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## Assessment of the factors militating against effective environmental sanitation practice in Oyigbo L.G.A

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#### Abstract

This research investigates factors militating against effective Environmental sanitation practices in Oyigbo Local Government Area. The research focuses on environmental sanitation practices in Oyigbo Local Government Area, factors militating against effective environmental sanitation practices in the local government, health hazards associated with poor environmental sanitation practices and solutions recommendations of eliminating the factors militating against effective environmental sanitation practices in Ovigbo Local Government Area. The populations of the study consist of all the inhabitants of the Oyigbo quarters in Oyigbo town use as research settings. Population sampling was carried out by random sampling through simple ballot method without replacement The only research instrument that was employed for the study was the questionnaire as it contains uniform questions. Data were respondents, and data obtained were analyzed using frequency counts and percentages to answer research questions and chi-square  $(x^2)$  statistics to test formulated Hypothesis. Findings of the study revealed that the people of Oyigbo Local Government Area do not carry our effective environmental sanitation practices, in their homes and its immediate surroundings, there are factors militating against effective environmental sanitation in the area. E.g. inadequate funds, lack of effective health education/advocacy on sanitation, ignorance, inadequate manpower etc and also health hazards associated with poor sanitation. It is therefore, recommended that the Local and State Government should provide the necessary tools/equipment for the public health officers e.g. the Environmental Health Officers to carry out their duties effectively and also enlighten the public especially the home-makers the best sanitation techniques to be employed in keeping their homes and the immediate environment clean as health measure to prevent diseases. The Ministry of Environment should put more effort>in demonstrating the importance of good sanitation practices and proper wealth education about the effects of poor sanitation on the people.

Keywords: Environmental sanitation practices, Oyigbo Local Government, chi-square.

#### Introduction

Environmental sanitation constitutes a major problem for most Communities all over the world (Ovoke, 1996). In most African countries today, there is generally little control over the disposal of liquid and solid wastes from individual dwellings, villages, factories, towns and cities. Yet, the control of the disposal of wastes is necessary in order to safeguard public health and water resources (Ovoke 1996).

According to Azuoka (1992), in most towns and villages in the developing counties, people know little or nothing about the importance of sanitation, thereby disposing their waste indiscriminately without any consideration of their health.

Sanitation according to Okon (2004), is the removal of waste matter of all kinds from the home and its immediate surroundings; while Module (2007) defined sanitation as the hygiene or cleanliness of the body (person) and or environment where a person resides.

Sanitation is synonymous to cleanliness.It involves the ability to tame our environment most especially the abiotic structure which comprises of the physical phase, in such a manner as to pose no danger to human existence. Sanitation covers more range than ordinary sweeping of our house, clearing or disposing the over-grown weeds in our premises, clearing or disposing off accumulated refuse. It represents or encompasses all area that touches life. No wonder a comprehensive definition was given to this concept (Adomi, 2004). It means man's effort to control all the factors in his physical and biological aspect of the environment which tend to exercise or may exercise a deleterious effect on his physical development, mental health, survival and his social well-being (Adomi, 2004). In other words, both physical and biological environment can adversely affect the overall well-being of man if handled non-challantly.

These aspects of the environment comprises of the air, water, land, forest, plant, animals, aquatic, disease causing or pathogenic organism, housing etc. (Adomi 2004). All these represent the factors that exist side by side with man. Though they are very useful to human's life but if not well managed, they can constitute danger to human existence (Adomi, 2004).

The current overall position of Oyigbo Local Government Area in the field of environmental sanitation especially in the rural areas is very poor because of the terrain. Most people in Oyigbo area especially the home-makers are faced with sanitation problems. Sanitation of the environment has continued to be a major problem confronting the people. Generally, sanitation is regarded by the people of the Oyigbo Local Government Area as the most difficult task. The people of Oyigbo Local Area have even contending with this challenge on daily basis. As a result of poor environmental sanitation practice the people are exposed to a variety of health hazards such as disease, infections, odour nuisance, environmental pollution, etc. (Okon, 2004).

It is quite dishearten to note that, environmental sanitation days are not effectively observed in Oyigbo Local Government Area, the three hours usually set aside by government every month for the people to keep their homes and surroundings clean, it often seen as opportunity to engage in other activities. Only about four (4) percent of the entire populace usually observe it, and this position has not help matters.

Clearly, much needs to be done in the field of environmental sanitation, and the training of people in the habit of cleanliness both personal and public. Good or effective sanitation practice is very important as it makes our environment clean and healthy. With effective environmental sanitation practice, the problems of disease infections, odour nuisance, rodents and vermin infestation, environmental pollution/degradation and other health hazards resulting from sanitation can be reduced if not totally eradicated.

#### **Objectives of the study**

The principal objectives of the study are:

- Examine environmental sanitation practices in Oyigbo Local Government Area.
- Identify factors militating against effective environmental sanitation practices in the Local Government Area.
- investigate the health hazards associated with poor environmental sanitation practices.
- Proffer solution/recommendations of eliminating the problems militating against effective environmental sanitation practices in Oyigbo Local Government Area.

#### **Materials and Methods**

#### **Design of the study**

This is a descriptive survey research and therefore employed the descriptive design. The research is concerned with environmental sanitation practice in Oyigbo Local Government Area, the health hazards associated with poor environmental sanitation practice in the local government area and

solutions/recommendations of eliminating the problems or factors militating against effective environmental sanitation practice in the area.

#### Area of study

This study was carried out to examine the factors militating against effective environmental sanitation practices in Oyigbo Local Government Area of Rivers State. However, to achieve the objective of the study, the nine (9) quarters in Oyigbo Township were used as research settings for the study, which includes:

- 1. Umusoya Quarter
- 2. Kom-Kom Quarter
- 3. Mbano camp Quarter
- 4. Oyigbo west Quarter
- 5. Location Quarter
- 6. Market road Quarter
- 7. Isaiah eletuo Quarter
- 8. Site Light village Ouarter
- 9. Old Aba road Quarter

#### **Population of the study**

The population sample of the study was limited to Oyigbo Township, the administration headquarter of the Local Government Area. Oyigbo has nine (9) quarters with an estimated population of about 34,804 people.

Therefore, for the purpose of the study, the nine (9) quarters in Oyigbo Township with an estimated population of about 34,804 were used for the study, and this constituted the population of the study.

#### Sample size and sampling techniques

Stratified random sampling using simple balloting method without replacement was used to carry out the sampling. A sampling balloting method replacement was adopted to select the respondents used for the study. To select the respondents for the study, people were gathered together in each of the nine (9) quarters used for the study; and each of them have equal opportunity of being selected as respondents for the study.

In the simple balloting method without replacement, pieces of paper with an indication mark "yes or No" were folded and dropped in a basket, which were shuffled and the people were allowed to pick one after the other, until the sample size was completed. And those that picked yes were selected for the study. The selection took a cross-section of both male and female inhabitants of the area; and a total of 200 respondents were randomly selected; which represent the sample size of the study.

In general, the use of random sampling procedure to select the respondents was aimed at reducing that difficulty involved in covering the whole population as well as for accuracy.

#### **Research instrument**

The instrument that was used for collection of data for this research was the questionnaire was adopted as the research instrument for data collection as it contains uniform questions aimed at testing the stated hypotheses.

The questionnaire was made up of two parts. The first part consist item meant to obtain demographic data such as name of respondents, age, sex and qualification etc. the second part consist of the questions or structured items intended to elicit data on environmental sanitation practices and the benefits of effective environmental sanitation practice on people's health.

#### **Reliability of instrument**

In order to determine the reliability of the instrument, a spilt half method (reliability) of the questionnaire was carried out using 10 respondents for Oyigbo West Quarters. Data generated were analyzed using Pearson's Product Moment Method which yielded r=080.

The positive correlation coefficient was considered very adequate for the study's instrument.

#### **Instrumental administrative**

The questionnaire was administered to select respondents in each of the quarters chosen for the study. The researcher personally carried out the administration of the research instrument. A face-toface method was adopted. In each selected quarter used for the study, copies of questionnaire were taken to each of the six (6) selected quarters and distributed on the sport for easy retrieval, the illiterate respondent were orally interviewed, and the respondents answered to the question were retrieved on the spot. And all the 200 questionnaires produced and distributed were dully answered, completed and retrieved which gave a 100% of their response rate.

However, for the purpose of clarification of certain information needed by the researcher, personal oral interview and close observation were also made in course of the study.

#### **Data collection**

Data were collected from the selected sampled element of the population through the administration of the research instrument developed for the study. Personal oral interview and observation and library research were also used to gather other necessary information required by the researcher. The area on which data were collected centered on environmental sanitation.

#### Data analysis

Data collected through the research instrument administered to respondents were analysed using frequency counts and simple percentages to answer research questions and chi-square statistics to test the formulated hypotheses. Chi-square  $(x^2)$ statistical test.

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S/N	Quarter used for the study	Respondents	Percentage %
1	Old Aba Road Quarter	20	10
2	Kom-Kom Quarter	30	15
3	Mbano Camp Quarter	20	10
4	Isaiah Eletuo Quarter	20	10
5	Market Road Quarter	20	10
6	Location Quarter	20	10
7	Umusoya Quarter	30	15
8	Site Light Village Quarter	20	10
9	Oyigbo West Quarter	20	10
	TOTAL	200	100

#### Table 1: Respondents sampled in each of the quarter used for the study

#### Results

A total of 200 questionnaires were administered to the environmental health officers and community members by the researcher which were dully completed and retrieved which gave a response rate of 100% of the number distributed.

#### Table 2: Do the people of Oyigbo Local Government Area carry out environmental sanitation?

Response	Frequency	Percentages
Yes	120	60
No	80	40
Total	180	100

It can be deuce from table 2 above that out of the 200 respondents interviewed on environmental sanitation (practice) in Oyigbo Local Government Area, 120 of the respondents with a percentage of 60% gave a positive response, while 80 of them with a percentage of 40% disagreed.

Thus from the analysis of their responses, I can be concluded that the people of Oyigbo local Government Area do carry out environmental sanitation practices in their homes and its immediate surroundings such as, water sanitation, food sanitation, house sanitation, street, roads and colleges and other aspect of sanitation in the area.

Table 3:	Do you carryout	Effective Environmental	Sanitation in the locality?

Response	Frequency	Percentages
Yes	10	5
No	190	95
Total	200	100

Table 3 above indicate that out of the 200 respondent interviewed, 10 of the respondents with a percentage of 5% indicated a positive response, while 190 of them with a percentage of 95% gave a

negative response. Thus from the analysis of their responses, it is shown that there is an effective environment sanitation practice in Oyigbo Local Government Area.

#### Table 4: Are there factors militating against effective environmental sanitation in Oyigbo Local Government Area?

Response	Frequency	Percentages
Yes	188	94
No	12	6
Total	200	100

Table 4 above indicates that out of the 200 respondents interviewed on factors militating against effective environmental sanitation practice, *189of* the respondents with a percentage of 94% gave a positive response, while 12 of them with a percentage of 6% indicated a negative response. Thus, from the analysis of their responses, it shows that there are

factors militating against effective environmental sanitation practice in Oyigbo Local Government Area. According to the respondents such factors includes lack of fund, ignorance, shortage of manpower, poor drainage system, inadequate equipment, shortage of sanitation facilities etc.

Table 5: Is there any health hazard associated with poor environmental sanitation practice?

Response	Frequency	Percentages
Yes	188	94
No	12	6
Total	200	100

Table 5 above shows that out of the 200 respondents interviewed on the health hazards association with poor environmental sanitation practice, 185 of the respondents with a percentage of 92.5% indicated a positive response while 15% of them with a percentage of 7.5% gave a negative response. Thus, from the analysis of their responses, it

indicates that there are health hazards associated with poor environmental sanitation practice in Oyigbo Local Government Area. According to respondents such health hazards includes diseases, infections, fire outbreak environmental degradation, environmental pollution, odour nuisance, insects/pest infestation etc.

Table 6:
 Is there any solution/recommendations of eliminating the problems militating against effective environmental sanitation practice

Response	Frequency	Percentages
Yes	183	91.5
No	171	8.5
Total	200	100

Table 6 above shows that out of the 200 respondents interviewed on solution/recommendations of eliminating problems militating against effective environmental sanitation practices, 183 of the respondents with a percentage of  $91/5^{\circ}$  Jo gave a positive response with a percentage of S.5%

Indicated a negative response. Thus, from the analysis of their response, it

Indicates that there are available solutions/recommendations of eliminating Problems militating against effective environmental sanitation practices in Oyigbo Local Government area.

**I**. Proper enforcement of environmental health sanitation laws, edicts and Bye-laws by environmental health officers in the area etc. Table: How relevance is environmental sanitation and health education to you?

Response	Frequency	Percentages
Yes	200	100
No	-	-
Total	200	100

It can be observed from table 7 above that the 200 respondents interviewed on importance of environmental sanitation and health education gave a positive response and none of them

disagreed, which gave a 100% of their premises or surrounding and proper health education of the individual on effective sanitation practice is necessary.

Table 8: Is it important to carry out effective environmental sanitation practice in the areas?

Response	Frequency	Percentages
Yes	200	60
No	-	-
Total	200	100

Table 8 above indicates that all the 200 respondents interviewed agreed that effective environmental sanitations practice is important, and none of them disagreed, which gave a 100% of their response rate. According to respondents, effective environmental sanitation practices help to reduce the spread of diseases and also make the environment clean and tidy, conducive, comfortable and pleasant that will contribute to optimal learning and living.

## Table 9: Summary table of chi-square analysis of Effective Environmental Sanitation Practice in Oyigbo Local Government Area.

Despendents	Le	evel of A	chievement	df	X <sup>2</sup> critical	x2 calculated	Decision
Respondents	Yes	No	Total	ai			
Malel	122	3	125	1	40 3.841	0.26	Accontad
Female	68	7	75	1	40 5.641	0.20	Accepted
Total	190	10	200		100		

P<0.05

It can be observed from table 9 that the calculated  $x^2$  value of 0.26 is lesser than the critical table value of  $x^2$  0.05 = 3.841, therefore, the null hypotheses tested was accepted, which makes us to conclude that the people of Oyigbo Local Government Area do not carry out effective environmental sanitation practice in their

homes and its immediate surroundings. This conclusion corroborate Welber(2006), who opines that the prevalence of diseases in Oyigbo Local Government Area can be attributed to poor sanitation, compounds, street, littered with heap of refuse. Refuse claim their streets, markets and very households.

Table10: there are factors militating against effective environmental sanitation practice in Oyigbo Local Government Area.

	Level of Achievement				2		
Respondents	Yes	No	Total	df	Xcritical	$x^2$ calculated	Decision
Male	121	4	125		40		Not
Female		67 8	75	1	3.841	0.62	Accepted
Total		188 12	200				

P<0.05

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From table 10 above, it can be observed that the calculated  $\%^2$  value of 4.62 is greater than the critical table value of  $x^2 \ 0.05 = 3.841$ , therefore, the null hypotheses tester was rejected, which shows that there are factors militating against effective environmental sanitation practice in Oyigbo Local Government Area. This conclusion corresponds Nwakwo (2004), who notes that the reasons for poor sanitation in Oyigbo Local Government Area are very many but the major ones are ignorance, lack of

finances. Non-challant attitude of workers towards sanitation, role of beliefs and customs and poor drainage system. The conclusion also corroborates that of (Ogugua, 2004) who opines that environmental sanitation has become intractable problem in many urban cities of our country. Major problems confronting effective environmental sanitation practices can be attributed to lack of fund, shortage of manpower, shortage of equipment, etc.

Table 11: Summary to table of chi-square analysis is health hazards associated with poor environmental sanitation
practice

	Respondents	Level of Achievement			16	2	2 - 1 1 1	Desision
		Yes	No	Total	df	$x^2$ critical	$x^2$ calculated	Decision
	Male	122	3	125	1	40 3.841	0.26	Accepted
	Female	68	7	75				
	Total	190	10	200		100		

**P<0.05** seen  $f_{rom}$  {aye *n* above that the calculated table value of 8.98 is greater than the critical table value of  $x^2$  0.05 = 3.841, hence, the null hypotheses tested was rejected, which means that there are health hazards associated with poor environmental sanitation practice in Oyigbo Local Government Area. This conclusion is in line with (Ovoke, 1996), who emphasized that the major effects of poor sanitation practice is acute

bacterial food poisoning, water contamination and emotional and social instability. The conclusion also corroborate that of (Egho, 1996), who opines that un healthy environment due to poor environmental sanitation practice encourages the growth of microorganism and certain insects which transmits and spread wide range of communicable diseases, which causes sickness and or even death.

 Table 12: Summary to table of chi-square analysis of solutions/recommendations of eliminating the problems militating against effective environmental sanitation practice.

Respondents	s Level of Achievement			df	$X^2$	x2 calculated	Decision
	Yes	No	Total		critical		
Male	120	4	125				
Female	63	12	75	1	3.841	8.59 .	Not Accepted
Total	183	17	200				

#### P<0.05

It can be deduced from table 12 above that the calculated  $x^2 0.05 = 3.841$ , therefore, the null hypotheses tested was rejected, which indicated that there are solutions/recommendations of eliminating the problems militating against effective environmental sanitation practices in Oyigbo Local Government Area.

#### Discussion

This section summarized the results obtained from the study, to find out whether the research questions or hypotheses have been accepted or rejected. Therefore, the results of the descriptive statistics and results discussion are summarized below.

It is obvious from the investigation that there is no effective environmental sanitation practice in Oyiglbo Local Government, it was discovered that the percentage (5)% of the respondents interviewed trjat agreed on effective environmental sanitation practice in Oyigbo Local Government Area. This conclusion is true because it was discovered that the percentage (5%) of the respondents interviewed that agreed on effective environmental sanitation practice in Oyigbo Local Government Area is lesser than the calculated percentage (95%) of the respondents that disagreed,

and in testing the hypotheses relating to effective environmental sanitation practice in Oyigbo Local Government Area 0.05 level of significance, the results obtained indicate that the value of  $x^2$ - 0.05 = 3.841 is greater than  $X^2$  =0.26 calculated which makes us to accept the null hypotheses tested at 0.05 level of significant, which indicates that the people of Oyigbo Local Government Area do not carry out effective environmental sanitation practice.

factors militating against On the effective environmental sanitation practice in Ovigbo Local Government Area, it was observed that 94% of the respondents that agreed on the idea is greater than 6% of the respondents that object the idea, and in testing the hypothesis relating to the factors militating against effective environmental sanitation practice at 0.05 level of significance results obtained shows that the value of  $x^2 = 4.62$  calculated, which led to rejection of the null hypotheses tested indicates that are factors militating against effective there environmental sanitation practice in Oyigbo Local Government Area.

As regards to health hazards associated with poor environmental sanitation practice in Oyigbo Local Government Area, respondents made it known that there are health hazards associated with poor environmental sanitation practice. This is true because the 92.5% of the respondents calculated, that agreed on health hazards alssociated with poor sanitation practices is greater than the 7.5% of the respondents that agreed; and in testing the hypotheses relating to the health hazards associated with poor environmental sanitation practice, the results obtained shows that the value of  $x^2 0.05 =$ 3.841 is lesser than the value of  $x^2 = 8.98$  calculated which led to the rejection of the null hypothesis tested at 0.05 level of significance, and this make us to conclude that there are health hazards associated with poor environmental sanitation practice in Oyigbo Local Government Area.

The study also revealed that there are solution/recommendations that could be used to eliminate problems militating against effective environmental sanitation practices in Oyigbo Local Government Area. This is obvious because it was observed that the 91.5% of the respondents that agreed on the idea is greater than 8.5% of the respondents that disagreed. And in testing the hypothesis relating to solutions/recommendations that could be used to eliminate problems militating against effective environmental sanitation practice, results obtained shows that the value of  $x^2 0.05 = 3.841$  is lesser than the value of

 $x^2 = 8.59$  calculated, which makes us to reject the null hypothesis test at 0.05 level of significance, thence it is concluded that there are solutions/recommendations of eliminating the factors militating against effective environmental sanitation practice in Oyigbo Local Government Area.

It is obvious that appropriate inspections and health education on proper sanitation is very important. This is because 100% of the respondents agreed on the idea. Also all the respondents with a percentage of 100% indicate that effective environmental sanitation practice is also very important and none of the respondents disagreed.

#### Conclusion

Based on findings of the study, it is obvious that sanitation means man's effort to control the factors in his physical and biological aspect of the environment which tends to exercise or many exercise a deleterious effect on his physical, mental and social well-being. In other words, both the physical and biological environment can adversely affect the overall well-being of man if handled non-challantly.

The standard of environmental sanitation in Oyigbo Local Government Area is very poor. There are several factors militating against effective environment sanitation practice in Oyigbo Local Government Area, these factors could be lack of finance. illiteracy, lack of awareness, lack of effective health education campaign, lack of sanitation facilities/inadequate and deficient infrastructure, poor perception of environmental sanitations an essential service, inadequate manpower, inadequate equipment, weak and poorly enforced environmental sanitation laws, Edicts and Bye-laws, poor drainage system, human factors such as human behavior etc.

As a result of poor sanitation practice, the people of Oyigbo Local Government Area are exposed to a variety of health hazards such as disease infections that may result to illness or even death, fire outbreak, odour nuisance, insect or pest infestation, environmental pollution, environmental degradation etc. Lack of effective environmental sanitation practice results to bad environment which encourages the growth of microorganisms and other insects which carry them from one place to another and also from one person to another.

Clearly, much need to be done in the field of sanitation. People should be educated about the health hazards associated with poor sanitation and the

relevance of effective environmental sanitation practice and then importance of living in a healthy environment. Hence it is recommended that health education on sanitation should be properly taught or organized by the department of environment on a continuous basic and roper enforcement of environmental sanitation laws, Edicts and Bye-Laws and provision of adequate sanitation facilities to the people of minimum cot in order to achieve effective environmental sanitation practice in the area.

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