



## **Availability And Utilization Of Sanitary Facilities In Selected Secondary Schools In Yenagoa, Bayelsa State**

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### **ABSTRACT**

This study investigated the availability and utilization of sanitary facilities in selected secondary schools in Yenagoa of Bayelsa State, Nigeria. Three research questions were formulated. The study adopted the descriptive survey design. Four hundred (400) students were drawn from the 15,214 secondary school students in Yenagoa using the stratified random sampling technique. The instrument for data collection was the questionnaire designed by the researcher. The instrument was validated by 3 experts in the department of Human Kinetics, Health and Safety Education, Ignatius Ajuru University of Education. The reliability of the instrument was determined using the Pearson Product Moment Correlation which gave a reliability coefficient of 0.8. The result show that there is lack of sanitary urinals, hand-washing point, soap for hand-washing and anal cleaning materials in the latrine. The condition of the sanitary facilities in most schools are in a deplorable state, as most of the latrines are in a poor condition, do not offer privacy, hand washing facilities non-functional and crossly inadequate for students. The utilization of available sanitary facilities is low. Based on the findings of study, some recommendations were made, which include: The provision of toilet facilities in schools should be one of the government priorities when awarding contracts for building of blocks in any school without those facilities, proper hygiene practices should be encouraged by the school hygienist or health education teacher in schools.

**Keywords:** Availability, utilization, sanitary facilities, secondary schools and Yenagoa.

### **INTRODUCTION**

The direct consequences of lack of access to safe drinking water and sanitary services are enormous with incidences of water-borne diseases and parasitic infections highest among the poor, especially school-aged children (WHO, 2010; 2007). It was reported that inadequate access to safe water and sanitary services, coupled with poor hygiene practices, is the cause of at least one quarter of all child deaths and 20% of the total childhood disease burden globally (UNICEF, 2005). WATER, sanitary and hygiene are also linked to school attendance and performance (particularly among girls), safety and security of women and girls, and socio-economic development of communities (UNICEF, 2006). Therefore, providing adequate levels of water supply, sanitary and hygiene in schools is of direct relevance to the MDGs of achieving universal primary education, promoting gender equality and reducing child mortality, and supportive to achievement of other goals (WHO, 2010 & Adam, Bartram, Chartier, Sims, 2009).

In Nigeria, sanitary access varies widely as low as 15% in some areas and higher than 80% in others while about 58.65% of primary and secondary schools do not have improved sanitary facilities (Sanitary Fact Sheet, 2017). Currently, Nigeria is part of the countries whose sanitary coverage rates are between 20 and 40% points below the MDG targets (Banerjee & Morella, 2011). It was observed that many of the available data and progress reports on the Millennium Development Target on sanitary focus on access at household levels without reference to access at public places like bus stations, schools, markets, religious and refugee camps, and construction sites (Adeniji & Afolabi, 2010). More importantly, boosting sanitary in public places like secondary schools could lead to the attainment of other MDGs in terms of health, education and economic development (WHO, 2010; Adam et al, 2009 & United Nations (UN), 2011). This study intends to investigate the availability and utilization of sanitary facilities in selected secondary schools in Yenagoa, Bayelsa State, to determine specific needs for boosting sanitary.

### **Statement of Problem**

Sanitary facilities need to be properly put in place in schools to provide an optimal sanitary environment which is safe and conducive for physical, mental and emotional health of the student in order to achieve maximum benefits from educational programmes (Joshua 2004; Vernon, 2003). Human excreta which form an important cause of environmental pollution need to be properly disposed through modern methods that are socially and culturally acceptable to the people (UNICEF, 2009; Dworsky, 2007). Apart from its availability, sanitary facilities should proportionately meet the demand of the population of both students and members of staff in such institutions.

It is sad to note however, that a visit to most schools, especially public school, would reveal serious concern about the school environment where students learn, some of which lack or characterized with inadequate toilet facilities (Weidner 2009; UN-water decade programme, 2007). According to Odimegwu (2014), a great number of public nursery, primary, secondary and tertiary schools across Nigeria do not have lavatories. Some of them that have toilets, either the restrooms do not have doors or water system for users' convenience. For example, in 2013, about 80% of primary schools in Enugu had no toilet amenities and both the students and teachers defecate in the bush. Schools that were affected were given as those in Udenu, Igbo-Eze North, Igbo-Eze South, Igbo-Etiti, Nsukka and Uzo-Uwani local government areas (Odimegwu, 2014).

In Yenagoa, Bayelsa State, the researcher observed that most public secondary schools do not have sanitary facilities. Those that have toilet facilities do not have water system, while others are dilapidated and cannot be utilized. Most teachers and students, therefore, defecate in the bush around the school premises. Defecating in the bush by students is dangerous as many do not have protective sandals and might be attacked by snake or bitten by poisonous ants. Most worrisome is the fact that the provision of sanitary facilities seems to be considered a privilege rather than a necessity by most school authorities and suggest an uncertain end to this ugly trend. To the best of the researcher's knowledge, there is no research on the availability and utilization of sanitary facilities in secondary schools in Yenagoa, Bayelsa State. It is against this backdrop that the study was designed to investigate the availability and utilization of sanitary facilities in selected secondary schools in Yenagoa Bayelsa State to determine specific needs for boosting sanitary.

### **Purpose of the Study**

The purpose of the study is to determine, through a cross sectional survey research design, the availability and utilization of sanitary facilities in selected secondary schools in Yenagoa, Bayelsa State. The study achieved the following objectives.

1. Determine the level of availability of the sanitary facilities in selected secondary schools in Yenagoa Bayelsa state.

2. Assess the state of sanitary facilities in selected secondary schools in Yenagoa, Bayelsa State.
3. Determine the level at which secondary school students utilize available sanitary facilities.

**Research question**

1. What is the level of availability of the sanitary facilities in selected secondary schools in Yenagoa Bayelsa State?
2. What is the state of sanitary facilities in selected secondary schools in Yenagoa, Bayelsa State?
3. What is the level of utilization of available sanitary facilities by secondary school students?

**RESEARCH METHODS**

**Research design**

The research design adopted for this study is a descriptive cross-sectional survey design.

**Population for the study**

The population for the study consists of all secondary school students in Yenagoa, Bayelsa state of Nigeria. According to records available in the ministry of education, Yenegoa branch, there are fourteen (14) secondary schools in Yenagoa with a population of 15214.

**Sample and Sampling Technique**

The sample size for the study consists of 401 students. Taro Yemen’s formula for calculation of sample size for a large population was used to calculate the sample size for a large population was used to calculate the sample size for the study. Simple random sampling technique was used to select 8 schools in Yenagoa. The stratified random sampling technique was used to draw the sample size, which percentages were accorded to each school based on its population.

**Instrument for data collection**

The instrument for data collection was a self structured questionnaire titled: availability and utilization of sanitary facilities in selected secondary. The questionnaire comprises of two sections; A and B. Section A provided for demographic data of respondents, while section B deals with variables under study.

**Validity of the instrument**

The structured questionnaire was given to the researcher’s supervisors and two other lecturers in the department of Human Kinetics, Health and Safety Education for face and content validity. Their corrections were incorporated in drafting the final copy of the instrument.

**Reliability of the instrument**

The reliability of the instrument will be established through the test re-test method using twenty respondents from Ogbia L.G.A who are not part of the sample under study. After two weeks the researcher will re-administer the same questionnaire to the same respondents. The results of the two tests were correlated for reliability using Pearson Product Moment Correlations and attained a reliability coefficient of 0.8. The reliability value of 0.8 is high enough and was used for the study.

**Procedure for data analysis**

Data collected was analyzed using the simple percentages and frequencies.

**RESULTS**

**Table 1: Availability of sanitary facilities**

Item	Yes F(%)	No F(%)	Total F(%)
Are there latrines in your school?	194(48.5)	206(51.5)	400(100)
Girls sanitary facilities separate from the boys	181(45.25)	219(54.75)	400(100)
Urinal present in the school	186(46.5)	214(53.5)	400(100)
Is there hand-washing point in your school?	167(41.75)	233(58.25)	400(100)
Water available at the hand washing point?	179(44.75)	221(55.25)	400(100)
Soap for hand washing at the hand washing point?	152(38)	248(62)	400(100)
Do your school have water supply?	239(59.75)	161(40.25)	400(100)
Are there anal cleaning material in the latrine (tissue paper)	163(40.75)	237(59.25)	400(100)

Table 1 showed that availability of sanitary facilities among the schools. 62% of the respondents indicated that there is no soap for hand washing at the hand washing point, 59.25% indicate the absent of anal cleaning materials in the latrine, 58.25% indicated that there is no hand washing point in their school, 55.25% also indicated that there is no water at the hand washing point, 54.75% reported that girls sanitary facilities are not separated from the boys, 53.5% reported that urinal is not present in their school, 51.5% indicated that there is no latrine in their school and 40.25% reported that there is no water supply in their school.

**Table 2: Frequency distribution showing types of latrine available in schools**

<b>Item</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Pit latrine	31	16.0
Water closets	59	30.4
Bucket	27	14.0
Bushes	77	39.7
<b>Total</b>	<b>194</b>	<b>100</b>

Table 2 showed the type of latrine in schools. 39.7% reported that the bushes around the school were used as latrine, 30.4% indicated that they have water closet latrine, 16% reported that the school has pit latrine and 14.0% highlighted that bucket latrines was used in the school.

**Table 3: Frequency distribution showing the type of water supply in schools**

<b>Item</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Bore hole	67	28.0
Well	44	18.4
Rain harvest	63	26.4
Public standpipe	65	27.2
<b>Total</b>	<b>239</b>	<b>100</b>

Table 3 revealed the type of water supply in schools. Majority 28.0% indicated that borehole was their source of water supply, 27.2% report that they get water from public standpipe, 26.4% indicated that the water supply in the school is rain harvest while 18.4% reported that well water is the source of water supply in the school.

**Table 4: State of sanitary facilities**

<b>Item</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Condition of school latrine</b>		
Poor	183	45.75
Good	116	29
Very good	101	25.25
<b>Is the area around the latrine bushy?</b>		
Yes	234	58.5
No	166	41.5
<b>Total</b>	<b>400</b>	<b>100</b>
<b>Do all the latrines have doors?</b>		
Yes	191	47.75
No	209	52.25
<b>Total</b>	<b>400</b>	<b>100</b>
<b>What is the condition of the latrine?</b>		
<b>Floor</b>		
Wet	108	26.25
Dry	81	20.25
Clean	90	22.5
Have faecal matter	124	31
<b>Total</b>	<b>400</b>	<b>100</b>
<b>What is the condition of the walls?</b>		
In good condition	170	42.5
Have cracks	230	57.5
<b>Total</b>	<b>400</b>	<b>100</b>
<b>Do the latrines offer complete privacy?</b>		
Yes	167	41.75
No	233	58.25
<b>Total</b>	<b>400</b>	<b>100</b>
<b>Are the hand washing facilities functional?</b>		
Yes	154	38.5
No	246	61.5
<b>Total</b>	<b>400</b>	<b>100</b>
<b>Which of the following is true about the latrine in your school?</b>		
Enough for all student, there is no over crowding	111	27.75
Not enough, but somehow we manage	151	37.75
Not enough, there is always overcrowding	138	34.5
<b>Total</b>	<b>400</b>	<b>100</b>

Table 4 revealed the condition of sanitary facilities in the selected schools. 45.75% of respondents report that the condition of the latrine is poor, 29% reported good and 25.25% reported very good. 58.5% indicated that the area around the latrine is bushy, 52.25% also highlighted that all the latrines do not have doors. Also, 31% indicated that the floor of the latrine have faecal matter, 26.25% indicated that it was wet, 22.5% indicated it was clean and 20.25% indicated dry. 57.5% reported that the walls of the latrine have cracks, while 42.5% reported that it was in good condition. 58.25% reported that the latrines do not offer complete privacy; also, 61.5% reported that the hand washing facilities are not functional. 37.75% reported that the latrine are not enough for them but they manage, 34.5% indicated that the latrines are not enough and there is always overcrowding while 27.75% indicated that it was enough for all student without overcrowding.

**Table 5: Utilization of available sanitary facilities**

Item	Yes F(%)	No F(%)	Total F(%)
Have you used your school latrine before?	180(45)	220(55)	400(100)
Do you wash your hands after visiting the toilet?	206(51.5)	194(48.5)	400(100)
Do you wash your hands with soap?	186(46.5)	214(53.5)	400(100)
Is the water being used by everybody in school?	172(43)	228(57)	400(100)

Table 5 showed the utilization of sanitary facilities in schools. 57% indicated that the water is not used by everybody in school, 55% reported that they have not used the school latrine before, 53.5% reported not washing their hands with soap and 48.5% indicated that washing hands after visiting the toilet.

**Table 6: Frequency distribution showing reasons for not using the school latrine**

Item	Frequency	Percentage (%)
It is always dirty	68	31.0
It is always locked	37	16.8
The floor is water	27	12.3
There is no water	28	12.7
There is no privacy	22	10
I prefer using the bush around	38	17.2

Table 6 revealed the reasons for not using the school latrine. The reason indicated by the respondent were that: it is always dirty 31.0%, it is always locked 16.8% and the floor is water 12.3%, there is no water 12.7%, there is no privacy 10% and I prefer using the bush around 17.3%.

## DISCUSSIONS

Sanitary facilities plays an important part in the life of human in every sphere of their endeavours such as school, home, office etc. The finding of this study (table 1) revealed that 62% of the respondents indicated that there is no soap for hand-washing at the hand washing point. 59.25% reported absence of anal cleaning materials in the latrine. 58.25% there is no hand washing point in their school, 55.25% there is no water at the hand washing point, 54.75 reported girls sanitary facilities not separated from the boys, 53.5% urinal is not present, 51.5 indicated absence of latrine and 40.25% no water supply in their school. The result of this study is similar to that of Aremu (2012) which reported that 5.5 to 26.5% of schools have sanitary facilities in adequate quantity, quality or usage; 23% have less number of facilities, 42% have grossly inadequate facilities and 12.5% have no sanitary facility. The facilities also corroborates that of Awauh and Ackerson (2001) which reported 53% of schools without toilet facilities while 83% without safe water on site. The findings are also in consonance to Seid and Kumie (2009) which reported that, the overall latrine to school population ratio was 1:64, which was about twice less than the recommended one, the ratio female student was significantly lower than that for males, drinking water facilities and hand washing facilities were very much limited. However, the findings are in contrast with that of Majra and Gur (2010) which reported a higher availability of 50% adequate latrine boys and 60% for girls. The findings are also in variance with that of Agbo et al (2012) which reported a higher availability of 84.9% with toilet facilities, 54.7% separate toilet for different sexes. The variance in results is as a result of geographical locale and the type of schools (government and private). The type of latrine available in schools were pit latrine 16%, water closet 30.4%, bucket 14% and others (bushes) table 2. The types of water supply in schools as revealed in the study are borehole 28%, well 18.4%, rain harvest 26.4% and public standpipe 27.2% table 3.

The condition of an object determine its usefulness to individuals. The findings of the study reveals that majority 45.75% reported poor condition of latrine, 58.5% indicated that the latrine was surrounded by bushes, 52.25% latrines do not have doors, 31% floor of latrine have faecal matter, 57.5% walls has cracks, 58.25% latrines do not offer complete privacy, 61.5% hand washing facilities are not functional and 37.75% latrine not enough for the students. The findings are in line with the findings of WHO (2009) which reported that sanitary situation in developing countries are in a deplorable state. The findings are also similar to the survey of Yopougo area by Kyalo (2009) ascent that 62% of WLs do not wore and there are about WC/toilet per 381 standards and one urinal per 892 students. The findings also conform to that of Seid and Kumie (2013) which reported that school population ratio to latrine was 1:64, ratio for female student was significantly lower than for males. Also, UNICEF (2004) reported that most schools in developing countries have non-functional latrines, while some do not have. Also, in consonance to the finding is the survey by FANSA (2013) which reported that 45% of toilets in schools were in a poor condition, majority of toilet facilities lack maintenance and repair, 30% of schools do not have hand washing facilities. The similarity in findings indicates the poor state of sanitary facilities in schools. There were no literatures contradicting with the findings of the study.

Proper utilization of sanitary materials reduces the outbreak of several excreta related infections. The study revealed that 57% respondents indicated the water is not used by everybody. 55% have not used the school latrine before 53.8% reported not washing the hands with soap and 48.5% indicated not washing hands after visiting. The findings are in line with that of Xuan, et al (2012) which reported 55% urinating and 53% defecating the open, while 3% used the school latrine. The findings are also in line with Nansereko (2010) which reported 57.5% students complain of poor cleanness of facilities, 30% use the bush, 20% wash their hands sometime, 80% do not bother at all.

## CONCLUSION

Conclusively, the result of this present study revealed lack of sanitary facilities among the selected secondary schools, ranging from lack of latrines, urinals, hand-washing point, soap for hand washing and anal cleaning materials in the latrine. The condition of the sanitary facilities in most schools are in a deplorable state, as most of the latrines are in a poor condition, do not offer privacy, hand washing facilities, non-functional and crossly inadequate for students. The utilization of available sanitary facilities is low.

## RECOMMENDATIONS

Based on the findings the following recommendations are made:

1. The provision of toilet facilities in schools should be one of the government priorities when awarding contracts for building of blocks in any school without those facilities.
2. School authorities should repair and maintain the faulty available facilities in the schools.
3. Proper hygiene practices should be encouraged by the school hygienist or health education teacher in schools.
4. School administration should develop a process where parents should have to donate soap and other anal cleaning materials once a term.

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