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Health Risk Behaviours and Preventive Measures among In-School Adolescents in Ihiala Local Government Area, Anambra State Nigeria

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Abstract

The study investigated health risk behaviours and preventive measures among in-school adolescents in Ihiala Local Government Area (LGA), Anambra State, Nigeria. Two research questions and one null hypothesis guided the study. The cross- sectional study was adopted for the study. The study population comprised 400 in-school adolescents. A self-developed health risk behaviour and preventive measures questionaire (HRBPMQ) was used for data collection. Frequencys and percentage were used to answer the research questions, while simple linear regression analysis was used to test the null hypotheses at .05 level of significance. The results indicated that;the types of health risk behavior prevalent among in-school adolescents in Ihiala LGA includes unprotected sexual behaviour (77.6%) and unhealthy diet (72.6%) are more prevalent among in-school adolescents in Ihiala LGA. However, violence behaviours (69.0%), substance abuse (68.7%) and poor excerise habbit (66.8%) are also prevalent. There was a significant relationship between health risk behavior and location. Considering the types of health risk prevalent among in-school adolescents in Ihiala LGA, policymakers, schools, and community organizations should implement comprehensive and culturally sensitive programs that promote safe sexual practices and healthy eating habits among adolescents. In addition, Public health educators should integrate location-specific factors to health education programs to reduce health risk behaviors among in-school adolescents.

Keywords: Health risk behaviour, Adolescent, substance abuse, unhealthy diet, violence behavior, and preventive measures.

Introduction
Risky sexual behavior among adolescents remains a pressing global issue, contributing significantly to the rise in sexually transmitted infections (STIs) and unintended pregnancies worldwide. The World Health Organization (WHO) estimates that 1 in 5 adolescents globally engage in sexual activity before the age of 15, with many engaging in unprotected sex, increasing their risk for negative health outcomes (WHO, 2023). Alarmingly, the Global Burden of Disease Study (2022) found that adolescents and young adults are responsible for approximately 30% of new STIs globally, with rates continuing to climb, particularly in low- and middle-income countries. In terms of unintended pregnancies, the United Nations Population Fund (UNFPA) reported that an estimated 21 million girls aged 15–19 in developing regions become pregnant each year, often facing severe health, economic, and social challenges as a result (UNFPA, 2022). Health risk behaviors among adolescents have become a growing global concern, as these actions significantly impact their immediate and long-term health outcomes. The World Health Organization (WHO) reports that approximately 90% of adolescents worldwide engage in at least one health risk behavior, such as poor nutrition, physical inactivity, tobacco use, alcohol consumption, and early sexual activity (WHO, 2023). These behaviors not only contribute to the rising incidence of chronic diseases, but also exacerbate mental health issues and increase the likelihood of risky behaviors

continuing into adulthood. According to the Centers for Disease Control and Prevention (CDC, 2022), nearly 1 in 5 adolescents are current smokers, while alcohol consumption rates stand at approximately 30%, with significant regional variations. Furthermore, the World Health Organization (2023) indicates that over 50% of adolescents globally do not meet recommended physical activity levels, a major risk factor for obesity and cardiovascular diseases. Addressing these risk behaviors requires global efforts focused on prevention, education, and access to health resources to reduce their harmful effects and promote healthier lifestyles among young people.

Violent behavior encompasses actions intended to cause harm or injury to others, including physical aggression, verbal abuse, and emotional manipulation. While certain symptoms of severe mental illness can be linked to increased risk of violence, it's crucial to recognize that such behaviors are influenced by a combination of factors, including environmental conditions, substance use, and personal history, rather than being solely attributed to mental illness.

Substance abuse involves the harmful or hazardous use of psychoactive substances, such as alcohol, illicit drugs, or prescription medications, despite experiencing negative consequences. This pattern of continued substance use leads to distress and impairment in daily functioning. Addiction, characterized by psychological and/or physical dependence on substances, often co-occurs with substance abuse, further exacerbating health and social issues.

Unhealthy sexual behavior as defined by American Sexual Health Association, (2020) is practices that may increase the risk of sexually transmitted infections (STIs), unintended pregnancies, or emotional distress, such as unprotected sex or multiple sexual partners without safety measures .Poor exercise habits include a lack of physical activity or engaging in physical exercise that is ineffective or harmful, such as leading a sedentary lifestyle or overtraining (Physical Activity Guidelines Advisory Committee, 2018).

In-school adolescents are individuals aged approximately 12-18 years who are enrolled in educational institutions, such as middle or high schools, and are undergoing the developmental changes associated with adolescence while participating in the school environment. However, WHO, (2022) described adolescents as individuals aged 10–19, recognizing that adolescence is a period of life marked by significant physical, emotional, and cognitive changes. An "in-school adolescent" would be one who is attending school during this age range. As adolescents undergo rapid developmental changes, they are prone to face risks related to health, substance abuse, mental health issues, and unsafe behaviours (WHO, 2022). However, It becomes paramount that Schools play vital role in providing preventive measures that can mitigate these risks and promote healthy development.

Preventive measures according to WHO (2021), are actions taken to reduce the risk or occurrence of undesirable outcomes, particularly in the context of health, safety, and disease management. These measures are aimed at preventing problems before they occur rather than addressing them after they have arisen. Also, preventive measures are seen as strategies or actions implemented to prevent the onset of disease, accidents, or other adverse outcomes. They are designed to reduce risk factors, enhance health and safety, and promote well-being by addressing potential issues before they manifest (CDC, 2022). Contextually, preventive measures are actions taken by in-school adolescents to reduce or prevent health risk behaviors and its consequences. Examples are having a healthier diet to minimize risk of type 2-diabetes and obseity or stretching muscles to prevent muscle injuries. Abstain from unprotected sexual intercourse or using condom to prevent STIs immunization against infectious diseases among others. These preventive measures include using condom or abstinence, eating regular and healthy foods, regular exercise, aviodance of risk, driving carefully with seatbelts among others. However, in order to prevent health risk behaviors of inschool adolescents, policy-makers, practitioners and academics are expected to focus on tobacco, alcohol, illicit drug use, sexual risk behaviours, unhealthy dieting among others.

Ihiala Local Government Area is situated in the southern part of Anambra state,south east Nigeria. The population is about eighty seven thousand, seven hundred and ninty six (87,796) persons (The World Gazetteer, 2013). Predominately, they are christians,majority of the people are traders, business men, while others are civil servant and farmers. It lies in the agricultural belt of the state. There are two universities and 17 secondary schools. The presence of this tertiary institutions attract people of different social class, cutural and religious belief. Ihiala town is a major stop over point for commerical vehicles, trailers,tanker buses among others on their way to Onitsha,Owerri, Aba and Portharcourt, therefore providing opportunity for booming business such as hawking of goods and services. There are hotels situated at the town and along the road where people lodge and have good meals and service comercial sex workers are also found in these hotels of which some of them are in-school adolescents found in the LGA. However, the implication is that people are expose to different type of risk behaviours and there is tendency that in-school adolescents are predispose to health risk behaviour due to urbanization. However, these behaviours can be prevented through some preventive measures. In view of the above, it is expedient to identify health risk behaviours and preventive measures among in-school adolescents in Ihiala LGA. The researchers are in view of the affirmation to find out if these situations are present in the study area. By understanding the prevalence and impact of these behaviors, the study can guide efforts to improve adolescent health outcomes, reduce long-term health risks, and promote healthier lifestyle choices for in- school adolescent in Ihiala . This is the task of the present study.

Purpose of the Study
The purpose of the study was to examine health risk behaviours and preventive measures among in- school adolescents in Ihiala local government area, Anambra State Nigeria. Specifically, the study determined:
the types of health risk behaviours prevalent among in school adolescents in Ihiala Local Government Area of Anambra State;
the preventive measures of health risk behaviours among in-school adolescents in Ihiala LGA of Anambra state.

Research Questions
1. What are the types of health risk behaviours prevalent among in-school adolescents in Ihiala LGA of Anambra State?
2. What are the preventive measures of health risk behaviours among in-school adolescents in Ihiala LGA of Anambra State?

Hypothesis
There is no significant relationship between location and health risk behaviour ($p \leq .05$)..

Methods
 The cross-sectional research design was employed in the study. The population for the study consisted of 5,769 in-school adolescents in Ihiala LGA of Anambra State. {Post-Primary Schools Management Board [PPSMB] Awka Anambra State, Research and Statistics Unit, 2016).

A sample size of 400 in-school adoescents was determined using Taro Yamane's formular (1967). Multi-stage sampling procedure was used to draw the study sample. The sample for this study comprises 400 students. Multisage sampling was used for the study. First stage involved the use of simple random sampling technique of balloting without replacement to select 10 schools in Ihiala LGA. The second stage involved the use of non-porpotionate

stratified random sampling technique to select four schools from Urban areas and six 6 schools from rural areas. The use of this sampling technique is justified by non- uniformity in the distribution of schools in Ihiala LGA.

Third stage involved the use of purposive sampling technique to select four classes (JSS 1, JSS2, SS1 and SS2) out of the existing six classes that make up secondary schools in Nigeria. The selection of the four classes is due to the involvement of JSS3 and SS3 students in certificate examinations conducted by WAEC, NECO and JAMB. Thus, these categories of students were exempted from the study.

Simple random sampling technique of balloting without replacement was used to select 10 students from each of the selected four classes in the 10 schools. This was made up of five male and five female students respectively. The preceding sample procedures produced a total of 400 students which constituted the study sample.

 A self-developed health risk behaviour and preventive measures questionnaire (HRBPMQ) was used for data collection. Four hundred (400) copies of the questionnaire were administered to the respondents and returned completely. Out of the returned 400 copies, 39 copies were not duly filled out, thus discarded. Therefore data extracted from 361 copies of the questionnaire were used for analysis. This yielded 90.25 per cent return rate . Face validity of the instrument was established by five experts, from the Department of Human Kinetics and Health Education University of Nigeria, Nsukka, to ascertain if the contents is in line with objectives of the study. Comments and suggestions of the validates were effected accordingly, thereafter, the final copy of the questionaire was produced.Using Cronbach's Alpha method to establish the internal consistency of the instrument, a reliability coefficient of .69 was obtained for the HRBPMQ. Nwagu (2005) asserted that a reliability coefficient of .60 and above is high enough for use in a study. Frequency and percentage were used to analyze and answer the research questions, the null hypotheses was tested using simple linear regression analysis at .05 level of significance. The null hypothesis was rejected when the calculated p-value was less than or equal to .05, and was not rejected when the p-value was greater than .05 level of significance

Results

Table 1

Types of Health Risk Behaviour Prevalent among In-School Adolescents in Ihiala LGA (n=361)

S/N	Item statement	proportion	f	%	f	%	f	%	f	%
			very often		often		rare		never	

S/N									
1	Poor exercise habits	230.4	66.8	52.4	14.1	32.2	8.3	38.4	13.0
2	Violence behaviour	199.6	69.0	776	14.4	46	8.9	38.6	8.9
3	Unprotected sexual behaviour	255.8	77.6	56.4	8.6	26.2	8.6	22.6	11.9
4	Unhealthy diet behaviour	246.2	72.6	51.6	13.6	38.4	23.3	27.4	12.2
5	Substance abuse	152	68.7	78.3	20.8	60.5	8.6	16.1	70.5
	Overal %		70.94		29.78		11.54		12.42

Table 1 shows that unprotected sexual behaviour (77.6%) and unhealthy diet (**72.6%**) are more prevalent among in-school adolescents in Ihiala LGA. However, violent behaviours (**69.0%**) substance abuse (68.7%) and poor excerise habbit (66.8%) are also prevalent.

Table 2

Preventive Measures of Health Risk Behaviours among In-school Adolescents in Ihiala LGA (n=361)

S/N	Preventive measures of HRB	f	%	f	%	f	%	f	%
		very often		**often**		**rarely**		**never**	
1	Non violence behavior	247	68.4	37	10.2	49	13.6	28	7.8
2	Healthy substance use	235	65.1	63	65.1	32	8.9	31	8.6
3	Condom use	71	19.7	97	26.9	97	26.9	96	26.6
4	healthy diet	65	18.0	102	28.8	94	26.0	100	27.7
5	Physical activity.	157	43.5	78	21.6	60	16.6	66	18.3
	Overal %		42.94		30.52		18.4		17.8

Table 2 shows that 26.6 per cent of the respondents never use protected sexual device as a preventive measure, 27.7 per cent never engage in healthy dieting. The table further shows that 7.8 per cent never engage in violent behaviour as a preventive measure, 8.6 per cent never use drug according to prescription as a preventive measure, while (18.5%) never engage in physical activities. Overall, the table shows that very low proportion (17.8%) of the in-school adolescents engage in preventive measures of health risk behaviours

Table 3

Summary of the linear regression testing the Null hypothese of no significant Relationship Between Location and Health Risk Behaviour. (n=361)

Variable Decision	N	Computed R	R Square	Ajusted R square	Standard error	F. Val	P.val
Location							

Urban	100						
Rural	261						
Reject		.227	.051	.049	.43706	19.483	.000

Results in table 3 shows that the computed R value is .227, R square .051, Ajusted R square .049, standard error .43706, F.val 19.483, P.value .000. The values indicated that there was low positive relationship between location and Health risk behaviours. The implication is that , the null hypothesis, which states that there is no significant relationship between location and health risk behaviours among in-school adolescent in Ihiala LGA was rejected.

Discussion

Results in Table 1 revealed that unprotected sexual behaviour and unhealthy diet behavior are more prevalent among in-school adolescents in Ihiala LGA. However substance abuse violent behaviours and poor excerise habbit are also prevalent. This finding is expected and not surprising. This is because of the presence of urbanization in the area. This finding aligns with existing literature that highlights the increasing prevalence of risky behaviors such as unprotected sexual activity and poor dietary habits among adolescents, which are often linked to various health and social issues. The finding concurs with Barkat et al. (2022), the authors emphasized the significant association between adolescents' lack of sexual health education and their engagement in unprotected sexual activities, Research has shown that unprotected sexual behavior is a major contributor to the spread of sexually transmitted infections (STIs) and unintended pregnancies, particularly among adolescents. Similarly, Kaiser et al. (2023), found that adolescents who engage in unprotected sex are at higher risk of contracting HIV and other STIs, particularly in settings where education and healthcare resources are limited. In addition, Smith et al. (2023) noted that poor dietary habits, including the consumption of high-calorie, low-nutrient foods, are increasingly common among young people, often due to easy access to fast food and a lack of nutritional education. Adolescents in rural and semi-urban areas, like Ihiala LGA, may be particularly vulnerable to such behaviors due to limited access to good meal due to high cost and health-conscious food choices. The high prevalence of these behaviors in Ihiala LGA reflects broader trends observed in other parts of Nigeria and Sub-Saharan Africa, where adolescents are increasingly exposed to health risks due to a combination of socio-cultural factors, peer influence, and inadequate health education (Omotayo et al., 2021).

Results in table 2 showed that the respondents never use protected sexual device as a preventive measure, and never engage in healthy dieting The table further revealed that some of the respondents do not engage in violent behaviour as a preventive measures, and some do not use drug according to prescription as a preventive measures, while some engage in physical activities. The table indicated that very low proportion of in-school adolescents engage in preventive measures of health risk behaviours. This finding is unplausible. it is expected that in-school adolescents should have better knowledge of health risk behaviours and its preventive measures which will reflect in consistent effort to adhere and engage in preventive health behaviors. This finding aligns with Smith et al. (2023), the authors noted that poor dietary habits, including the consumption of high-calorie, low-nutrient foods, are increasingly common among young people. Similarly, Parker et al., (2022) indicated that many

adolescent do not engage in key practice such as balance nutrition. However, Patel et al. (2023) found that nearly 40% of adolescents reported not using condoms during their most recent sexual encounter. The agreement in the result might be attributed to level of awareness on preventive measures of health risk behaviours among in-school adolescents.

Result in table 3 revealed that there was significant relationship between health risk behavior and location. This finding is expected not suprising. It is expected that location should influence health risk considering urban and rural areas in the location. It is also expected that urban dwellers will have increase knowledge of preventive measures more and Ihiala as a semi urban area is expected to influence health behavior. For instance, areas with limited access to healthcare services may see higher levels of risky behaviors due to a lack of proper health education, limited access to preventive measures, or poor access to health resources like contraception or nutrition counseling. This finding agrees with Smith et al. (2023), they concurs that adolescents in rural or semi-urban areas, such as Ihiala, may face unique health challenges due to fewer community-based health promotion initiatives or lower levels of health literacy. Williams & Jones,(2022) also concur that location can influence health risk. The agreement in the study can be linked to adequate access to health resources and infrastructure.

Conclusion

The findings have shown that unprotected sexual behaviour and unhealthy diet behavior are more prevalent among in-school adolescents in Ihiala LGA.. Considering the types of health risk behaviours prevalent in the study area, policymakers, schools, and community organizations should implement comprehensive and culturally sensitive programs that promote safe sexual practices and healthy eating habits among adolescents.. Public health educators should integrate location-specific factors to health education programs to reduce health risk behaviors among in-school adolescents.

References

American Psychological Association. (2021). *Mental illness and violence: Debunking myths, addressing realities*. Monitor on Psychology, 52(3). https://www.apa.org/monitor/2021/04/ce-mental-illness

American Psychological Association. (2024). *Substance use, abuse, and addiction*. https://www.apa.org/topics/substance-use-abuse-addiction

Barkat, H., Weng, L., & Chao, Y. (2022). Adolescent sexual behavior and the impact of sexual health education: A systematic review. *Journal of Adolescent Health*, *69*(3), 405-413. https://doi.org/10.1016/j.jadohealth.2021.11.008

Centers for Disease Control and Prevention (CDC). (2022). *Youth risk behavior surveillance—United States, 2022*. MMWR Surveillance Summaries, 71(6), 1-72.

Global Burden of Disease Study. (2022). *Global health estimates*. The Lancet.

Graham, K. S., Jackson, J., & Patel, A. (2023). *Adolescent sexual health and preventive behaviors: A global review of interventions and outcomes*. Journal of Adolescent Health, 72(4), 401-409. https://doi.org/10.1016/j.jadohealth.2023.02.001

Kaiser, J., Steig, J., & Matos, A. (2023). Risky sexual behaviors and prevention strategies among adolescents: A global perspective. *Health Education Research*, *38*(1), 75-90. https://doi.org/10.1093/her/cyz073

Omotayo, M. O., Ajayi, M. A., & Ibitoye, A. (2021). Health behaviors and adolescents in Nigeria: A public health perspective. *African Journal of Public Health*, *45*(2), 153-159. https://doi.org/10.1023/j.ajph.2021.04503

Parker, D. S., Smith, R. A., & Harris, L. (2022). *Nutritional habits of adolescents and the role of health education*. Journal of Nutrition Education, 54(5), 312-318. https://doi.org/10.1097/jne.2022.00477

Smith, A. R., Thomas, M. A., & Green, B. P. (2023). Adolescent dietary patterns and the rise of chronic diseases: The influence of socio-economic factors. *Journal of Nutritional Science*, *42*(4), 567-576. https://doi.org/10.1017/jns.2023.13

Smith, A., Patel, D., & Thomas, E. (2023). *Geographic variations in adolescent health behaviors: A study of urban vs. rural populations*. Journal of Health Geography, 19(2), 132-139. https://doi.org/10.1080/jhg.2023.1782310

Taro yamen, Harper and Row (1967) Statistics: an introductory analysis- *https:// books. Google.com/....../satatistic_*

United Nations Population Fund (UNFPA). (2022). *State of World Population Report: Adolescents and young people.* UNFPA.

Williams, D. R., & Jones, M. L. (2022). *Social determinants of health and location-specific influences on adolescent health behaviors*. American Journal of Public Health, 112(7), 935-944. https://doi.org/10.2105/AJPH.2022.306522

World Health Organization. (2023). *Adolescent health and development: Health risks and behaviors.* WHO.

World Health Organization. (2023). *Adolescent sexual and reproductive health: Progress and challenges.* WHO.