open air defecation. Considering the constraints of time and resource, data were collected by employing group interview.

II. OBJECTIVE

To assess the knowledge of the utility of toilets and hazards of open air defecation practice among rural adults.

III. METHODOLOGY

This is a descriptive study set out to examine the knowledge of utility of toilets and hazards of open air defecation practice among rural adults. The researcher used survey research design for obtaining the data. The interview schedule was prepared to collect the data. Keeping in view the availability of enough respondents at one place, the constraint of time and resource at the disposal of the researcher and also the convenience, it was decided to collect data from The data from rural adults of Muchakandi village, Bagalkot district of Karnataka state. To begin with the official details of the population in Muchakandi village was obtained from the Panchayat

office. The authorities of the Panchayath office were approached and permission was obtained. The objective of the study was explained to the subjects. The study was conducted on a sample of 50 rural adults to assess the knowledge of the utility of toilets and hazards of open air defecation practice. The questionnaire consists of two sections pertaining to demographic items and knowledge questionnaire. The demographic schedule consists of 10 items on age, gender, education, occupation, relation to head of family, total members of family, type of family, marital status, family income and religion. The knowledge questionnaire consists of 19 items on own toilet, year of construction, financial help availed from the government, use of toilets, cleanliness of toilets, water facilities, mass media, practice of open air defecation, health hazards of open air defecation, swach Bharath, etc. The sample is rural adults of Muchakandi village. Multiple choice questionnaire was used to collect the data. The data obtained has been analysed by using simple statistical methods.

IV. RESULTS

Sociodemographic variable	f	%
Type of Family		
1. Nuclear	35	70
2. Joint	15	30
Monthly income		
1. ≤ Rs. 5000/-	41	82
2. > Rs.5000/-	9	18
Educational Status		
1. No formal education	26	52
2. Literate	24	48
Gender		
Female	43	86
Male	7	14
Religion		
Hindu	47	94
Muslims	3	6

Table 1:- Socio-demographic characteristics of rural adults

The study conducted on a sample of 50 revealed seventy per cent of the families is nuclear and only thirty per cent are joint families. From this it may be concluded even in rural area nuclear families are more in number. This may be due to the technological development in the society.

Regarding the income eighty two per cent of the families earn more than Rs. 5000 per month and eighteen earn less than Rs. 5000 per month. It is an indication to show the economic backgrounds of the families are below poverty line. The large number of population (Eighty six per cent) is female and only fourteen per cent are male.

Regarding their educational background forty eight are literates and fifty two per cent are illiterates. Even among the literates only eight per cent have studied up to PUC. The rest are only primary school. In this sample

ninety four per cent are Hindus and only six per cent are Muslims.

A. Association between attached toilet and type of family, income and education of rural people

The data in table-2 reveals, regarding the availability of toilets in their house. Eighty per cent of the rural adults say they do not have; only twenty per cent have toilets in their houses. The Chi-square value (5.1282) and P value (0.02354) was computed and it was found that there is significant association between the educational status and home with attached toilets. The data reflects even though there is lot of cry for construction of toilets in every village under the scheme launched by the central and the state governments. It is shocking to know hardly any efforts have been made in the direction of constructing toilets in the villages. We are living in an era of development. Hence, Grama panchayaths, taluque panchayats and jilla panchayats have to undertake a survey in the villages and see every house should have a toilet at the earliest. This goes a long way in solving the problems of ladies in rural areas.

Out of 50 samples only two per cent has constructed toilet way back in the year 2002 due to their financial and availability of space in their house.

Eight per cent have constructed in the year 2013 another eight per cent have constructed in the year 2014, eight per cent in the year 2016 and only two per cent has constructed relevantly. The others gave the reason that they do not have place to construct toilets.

Regarding the financial help from the government to construct toilets in their house only six per cent of the house obtained financial support from the government and fourteen per cent have constructed toilets on their own without taking help from the government.

Sociodemographic variable	Home with attached toilet		Chi Square	p value
	Yes	No		
Type of Family				
1. Nuclear	7	28	0.000	1.000
2. Joint	3	12		
Monthly income				
1. ≤ Rs. 5000/-	8	33	0.0339	0.853972
2. > Rs.5000/-	2	7		
Educational Status				
1. No formal education	2	24	5.1282	0.02354
2. Literate	8	16		

Table 2:- Chi Square and P value for the attached toilet with type of family, income & education status of rural adults

B. Mass Media influence in terms of degree of getting knowledge about using toilet

The data in Fig 1 reveals regarding the source of knowledge about using toilet. Six per cent of the houses got knowledge about using toilet through TV, six per cent of the houses got through radio and eight per cent got through all the sources. Today is the era of information and communication. The mass media is very strong in providing information from any parts of the world. Since Swatch Bharath Mission is the primary goal of our Prime Minister. Therefore the people of rural areas are having sufficient information about using toilets. Many add in TV, radios, and newspapers. In fact the mass media has played a key role in reaching this knowledge to each and every corner of the country.

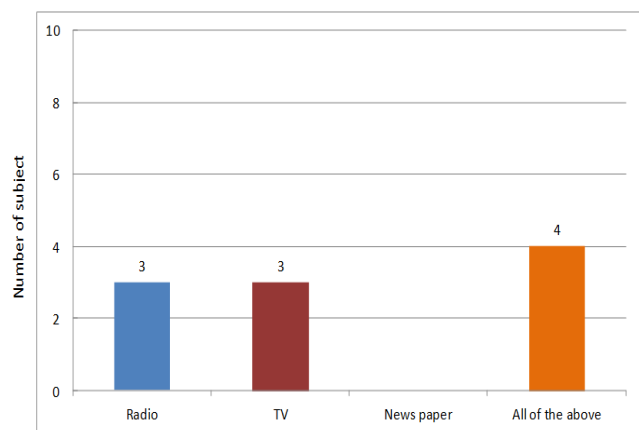


Fig 1:- Distribution of subjects by getting knowledge about using toilet , Source of knowledge about using toilet

C. Association between Open Air Defecation & type of family, income and education of rural people

The data in table-3 reveals regarding the practice of open air defecation. Majority (Ninety four per cent) of them still practicing open air defecation because of the non-availability of sufficient water. Both nuclear and joint families practice open air defecation. Fourteen per cent revealed that in spite of having their own toilets at their house they are practicing open air defecation. Six per cent reported they are not practicing open air defecation.

Sociodemographic variable	Practicing open air defecation		Chi Square	p value
	Yes	No		
Type of Family				
1. Nuclear	33	2	0.0169	0.896608
2. Joint	14	1		
Monthly income				
1. ≤ Rs. 5000/-	36	2	0.1524	0.696233
2. > Rs.5000/-	11	1		
Educational Status				
1. No formal education	22	1	0.2061	0.649808
2. Literate	25	2		

Table 3:- Distribution of subjects by practising open air defecation

D. Association between reasons for not constructing toilets & type of family, income and education of rural people

The data in the table 4, reasons for not constructing toilets in their house, majority sixty eight per cent of the rural adults strongly reported that they don't have space to construct and twelve per cent reported that they are not having money to construct toilets. In villages houses are very small and they are practicing open air defecation. Even though, rural area people are having enough information through mass media to construct toilets in their houses by using financial support from the government. But the practical problem is they do not have space to construct toilets in their houses. Therefore to implement the clean India mission the local government agency must take a responsible challenge to provide them a place to construct toilets in the rural areas.

Sociodemographic variable	reasons for not constructing toilet		Chi Square	p value
	No Space	No money		
Type of Family				
1. Nuclear	24	5	0.4155	0.519184
2. Joint	10	1		
Monthly income				
1. ≤ Rs. 5000/-	29	5	1.2257	0.268244
2. > Rs.5000/-	4	2		
Educational Status				
1. No formal education	21	2	1.687	0.194
2. Literate	13	4		

Table 4:- Distribution of subjects by reasons for not constructing toilet

E. Health Hazards of open air defecation

The data in the Fig 2 reveals regarding the health hazards of open air defecation. Sixty two per cent of the rural adults reported that diarrhoea is the main hazard of open air defecation, twenty per cent reported gastrointestinal infection, ten per cent reported malnutrition and eight per cent reported skin diseases.

It is one of the major causes for the spread of infections and communicable diseases. Open air defecation is the mother of all infection and mortality. Therefore there is an urgent need to stop open air defecation.

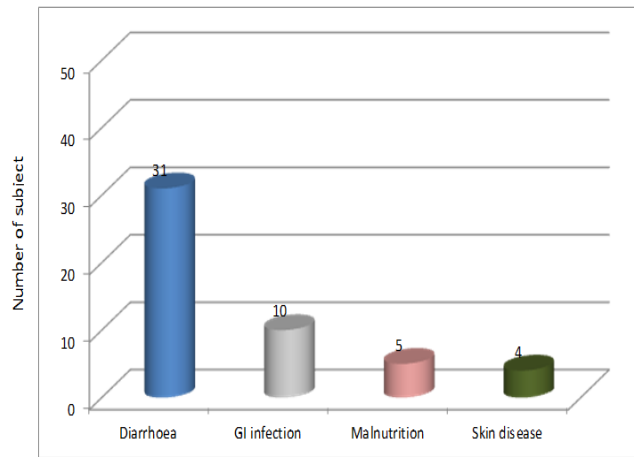


Fig 2:- Distribution of subjects by health hazards of open air defecation

F. Massive Reservoirs of open Air Defecation

The data in the Fig 3, reveals regarding open air defecation is a massive reservoir of different pathogenic microorganisms. Thirty per cent of the rural adults revealed the open air defecation leads to massive reservoir bacteria, virus and parasite. Twenty four per cent say bacteria, two say viruses, and forty two per cent do not know. Open air defecation is a favourable massive reservoir of many pathogenic microorganisms and source of spreading communicable diseases. Therefore there is an urgent need for avoiding or preventing/controlling open air defecation by the local government agencies.

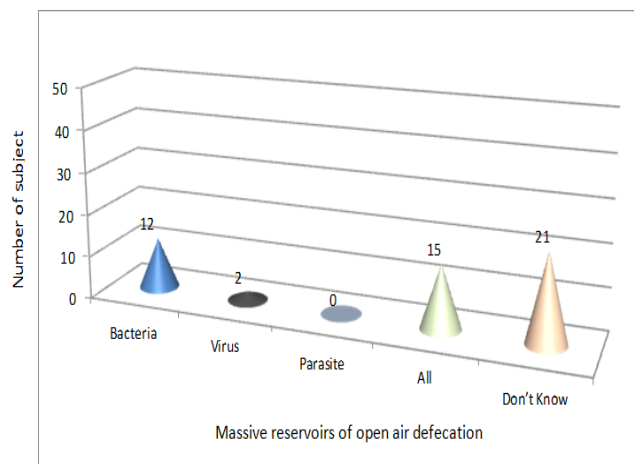


Fig 3:- Distribution of subjects by massive reservoirs of open air defecation

G. Awareness of Swach Bharath

The data in the figure 4 reveals regarding the meaning of Swach Bharath. Fifty eight per cent of them say that swach Bharath means keeping the surrounding clean. Sixteen per cent say construction and use of toilets, four per cent say avoiding open air defecation and twenty two per cent say all the three answers. There is pathetic situation in rural India regarding cleanliness. Therefore it is the responsibility of all the citizens and local government agencies, and voluntary agencies to keep cleanliness

around including open air defecation with full sense of responsibility.

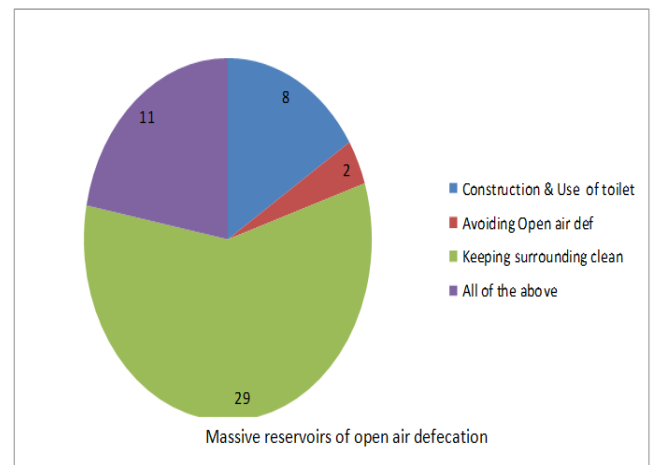


Fig 4:- Awareness of Swach Bharath

H. Pattern of Garbage Disposal

The data in the table-4, reveals regarding the pattern of disposing garbage. Majority ninety per cent of the houses are dumping in a common place. Six per cent say storing all garbage in common dustbins and four per cent say segregation of dry and wet garbage. Disposal of garbage/waste management has become challenge in both urban and rural areas. Even though there are many new ideas, innovations and rules and regulations in segregation of garbage and its disposal people are still not following. Therefore, the local government agencies have to survey the pattern of disposal of garbage and take the necessary actions against those who are not following the rule of disposal garbage. Dumping garbage in a common place is speeded around by street dogs and other animals. It also leads bad odour and spread of infection around.

Segregation of dry & wet garbage	Dumping in a common place	Through in a open drainage	Storing all garbage in common dustbin	Total
2	45	-	3	50

Table 4:- Distribution of subjects by pattern of garbage disposal

V. DISCUSSION

The renowned Sociologist Professor Shrinivas has long back observed in his studies that open air defecation as a pathetic situation in rural India. Ever the dream of Gandhiji was clean India. Now this message has been taken up by our Prime Minister under Swach Bharat Mission, one has to appreciate his passionate concern for clean India. In this study fifty eight per cent of them say that swach Bharath means keeping the surrounding clean. Sixteen per cent say construction and use of toilets, four per cent say avoiding open air defecation and twenty two per cent say all the three answers.

VI. CONCLUSIONS

Thirty per cent of the rural adults revealed the open air defecation leads to massive reservoir bacteria, and parasite. Twenty four per cent say bacteria, four per cent say viruses and forty two per cent say do not know. Present study findings were also supported by the studies of Vyas S, et al. 2014, Ngure FM, et al. and WHO Diarrhoeal Disease Int. Retrieved 2014 revealed that every year about 2000 children aged less than five succumb to diarrhoea and every 40 seconds a life is lost. It is depressing that all this needless suffering is actually preventable. In densely populated countries like India, the health impact is magnified many fold. There is evidence to suggest that water sanitation and hygiene practices are associated with child's linear growth. In rural settings where open defecation is prevalent, large amounts of faecal pathogens via human and animal faces are ingested by children. This creates a massive reservoir of bacteria, parasites and viruses that keep spreading gastrointestinal infection. An eventual result is growth stunting and malnutrition.

The data reveals the women's protest of open air defecation. Seventy four per cent say no and twenty six per cent say yes. Women know their family conditions and practically it is not possible to construct toilet in their houses due to lack of space and water supply. This type of houses women will not protest and those who are having space and water facilities are protesting many times regarding the use of open air defecation. Sixty four per cent rural adults revealed that they do not have any traditional dogma regarding the use of toilets and thirty six per cent say that they have traditional dogma regarding the use of toilets.

In rural India we have multi cultures, many religions and beliefs and practices since beginning. Still now the people are having belief that the toilets should not be at houses because of kitchen and puja room are near and it is unhygienic. In fact couple of houses, elders expressed very strongly that, we don't prefer to have toilets in their house, since it was practiced from the beginning of their forefathers. The present study findings were also supported by WHO and UNICEF Joint Monitoring programme for Water Supply and Sanitation (JMP), 2014; it is a matter of national concern in India number of people depends on open defecation is more. 65 per cent is it in rural areas. In urban settings the prevalence is 16 per cent. This problem has deep roots with a multi-factorial origin. Unavailability of proper toilets with dimly lit, broken or clogged latrines is common. However, the biggest problem is the mind-set of the people in both rural and urban settings. Children grow watching parents and grandparents practice open defecation.

Majority admitted that they view TV programs and advertisements on cleanliness, hygiene, health, nutrition have made a tremendous positive impact on them and they have resort to ban open air defecation. The incentive for building toilet has been increased by Rs.2000/- from Rs. 10,000/- to Rs. 12000/- by the Government for those who are not having toilet for individual households.

Panchayath administration has to take up the responsibility to monitor the programme. Rural women and children should be educated through mass media to play a proactive role in educating their neighbourhood. Shrishakthi, swashakthi, community health nurses, Axillary nurses and other mahila groups and women organization may be involved in companying. We can celebrate World Toilet Day, Participation of school children in creating awareness and Lessons on Swachh Bharath. The local government agencies have to provide place and water facility for toilet construction and use. The study revealed that mass media is educating them on various aspects of life more particularly on health and hygiene. The Swachh Bharath Abhiyan started by our Prime Minister and his crusade against open air defecation has tremendously impacted. The attitude of rural people the study has revealed that majority of the rural people have realised the hazards of open air defecation. Further they have constructed family toilets with the help of the government and those who do not have space, water and financial capacity yet to construct toilet. It's also true that prejudices about having a toilet inside the house still prevail among a few. But the overall sensorium is positive and encouraging.

VII. IMPLICATION TO NURSING

The nurses who have been working in rural communities may be motivated to visit villages and create awareness among women population regarding Swachh Bharath. It may help the rural community to improve health and hygiene.

Proper awareness among women may lead to avoiding open air defecation and they may start in the direction of using toilets. The health department may undertake health and hygiene camps to spread the message of Swachh Bharath Abhiyan to all the rural population by making usage of nursing and other people who are interacting in social service. This goes a long way to improve the health of our rural adults.

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