

ANALYSIS OF CAUSES AND EFFECTS OF POOR SANITATION AND HYGIENE IN  
SECONDARY SCHOOLS IN ABA METROPOLIS, ABIA STATE, NIGERIA.

By

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**Abstract**

This study analyzed the causes and effects of poor sanitation and hygiene in secondary schools in Aba metropolis, Abia State, Nigeria. Descriptive research survey design was adopted for the study. There are 7 Local government areas in Aba metropolis in which 120 respondents were randomly selected through purposive random sampling technique guided by research advisor 2006. Three research questions guided the study. Mean scores were used as statistical tools for the study. Findings showed that the respondents agreed to the main causes, and the effects of poor sanitation in secondary schools with a grand mean of scores of 2.88, 3.08 and which is greater than the critical mean score of 2.50. It was recommended that the government and non-governmental organizations should make adequate provision of toilets and urinary facilities for the schools.

**Keywords:** Causes, Effects, School Hygiene, School Sanitation.

**Introduction**

Sanitation and hygiene remains a challenge in many parts of the world. Hygiene and sanitation is a healthcare science and a form of school health education. It is the provision of facilities and services for the safe disposal of human urine and feces. upto 50% of the developing world's population lack improved sanitation facilities and over eight hundred and eighty-eight million people still use unsafe drinking water sources (Faiza, Christine, Nathan, Mustafa, and George, 2015). Poor sanitation is a significant public health issue that has widespread implications for school children in developing regions particularly Aba metropolis in Abia state, Nigeria. The state of sanitation in secondary schools has raised concerns due to its potential impact on the health and academic performance of learners.

In most developing parts of the world hygiene and sanitation remains a challenge. About 60% of the developing world's population lack improved sanitation facilities and are used to unsafe drinking water sources (Azuogu, Ilo, Nwimo, Azuogu, & Onwunaka, 2016). This contributes greatly to morbidity and mortality in children. A cross-sectional survey, conducted in schools in Nicaragua, showed that self-reporting of hand washing practice produced higher rates than those observed practices (Jordanova, Cronk, Obando, Medina, Kinoshita, & Bartram, 2015). Conversely, effective hygiene promotion and practice in schools can be severely affected by the level of knowledge and attitudes learners have. Findings from A study among school learners in Ethiopia shown that 76.7% of learners knew the importance of washing hands after toilet use, however, only 14.8% reported actually washing hands (Shilunga, et al., 2018). To address this global challenge, efforts should be

made towards improving public health in schools by various stakeholders. Globally, the “Call to Action for WASH in Schools” campaign was formally launched in 2010.

In recent implementation of the policy for universal basic education, it was found that the ratio of students to toilet facilities has reduced. According to Morgan, Bowling, Bartram, and Kayser, (2017) Morbidity figures available show that diarrhea, worm infection, eye and skin diseases related to poor sanitation accounted for further 35.5% of diseases. The level of nutritional stunting in the country is still among the worst rates of nutritional stunting in African and is partly attributed to the high incidence of diarrhea which develops as a result of poor sanitation. Secondary school learners in developing countries are among the most vulnerable sub-population. These mortalities and illnesses can be reduced by addressing personal hygiene among school children and simultaneously promoting school attendance and improved learning. Inadequate sanitation and hygiene is a major concern in schools due to the greater potential for disease transmission among school learners, who are considered to be a vulnerable group.

However, improved knowledge and effective hand hygiene practices especially among children can effectively reduce gastrointestinal and respiratory tract infections, the two leading causes of childhood morbidity and mortality globally (Mohammed, Nihar, Bashayer, Hiba, Rasha, & Zaid, 2016) (Shilunga et al., 2018). Good sanitation and personal hygienic practices are considered important towards reducing the risks of spreading communicable diseases and improving public health. Water, Sanitation and Hygiene (WASH) attributable diseases are a cause of concern globally. Secondary school learners are among the most vulnerable sub-population. This is due to inadequate facilities for domestic water supply, as well as poor sanitation and hygienic conditions and services. Hygiene behaviors and practices are only made possible through a combination of hygiene education, water, sanitation and hygiene, as well as suitable facilities. It is believed that in many schools, poor sanitation creates conditions that facilitate the spread of infections. These conditions include the breeding of flies and mosquitoes, unsafe drinking water, contaminated surfaces, and unhygienic environments for washing or swimming.

According to Mbula, (2014), the ability of eliminating faecal materials from the school environment depends on latrines being conveniently located, clean, odour-free, private, and adequate and well- maintained. It was found that the overall ratio of latrines provided to total boys enrolled was 1:42 and 1:31 for girls. While most of the schools were compliant with the recommended standard of 1:30 for boys and 1:25 for girls, high ratios of 1:123 for boys and 1:113 for girls were recorded. Such was evident in schools where no health programmes were being implemented and particularly no sanitation programme in place. This implies that the challenging problem of inadequate latrines could persist for a longer time.

In a similar study carried out in Nakuru, Kenya, revealed that the major problem in school sanitation was the high pupil/toilet ratio ( Barasa et al., 2015). It was also found that the availability of adequate sanitation facilities had implications on good hygiene practices in schools indicated by proper use of toilets. WHO estimates that each year, nearly two million school children die of diarrhea diseases caused by unsafe water supplies, sanitation, and hygiene. Drinking water should be safe and clean. According to the NSHG, schools should provide separate drinking water facilities to ensure drinking water is safe (Sharma, S. 2014). The pressure on the few available sanitation facilities was evidenced by the cleanliness of latrines and their wear and tear. Therefore in order to facilitate improved health and educational outcomes, it is necessary therefore to effectively address water sanitation, toilet and hygiene matters within the school environment/premises (Bello, Adamu, Sarkingobir, & Maiakwai, 2022).

### **Statement of the Problem**

The issue of poor sanitation in secondary schools within Aba metropolis in Abia state presents a significant public health challenge that extends beyond the confines of the educational environment. Despite various efforts to raise awareness about the dangers associated with unhealthy sanitary conditions, many schools continue to struggle with inadequate sanitation facilities. This persistent problem has serious impact on the health of the students. It exposes them to a range of diseases, such as cholera, diarrhea, and other various water-borne illnesses. The spread of these diseases is facilitated by the lack of proper sanitation facilities such as clean toilets, hand washing stations, and safe drinking water. In some cases, the situation is exacerbated by outweighing population of students

in schools, which puts additional pressure on already limited resources. The sanitary condition of the school also has a profound effect on pupils' education. Students fall sick due to unhealthy sanitary conditions which in turn affects their academic performance. Even when students are physically present, the fear of using inadequate sanitation facilities can cause discomfort and distraction, reducing their ability to concentrate in class. This is particularly true for female students, who may face additional challenges due to the lack of gender-specific sanitation facilities, leading to increased absenteeism, especially during menstruation. In many cases, schools lack the necessary funding and infrastructure to implement sustainable sanitation solutions. Additionally, the enforcement of sanitation standards is often weak, with little monitoring and accountability for maintaining hygienic conditions in schools. This research aims to explore the underlying causes of poor sanitation in secondary schools in Aba metropolis and to propose practical solutions that can be implemented to improve the situation.

### **Purpose of the Study**

The purpose of this study is to:

1. To analyze the main causes of poor sanitation in secondary schools in Aba metropolis.
2. To analyze the effects of poor sanitation on pupils' health and academic performance in secondary schools in Aba metropolis.
3. To propose various ways to improve the sanitary conditions of secondary schools in the study area.

### **Research Questions**

1. What are the main causes of poor sanitation in secondary schools in Aba metropolis?
2. What are the effects of poor sanitation on students' health and their academic performances in secondary schools in Aba metropolis?
3. How can the sanitary condition of secondary schools in Aba metropolis be improved?

### **Methods**

This study employed a descriptive research design to analyze the causes and effects of poor sanitation in selected secondary schools in the study area. The population for this study comprises of all the secondary schools teachers who teach in schools within Aba metropolis. Aba metropolis comprised of seven (7) local government areas namely: Aba south, Aba North, Osisioma Ngwa, Obingwa, Ugwunagbo, Ukwa East, and Ukwa West Local Government Areas. A sample size of 120 was selected using research advisors (2006). Purposive random sampling technique was used for the study. The data collected was analyzed using descriptive statistics which involves the use of Mean. The critical mean for this analysis is 2.50 which forms the decision rule for the study. By this definition, any descriptive statement for which a mean score of more than 2.50 is observed denotes agreement of respondents to the statement, and for any descriptive statement for which the mean score is less than 2.50 is observed as an indication of disagreement of the respondents to that statement.

## **RESULTS**

**Research Question 1:** What are the main causes of poor sanitation in secondary schools in Aba metropolis?

Table 1 below shows the weighted responses of respondents on the main causes of poor sanitation in secondary schools in Aba metropolis of Abia state. Items in this section were from 1, 2, 3, 4, and 5. Each item was formed in order to find out the main causes of poor sanitation in secondary schools in Aba metropolis in Abia State.

Table 1: weighted response on causes of poor sanitation in schools.

S/n	Item statement	SA	A	D	SD	X	Remark
1	The school premises is cleaned on regular basis	8	38	43	41	2.19	Disagreed
2	Inadequate toilet facilities results in pupils defecating and urinating indiscriminately within the school premises	37	63	12	8	3.07	Agreed

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3	Inadequate supply of clean water for the pupils	28	81	10	1	3.13	Agreed
4	Poor enforcement of good/ healthy habits or practices by pupils	39	72	6	3	3.22	Agreed
5	Teachers and pupils are to be blamed for unsatisfactory/poor sanitation in schools.	17	74	18	11	2.80	Agreed
<b>Grand Mean</b>						<b>2.88</b>	<b>Agreed</b>

From the analysis above, majority of the respondents are in agreement to the main causes of poor sanitation in secondary schools in Aba metropolis with a grand mean of 2.88 which is greater than the critical mean score of 2.50.

**Research Question 2.** What are the effects of poor sanitation on students' health and their academic performances in secondary schools in Aba metropolis?

Table 2 below shows the weighted responses of respondents on the effects of poor sanitation on students' health and their academic performances in secondary schools in Aba metropolis of Abia state. Items in this section were from 1, 2, 3, 4, and 5. Each item was formed in order to find out the effects of poor sanitation on students' health and their academic performances in secondary schools in Aba metropolis in Abia state.

Table 2: weighted responses on effects of poor Sanitation in school on students' health and their academic performances in Secondary schools in Aba metropolis?

S/n	Item statement	SA	A	D	SD	X	Remark
1	Poor sanitation leads to unhealthy atmosphere in schools	32	78	5	5	3.14	Agreed
2	Poor sanitation leads to increased cases of ill health among pupils	60	60	0	0	3.50	Agreed
3	Poor sanitation may result increased cases of absenteeism by pupils	20	77	15	7	2.94	Agreed
4	Poor sanitation may have negative effect on pupils learning outcomes	11	85	21	3	2.86	Agreed
5	Poor sanitation may negatively affect the level of knowledge and attitudes of learners.	10	98	10	2	2.96	Agreed
<b>Grand mean</b>						<b>3.08</b>	<b>Agreed</b>

From the above analysis, it is observed that all the respondents were in agreement to the effects of poor sanitation in secondary schools in Aba metropolis with a grand mean of 3.08 which is greater than the critical mean of 2.50.

**Research Question.** How can the sanitary condition of secondary schools in Aba metropolis be improved?

Table 3 below shows the weighted responses of respondents on how the sanitary condition of secondary schools in Aba metropolis can be improved. Items in this section were from 1, 2, 3, and 4. Each item was formed in order to find out how the sanitary condition of secondary schools in Aba metropolis in Abia State can be improved.

Table 3: Weighted responses on improvement of sanitary condition of secondary schools.

S/n	Item statement	SA	A	D	SD	X	Remark
1	Provision of toilets and urinary facilities by the government in the schools will help improve the sanitary condition of the school	43	77	0	0	3.35	Agreed
2	Employment of school genitor will improve the sanitary condition of the school	17	92	7	4	3.01	Agreed
3	Routine sweeping and cleaning of the school environment will improve the sanitary condition of the school.	46	74	0	0	3.38	Agreed
4	Availability of water resources in the school will help improve the sanitary condition of the school	43	77	0	0	3.35	Agreed
<b>Grand mean</b>						<b>3.27</b>	

From the above analysis, it implies that all the respondents are in agreements with the ways of improving the Sanitary Conditions of Secondary Schools in Aba metropolis with the grand mean of 3.27 which is greater than the critical mean of 2.50.

### **Discussion of Findings**

This study analyzes the causes and effects of poor sanitation in selected secondary schools in Aba metropolis. Results were discussed in accordance with the research questions as presented below.

**Research question one** revealed the main causes of poor sanitation in secondary schools in Aba metropolis. Findings of the study revealed the inadequate supply of clean water for the pupils, poor enforcement of good/ healthy habits or practices by pupils, and that inadequate toilet facilities results in pupils defecating and urinating indiscriminately within the school premises thereby causing poor school sanitation and that teachers and pupils are to be blamed for unsatisfactory/poor sanitation in primary schools within Aba metropolis. This finding agrees with the findings of Shilunga et al., (2018) who stated that the government and school management inability to make appropriate provisions for school facilities will cause poor school sanitation and will lead to rapid dilapidation of the school environment.

**Research question two** revealed the effects of poor sanitation on students' health and their academic performances in secondary schools in Aba metropolis. The findings of the study revealed that poor sanitation leads to unhealthy atmosphere in secondary schools, poor sanitation leads to increased cases of ill health among students, poor sanitation may also result to increased cases of absenteeism by pupils. Poor sanitation may have negative effect on pupils learning outcomes, and that poor sanitation may negatively affect the level of knowledge and attitudes of learners. This finding also agrees with Jordanova, et' al (2015) who stated that in many schools, poor sanitation creates conditions that facilitate the spread of infections and diseases. These conditions include the breeding of flies and mosquitoes, unsafe drinking water, contaminated surfaces, and unhygienic environments for washing or swimming. The spread of these diseases is often facilitated by the lack of proper sanitation facilities such as clean toilets, hand washing stations, and safe drinking water. The impact of poor sanitation in primary schools is not limited to health alone. It also has a profound effect on pupils' education.

**Research question three** revealed how the sanitary condition of secondary schools in Aba metropolis can be improved. The findings of the study revealed that provision of toilets and urinary facilities by the government in the schools will help improve the sanitary condition of the school, employment of school genitor will improve the sanitary condition of the school, and Routine sweeping and cleaning of the school environment will improve the sanitary condition of the school. The study further finds out that availability of water resources in the school will help improve the sanitary condition of the school, regular supervision of school facilities will help improve sanitary condition of the school, and proper orientation on the usage of sanitary facilities will help improve the sanitary condition of the school. This finding agrees with Abubakar, & Raji, (2021). Who stated the urgent need for comprehensive sanitation strategies that address both the immediate and long-term challenges facing primary schools in Nigeria thereby highlighting government policies and programs, community and NGO involvement and school-based initiatives.

### **Conclusion**

Based on the findings, it was concluded that; The sanitation condition of secondary schools in Aba Metropolis are not in good and excellent condition being that the main causes of poor sanitation are prevalent in secondary schools in Aba metropolis. The study further Highlighted the effects of poor sanitation on pupils' health and their academic performances in secondary schools in Aba metropolis to include unhealthy atmosphere, increased cases of ill health among students, result to increased cases of absenteeism by students, and negative effect on students learning outcomes. On the basis of ways to improve the sanitary conditions of secondary schools in Aba metropolis, this study further concluded that provision of toilets and urinary facilities by the government in the schools will help improve the sanitary condition of the secondary schools within Aba metropolis, the employment of school genitor will improve the sanitary condition of primary schools in Aba metropolis, routine sweeping and cleaning of the school environment will improve the sanitary condition of the secondary

schools in Aba metropolis, that regular supervision of school facilities will help improve sanitary condition of secondary schools in Aba metropolis, and proper orientation on the usage of sanitary facilities will help improve the sanitary condition of the school in Aba metropolis.

### **Recommendations**

1. The government and non-governmental organizations should make adequate provision of toilets and urinary facilities for the schools
2. The students should be educated and orientated on the usage of the urinary facilities and other school facilities for proper use and durability
3. Schools should have trained genitors and cleaners who will be vested with the responsibilities of taking care of the school facilities.

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