



**AN ASSESSMENT OF THE DETERMINANTS AND GENDER DIFFERENCES IN  
SUBSTANCE ABUSE AMONG SECONDARY SCHOOL STUDENTS IN BIOGBOLO  
COMMUNITY, YENAGOA, BAYELSA STATE: IMPLICATIONS FOR PREVENTION**

**TAMAR PRECIOUS ORU-BO**

Department of Nursing Sciences, Bayelsa Medical University  
tamar4precious@gmail.com  
+2348036750259

**HELEN IDUBAMO WANKASI**

Department of Community Health Nursing, Niger Delta University, Wilberforce Island, Bayelsa State,  
Nigeria  
helenwankasi@ndu.edu.ng  
+2348037074692

and

**ISHAYA KUKU YAHAYA**

Department of Geography, Nigerian Defence Academy Kaduna, Nigeria  
kukuishaya@yahoo.com  
+2348035975947

Corresponding Author's email: [kukuishaya@yahoo.com](mailto:kukuishaya@yahoo.com)

**Abstract**

Substance abuse among adolescents remains a pressing challenge in Nigeria, with significant implications for health, education and social development. This study integrated findings from a survey conducted in Biogbolo Community in Yenagoa, Bayelsa State, to examine the prevalence, determinants, gender perspectives and preventive strategies of substance abuse among secondary school students. A descriptive cross-sectional design was employed, involving 338 students randomly selected from four secondary schools, representing 15.5% of the total population of 2,181. A structured and validated 28-item questionnaire was used, with Cronbach's alpha values ranging from 0.72 to 0.87. Data analysis employed descriptive statistics and the results showed widespread abuse of both local and synthetic substances, including *kaikai* (local gin), tramadol, cannabis, cough syrups and tobacco. Peer influence and community availability of substances emerged as the strongest determinants, while family background issues and weak parental monitoring also contributed. Although no significant gender differences were found in determinants of substance abuse, female students significantly favored preventive strategies such as school-based interventions and parental monitoring. Preventive strategies perceived as most effective included awareness campaigns, counseling, peer education and community sensitization. The findings highlight the need for gender-sensitive, multi-level interventions that integrate schools, families and communities.

**Keywords:** Substance Abuse, Adolescents, Determinants, Prevention, Gender Perspectives

**Introduction**

Globally, substance abuse among adolescents is a significant public health concern (Daukere et al., 2023). The World Health Organization (2023) estimates that approximately 13% of adolescents use psychoactive substances, with a higher prevalence in low- and middle-income countries. Substance abuse undermines



academic performance, increases delinquency and exposes students to long-term physical and psychological harm (Adekeye et al., 2019; Obot, 2020). Its determinants are multifaceted, ranging from curiosity, family dysfunction and academic stress to social pressures (Yahaya et al., 2022). Peer influence remains consistently reported as a leading factor (Idowu et al., 2018; Ebrahim et al., 2024). International evidence also suggests gender differences in drivers and prevention: while boys may abuse substances for social bonding, girls may be influenced by emotional coping or relational factors (Deep et al., 2024).

In Nigeria, substance abuse is widespread, particularly among secondary school students (Kolawole and Ogunlade, 2025; Lawal et al., 2025). Despite the existence of the National Drug Law Enforcement Agency (NDLEA), established by Decree number 48 of 1989 to prevent a drug-free society (Otu, 2013), substance abuse continues to rise. The Nigerian government has implemented laws to curb substance abuse, including a prison sentence of at least 15 years and no more than 25 years for possession of hard drugs (Act CAP, N30 Section 19, p.11). However, research shows that drug abuse is on the rise, particularly among students (Ekpenyong et al., 2012). According to research by Gyong and Tanimu (2014), the number of people detained in Nigeria for drug-related crimes has been rising consistently over the last 20 years. Nearly 14.1 million people in Nigeria use drugs, including a disproportionately high percentage of adolescents abusing substances, according to a 2018 poll included in the UNODC's 2021 World Drug Report.

In Bayelsa State, substance abuse is a significant issue, with alcohol being one of the traditional drinks for entertainment during festivals and ceremonies, introducing children to it early in life (Raimi et al., 2019). There is a strong relationship between substance abuse, cultism and violent crimes in Bayelsa State (Francis et al., 2021; Zacchaeus et al., 2020; Daukere et al., 2023). Biogbolo community, in particular, has experienced a series of cult clashes, violent crimes and criminality, which may be linked to substance abuse (Ekpinah, 2018). For instance, on March 19, 2018, four students in comprehensive secondary school Biogbolo were expelled for coming into the school premises to terrorize staff and students with assault rifles. Again, one 18-year-old boy was killed in the same community on 30th May 2018 in another rival cult shoot-out (Ekpinah, 2018). On 17th June 2020, three students allegedly belonging to the dreaded Icelanders cult group were killed around the Green Villa area of Biogbolo by their arch-rivals (Wankasi et al., 2025). These incidents highlight the need for urgent attention to address substance abuse and related issues in Biogbolo community.

While there is existing research on substance abuse, there is a need for a study that specifically examines the determinants, gender perspectives and preventive strategies of substance abuse among secondary school students in Biogbolo community. Prevention efforts such as awareness campaigns, peer education and parental involvement have shown promise (Idowu et al., 2023; Darko et al., 2025). Yet, without gender-sensitive analysis, interventions risk being generic and less effective. Hence, this study seeks to examine the determinants, gender perspectives and preventive strategies of substance abuse among secondary school students in Biogbolo community, Bayelsa State. This study aims to provide valuable insights that can inform effective prevention and intervention strategies through exploring the specific context and experiences of adolescents in Biogbolo.

### **Purpose of the Study**

The purpose of this study is to comprehensively investigate the determinants, gender perspectives and preventive strategies of substance abuse among secondary school students in Biogbolo community, Bayelsa State, Nigeria. This study aims to provide a detailed understanding of the complex interplay of factors contributing to substance abuse in this specific context, with a particular focus on the differences in experiences and influences between male and female students. This research seeks to examine the prevalence and patterns of substance abuse among secondary school students in Biogbolo community, exploring the types of substances used, frequency of use and associated risk factors. It will also investigate the determinants of substance abuse, including individual, family, peer and community-level factors that contribute to substance use among secondary school students in Biogbolo community.

Furthermore, this study will explore gender differences in substance abuse, including the motivations, experiences and consequences of substance use among male and female students in Biogbolo community. The study aims to identify effective preventive strategies, including awareness campaigns, peer education and parental involvement, which can be tailored to address the specific needs of secondary school students in Biogbolo community by understanding these differences. Ultimately, this study seeks to inform policy and intervention development by providing evidence-based recommendations for stakeholders, policymakers and practitioners to develop targeted interventions as well as support services for adolescents in Biogbolo community. The study hopes to contribute to the development of effective solutions that promote the health, well-being and future prospects of young people in Biogbolo community and beyond through shedding light on the complex issues surrounding substance abuse among adolescents in this specific context.

The significance of this study lies in its potential to address a critical gap in research on substance abuse among adolescents in Biogbolo community. Additionally, this study will provide valuable insights that can inform effective prevention and intervention strategies in Bayelsa State by means of exploring the complex interplay of factors contributing to substance abuse. The findings of this study will contribute to the development of evidence-based policies and programs aimed at reducing substance abuse in addition to promoting the health and well-being of adolescents in Biogbolo community and beyond.

### Research Questions

The following research questions guided the study:

1. What is the prevalence of substance abuse among secondary school students in Biogbolo Community?
2. What are the determinants of substance abuse among secondary school students in Biogbolo Community?
3. What preventive strategies are perceived as effective in mitigating substance abuse among secondary school students in Biogbolo Community?

### Methodology

The study employed descriptive cross-sectional survey designs to capture adolescent behaviors and perceptions at a single point in time. The setting was Biogbolo Community in Yenagoa Local Government Area, Bayelsa State, an area marked by socio-economic challenges and accessibility to both local and pharmaceutical substances. Yenagoa, the capital of Bayelsa State, is located between latitude 4° 47' 15" and 5° 11' 55" North and longitude 6° 0' 35" and 6° 2' 00" East (Raimi et al., 2018). The Local Government Area (LGA) covers 706 km<sup>2</sup> with a population of 353,344 (187,791 males and 165,553 females) and an annual growth rate of 2.9% (Ndiwari, 2014). Yenagoa LGA is bounded by Mbiama communities of Rivers State to the north and east, Kolokuma/Opokuma LGA to the northwest, Ogbia LGA to the south and southeast, and Southern Ijaw LGA to the southwest (Koinyan et al., 2013). The LGA consists of 21 communities, including Igbogene, Yenegwe, Akenfa, and Biogbolo. Yenagoa LGA is the traditional home of the Ijaw people, with English as the official language and Epie/Atissa as the major local language (Ayenimo et al., 2010). Other languages spoken include Tamu, Mein, Jobu, Oyariri, and Tarakiri. The people of Yenagoa express their culture through unique dresses, festivals, dietary habits, arts, and crafts (Raimi et al., 2018). The major crafts include canoe building, fish net making, pottery, and basket making (Ndiwari, 2014).

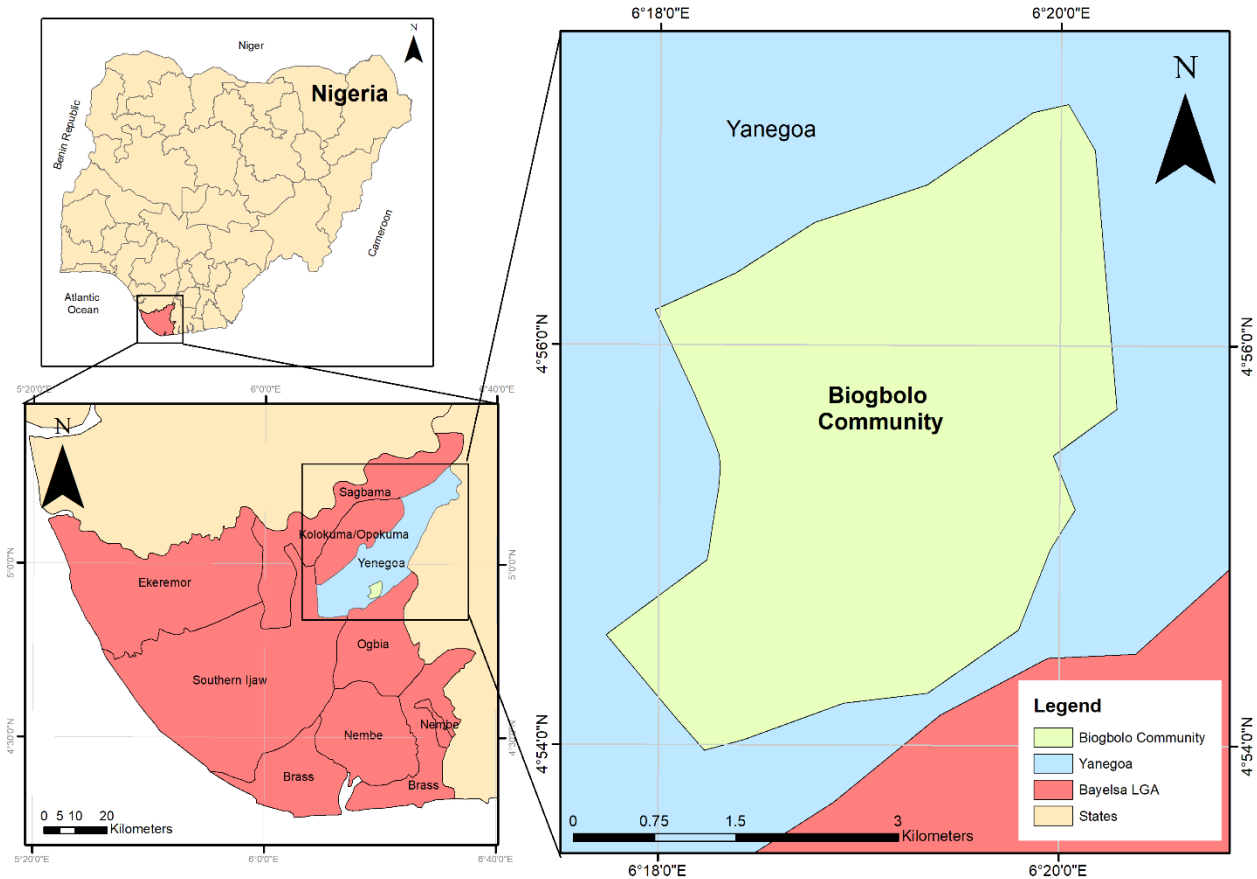


Figure 1. Map of Bayelsa State Showing the Study Area  
Source: Authors 2025

The study population comprised 2,181 students enrolled in four secondary schools during the 2022/2023 academic session. A sample of 338 students (15.5%) was selected using purposive sampling to select Biogbolo Community and participating schools, while stratified proportional sampling was applied to select students across gender and grade levels. Data were collected using the Determinants and Prevention of Substance Abuse among Secondary School Students Questionnaire (DPMSASSSQ), a 28-item structured questionnaire covering demographics, prevalence, determinants and prevention. The instrument demonstrated strong reliability, with Cronbach's alpha values ranging from 0.72 to 0.87 and was validated by experts in public health and education. The DPMSASSSQ employed a 5-point Likert scale format, ranging from "Strongly Agree" (5) to "Strongly Disagree" (1), allowing respondents to indicate their level of agreement with statements such as "My friends influence me to use substances" or "I believe substance abuse is a significant problem in my community." This scale format enabled the collection of comprehensive data on students' perceptions and experiences related to substance abuse. Questionnaires were administered by trained assistants after obtaining informed consent from students and parents. Data were analyzed using SPSS v25. Descriptive statistics summarized prevalence, determinants and prevention strategies. Ethical clearance was secured from the Bayelsa State Ministry of Health Ethics Committee, with all procedures aligned to the Declaration of Helsinki (2013).

## Results

**Research Question One:** What is the prevalence of substance abuse among secondary school students in Biogbolo Community?

**Table 1: Mean Responses on Commonly Abused Substances**

Substances	Mean ( $\bar{x}$ )	Std. Dev.	Remark
Kaikai (local gin)	3.32	0.84	Abused
Weeds	3.26	0.89	Abused
Tramadol	3.41	0.75	Abused
Cough syrup	3.27	0.86	Abused
Loud cannabis	3.29	0.79	Abused
Tobacco/Nicotine	3.14	0.84	Abused

*Cut-off mean = 2.50 ( $\geq 2.50 = Abused$ )*

Tramadol ( $\bar{x} = 3.41$ ), kaikai ( $\bar{x} = 3.32$ ), and loud cannabis ( $\bar{x} = 3.29$ ) emerged as the most commonly abused substances.

The mean responses on commonly abused substances among secondary school students in Biogbolo Community are presented in Table 1. The results indicate that all the substances listed have mean scores above the cut-off mean of 2.50, suggesting that they are abused by the students. Specifically, Tramadol has the highest mean score ( $\bar{x} = 3.41$ ,  $SD = 0.75$ ), followed closely by Kaikai ( $\bar{x} = 3.32$ ,  $SD = 0.84$ ) and Loud cannabis ( $\bar{x} = 3.29$ ,  $SD = 0.79$ ). Other substances abused by the students include Weeds ( $\bar{x} = 3.26$ ,  $SD = 0.89$ ), Cough syrup ( $\bar{x} = 3.27$ ,  $SD = 0.86$ ) and Tobacco/Nicotine ( $\bar{x} = 3.14$ ,  $SD = 0.84$ ). These findings suggest that secondary school students in Biogbolo Community abuse a range of substances, with Tramadol, Kaikai and Loud cannabis being the most commonly abused.

**Research Question Two:** What are the determinants of substance abuse among secondary school students in Biogbolo Community?

**Table 2: Determinants of Substance Abuse**

Determinants	Mean ( $\bar{x}$ )	Std. Dev.	Remark
Peer group influence	3.36	0.81	Major factor
Curiosity/experimentation	3.21	0.86	Major factor
Community availability	3.19	0.83	Major factor
Lack of parental monitoring	3.05	0.89	Contributing
Family background issues	2.98	0.90	Contributing
Academic stress	2.77	0.92	Contributing

The determinants of substance abuse among secondary school students in Biogbolo Community are presented in Table 2. The results reveal that peer group influence ( $\bar{x} = 3.36$ ,  $SD = 0.81$ ) is the strongest determinant of substance abuse, categorized as a major factor. Curiosity/experimentation ( $\bar{x} = 3.21$ ,  $SD = 0.86$ ) and community availability ( $\bar{x} = 3.19$ ,  $SD = 0.83$ ) also emerged as major factors contributing to substance abuse. Additionally, lack of parental monitoring ( $\bar{x} = 3.05$ ,  $SD = 0.89$ ), family background issues ( $\bar{x} = 2.98$ ,  $SD = 0.90$ ), and academic stress ( $\bar{x} = 2.77$ ,  $SD = 0.92$ ) were identified as contributing factors, albeit to a lesser extent. These findings suggest that peer influence and environmental factors play a significant role in shaping substance abuse behaviors among secondary school students in the study area.

**Research Question Three:** What preventive strategies are perceived as effective in mitigating substance abuse among secondary school students in Biogbolo Community?

**Table 3: Prevention Methods of Substance Abuse**

Prevention Methods	Mean ( $\bar{x}$ )	Std. Dev.	Remark
Awareness campaigns in schools	3.42	0.77	Effective
Counseling and peer education	3.38	0.81	Effective
Strong parental monitoring	3.31	0.85	Effective
School enforcement of discipline	3.26	0.84	Effective

The effectiveness of various prevention methods for substance abuse among secondary school students in Biogbolo Community is presented in Table 3. The results indicate that awareness campaigns in schools ( $\bar{x} = 3.42$ ,  $SD = 0.77$ ) are considered the most effective preventive strategy, closely followed by counseling and peer education ( $\bar{x} = 3.38$ ,  $SD = 0.81$ ). Strong parental monitoring ( $\bar{x} = 3.31$ ,  $SD = 0.85$ ) and school enforcement of discipline ( $\bar{x} = 3.26$ ,  $SD = 0.84$ ) were also rated as effective preventive measures. These findings suggest that students believe awareness-driven and peer-led initiatives are crucial in preventing substance abuse, highlighting the importance of involving students in prevention efforts.

### Discussion of Findings

The findings of this study provide a comprehensive understanding of the prevalence, determinants and preventive strategies of substance abuse among secondary school students in Biogbolo community, Bayelsa State. The high rating of tramadol use among students aligns with national reports by the NDLEA (2022) and Idowu et al. (2018), which highlight tramadol as the fastest-rising drug of abuse among Nigerian adolescents. This trend is concerning, given the potential for tramadol dependence and its associated health risks. The prominence of kaikai, a locally brewed alcohol, underscores the cultural acceptance of traditional substances in the Niger Delta region. The use of cough syrups and cannabis indicates growing exposure to synthetic substances, reflecting the evolving nature of substance abuse in the community. This dual pattern of abuse demonstrates that adolescents navigate between traditional practices and modern drug markets, making prevention efforts more complex.

The study's findings on the determinants of substance abuse highlight the central role of peer pressure in adolescent decision-making, consistent with Obot (2020), who emphasized the influence of social networks on youth behavior in sub-Saharan Africa. Easy availability of substances within the community further compounds the problem, as substances are often sold openly near schools or in local shops. This lack of regulation and oversight contributes to the normalization of substance use among adolescents. The World Health Organization (2023) has also noted that the widespread availability of psychoactive substances in many communities contributes to the high prevalence of substance use among adolescents. Weak parental monitoring and family instability also emerged as significant contributors to substance abuse, suggesting that lack of supervision provides opportunities for risky behavior.

The study's findings on preventive strategies highlight the importance of integrating both school-based and family-centered approaches. Peer education, in particular, resonates with adolescents because it leverages peer influence, the same factor driving substance abuse as a tool for prevention. Strong parental monitoring also emerged as crucial, pointing to the continuing role of the family in shaping adolescent choices. School discipline, though rated slightly lower, indicates students' recognition that institutional rules can act as deterrents. The gender analysis adds tone to the findings, revealing that while determinants of substance abuse did not significantly differ between male and female students, female students were more inclined toward preventive behaviors. This suggests that adolescent girls may be more receptive to structured interventions, aligning with international evidence showing that they are more responsive to health education and family-based interventions (Deep et al., 2024).

The study's findings have implications for policy and practice. Firstly, they highlight the need for a comprehensive approach to substance abuse prevention that addresses the social, environmental and familial factors contributing to substance use. Secondly, they underscore the importance of tailoring

interventions to the specific needs and contexts of adolescents, including gender-sensitive approaches. Finally, they emphasize the need for collaboration between schools, families and communities to create a supportive environment that promotes healthy choices and reduces the risk of substance abuse.

### Conclusion

In conclusion, this study provides valuable insights into the prevalence, determinants, and preventive strategies of substance abuse among secondary school students in Biogbolo community, Bayelsa State. The findings highlight the complexity of substance abuse and the need for a multifaceted approach to prevention. It is possible to reduce the risk of substance abuse and promote healthy choices among adolescents by addressing the social, environmental and familial factors contributing to substance use in addition to leveraging peer influence and family support,. The study's findings also underscore the importance of further research into the causes and consequences of substance abuse among adolescents, as well as the evaluation of prevention and intervention strategies.

### Recommendations

The following are recommendations made:

1. School-Based Programs: The school administration, in collaboration with health educators and peer mentors, should lead quarterly awareness campaigns focusing on the dangers of substance abuse, effects on mental health and strategies for resisting peer pressure. These campaigns should be integrated into the school curriculum and extracurricular activities.
2. Parental Engagement: School administrators should organize bi-monthly parent-teacher conferences to educate parents on effective monitoring strategies, such as setting clear expectations and maintaining open communication with their children. This would enable parents to support their children in making informed decisions about substance use.
3. Community Regulation: Local authorities, in partnership with school officials and community leaders, should establish a regulatory task force to enforce laws prohibiting the sale of psychoactive substances near schools. This task force should conduct regular sting operations and impose strict penalties on vendors who sell substances to minors.

### References

- Adekeye, O., Adeusi, S. O., Chenube, O. O., Ahmadu, F. O., & Sholarin, M. A. (2019). Assessment of alcohol and substance use among undergraduates in selected private universities in Southwest Nigeria. *Open Access Library Journal*, 6(2), 1–11. <https://doi.org/10.4236/oalib.1105180>
- Adelekan, M. L. (2010). Substance use and abuse in Nigeria: Epidemiological perspectives. In O. Olugbile & I. Morakinyo (Eds.), *Contemporary issues in substance use in Nigeria* (pp. 1–24). Lagos: Centre for Youth Studies.
- Ayenimo, J. G., Yusuf, A. M., Adekunle, A. S. (2010). Heavy metal exposure from personal care products. *Bull Environ. Contam. Toxicol.*, 84(1), 8-14. doi: 10.1007/s00128-009-9867-5
- Darko, R. A., Amponsah, S., & Mensah, E. (2025). Psychosocial factors driving common substance use among adolescents in urban Ghana. *Substance Abuse Treatment, Prevention, and Policy*, 20(1), Article 34. <https://doi.org/10.1186/s13011-025-01234-5>
- Daukere, B. E., Yahaya, I. K., Ahundu, M. O., & Ananya, B. J. (2023). Examining the spatial distribution and rationale for commercial sex work in Zaria, Kaduna State Nigeria. *FUGA Journal of Management and Social Sciences (FUJOMAS)*, 1(1), 23-34.



- Daukere, B. E., Dankani, I. M., Yahaya, I. K., Sulaiman, T. M., Olaniyi, O. I., & Eniolorunda, N. B. (2023). A spatial patterning of the relationship between indigenous police force numerical strength, socioeconomic characteristics and crime rate in Nigeria. *Social Sciences & Humanities Open*, 8(1), 100644. <https://doi.org/10.1016/j.ssaho.2023.100644>
- Deep, P. D., Shrestha, K., & Khanal, R. (2024). Factors affecting substance use and the role of peer influence among high school students. *Journal of Substance Use Research*, 3(4), 28. <https://doi.org/10.3390/jsur3040028>
- Ebrahim, J., Bekele, A., & Tesfaye, M. (2024). Substance use among young people in sub-Saharan Africa: A systematic review of recent prevalence studies. *Frontiers in Psychiatry*, 15, Article 1328318. <https://doi.org/10.3389/fpsy.2024.1328318>
- Ekpenyong, C. E., Akpan, U.P. & Ibu, J. O. (2012). Gender and Age Specific Prevalence and Associated Risk Factors of Type 2 Diabetes Mellitus in Uyo Metropolis, South Eastern Nigeria. *Diabetologia Croatica*, 41, 17-28.
- Ekpinah, A. (2018). *An anecdotal source from Biogbolo Community*.
- Francis, C., Iruo, L. A., & Henry, U. O. (2021). *The level of substance use disorders in Tombia Community, Bayelsa State-Nigeria*.
- Gyong, J. E., & Taninu B (2014). A Sociological assessment of the National Drug Law Enforcement Agency (NDLEA) Strategies of arrest and detention, *Nigerian Journal of Social Sciences*, 2(3), 127-132.
- Idowu, A., Lawal, O., & Abdullahi, T. (2023). Prevalence, pattern, and determinants of substance abuse among youths of Ejigbo community, Osun State, Nigeria. *International Journal of Public Health*, 68(3), 115–127. <https://doi.org/10.1186/s12889-023-01765-y>
- Idowu, A., Aremu, A. O., Olumide, A., & Ogunlaja, O. (2018). Substance abuse among students in selected secondary schools of an urban community of Oyo State, South West Nigeria: Implication for policy action. *African Health Sciences*, 18(3), 776–785. <https://doi.org/10.4314/ahs.v18i3.39>
- Koinyan, A., Nwankwoala, H. O., & Eludoyin, O. S. (2013). Water resource utilization in Yenagoa, central Niger Delta: Environmental and health implication. *Journal of Water Resources and Environmental Engineering*, 5(4), 177-186. doi: 10.5897/IJWREE2013.0389
- Kolawole, T. O., & Ogunlade, J. (2025). Prevalence of substance use and knowledge of its effects among secondary school students in Lagos, Nigeria. *Frontiers in Public Health*, 13, Article 12135711. <https://doi.org/10.3389/fpubh.2025.12135711>
- Lawal, A., Musa, I., & Okonkwo, F. (2025). Prevalence and factors associated with substance abuse among school-going adolescents in Nigeria. *BMC Public Health*, 25, Article 21739. <https://doi.org/10.1186/s12889-025-21739-y>
- National Drug Law Enforcement Agency. (2022). *National survey on drug use and health in Nigeria*. Abuja: NDLEA.
- Ndiwari, E. L. (2014). *Road network Analysis for Yenagoa Local government Area, Bayelsa State*. Unpublished.
- Obot, I. S. (2020). Substance use and abuse in sub-Saharan Africa. In M. E. Marlatt, K. Witkiewitz, & J. R. Larimer (Eds.), *Addictive behaviors: New readings on etiology, prevention, and treatment* (pp.



325–340). Washington, DC: American Psychological Association. <https://doi.org/10.1037/0000159-018>

Otu, S. E. (2013). The “war on drugs” in Nigeria: How effective and beneficial is in dealing with the problem? *African Journal of Drug and Alcohol Studies*, 12(2), 34-45.

Raimi, M. O., Omidiji, A. O., & Tonye, V. O. (2018). Measures of harm from heavy metal contents (lead and cadmium) in women's lipstick and lipgloss in Yenagoa Metropolis, Bayelsa State, Nigeria. *International Journal of Petrochemistry and Research*, 2(3), 236-252. doi:10.18689/ijpr-1000141

United Nations Office on Drugs and Crime (UNODC). (2021). Global study on homicide 2021. *United Nations Office on Drugs and Crime*.

Wankasi, H. I., Oru-bo, P. T., Sambo, B., Muojekwu, E., & Alpojisheri, F. (2025). Classification of commonly abused substances among students of selected secondary schools in Biogbolo Community: A quantitative study. *Journal of Health, Applied Sciences and Management*, 8(2). <https://dx.doi.org/10.4314/johasam.v8i2.10>

World Health Organization. (2023). *Adolescent substance use: Global trends and interventions*. Geneva: WHO

World Medical Association. (2013). WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects. *JAMA*, 310(20), 2191-2194. doi: 10.1001/jama.2013.281053

Yahaya, M. I., Yahaya, I. K., & Lawan, L. Y. (2022). Determinants of educational growth and development. *Uniafrica Journal of Education*, 1(1), 127-133.

Zaccheus, E.A., & Iruo, L.A (2020). The Mental Health Impact of Sexual Violence: Attending to the Unmet Needs of Rape Survivors in BayelsaState. *International Journal of Research Innovation in Science*, 4(2), 45-54.