

The Barriers To Accessing Sanitary Facilities Experienced By Adolescent Girls In An Urban Slum Of Patna : A Cross Sectional Study

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Abstract

Aim: The barriers to accessing hygienic sanitary facilities experienced by adolescent girls in an urban slum.

Materials and Method: The study included 98 adolescent females (10-19 years) living in an urban slum of Patna.

Result: Mean age of adolescent girls in the present study was 15.44 ±2.2 years (Range:12 to 19 years) and majority of them were in high school (60.2%). About half (42%) of the study subject were living in semipucca house and only 38% had access to an independent toilet facility, 9% were practicing open defecation and remaining 51% were using public toilets. **Conclusion:** The availability of sanitation facility and latrine utilization rate of the households were satisfactory. Privacy is a concern in public toilets.

Keywords: Adolescent girls, sanitary facilities, urban slums.

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Introduction

Sanitation refers to provision of facilities and services for the safe disposal of human waste of all type with a view to condition the environment fit for human habitation. Universal access to adequate sanitation is a fundamental human right and right to sanitation is fundamental right under article 21 of Indian Constitution[1]. Hygienic sanitation facilities are crucial for public health. [2]. The world continues to urbanize and the cities increasingly bear the burden of poor sanitation with an estimated 57% and 16% of urban dwellers lacking access to toilets and basic sanitation services respectively and almost 100 million urban residents practicing open defecation in the midst of challenges of providing many millions of rural household with adequate sanitation. [3,4]. Poor sanitation, open defecation and lack of awareness about hygiene have a great impact on the health of women and children living in slums. [5-7]. Women need to be

physically safe when they use outside or public toilets; be it at school, marketplace or workplace. If WASH (Water, Sanitation and Hygiene Facilities) facilities in a school, workplace, market space and public areas are poorly maintained, dirty and unsafe, it will have a cascading effect on women's health. The issue of toilet is more serious in urban areas than rural areas because spaces are cramped and open space is deficient. Women who have poor access to toilet facilities routinely withhold food and water which subsequently leads to dehydration, discomfort, fear of incontinence and at worst urinary tract infections(UTIs). [8,9]. In urban poor environment, living conditions are often crowded and unsanitary, social relation can be fraught with tension over making ends meet and parents are often faced with the challenges of upholding cultural values in the face of a rapidly changing social and economic environment. Hence, adolescence, especially for girls can be a difficult time. [10] The link between sanitation and human health are well-documented. The Government of India vide Swachh Bharat Mission is trying to clean up the streets roads and infrastructure of Indian cities. However there is no program which directly addresses the barriers and

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problems faced by adolescent girls with respect to sanitation.

Material and Method

This community based cross sectional study was designed to study the barriers to accessing hygienic sanitary facilities experienced by adolescent girls in an urban slum of Patna. Simple random sampling was used. 98 adolescent girls were included in this study. A pre designed, pretested validated proforma was used to collect the appropriate information by one to one interview of each of the adolescent girl. The data collected were numerically coded in SPSS v.16 and were summarised using descriptive statistics frequencies and percentages. Participants were included in the study only after verbal consent either from them or their parents or legal guardian and strict protocol was followed to maintain confidentiality of their responses.

Result

Of the 98 girls interviewed 61.2 %(60 in number) belonged to 15-19 years is group. The mean age and standard deviation of this study group was 15.44 ± 2.2 years. All belonged to Hindu religion. About 9.2%(9) were working and 10.2%(10) were married. Approximately 86% of adolescent girls were between the age of 15 and 19 years in a similar study done by Sharanya. [11] In this study, a majority of adolescent girls were in high school(60.2%) and more than half (60%) of the subjects belonged to class 5 socio-economic status according to BG Prasad classification. About half(42%)of the study subjects were living in semipucca house, 35.9% of them were living in kachcha house and 21.4% were living in pucca houses. Only 38 of 98 surveyed adolescent girls have access to independent toilet facility, 9 were practicing open defecation.31 (81.5%) independent toilet users and 45(88.2%) public toilet users; only few girls (18.4% and 13.7% respectively) from both the groups were not using it because of cultural practice. In our study, 14.6% of reasons cited for not using because of cultural practice which was low when compared with the remaining 51 were using public toilets. The results were lower when compared with a similar study done

by Oljira and Berkessa[12] where 88.2% of the population had independent access to the toilet. of 89 using the toilets 64.3% were using septic tank type of toilet. similar study by Bharet al [13]found that two third of the households(65.7%) used improved sanitation facilities of which 47.5 had flush/ tanks pour flush facility and 18.2% used improved pit latrine. More than a third household(34.3%) use improved sanitation facilities; 27.2% used shared latrine and 2.6% used pit latrine without slabs. Bora et al [14] in their study found that sanitation facilities tab label in 58.9% of households of which 83.1 % wear sanitary type and 9.7% latrine were functional. About 61.1 % of the respondents used latrine regularly and 64.1 % practiced open air defecation. Among independent toilet users(38) a majority{25(65.8%)} had access to piped water supply in their house; among public toilet users(51) less than half of 21(41.2%) had access to piped water supply[Table 2]. The distance of independent toilet users(38) was within hundred metre from their house in a majority of them37(96.8%), whereas among public toilet users(51) the distance was 200- 300 metre in a majority[35(68%)] of this study subject [Table 3]. Of 51 public toilet users, few of them (13.7%) were scared to go alone. Of 38 independent toilet users, a majority of them used when they wanted[yes 34(89.5%)] and few(10.5%) said that they had to wait because of joint family. About 64.7 %(51) public toilet users had to wait for using the toilet facility and avoiding the use in evening and night. Dustbin was absent in all the independent toilet users; even in a public toilet(51) a majority did not have dustbin[38(74.5%)]. Public toilet users complaint about lack of privacy(29) while using toilets; 7(13.7%) and 4(7.8%) respectively complaint of hygiene and bad smell while using it. About 66% of the public toilet users complaint about guys gathering around the toilets and 25% reported that they were abused while using toilet. Common diseases suffered by independent toilet users(38) were UTI[8(21.1%)]; whereas out of 51 public toilet users, 26(51%) suffered diseases in the past:UTI(19.6%) and PID(16.4%).

Table 1: Demographic Variables

Demographic Variables	No(%) n=98
Age in years	
10-14	38(38.8)
15-19	60(61.2)
Education	
Graduate	3(3.1)
Intermediate	11(11.2)
High school	60(60.2)
Primary	20(20.4)
Illiterate	4(4.1)
Household Type	
Kahcha	35(35.7)
Pacca	21(21.4)
Semi pucca	42(42.9)
Family Type	
Joint	25(25.5)
Nuclear	71(71.4)
Three generation	2(2.0)

Table 2: Modality of toilet and its use

Variables	Independent toilet users(n=38)	Public toilet users(n=51)
Main source of water supply		
Pipe water	25(65.8)	0
Dug well water	3(7.9)	21(41.2)
Tank water	10(26.3)	16(31.4)
Bucket water from outside	0	14(27.5)
Frequency of toilet cleaning		
Daily	13(34.2)	31(60.8)
Once in a week	12(31.6)	18(35.3)
Biweekly	13(34.2)	2(3.9)
Cleaning agent used		
Acid	27(71.1)	32(62.7)
Detergent	00	3(5.9)
Brush	7(18.4)	10(19.6)
Don't know	4(10.5)	6(11.8)
Distance of toilet from house		
Less than 100m	37(97.4)	35(68.6)
200-300m	1(2.6)	16(31.4)
More than 500m	0	0
Go to toilet when you want to go		
Yes	34(89.5)	18(35.3)
No	4(10.5)	33(64.7)

Table 3: Problems associated with public toilet users

Variables for public toilet users, n=51	Yes	No
Approach road to the toilet	28(54.9)	23(45.1)
Light present o approach road	38(74.5)	13(25.5)
Pays to use toilet	51(100)	0
Problem using toilet	39(76.5)	12(23.5)
Privacy while using it	29(56.9)	NA
Hygiene(n=39)	7(13.7)	NA
Bad smell(n=39)	4(8.8)	NA
Go alone to the toilet	44(86.3)	7(13.7)

Discussion

Basic sanitation facilities are human rights. With the rapid increase in urban population, provision of accessible, affordable and acceptable safety sanitation facility in

urban slums and raising the utilisation gap between the slums and non slums are a challenge. In poor urban environment, living conditions are often crowded and unsanitary, social relation can be fraught with tension over making ends meet and parents are often faced with the

challenges of upholding cultural values and practices in the face of a rapidly changing social and economic environment. Our study documented the availability and use of sanitary facilities by adolescent girls in an urban slum. It was found that independent toilets were better maintained when compared with public toilets. Open defecation was present in 9% of study respondents. Piped water supply was lacking in public toilets cleaning of toilet was done on bi-weekly basis by majority of independent toilet users, whereas done on daily basis in public toilets. It is well known that sanitary facilities for each household that is individual toilets, when constructed, used and maintained and cleaned properly, are the ideal solution for a public health point of view. However, it may be practically impossible for households living in slums to have their own toilets for a variety of reasons including uncertain tenure, lack of space and/ or affordability constraints. Problem identified to be associated with public toilet users where and unsatisfactory approach roads. Also the problem of privacy, hygiene and foul smell inside the toilets. Dirty toilet means invitation to various diseases. Disposable bins with lids should be placed within the toilet at the initial point of waste collection. It is known fact that poor access to clean water and sanitation is associated with greater mortality and adolescent girls are the most vulnerable is group in the life cycle as they are the building blocks of our future generation. The knowledge about barriers to accessing hygienic sanitary facilities by adolescent girls in an urban slum will provide an insight into the etiology of common diseases associated with it and thereby help to prescribe the primary care physician a long term preventive and promotive strategy.

Conclusion and recommendation

In this study, it was found that a majority of the adolescent girls wear in high school and not working (90.8%). About half of the study subjects were living in semi pucca house. Half of the study subjects use public toilets and need to wait long because of less number of toilets and large number of population. It is noteworthy that the practice of open defecation was found to be lower. This study reveals that lack of privacy is a concern in public toilet. Dustbin with proper lids should be placed in the toilets. Encouraging adolescent girls to practice safe and hygienic behaviour is the need of the hour. Appropriate emphasis needs to be given to behaviour change communication to create awareness among adolescents on the importance of hygienic and safe sanitation practice.

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