



Reasons of Open Defecation Behavior in Rural Households of Bhopal, Madhya Pradesh, India

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Financial Support: None declared

Conflict of Interest: None declared

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How to cite this article:

Namdev G, Narkhede V. Reasons of Open Defecation Behavior in Rural Households of Bhopal, Madhya Pradesh, India. Natl J Community Med 2020;11(3):103-106

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Date of Submission: 16-01-20

Date of Acceptance: 28-03-20

Date of Publication: 31-03-20

ABSTRACT

Background: According to World health organization (WHO), open defecation (OD) is a major public health concern in India both in rural and urban counterparts. Therefore, Government decided to eliminate open defecation (OD) by 2019 with the introduction of Swachh Bharat Mission. But, still, many individuals found to choose to defecate in open fields. The study was conducted to find out the prevalence of open defecation and its reasons.

Material and methods: The present cross sectional, descriptive study was carried out across villages coming under rural field practice area for one year. Total five villages were randomly selected consisting of 1000 population approximately. Data was collected using pre designed questionnaire and analyzed using SPSS 23.0.

Result: Out of total 1000 study subjects, 27.7% study subjects opt for defecation practices. Out of them, 76.5% opt due to their habits. Next reason (57%) came out was feeling comfortable followed by unawareness (36.4%) and lack of water (34%).

Conclusion - The present study concluded prevalence of open defecation 27.7%. Due to their habits, feeling comfortable, unawareness and lack of adequate water in study area were major factors contributing persistence of open defecation.

Key words: Open defecation, tradition, Swachh Bharat Mission, sanitary latrines

INTRODUCTION

According to World health organization (WHO), open defecation (OD) is the "riskiest sanitation practice of all".¹ It is a major public health concern in India because nearly 60 % of the people throughout the world, that does not have access to toilet and are forced to defecate in the open, belong to our country.²

This open defecation practice is very much common in villages, where majority (about 70%) of Indian population reside, but, it is also found in urban areas also. According to census 2011, 67% of rural household and 13% of urban households defecating in the open field.^{3,4}

OD is a well established traditional practice deeply ingrained from early childhood. It is considered as a norm for so many Indians. In addition to tradition and communication taboo, the practice still exists due to poverty. These people don't have enough money to construct toilets at their home leaving their urgent needs. Along with it, having toilet at home is perceived by society as unacceptable and unhygienic.⁵

Therefore, keeping this in streamline, Indian Prime Minister Narendra Modi inaugurated the Swachh Bharat Mission (SBM; Clean India Mission) in October 2014, to accelerate the efforts for achieving universal sanitation coverage and to put emphasis on sanitation. The target of this mission has been decided to eliminate open defecation (OD) by 2019.

To meet this goal, two major changes must occur: 1. increase in the number of households that have latrines; 2. increase in the number of household members using latrines.⁶

But, it would be wrong to assume that construction of a toilet in every house can curb the problem of open defecation in India. Despite having toilet at home, many in rural India choose to defecate in open. Talking about reasons for this behavior, about 47 per cent of those who defecated in the open found it more comfortable and convenient. Others cited reasons like an opportunity for morning walk along with visit to their fields and access to fresh air in the morning are some of the factors that drive them to defecate in open.³ Thus, present study was conducted to find out prevalence as well as various reasons of open defecation practices.

OBJECTIVES

The study was conducted to find out prevalence of open defecation practice and also to explore reasons behind practice of open defecation.

MATERIAL AND METHODS

The present cross sectional, descriptive study was carried out across villages coming under Rural field practice area, Department of Community Medicine between September 2018 to August 2019.

After obtaining approval from Institutional Ethical Committee, data collection was started. Rural field practice area caters total 25 villages and out of them, five villages were selected for study using simple random sampling technique by Lottery method. There were a total of 618 households in selected five villages and out of them, 523 households gave us consent for participation in study. Trained social workers conducted interview from at least two adult family members from each household using structured questionnaire. Thus, 1000 study subjects were interviewed at the end of

study whose households had sanitary latrines or access to community sanitary latrines.

All data was entered and compiled in MS excel and analyzed using SPSS 23 version accordingly.

RESULT

The present study was done to find out the prevalence and reasons behind open defecation practices. Out of total 1000 study subjects, 27.7% study subjects opt for open defecation practices in spite of having sanitary latrine at their premises as shown in Table 1. Out of them, by analyzing various reasons of open defecation practices, it was found that 76.5% opt for it due to their habits and 57% felt this practice very comfortable or convenient. (Table 2)

The next reason (36.4%) was reported unawareness regarding toilet facility followed by lack of enough water (34%). Approximately 25.3% subjects follow this practice because of very poor infrastructure of constructed toilets whereas 21% due to tradition. (Table 2)

Other reasons were also found in a very few study subjects like constructed sanitary toilets were located at a very far distance from their home and told that pit was too small to use while others believed that being a toilets at their own home as a very dirty sign. Very few study subjects went for open defecation according to the weather and some other follow it because of getting enough time for social interaction to others.

Table 1. Distribution of Study Subjects according to the place of open defecation (n =1000)

Place of defecation	Participants (%)
Pit latrine	200 (20)
Septic tank	523 (52.3)
Open defecation	277 (27.7)

Table 2. Gender wise distribution of study subjects according to reasons for open defecation (n =277)

Reasons	Male (%)	Female (%)	Total	P value
Habitual	419 (61)	269 (39)	688	0.03
Convenient/Comfortable	340 (61)	219 (39)	559	0.04
Lack of enough water	301 (59.5)	205 (40.5)	506	0.07
Not aware regarding facility	137 (49.1)	142 (50.9)	279	0.87
Very dirty	78 (31.6)	169 (68.4)	247	0.001
Poor infrastructure	123 (54.6)	102 (45.4)	225	0.6
Pit is too small	130 (59)	90 (41)	220	0.12
Traditional	132 (61.7)	82 (38.3)	214	0.05
Improper maintenance	60 (62.5)	36 (37.5)	96	0.07
Time for social interaction	49 (51)	47 (49)	96	0.02
Far from house	27 (79.4)	07 (20.6)	34	0.002

Out of those study subjects following open defecation practice; 57.4% were males and 42.6% females. By analyzing its reasons with gender, it was found that 57% males go for open defecation due to their habits and also 57 % males feel it comfortable for them whereas same findings were reported among 43% females. It was not found statistically significant difference. (Table 2)

Because of reason of unawareness, almost equally males and females follow this practice whereas 64.5% males and 35.5% females follow due to lack of enough water. Although, it was not found statistically significant.

DISCUSSION

In present study, 27.7% study subjects prefer open defecation in spite of having constructed sanitary latrines at their houses. This finding collaborates with studies done by Panda et al (23.2%)⁷, by Kumar et al (35%)⁸ and by Anuradha et al (33%)⁹.

On the contrary, few studies reported much higher prevalence as compared to our study like Bhardwaj et al¹⁰(67%), Geetha²(90%), Hari Shankar et al¹¹(78%), Banerjee et al¹² (74.6%), Rakesh et al¹³(78.8%) and Yogananth et al¹⁴ (54.8%) It may be due to different study setting or may be because of lack of awareness among study population or due to more subjects having lower socio economic status.

Reasons behind Open Defecation

The present study was carried out for the purpose to find out the various reasons of open defecation practices. Due to their habits, feeling comfortable, unawareness and scarcity of water were found commonest reasons. Few studies support our findings like Banerjee et al¹² reported feeling comfortable with carrying out age old tradition and scarcity of water forcing subjects to opt for open defecation practices. Rakesh et al¹³ also reported unawareness about availability of public latrines followed by inadequate water were reasons of open defecation.

Yogananth et al¹⁴ observed reasons behind this practice were inadequate design and incompletely constructed toilets, poor accessibility and availability of water, preference for open defecation, personal beliefs and socio cultural beliefs. Studies done by Bhardwaj et al¹⁰ and Geeta et al² also favor our observation.

Although, the prevalence of open defecation practice has been reduced so far by the strict implementation of government initiative since last five years, but still, we are much lagging behind from our desired target. So, our question is that are we able to

stop this practice or it will be going on as usual in spite of collaborative efforts by government?

As far as, the present study is concerned, there is gross lack of knowledge regarding its harmful effects among study subjects. Therefore, there is extreme necessity to accelerate the efforts to stop this practice at grass root level. Regular organization of awareness sessions in the near vicinity of people should be conducted. There is need of hour to arise the feeling of dignity and importance of cleanliness among people. To achieve this, we should explain school children so that they may pressurize their family to stop this traditional practice. Also, there should be taken help from various sources of media to create awareness among people.

Simultaneously, we will also have to provide regular water supply and improve quality of constructing toilets, so that, people can use them without any kind of interruption. There should be more organized efforts at local level by village representatives along with the active involvement of health workers, local bodies and political leaders as well because they actually know the discrepancies in their area.

At last, our study tried to show important message to every citizen in India is that, to stop open defecation practice absolutely from our country, there must be active involvement of each and every individual irrespective of age, sex, caste, education and socio economic status because it is not only sole responsibility of government, everybody must have to involve in making India clean.

CONCLUSION

The prevalence of open defecation was found 27.7%. Being habitual to this practice among study population, feeling comfortable, unawareness and lack of adequate water in study area were reported major factors that contributing persistence of open defecation.

Majority of study subjects complained of very poor infrastructure of newly constructed toilets whereas due to following deep rooted traditions were also reported other reasons of using this practice. Gender wise statistically significant difference among few factors of open defecation not found in our study.

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