

AVAILABILITY AND UTILIZATION OF SANITATION AND HYGIENE FACILITIES IN PUBLIC PRIMARY SCHOOLS IN ILORIN METROPOLIS, KWARA STATE**BY****Kuranga, Yunus: Department of Adult and Primary Education, Faculty of Education, University of Ilorin, Ilorin****Adebayo, Kayode: Department of Adult and Primary Education, Faculty of Education, University of Ilorin, Ilorin****Sodiq, Toyin: Department of Adult and Primary Education, Faculty of Education, University of Ilorin, Ilorin****&****Ahmed, Tijani Ayinla: Department of Adult and Primary Education, Faculty of Education, University of Ilorin, Ilorin; E-mail: kuranga.ay@unilorin.edu.ng****Abstract**

The study investigated the availability and utilization of sanitation and hygiene facilities in public primary schools within Ilorin metropolis of Kwara State. The research questions formulated for the study were: Are there sanitation and hygiene facilities for pupils' use in public primary schools in Ilorin metropolis, Kwara State? ii) To what extent are the available facilities being properly utilized by the pupils in public primary schools in Ilorin metropolis? iii) Do the number of pupils correspond with the number of available sanitation and hygiene facilities in the schools. The population of the study was 210 public primary schools within Ilorin metropolis. 21 schools were selected as sample using stratified random sampling technique to reflect the three local governments that constitute Ilorin metropolis. The subjects were the head teachers in the selected schools. The availability and utilization of sanitation and hygiene facilities were assessed using checklist and questionnaire respectively. Percentage, frequency counts, ratio and means were used in the analysis. The result showed that the sanitation and hygiene facilities are inadequately available, the available ones were not being utilized, and there was no proper utilization of the available sanitation and hygiene facilities by the pupils in public primary schools in Ilorin metropolis.

Keywords: *Availability, Utilization, Sanitation and hygiene facilities*

Introduction

There is prevalence of sanitation and hygiene related diseases in many countries especially the developing countries of the world like Nigeria, causing many people, children in particular, to fall ill or even die. Improve hygiene and sanitation practices are essential if transmission path of sanitation and hygiene related diseases are to be reduced, especially among children who are believed to be more susceptible to infection diseases. The availability, accessibility and usage of Water, Sanitation and Hygiene (WASH) facilities are associated with lower levels of morbidity, mortality and expenditure on the treatment of WASH-related diseases particularly among the children under five years of age (Joshi & Amadi, 2013). The study also showed that lack of appropriate sanitation and hygiene facilities in schools often lead to diarrhea, worm infections and other childhood diseases which are associated with growth and cognitive impairment in children.

The World Health Organization (WHO) reports that diarrhea is the second leading cause of death in children under five years of age, accounting for 1.7 billion cases, and the death of 525,000 children annually (WHO, 2017). In Nigeria, over 150,000 deaths occur annually among children due to diarrhea. The National Population Commission (2019) in his Demographic and Health Survey, report that the infant mortality rate is 69 death per 1,000 live birth, while the under 8 mortality was 132 death per 1,000 live birth. This implies that more than 1 in 8 children in Nigeria die before their 8th birthday. The infant

and child mortality survey showed that under 8 mortality declined from 157 deaths per 1,000 live birth in 2008. Similarly, the infant mortality rate decline from 75 death per 1,000 live birth in 2008 to 67 death per 1,000 live birth in 2018. The survey also revealed that the mortality rate is high in the north and low in the southern part of Nigeria. Among the reason responsible for this is the poor hygiene and sanitation practices in the communities.

After the family, schools are considered to be the most important places of learning for children and stimulate change. If sanitary facilities in schools are available in good quality and quantity, they can serve as a model, and teachers can act as role models. It is believed that schools can also influence communities through outreach activities, since through their pupils and students; schools are in regular touch with majority of the household in a community. Appropriate sanitation and hygiene education is likely to bring about the intention to change hygiene behaviour. In order to allow people to transform intention to change into real change otherwise referred to as good health behaviour, appropriate sanitation and hygiene facilities are required. Ensuring access to hygiene and sanitation services in schools promotes the retention of children in school (UNICEF, 2013). Apart from reducing the burden of disease among children, staff and their families and creating a healthy environment for the children to learn more effectively it will also contribute towards achieving the sustainable development goal (SDG)3, which aimed at ensuring a healthy life and wellbeing of all, (SDG)4, which seek to achieve an inclusive and equitable quality education and lifelong learning opportunities for all, (SDG)5, which concentrate on attaining gender equality and empowerment of all women and girls. Providing schools especially primary schools with proper and adequate hygiene and sanitation facilities is capable of encouraging children to develop a healthy behaviour for life (UNICEF, 2012). The statements above shows that in an environment characterized with poor hygiene and sanitation facilities, children are unable to fulfill their education potentials.

Ikogho et al (2013), revealed that sanitation and hygiene facilities in Ugheli north local government of Delta State public primary schools were inadequate and the usage of the available ones are hindered by poor maintenance culture and lack of hand washing supplies. The availability and utilization of sanitation and hygiene facilities in public primary schools have become a source of concern among the stakeholders in education, especially in lower basic education in Nigeria. Aremu, (2013), observed that sanitation facilities in Ilorin need more attention because they are insufficient and poorly located, constructed or poorly maintained. The school has direct contact with vast majority of children between the age of five to seventeen years, for about five to six hours a day and up to twelve to thirteen critical years of their physical, intellectual, social and psychological development. School age is referred to as the period of rapid growth and development (formative period) and it constitute about 25% of the population of the average Nigeria community. The health habits inculcate in them at this period can be carried on to adulthood. The health of children is strongly linked to their academic success.

UNICEF (2012) reveal that about half of the sickness found among school children in north East Nigeria are related to unsanitary condition and lack of personal hygiene. The study opined that childhood is the appropriate period for children to learn hygiene behaviours, hence the need to pay more attention on children. Children are believed to be future parents and whatever they learn is likely to be applied in the rest of their lives. If children are involved in the development process, they can become change agent within their families and a stimulus to community development. Schools are often more than just places for learning and behavioural change. If school hygiene and sanitation facilities are not properly maintained and used or are completely absent, schools become a dangerous place where diseases are transmitted. If we actually want to reduce the occurrence of sanitation and hygiene related diseases in our schools, improved facilities are not enough; this has to be complemented with behavioural changes, leading to proper use of the facilities.

Children tend to be absent from school, frequently get sick and perform poorly when suffering from poor hygiene and sanitation related diseases. The diseases are usually transmitted as a result of close interactions in school. It is believed that diseases are easily spread when the children are in school when compared to any other places in the society. Childhood diseases, according to WHO (2017) are preventable by simple adherence to the principle of good sanitation and hygiene practices and can significantly reduce deaths caused by these diseases by half. There is, therefore, the need to examine the extent of availability of hygiene and sanitation and their utilization among public primary schools children in Ilorin metropolis of Kwara state.

Statement of the problem

Learning, health, hygiene and sanitation are inter related as children often absent in school or perform when they are ill or suffering from diseases, especially childhood communicable diseases. These diseases spread fast in an environment where children gather and interact for many hours in a day. Many parents allow their children to attend school even when they are showing symptoms of some of these childhood communicable diseases thereby making the spread of diseases to be very fast in schools than any other places in the society. These diseases according to WHO (2007) are preventable by adherence to simple hygiene and sanitation practices in schools. There is therefore the need to assess the availability and utilization of hygiene and sanitation facilities in public primary schools in Ilorin metropolis. Kwara state.

Purpose of the Study

The main objectives of this study are to determine the availability and utilization of sanitation and hygiene facilities in public primary schools in Ilorin metropolis, Kwara State.

Specifically, this study was designed to:

1. Ascertain the availability of sanitation and hygiene facilities in public primary schools in Ilorin metropolis.
2. Find out if the available sanitation and hygiene facilities are being properly utilized by the pupils.
3. Ascertain if the number of sanitation and hygiene facilities correspond with the number of pupils in the school.

Research Questions

1. Are there sanitation and hygiene facilities for pupils' use in public primary schools in Ilorin metropolis?
2. To what extent are the available facilities being properly utilized by the pupils in public primary schools in Ilorin metropolis?
3. Do the numbers of pupils correspond with the number of available sanitation and hygiene facilities in the schools?

Methodology

The design for this study is descriptive survey which describes the availability and level utilization of sanitation and hygiene facilities in public primary schools in Ilorin metropolis. The population for the study consisted of all the head teachers or their representatives in all government owned primary schools in the three (3) local governments that make up Ilorin metropolis of Kwara state. There are two hundred and ten (210) government owned primary schools in Ilorin metropolis of Kwara state (Kwara state universal basic education board, 2019) with 210 head teachers. A total of twenty one (21) schools were selected by simple random sampling technique to reflect the three local governments. Data was collected with availability and utilization of sanitation and hygiene facilities questionnaire (AUSHFQ) and checklist with the support of two research assistants.

The questionnaire (AUSHFQ) and a checklist were developed by the researcher and distributed. The questionnaire was a 9 item questionnaire with two sections. Section A personal data, and section B, the questionnaire items for the utilization of sanitation and hygiene facilities. Respondents were asked to tick

for the options very Often (4), Often (3), Sometimes (2), Never (1) for the section B on a four point-likert type scale while the checklist was developed to ascertain the availability of sanitation and hygiene facilities in schools. The instruments for this study were validated by experts in the department of health promotion and measurement and evaluation faculty of education, university of Ilorin. Reliability of the instruments was determined by using the split-half method. The two means were correlated and the reliability co-efficient of 0.95 was obtained and was therefore considered reliable.

The sampled schools were visited to observe the availability of facilities and the questionnaire was administered to the respondents by the researcher and two trained research assistants who were adequately trained on the administration of the instrument. Their involvement help to ensure high percentage rate of return. Data were collected and analyzed using frequency counts, percentage, ratio and means. Frequency counts and percentage were used to analyse the data gathered from the checklist. Adequacy of the facilities were also analysed using ratio of total number of sanitation and hygiene facilities and total number of pupils per school. While the mean for the utilization of availability were derived using four point-likert type scale of very often (4), often (3), sometimes (2), and Never (1).

This study is concerned with the availability and utilization of sanitation and hygiene facilities for pupils' use in public primary schools in Ilorin Metropolis, Kwara State, Nigeria. Out of Twenty-One (21) checklists and questionnaires administered, all were successfully filled and returned (100%). The data collected are presented below and analysed using frequency counts and percentage, ratio, mean and standard deviation for the analysis of the demographic information and answering the research questions generated. The data were analysed using Statistical Package for Social-Sciences (SPSS 16.0) window version. The result of the analysis presented below:

Results

Three research questions were generated, and were answered with the use of frequency count, ratio, mean and standard deviation. The results were presented in the table below:

Research Question 1: *Are there hygienic and sanitation facilities for pupils' use in public primary schools in Ilorin metropolis?*

In order to ascertain the availability of hygienic and sanitation facilities in public primary schools in Ilorin metropolis, frequency count and percentage is used. The result is presented in the table below;

Table 4: Percentage analysis of the availability of hygienic and sanitation facilities in public primary schools

Facilities	No of school With	No of school Without	% Availability
Sink with running water	8	13	38.1%
Container with tap running water	7	14	33.3%
Fundamental source of water	4	17	19.4%
Water sewage container	3	18	14.3%
Towel and soap for hand washing	6	15	28.6%
Pit latrine with water	16	5	76.2%
Pit latrine without water	10	21	47.6%
Modern water system toilet	5	16	23.8%
Waste disposal system	14	7	66.7%
Brooms and mopping sticks	17	4	81.0%
Total Number of Sampled Schools	21		

The above table revealed that 8 (38.1%) schools with have sink with running, 7 (33.3%) schools with have container with tap runner water, 4 (19.4%) schools have fundamental source of water like (tap water, bore hole, well water), 3 (14.3%) schools have water sewage disposal, 6 (28.6%) schools have towel and

soap for hand washing, 16 (76.2%) schools have pit latrine with water, 10 (47.6) schools have pit latrine without water, 5 (23.8) schools have modern water system toilets, 17 (66.7%) schools have waste disposal system, while 17 (81.0%) schools have brooms and mopping sticks. This revealed that majority of the public primary schools in Ilorin Metropolis have no adequate hygienic and sanitation facilities in school.

Research Question 2: *To what extent are the available facilities been properly utilized by primary school pupils in Ilorin metropolis?*

Table 4: Mean and Standard deviation Analysis showing the extent to which hygienic and sanitation facilities are properly utilized

S/N	ITEMS	X	SD	Rank
1.	Pupils have access to the toilet	2.19	1.167	7 th
2.	Pupils make use of the toilet/latrine during school hours	2.47	1.167	5 th
3.	Pupils wash their hands with water and soap after using the toilets	2.16	.995	8 th
4.	All the toilet/latrine in the school are functioning	2.57	1.065	2 nd
5.	Water storage containers are washed everyday	2.43	.978	6 th
6.	I ensure regular supply of water in the school	1.90	1.136	9 th
7.	I ensure availability of water and soap in the school for hand washing	2.48	1.250	4 th
8.	Waste are disposed regularly	2.52	1.284	3 rd
9.	Classrooms are cleaned every morning	2.62	1.030	1 st
Mean Value		2.37		

Table 5 above revealed the extent of utilization of available hygienic and sanitation facilities in public primary schools in Ilorin Metropolis. This is evident by the mean value of all the items in the table above, which are all less than 2.5 except the means of the respondents on items 4, 8, and 9 which are greater than 2.5. It was revealed that most of the hygienic and sanitation facilities are not properly utilized in by the pupils in public primary schools due to the low availability of the so called facilities. While it was revealed that the little toilet/latrine are often used by the pupils, wastes are properly disposed, and classrooms are cleaned every morning. This was evident by their mean values (2.52, 2.57, and 2.62 respectively) which are all greater than the constant value of 2.5. The overall mean of 2.37 indicated that, there are low or little availability of hygienic and sanitation facilities for the pupils' use in public primary schools in Ilorin Metropolis, Kwara State.

Research Question 3: *Do numbers of pupils in public primary schools corresponds with the numbers of available hygienic and sanitation facilities in Ilorin metropolis?*

Table 6: numbers of pupils in public primary schools

Facilities	No of school With	Total No of	Average No of Pupils/school	Ratio
Sink with running water	8	16	240	1:10
Container with tap running water	7	13	240	1:12
Fundamental source of water	4	6	240	1:24
Water sewage container	3	5	240	1:30
Towel and soap for hand washing	13	127	240	1:2
Pit latrine with water	16	18	240	1:7
Pit latrine without water	10	20	240	1:8
Modern water system toilet	5	10	240	1:16
Waste disposal system	14	14	240	1:9
Brooms and mopping sticks	17	104	240	1:2
Total Number of Sampled Schools	21		240	

The above table shows a ratio of the numbers of available hygienic and sanitation facilities for pupils use in public primary schools and average number of pupils per class in Ilorin Metropolis. From the table

above, it can be seen that the ratio of the numbers of pupils to the numbers of available hygienic and sanitation facilities is extremely low. This indicates that the numbers of primary school pupils are more than the numbers of available facilities. This can be concluded that, the hygienic and sanitation facilities available for the primary school pupils' use in Ilorin metropolis is very scanty and not enough for the pupils' use. This is because most of the public primary schools in Ilorin metropolis have little or no hygienic and sanitation facilities for the use of their pupils.

Discussion

The research question one sought to find out the availability of sanitation and hygiene facilities for pupils' use in public primary schools in Ilorin metropolis of kwra state. the study revealed that the number of the available facilities is grossly inadequate with either one or two of the facilities is available in 21 sampled schools with average number of 240 pupils per school. Only about 6 schools have hand washing facilities, 4 schools with functional sources of water and 10 schools with pit latrine without water. This is considered to be grossly inadequate for the achievement MDG 2020. This is close to the findings of Ikogho and Igbudu (2013) which was carried out in Delta State that sanitation and hygiene facilities were lacking in schools.

Research question two ascertained the extent of utilization of the available sanitation and hygiene facilities in public primary schools in Ilorin metropolis. The result shows the mean value of all the items are less than 2.5 with the exception of only items 4, 8 and 9. The overall mean of 2.37 means that the available sanitation and hygiene facilities were not being adequately utilized. This is similar to the study carried out by the same Ikogho and Igbudu that the available facilities were poorly maintained and utilized.

Research question three sought to find out the ratio of the available sanitation and hygiene facilities per population of of pupis in public primary schools in Ilorin metropolis. The result showed a ratio of 1 to 30 in in most of the sampled schools. This was derived from the available numbers of facilities and the average of 240 pupils per school. This shows inadequacy in sanitation and hygiene facilities in public primary schools in Ilorin metropolis.

Conclusions

From the findings of the study, the following conclusion has emerged. Sanitation and hygiene facilities in public primary school in Ilorin metropolis are not adequately available; the available facilities in public primary schools are poorly maintained and utilized and number of pupils per schools does not correspond with the number of available facilities.

Recommendations

In light of the findings of the study above the following recommendations are made

1. Agencies in Health and Education sectors should assist public primary schools in the provision of some of these facilities as it has been observed that government alone con not adequately fund Education system.
2. Facilities should be properly utilized by ensuring adequate sensitization for both the teachers and the pupils on the advantages and disadvantages of adequate and functioning sanitation and hygiene facilities in schools thereby ensuring that pupils have access to them in schools.

References

- Aremu A.S. (2013) Assessment of sanitation facilities in primary schools within Ilorin, Nigeria. *Journal of Applied Science in Environmental Sanitation*, 7(1) 29-30.
- Ikogho, D.E & Igbudu, U (2013). Availability and utilization of hand washing facilities among Primary school pupils in Ughelli north LGA of Delta state. *Journal of social science and Humanity*, 4(5).

- Joshi, A, & Amali, C. (2013). Impact of water sanitation and hygiene intervention on improving Health outcomes among school children. *Journal of environmental and public health*.
- National population commission. (2019). *Nigeria demographic and health survey (NDHS) in Nigeria*.
- UNICEF. (2012). Water, sanitation and hygiene (WASH) in schools: A companion to the child Friendly schools. Manual. UNICEF.
- UNICEF. (2013). Child friendly schools. (online). Available: www.unicef.org. Accessed 10th November 2020.
- World Health Organization (WHO). (2013). *Diarrhea disease factsheet*. WHO, Geneva. Retrieved November 10th 2020, from <http://www.who.int/news.roomfact-sheets/detail/Diarrhea-disease>.