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Assessment of the Problems Associated with the use of Public Latrine System in Ife-North Local Government, Osun State, Nigeria

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ABSTRACT

Public toilets are an essential means of sanitation in some developed countries and have been the only possible alternative for many people living in low-income, heavily populated, and informal settlements. The aim of this study was to assess the problems associated with the use of public latrine system in Ife-north local government, Osun State. The data used for the study were obtained through well-structured questionnaires. A total of 181 questionnaires were distributed and 150 questionnaires were retrieved, while 31 questionnaires were missing. The respondents were selected randomly for the study. The descriptive statistics showed that male respondents were the major participants in this study. 80% of the respondents in the study area had access to public toilet. The respondents identified Sit latrine as the major type of latrine system available in the area. This study revealed that majority (40.66%) of the households used the latrine every day and the latrine was being maintained properly by the community. The result of this study showed that 86.66% of the respondents were reported to have contacted diseases as a result of public latrine use. This study has shown that poor maintenance of practice exposed the users of latrine to various diseases. This study recommended that Community leaders must ensure that users have been sensitized on the correct use, appropriate maintenance, hand washing and other basic hygiene practices

Keywords: Public toilets, sanitation, developed countries

INTRODUCTION

Public toilets are an essential means of sanitation in some developed countries and have been the only possible alternative for many people living in low-income, heavily populated, and informal settlements [1]. Public bathroom rules, as well as proper methods of running and maintaining public toilets, are an important means of controlling excreta pollution in the environment. Latrines have been associated with effects on the environment leading to un-conducive living environment for the residents. Diarrheal diseases are caused by a lack of adequate toilets and clean water, and almost 800 children die from them every day. Bad sanitation's health consequences put people in poverty, making it impossible for them to get an education or job to help their families. According to Gwebu, due to overcrowding, the cleaning and maintenance of latrines in the low-income areas is so poor that the facilities have

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become a poor health hazard, that which people avoid getting close to. Pit latrines also fill up and due to their inadequate facilities for their regular drainage; they overflow [2]. Despite years of effort to increase the availability of latrine facilities, it is still difficult to find a village that is completely free from open defecation. Provision of public toilet to everyone is considered essential as it helps in removing serious barrier to wider participation in public life [2]. The provision of toilet facilities for population is a must and good sanitation increases the prestige of society. People still do not have the same access or opportunity to go to the toilet, and the public unmanned toilet is still a site of conflicts and clashes in public space. Poor service has a growing effect on public health and environmental concerns such as street cleanliness, social disorder, and diseases linked to badly managed or non-existent public sanitary facilities. The provision of these facilities was also shown to be crucial for public health and cleanliness of the cities since, in the absence of toilets on the streets, people urinate on walls and sidewalks [3]. Many people in the developing countries like Nigeria lack access to adequate sanitation services, resulting in insufficient waste disposal [4]. Due to the increased in population growth and high health demands, the global demand for basic sanitation facilities (such as drinking water delivery, excreta disposal, and waste water disposal) has increase rapidly [5].

METHODOLOGY

Research Design: This study was a descriptive survey design. **Study Area:** This research was conducted in five areas of Ife-North local government. Ife North Local Government area is in Osun state, Southwest Nigeria and has its headquarters in the town of Ipetumodu. The Local Government area comprises several towns and villages such as Ipetumodu, Edunabon, Yakooyo, Moro, Asipa,Akinlalu, Iwaro Oyere and Famia. The estimated population of Ife North LGA is 86,708 inhabitants with the vast majority of the area's populace being members of the Yoruba ethnic affiliation.

Sampling Techniques: Random sampling technique

Sample Size:

The sample size for this study would be one thousand (1000) respondents to be selected from the study population using Taro Yamane formula.

$$\mathrm{n} = \frac{N}{3 + N\,(e)2}$$

Where n=sample size
N=population = 1,000
e= sampling error usually = 0.05 (level of precision)
3= constant.

$$\mathrm{n} = \frac{1{,}000}{3 + 1{,}000 \text{ x } (0.05)2}$$

$$\mathrm{n} = \frac{1{,}000}{3 + 1{,}000 \text{ x } 0.0025}$$

$$\mathrm{n} = \frac{1{,}000}{3 + 2.5}$$

$$\mathrm{n} = \frac{1{,}000}{5.5}$$

$$\mathrm{n} = 181$$

Instrument for Data Collection:

The data collection instrument used for this study was questionnaire based. The design was well constructed and was divided into two sections (A and B). Section A was for collection of information on personal data of respondents while Section B contained questions that elicited responses from the respondents with the response options: Strongly Agreed (SA), Agreed (A), Strongly Disagreed (SD) and Disagreed (D).

Method of Data Analysis:

The responses to the questionnaire items were analyzed using frequency tables and simple percentage method.

Data Presentation and Analysis: The frequency distribution table was used by study to present data obtained from the respondents. One hundred and eighty-one (181) questionnaires to the respondents were distributed to the respondents. One hundred and fifty-one (150) questionnaires were retrieved, while thirty-one (31) questionnaires were missing, as such, one hundred and fifty (150) questionnaires were used for this analysis.

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RESULTS

Table 1: Demographic Data of respondents

Gender		
Respondents	Frequency	Percentage
Male	86	57.3
Female	64	42.7
Total	150	100
Age of respondents		
10-15	4	2.7
16-20	18	12
21-25	21	14
26-30	24	16
31-35	32	21.3
36-40	16	10.7
41-45	17	11.3
46-50	2	1.3
51-55	14	9.3
Total	150	100
Educational Qualification		
Primary School	22	14.7
Secondary School	48	32
Tertiary Institution	80	53.3
Total	150	100
Marital Status		
Single	65	43.3
Married	64	42.7
Widow/Widower	12	8
Divorced	8	5.3
Total	150	100
Occupation		
Student	39	26
Civil Service	34	22.7
Farming	17	11.3
Civil Service	25	16.17
Unemployed	25	16.7
Total	150	100

Table 1 indicates the gender of the respondents where 57.34% are male and 42.66% of the remaining respondents are female. The above table also showed that majority (45%) of the respondents were between the ages of 31-35years, followed by 26-30years of age, when 15% were within the age of 18-20year and only 10% of the respondents are within the age of 45-50years. 14.66% of the respondents attended primary school, coupled with 32% that have secondary education and other respondents have tertiary education. According to table, 45% of the respondents were reported to be single, however 43% of them are married, when 10% were revealed to be widows/widowers and only 2% of them were divorce. 40% of the respondents were Civil servants, when 26.66% were students and 16.67% were farmers in the study area. However, 53.33% of them were Christians, when 40% were Muslim and only 6.67% were traditional worshippers.

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Table 2: Access to Public Latrine

Respondents	Frequency	Percentage
Yes	111	74
No	39	26
Total	150	100

The table above revealed the respondents opinion on the accessibility of latrine, that 80% of the households have public latrine system in the area and 20% of them claimed otherwise.

Table 3: Types of Latrines

Respondents	Frequency	Percentage
Sit	107	71.33
Squat	43	28.66
Total	150	100

(71.34%) of the respondents identified Sit as the type of latrine system in their area and 28.66% of the respondents claimed Squat is the type of latrine system in their area as shown in table above.

Table 4: Types of Latrine Preference

Respondents	Frequency	Percentage
Sit	107	71.33
Squat	43	28.66
Total	150	100

Table 4 represent 71.33% of the respondents preference Sit as the type of toilet in their area, while 28.66% prefer Squat.

Table 5: Payment for the Use of Latrine

Respondents	Frequency	Percentage
Yes	123	82
No	27	18
Total	150	100

In table 5 it was revealed that 80% of the respondents claimed they pay for using public latrine in the study area, while 18% claimed they don't pay for latrine use.

Table 6: Duration of Latrine Usage

Respondents	Frequency	Percentage
Every day	61	40.66
Twice in a week	35	23.33
every week	26	17.33
Twice a day	28	18.66
Total	150	100

In table 6 showed that 58% use the latrine every day, when 25% of them claimed they use the latrine twice in a week, 15% use the latrine twice a day and only 2% make use of the latrine every week.

Table 7: Do your community have cleaners for the public latrine?

Respondents	Frequency	Percentage
Yes	105	70
No	45	30
Total	150	100

In table , with 70% population agreed that the public latrine in their community has a cleaner, while 30% of them disagree.

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Table 8: Landlord's Ownership of Latrines

Respondents	Frequency	Percentage
Yes	105	70
No	45	30
Total	150	100

The table revealed that 70% of the respondents claimed that landlords in their area have latrines in their house and 30% disagree.

Table 9: Sanitary Condition

Respondents	Frequency	Percentage
Normal	72	48
Poor	46	30.7
Very poor	32	21.3
Total	150	100

Table 9 shows that 48% of the respondents claimed that the sanitary condition in the area is normal, 30.7% claimed the sanitary condition is poor and 21.3% said it is very poor in the study area.

Table 10: Toilet Disease

Respondents	Frequency	Percentage
Yes	130	86.66
No	20	13.33
Total	150	100

As shown in above table 86.66% of the respondents reported to have contacted diseases as a result of public latrine use and 13.33% contacted no disease.

Table 11: Hand Washing After the Use of Latrines

Respondents	Frequency	Percentage
Yes	83	55.33
No	49	32.66
Some times	18	12
Total	150	100

Table 11 represents 55.34% of the respondents that claimed to have washed hand with soap after toileting and 44.66% disagree.

Table 12: Means of Contacting Toilet Disease

Respondents	Frequency	Percentage
Through drinking of polluted water	90	60
By eating food exposed to air	24	16
By using a very dirty toilet and sharing toilet with an infected person	30	20
Poor hygiene	6	4
Total	150	100

Key: A by drinking polluted water
B By eating food exposed to air
C By using a very dirty toilet and sharing toilet with an infected person
D Poor hygiene

According to report from table 2.11, it was shown that 60% of the respondents claimed that one can get in contact with toilet diseases by drinking polluted water, followed by using a very dirty toilet and sharing toilet with an infected person a t 2 0 % , by eating food exposed to air at 15% and only 5% of them claimed one can get in contact with toilet diseases by poor hygiene.

Table 13: Does the latrine pose any health threat to your area?

Respondents	Frequency	Percentage
Yes	72	48
No	78	52
Total	150	100

According to the data obtained, 52% of the respondents agreed that latrine pose health threat to the study area, while 48% disagreed.

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Table 14: Health Threat from Latrines

Respondents	Frequency	Percentage
borehole	75	50
Deep well	40	26.66
None	6	4
Tap	29	19.33
Total	150	100

Table 14 above, revealed that 86.67% of the respondents claimed that water is supplied by borehole, 26.66% claimed got water through deep well. The table also showed that 19.33% of them get water supply through Tap and only 4% of them had no source of water supply at all.

DISCUSSION

This study examined the effects of latrine and the factors hindering its use among the inhabitants of Ile-ife, Osun State. The result showed that over 57.3% of the respondents were male while the majority of the respondent's age ranged from 31-35years. The analysis revealed that majority of the respondents had formal education as 53.3% attended tertiary institution, 32% attended secondary school and only 14.7% couldn't further their education from primary school. Respondents at 43.3% were found to be single and 42.7% were married with one or two kids. The finding revealed that 74% of the households in the study area have public latrine system in their house. Based on the result, 71.33% of the respondents identified sit as the type of latrine use in their house and 82% of the households were found to pay for the use of latrine in the area. Majority of the respondents were found to visit the latrine every day for defecation. The analysis revealed that 86.66% of the respondents reported to have contacted diseases as a result of public latrine use and this has been as a result of poor facility management and hygiene practice among the households in the area. This study showed that there is poor water supply in the area and this could prevent latrine users from washing their hand after making use of the toilet. According to the report obtained from the respondents, there is also poor maintenance of the available latrine system in the area due to the nonchalant attitude and poor support of the households in keeping the latrine safe for man use [6-15].

CONCLUSION

Poor maintenance of the Latrine system practice exposes the users to various diseases. Inadequate water supply prevents the households from practicing proper hygiene and the households may easily get in contact with diseases when there is no water to clean up after the use of latrine in the area. The bad and uncared attitude of the people in the area led to misuse and poor management of the latrine and other public facilities

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