



## **THE ROLE OF THE YOUTHS IN ENVIRONMENTAL HEALTH PRACTICES IN ENUGU NORTH LOCAL GOVERNMENT AREA, ENUGU STATE**

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### **Abstract**

*Environmental health practices preclude the spread of diseases and lifestyles that are inimical to human healthy living. Central in these practices are the youths whose young age avails the opportunity of engaging in environmental health practices that advance healthy living in human societies. In Enugu North LGA of Enugu state, the case appeared the same because of the teeming youth population in the area; yet appearance is not always the reality. Using a descriptive survey design, this study determined and evaluated the role of the youths in environmental health practices in Enugu North LGA of Enugu state. The study thus evaluated how young people contribute to environmental health practices in Enugu North LGA. Enugu North LGA has 16 electoral wards that house 3175 urban and rural youths. From this population, 316 respondents; 203 from urban areas and 113 from the rural areas of Enugu North LGA were selected via the rule of thumb. A self-structured and validated questionnaire consisting of 21 item statements was used as the data collection tool. Using the Cronbach alfa technique, the internal consistency was calculated; yielding an overall dependability value of 0.7131. The research questions were answered using the mean and standard deviation as statistical tools, and the null hypothesis was tested at the 0.05 level of significance using the t-test statistics. The results showed that young people in Enugu North LGA do not engage in environmental health practices ( $x=2.33$ ). Additionally, it was discovered that local teenagers do not even engage in solid and liquid waste health practices ( $x=2.25$ ;  $x=2.24$ ). Regarding the anticipated roles of the youths in environmental health practices in Enugu North however, the mean replies of urban and rural youths on solid and liquid wastes health practices did not differ significantly ( $P>.05$ ). These signify that the youths of Enugu North do not generally engage in environmental health practices. The study suggests promotion of environmental education in Enugu North in order to make young people aware of the roles expected of them in environmental health practices in the community.*

**Key words:** Environment, Sanitation, Environmental sanitation, Youth.

### **Introduction**

The longevity of human life is also dependent on environmental health practices. The increasing dynamics of human existence propelled by creativity, purpose in life, participation in the industrial revolution, commercial networks, advanced global networking systems and scientific research have resulted to waste production. As such, the pollution brought by liquid and solid wastes has degraded the environment, raising significant concerns about the role of the youths in environmental health practices (Alumustapha & Adama, 2015). This concern has snowballed into heightened interest in environmental sanitation that involves the youths.



Sanitation however constitutes the fundamental responsibility of individuals within their environment. Environmental sanitation involves the regulation of the environmental factors that contribute to the transmission of diseases. Such interventions constitute waste management as they encompass safe water supply, appropriate waste disposal and disease vector control to mitigate disease transmission (World Health Organization (WHO), 2018). Waste management in this sense encompasses two primary components: collection and disposal. Various societies have implemented communal collection, block collection, door-to-door collection and kerbside collection methods. The collection process encounters numerous challenges, including climatic conditions, public attitudes, waste characteristics and transportation conditions. Various disposal methods, including landfill sites, incineration, recycling processes and residential waste disposal units, have been employed across different societies. Recent advancements in disposal methods include pyrolysis, biodegradable containers, and biodegradation (Adama, 2014). Adama (2011) notes that residents of Enugu occasionally dispose of refuse materials, including pure water sacks and other plastics, on roads or the ground, often unaware of the associated risks and effects. Enugu North is integral to this unwelcoming disposition. The management of waste and youth engagement in environmental health practices present specific challenges within the locality. This is as the youths appear to lack the positive environmental behaviour, interest and necessary facilities necessary for adequate environmental health practices (Mmom & Mmom, 2017).

These notwithstanding, the youths are expected to play significant roles in environmental health practices within their communities. Young people are thus expected to participate in environmental sanitation efforts by participating in community clean-up initiatives, promoting awareness of waste management, devising innovative solutions and advocating for policy changes. They are to monitor environmental conditions, engage in health advocacy, collaborate with existing organizations, participate in tree planting initiatives and promote environmental health education (Amadi, 2022). In other words, the youth are to significantly contribute to solid waste sanitation practices by engaging in clean-up activities in streets, markets and public areas. They are to get involved in implementation of awareness programs that educate local communities on environmental health practices like solid waste management and utilization. This essential involvement in environmental health practices must encompass all dimensions of environmental sanitation, including solid and liquid waste management. These roles are maximally expected of the youths because of their youthful advantage and observable gallant capacity in addressing community health challenges in many parts of the world. However, the discharge of these roles that has to do with environmental health practices by the youths of Enugu North LGA have remained a subject of great concern; especially with the increasing waste generation, poor waste management and their resultant health hazards in Enugu North. It is on this ground that this study burdens



the task of determining the role of youths in both solid and liquid aspects of environmental health practices in Enugu North LGA of Enugu State.

### **Statement of the Problem**

Given the significance of environmental health practices, it is anticipated that the youth in Enugu North LGA will actively engage in effective solid waste management, proper liquid waste disposal and comprehensive vector control measures. In this scenario, solid waste would be systematically sorted and disposed of in designated bins, liquid waste would be treated appropriately to prevent water source contamination and effective strategies would be implemented to manage mosquito populations and other disease vectors in the area. Conversely, commercial activities in diverse market areas in Enugu North produce both biodegradable and non-biodegradable waste materials, which are observed scattered throughout various shopping areas and marketplaces. In various market abattoirs, animal faeces or waste are discharged into surface waters. Clinical waste from health centres and hospitals is observed being discharged into streams and underground water sources. In numerous undeveloped sites, individuals utilize these areas for defecation and waste disposal. Additionally, various street hawkers contribute to the accumulation and generation of waste within and around the metropolis. These constitute both remote and proximate pollutants and pollution processes that degrade the environment (Ofomata, 2013). These signs of poor environmental health practices and the urgent health risks they pose to Enugu North inhabitants necessitate focused research and intervention strategies that address the challenge. The high presence of these wastes on the other hand, questions the role of youths in Environmental health practices in Enugu North LGA. This is because the youths, who are typically expected to advocate for healthy environmental practices are notably absent in this context. Hence, this unhealthy environment points to the fact that the youths might be unaware of their roles in environmental health practices. As such, there is need to determine the roles of youths in environmental health practices towards creating awareness to the teaming youths of Enugu North LGA of Enugu State.

### **Purpose of the Study**

This study aims to identify the roles of youth in environmental health practices within Enugu North LGA. The study specifically;

1. Identifies the role of youths in environmental health practices in Enugu North LGA of Enugu State.
2. finds out the role of youths in liquid waste health practices in Enugu North LGA of Enugu State.
3. ascertains the role of youths in liquid waste health practices in Enugu North LGA of Enugu State.



### **Research Questions**

The study answered the following research questions.

1. What are the roles of the youths in environmental health practices in Enugu North LGA of Enugu State?
2. What are the roles of youths in liquid waste health practices in Enugu North LGA of Enugu State?
3. What are the roles of youths in solid waste health practices in Enugu North LGA of Enugu State?

### **Hypotheses**

- H0<sub>1</sub>: There is no significant difference in the mean responses of urban and rural youths on the role of youths in environmental health practices in Enugu North LGA of Enugu state?
- H0<sub>2</sub>: There is no significant difference in the mean responses of urban and rural youths on the roles of youths in liquid waste health practices in Enugu North LGA of Enugu state?
- H0<sub>3</sub>: There is no significant difference in the mean responses of urban and rural youths on the roles of youths in solid waste health practices in Enugu North LGA?

### **Method**

This study employed descriptive survey design and was conducted in the Enugu North Local Government Area of Enugu State. The study population consisted of 3,175 youths from the 16 electoral wards in Enugu North LGA. A total of 316 youths; comprising 203 from urban areas and 113 from rural areas, were selected as respondents based on the principles of the rule of thumb. A self-structured and validated questionnaire consisting of 21 items was utilized for data collection. The internal consistency was assessed using the Cronbach alpha method, yielding an overall reliability index of 0.7581. The research questions were addressed using mean and standard deviation, while the t-test was utilized to evaluate the null hypothesis at a significance level of 0.05.



## Results

**Research Question One:** What roles do youths play in environmental health practices in Enugu North LGA?

**Table 1:** Mean Responses of the Respondents on Roles of the Youths in Environmental Health Practices

Items	Indicate the roles played by the youths in environmental sanitation practices in your community.	Urban (203)			Rural (113)			Overall (316)		
		Mean	SD	Dec	Mean	SD	Dec	Mean	SD	Dec
1	Participate in Community Clean-ups.	2.50	0.13	A	2.60	0.91	A	2.55	0.15	A
2	Raise Awareness on Waste Management	2.36	0.25	D	2.33	0.04	A	2.34	0.68	D
3	Develop Innovative Solutions	2.40	0.23	D	2.30	0.44	D	2.35	0.55	A
4	Advocate for Policy Changes	1.40	0.11	D	2.20	0.35	D	1.80	0.99	D
5	Monitor Environmental Conditions	2.35	0.25	D	2.40	0.35	D	2.37	0.26	D
6	Engage in Environmental Advocacy	2.44	0.05	D	2.45	0.14	A	2.44	0.65	D
7	Collaborate with Existing Organizations	2.37	0.2	D	2.46	0.34	D	2.41	0.35	D
8	Participate in Tree Planting Initiatives	2.36	0.2	D	2.42	0.31	D	2.39	0.71	D
9	Promote environmental education	2.33	0.3	D	2.41	0.34	D	2.37	0.53	D
	Grand mean	2.28	0.19	D	2.39	0.35	D	2.33	0.27	D

**Key:** A-Agree. D-Disagree.

Data from Table 1 indicates that among 316 youths in Enugu North LGA who responded to items 1-9 regarding their roles in environmental health practices, the mean scores are as follows: item 1 has a mean score of 2.55, item 2 has 2.34, item 3 has 2.35, item 4 has 1.8, item 5 has 2.37, item 6 has 2.44, item 7 has 2.41, item 8 has 2.39, and item 9 has 2.37. This indicates disagreement. Item 1 indicates agreement. The grand mean of 2.33 indicates disagreement. This indicates that youths in Enugu North LGA do not fulfil their responsibilities related to environmental health practices in the area.



HO<sub>1</sub>: There is no significant difference in the mean responses of urban and rural youths on environmental health practices in Enugu North LGA.

**Table 2:** t-test of difference in the Mean scores of urban and rural respondents on their roles in environmental Health Practices.

Location	No	Mean ( $\bar{x}$ )	S.D	t-cal. val	t-crit. val	Decision
Urban	203	2.28	0.19			
Rural	116	2.39	0.35	5.33	3.31	Reject H <sub>0</sub>

Table 2 indicates that the urban group had a mean score of 2.28 with a standard deviation of 0.19, whereas the rural group had a mean score of 2.39 with a standard deviation of 0.35. The calculated t-value was 5.33 while the t-critical value was 3.31. Consequently, as the calculated t-value exceeds the t-critical value, the null hypothesis is rejected.

**Research Question Two:** What are the roles of youths on solid waste health practices in Enugu North LGA?

**Table 3:** Mean Responses of the Respondents on Roles of the Youths on Solid Waste Health Practices

Items	Indicate the roles played by the youths in solid waste practices in your community.	Urban (203)			Rural (113)			Overall (316)		
		Mean	SD	Dec	Mean	SD	Dec	Mean	SD	Dec
10	Participate in street clean-ups streets	2.55	0.19	A	2.52	0.51	A	2.55	0.15	A
11	Participate in market clean-ups	2.51	0.17	D	2.50	0.34	D	2.43	0.88	D
12	Participate in clean-ups of public places	2.30	0.27	D	2.36	0.44	D	2.50	0.45	A
13	Raising awareness programmes to educate the communities on solid waste management.	1.40	0.15	D	2.10	0.32	D	2.04	0.89	D
14	Encouraging the adoption of sustainable practices such as using reusable bags, reducing water consumption, and conserving energy.	2.15	0.24	D	2.30	0.14	D	2.51	0.66	A
15	Promotion of sustainable practices	2.25	0.35	D	2.14	0.24	D	1.75	0.85	D
	Grand Mean	2.19	0.22	D	2.32	0.33	D	2.25	0.27	D

**Key:** A-Agree. D-Disagree.

Table 3 indicates that among the 316 urban and rural youths in Enugu North LGA who responded to items 10-15 regarding the roles of youths in solid waste health



practices, item 10 received mean scores exceeding 2.5 for both urban and rural respondents. In contrast, items 11-15 recorded mean scores below 2.5 for both groups. This indicates disagreement. Item 10 indicates agreement. The grand mean of 2.25 indicates disagreement. This indicates that youths in Enugu North LGA do not fulfil their roles concerning solid waste health practices in the area.

HO<sub>2</sub>: There is no significant difference in the mean responses of urban and rural youths on solid waste health practices in Enugu North LGA.

**Table 4:** t-test of difference in the Mean scores of urban and rural respondents on their roles in solid waste Health Practices.

Location	No	Mean ( $\bar{x}$ )	S.D	t-cal.val	t-crit.val	Decision
Urban	203	2.19	0.22			
Rural	116	2.32	0.33	4.31	3.32	RejectH <sub>0</sub>

Table 4 shows that the urban had mean score of 2.19 with S.D of 0.22 while the rural had mean score of 2.32 with S.D of 0.33 respectively. The calculated t-value was 4.31 while the t-critical value was 3.32. Therefore, since the calculated t-value is greater than the t-critical value, the H<sub>0</sub> hypothesis stands rejected.

Research Question Three: What are the roles of the youths on liquid waste health practices in Enugu North LGA based on location?

**Table 5:** Mean responses of the respondents on roles of the youths on liquid waste health practices

Items	Indicate the roles played by the youths in liquid waste practices in your community.	Urban (203)			Rural (113)			Overall (316)		
		Mean	SD	Dec	Mean	SD	Dec	Mean	SD	Dec
16	Monitor environmental conditions in their communities and report any issues, such as illegal dumping or pollution, to the relevant authorities	2.31	0.19	D	2.22	0.71	D	2.55	0.15	A
17	Joining in clean-up campaigns around the community to remove standing water and trash.	2.16	0.13	D	2.38	0.54	D	2.43	0.98	D
18	Conduct liquid waste audits of their communities to identify areas of concern and develop targeted interventions.	2.20	0.27	D	2.10	0.64	D	2.50	0.85	D
19	Encouraging the people to Participate in awareness programmes about saving water and properly managing liquid waste.	2.40	0.31	D	2.30	0.11	D	2.04	0.99	D





Items	Indicate the roles played by the youths in liquid waste practices in your community.	Urban (203)			Rural (113)			Overall (316)		
		Mean	SD	Dec	Mean	SD	Dec	Mean	SD	Dec
20	Encouraging the adoption of sustainable practices such as using reusable bags, reducing water consumption, and conserving energy.	2.35	0.53	D	2.30	0.18	D	2.51	0.26	D
21	Discouraging the locals from open defecation and poor agricultural practices that are capable of contamination the ground water in the area.	2.25	0.05	D	2.14	0.14	D	1.75	0.95	D
Grand Mean		2.27	0.24	D	2.24	0.38	D	2.24	0.31	D

Data from table 5 indicates that among 316 urban and rural youths in Enugu North LGA who responded to items 16-21 regarding the roles of youths in liquid waste health practices, item 16 achieved a mean score exceeding 2.50, whereas items 17-21 all recorded mean scores below 2.5 for both urban and rural respondents. This finding indicates that youths in Enugu North LGA do not fulfil the roles expected of them concerning liquid waste health practices in the area.

HO<sub>3</sub>: There is no significant difference in the mean responses of urban and rural youths on liquid waste health practices.

**Table 6:** t-test of difference in the mean scores of urban and rural respondents on their roles in liquid waste health practices.

Location	No	Mean ( $\bar{x}$ )	S.D	t-cal. val	t-crit. val	Decision
Urban	203	2.27	0.24	6.21	3.30	Reject H <sub>0</sub>
Rural	116	2.24	0.38			

Table 6 shows that the urban had mean score of 2.27 with S.D of 0.24 while the rural had mean score of 2.24 with S.D of 0.38 respectively. The calculated t value was 6.21 while the t-critical value was 3.30. Therefore, since the calculated t-value is greater than the t-critical value, the H<sub>0</sub> hypothesis stands rejected.

## Discussion

The findings indicate that youths in Enugu North LGA fail to fulfil their responsibilities related to environmental health practices. The hypothesis indicates that no significant difference was found in the mean responses of urban and rural respondents concerning their anticipated roles in environmental health practices. This finding contradicts Amadi (2022), which identified the anticipated roles of youths in environmental sanitation practices as participation in community clean-ups, raising awareness on waste management, developing innovative solutions, and advocating for policy changes. Monitoring environmental conditions, engaging in





advocacy, collaborating with organizations, participating in tree planting initiatives, and promoting environmental education are essential activities.

The lack of difference in the mean scores of urban and rural respondents regarding their expected roles in environmental health practices is not unexpected, as the rural area of Enugu North is semi-urban. Consequently, youths in both settings are likely to exhibit similar patterns of environmental behaviour. The failure of youths to fulfil their roles in environmental sanitation may stem from a breakdown in social order within many communities, leading to non-conformity with essential functions, including sanitation practices. This finding aligns with Nordhaus (2013), which demonstrated that solid waste is significantly increasing in all communities due to heightened human activity linked to modern technology and population growth. Enugu North may rely on the sanitation authority, potentially hindering the youth's engagement in environmental sanitation responsibilities.

The study also found that youths in Enugu North LGA do not fulfil their roles concerning solid waste health practices in the area. The hypothesis indicates that no significant difference exists in the mean responses of urban and rural respondents concerning the anticipated youths' roles in solid waste health practices. This finding aligns with Adama's (2014) research, which noted that Enugu residents occasionally dispose off refuse materials, such as pure water sacks and other plastics, on roads or the ground, often unaware of the associated risks. The finding also indicates that youths are not fulfilling their sanitation responsibilities within their communities. This finding, however, does not align with the recommendations of Amadi (2022), which suggested that youths could significantly contribute to solid waste sanitation practices by engaging in clean-ups of streets, markets and public areas, implementing awareness programs to educate communities on solid waste management and promoting the adoption of sustainable practices; such as using reusable bags, reducing water consumption and conserving energy. The youths in this locality may perceive an urban environment as dependent on the roles of ESWAMA in promoting community engagement in environmental health practices.

The study indeed reveals that youths in Enugu North LGA fail to fulfil their responsibilities concerning liquid waste health practices. The hypothesis indicates that no significant difference was found in the mean responses of urban and rural respondents concerning youths' anticipated roles in liquid waste health practices within the locality. This finding contradicts Amadi (2022), which indicated that youths in Enugu North communities could address liquid waste practices by monitoring environmental conditions and reporting issues; such as illegal dumping of wastes or pollution to the appropriate authorities. Participating in community clean-up campaigns to eliminate standing water and litter, conducting liquid waste audits to pinpoint areas of concern and formulate targeted interventions and refraining from open defecation and unsustainable agricultural practices that may contaminate groundwater. Encouraging participation in awareness programs



focused on water conservation and effective liquid waste management. The inability of the youths in Enugu North to fulfil this role may indicate that sanitation advocacy is ineffective in the area.

### **Conclusion**

This study concluded that youths do not fulfil the anticipated roles in their communities regarding environmental health practices. Therefore, empowering youths to take action can significantly impact environmental health. Also, by engaging in waste management practices, promoting awareness, contribute to a healthier environment. Collaborative efforts between governments, organizations and community can support youths in driving positive change and ensuring a sustainable future.

### **Recommendations**

Based on the findings, the study recommends the following.

1. There is need for youth sensitization on the roles of youths in environmental health practices in Enugu North LGA. This can be achieved through sanitation education offered by faith-based organizations.
2. The monitoring of the monthly clean-up exercise in Enugu state should be compulsorily managed by the youths in all the communities in Enugu North for maximal result.
3. Health advocacy is required for the general population of Enugu North LGA to enlighten the inhabitants of the area on the dangers of open defecation as well as poor agricultural practices that are capable of contaminating the ground water.

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