

HOUSEHOLD WATER SANITATION PRACTICE AND FACILITIES SURVEY IN GASHU'A TOWN YOBE STATE NIGERIA.

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ABSTRACT

Poor sanitation practice is linked to the causes and transmission of many water-borne diseases such as diarrhoea, cholera, dysentery, hepatitis, and polio, it is estimated that it causes the death of 432000 people globally each year. Sanitation of modern days goes beyond the disposal of human excreta but a total way of managing environment to prevent disease and promote health of the people. The study has the following objectives; 1.To assess the availability of sanitation facilities at household level in Gashu'a town 2.To examine of practice of sanitation at household level in Gashu'a town. The aim of this study was to find out the availability and proper utilization of sanitation facilities in Gashu'a town. The study was carried out in Gashu'a town Yobe state Nigeria. Descriptive cross sectional research design was used while Cluster and simple random sampling were used to select households. Three hundred and seventy nine (379) sample size was determined using Cochran sampling technique for cross sectional studies. Majority of the households 76.8% were found to be using improved sanitation facilities of either open-pit latrines with slab or water sealed latrine. Most of the respondents 79.7% practice proper solid waste management by dumping it in a designated dumping site, burying (landfill) or burning it while the rest engage in improper dumping of refuse. Though most of the households were found to have been using a lid to cover their water storage containers, however, a vast number of households are still living their containers open despite using wide-mouth containers that are vulnerable to contamination. It was recommended that There is a need for government and non-governmental organizations to engage in creating awareness among the community members on dangers associated with open defecation, improper dumping of garbage and on water sanitation and hygiene practices as a whole.

Keywords: Household, water, sanitation, facilities, Survey.

I. INTRODUCTION

Poor sanitation practice is linked to the causes and transmission of many water-borne diseases such as diarrhoea, cholera, dysentery, hepatitis, and polio, it is estimated that it causes the death of 432000 people globally each year. Despite the death, still more than half of the global population lacks safely managed sanitation facility [1].

Sanitation of modern days goes beyond the disposal of human excreta but a total way of managing environment to prevent disease and promote health of the people [2]. Safe sanitation practice is sacrosanct and must be duly followed to protect the lives and wellbeing of the people, hence it is of great public health importance [1].

In Nigeria despite the fact that majority of the households use improved sanitation facilities, still close to half of the population 45.5% are using either unimproved sanitation or practice open defecation. However in Yobe state only 30.8% of the household have improved sanitation facilities leaving 69.2% using unimproved facilities or practice open defecations this might be connected with the fact that the state has 33.4% prevalence of diarrhoea cases of under 5 children [3].

Objectives of the study

1. To assess the availability of sanitation facilities at household level in Gashu'a town
2. To examine of practice of sanitation at household level in Gashu'a town.

The aim of this study was to find out the availability and proper utilization of sanitation facilities in Gashu'a town

II. MATERIALS AND METHODS.

The study was carried out in Gashu'a town Yobe state Nigeria. Descriptive cross sectional research design was used while Cluster and simple random sampling were used to select households. Three hundred and seventy nine (379) sample size was determined using Cochran sampling technique for cross sectional studies. Data was collected through administration of questionnaire and observations of water and sanitation facilities in the respective households. However, SPSS version 21 was used to analyse the data collected, descriptive statistics was carried out to obtained frequencies and percentages of households' water sanitation and hygiene practice in the community.

Research ethical clearance was collected from Yobe state ministry of Health and Human Services for the purpose of this study, consent of the households were obtained before the survey was conducted.

III. RESULTS

Table 1 showing results of household water and sanitation facilities and practice

VARIABLES	FREQUENCY	PERCENTAGE (%)
Containers use in storing water		
Gallon	30	7.9
Bucket (wide mouth)	66	17.4
Drum (wide mouth)	94	24.8
Clay pot (wide mouth)	153	40.4
Metal pot (wide mouth)	19	5.0
Tank (wide mouth)	17	4.5
Total	379	100.0
Container cover with lid		
Yes	223	58.8
No	156	41.2
Total	379	100.0
Time of washing containers		
Every day	119	31.4
Every week	69	18.2
Before storing water	73	19.3
When it is dirty	71	18.7
After a long time	24	6.3
Every month	7	1.8
Never	16	4.2
Total	379	100.0
Facility Use For Excreta Disposal		
Water sealed latrine	111	29.3
Open pit latrine with slab	180	47.5
Open pit with no slab	48	12.7
Open field	40	10.6
Total	379	100.0
Ways of managing solid waste		
Burning	67	17.7
Burying (Land fill)	56	14.8
Dumping on designated site	179	47.2
Dumping in river	31	8.2
Dumping in drainage	14	3.7
Dumping in an open field	32	8.4
Total	379	100.0

All the households visited in this study were using containers to store water collected from different sources. Most of the households 153(40.4%) use Clay pot to store water, 93(24.8%) of the households uses drum, and Bucket was used by 66(17.4%), 30 of the households uses Gallon, while 17 were reported to have been using Tank to store water. However, majority of households 223 (58.8%) have lid covered on their water storage container, while 156 (41.2%) were found to be using nothing to cover their water storage containers.

The result shows that most households 119 (31.4%) wash their water storage containers on daily basis, and 73 (19.3%) used to wash their containers whenever they will store water, 71(18.7%) wash their container only when they think is dirty. However 24 (6.3%) households were reported to have been washing their water storage containers after a long time, and 7(1.8%) were washing it on monthly basis, while 16 (4.2%) claimed that they are not washing their water storage containers at all.

Most of the households 180 (47.5%) use Open-pit latrine with a slab for excreta disposal, 111(29.3%) were reported to have been using water sealed latrine, while 48 (12.7%) and 40 (10.6%) households were using open-pit without slab and open field for excretion.

On solid waste management, majority of the households 179 (47.2%) were using designated dumping site to discard their solid waste, and 67 (17.7%) of the households were burning their solid waste while 56 (14.8%) were reported to have been digging a hole to burying it. However, 31 (8.2%) households were using the river as their solid waste dumping ground, and 32 (8.4%) of the households dump it in an open field, while 14 households dump their solid waste in drainages.

IV. DISCUSSION

Out of the 379 households visited in this study, only 30 were found to be using Gallon which is narrowed mouth container while the rest 349 (92.1%) used wide-mouth containers to store water which can easily get contaminated at the household level if not properly covered with a lid, it is similar to the result obtained by [4] which shows that 75% of the households are using wide-mouth containers, and is in contrast with what [5] found which revealed that 63% used narrow mouth closed containers. However this research further revealed that 58.8% of the households were using a lid to cover their water containers which is similar to the study carried out by [6] were 90% of the households surveyed covered their containers with lid. Furthermore, taking into consideration the percentage of those households that were reported to have not been covering their water storage containers with a lid, it is believed that water can easily get contaminated at the household level.

The study revealed that 31.4% of the households clean their containers daily while 19.3% clean it whenever they will store water, the result is in agreement with that of [5] and [7] in which only 33% and 11% were found to

have been cleaning water storage containers on daily basis, the study is in contrast with that of [4] who reported that 90% of the household studied were washing their water storage containers daily.

Majority of the households 76.8% were found to be using improved sanitation facilities of either open-pit latrines with slab or water sealed latrine, this result is in contrast with what [8] found which disclose that 85.94% of households were using unimproved toilet. However the result of the survey carried out by National health demographic survey is also in disagreement with our studies which revealed that only 30.8% used improved sanitation facility while 69.2 % of the households were using unimproved sanitation facilities or practice open defecation, this might not be unconnected with the prevalence of diarrhoea in the state [3].

Most of the respondents 79.7% practice proper solid waste management by dumping it in a designated dumping site, burying (landfill) or burning it while the rest engage in improper dumping of refuse, the result found is similar to the one disclosed by [9] 61% of the households were reported to have been practicing appropriate solid waste disposal. The remaining households that were found disposing their waste improperly might be doing it because of the distance between their households and the designated places of waste disposals and this can easily contaminate their water and lead to diseases such as diarrhoea, cholera, typhoid and polio [1].

V. CONCLUSION

Though most of the households were found to have been using a lid to cover their water storage containers, however, a vast number of households are still living their containers open despite using wide-mouth containers that are vulnerable to contamination. Proper waste disposal was practice by most of the households and majority uses improved sanitation facilities but still many are left behind. There is a need for government and non-governmental organizations to engage in creating awareness among the community members on dangers associated with open defecation, improper dumping of garbage and on water sanitation and hygiene practices as a whole. The study has limitation because cross-sectional design was used hence the result cannot be generalized.

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