



## Prevalence, knowledge and Determinants of Substance Abuse among Undergraduates in Tertiary Institutions in Ika South LGA: Narrative Review

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### Abstract

**Background:** Abuse of substances and other drugs heightens the attention of researchers. Young adults in tertiary institutions are particularly vulnerable because of peer influence, academic stress, curiosity, easy access to psychoactive substances and other psychosocial factors. Although numerous studies have examined substance abuse among university students, findings vary across settings, and evidence from some parts of Nigeria, including Ika South Local Government Area, Delta State, remains limited.

**Objective:** To synthesize current evidence on the prevalence, knowledge, commonly abused substances and determinants of substance abuse among undergraduate students in tertiary institutions.

**Methods:** A narrative literature review was performed by use of peer-reviewed literature which was published majorly between the years 2020 and 2025. Search for electronic databases like Pub Med, Scopus, Google Scholar, Science Direct and African Journals Online (AJOL) was performed using key terms. Additionally, publications by World Health Organization (WHO) and United Nations Office on Drugs and Crime (UNODC) were evaluated to understand the situation globally and regionally.

**Results:** The prevalence differs across studies, demographics, and geographical locations. Alcohol, cannabis, tobacco, tramadol and codeine-containing medications were the most commonly abused substances. Most students demonstrated moderate to good knowledge of the harmful effects of substance abuse; however, this knowledge did not consistently translate into healthy behavioural practices.

**Conclusion:** Substance abuse among undergraduate students is a complex public health problem that requires comprehensive and coordinated interventions. Further context-specific research is needed to generate evidence that will inform effective policies and targeted interventions in underserved settings.

**Keywords:** Substance abuse; undergraduates; tertiary institutions; prevalence; knowledge; determinants; psychoactive substances; narrative review, Ika South LGA, Nigeria.

## 1.Introduction.

Substance abuse is a global challenge with detrimental effects on health, livelihood and security of a nation, individual physical, mental, social health status and responsibilities, and abusers usually suffer from different concurrent medical, psychological and social conditions. (Kabbash*et al.*, 2022). Psychoactive substances, including alcohol, tobacco, cannabis ,opiod, stimulant sand sedatives continues to have serious health consequences with adolescent and young people being the most affected groups. This stage of life is marked by personal growth, increase independence, and search for identity. During this period, young people are more likely to be influenced by their peers, making them more vulnerable to start and continue the use of psychoactive substance use (Nath *et al.*, 2022).

Despite ongoing efforts to prevent and control substance misuse, the substance misuse continues to be a public health concern as youths in tertiary institutions are often faced with a combination of social, psychological and environmental challenges which include academic demands, financial difficulties, curiosity, new peer relationships, and reduced parental supervision. Such behavior may encourage the initiation of psychoactive substance use, which can also progress into substance use disorders. As emphasized by Malami *et al.* (2025), if the cases of substance abuse are not adequately addressed, it will be detrimental for the students.

Rapid urbanization, unemployment, poverty, weak policy regulation system and increased drug trafficking have all contributed to the rising used of psychoactive substance among young people. Nigeria is among the countries that continue to experience a high burden of substance use. According to the National Bureau of Statistics and the United Nations office on drugs and crime, (2019) about 14.4million Nigerians aged 15-64 years reported using psychoactive substances in the previous years, representing a national prevalence of 14.4%, Cannabis, identified as the most commonly used illicit substance. The report also identified that young adults are among the groups most affected, reinforcing the need for effective evidence based prevention program within educational institutions.

Despite the growing body of literature on substance abuse among youths in Nigeria, important knowledge gaps remain. Prior researches only focus on the southern or northern part of the Nigeria without many attentions in the Ika south local government area of Delta State. More

also, limited researches were carried out on single aspect of substance abuse instead of investigating the three dimensions such as knowledge, determinants, and prevalence. Differences in study design, measurement instruments, sampling methods, and institutional settings have also produced inconsistent estimates of prevalence and varying conclusions regarding the influence of knowledge on substance use behavior. There is no enough research evidence to explain how drugs and alcohol abuse affects young people in the tertiary institutions in Ika South Local Government Area. This review examines existing studies on substance abuse among Nigerian institutions, outlined the key findings and their implications for the institutions. It further examined the prevalence of substance abuse, assess youth's knowledge regarding substance use and its consequences, identified the various factors influencing substance abuse among youths in Ika South LGA. The findings of this review are expected to provide a robust evidence base for the empirical component of this study and to inform the development of context specific public health interventions, institutional policies, and health promotion program aimed at reducing substance abuse among youths in tertiary institutions.

## 2. Statement of the Problem

The problem of substance abuse especially among youths and young person's is a silent epidemic and a major public health problem globally. A total of 270 million people (about 5.5% of the world's population are estimated to be using psychoactive substances in 2021. Also, not less than 35 million people are currently being affected by drug use disorders while 0.5million deaths are attributed to abnormal drug use all over the world (Idowu *et al.* 2023).

The burden of substance abuse is humongous as about 1.3% of the global disease burden is attributed to it in 2017. It is also estimated that there are about 11 million people who inject drugs worldwide, of which 1.4 million live with HIV and 5.6 million with hepatitis C. World Health Organization,(2021), and United Nations Office Drug and Crime, (2021). Substance abuse is also huge in sub-Saharan Africa. A systematic review by Olawole-Isaac *et al.* (2018), revealed the prevalence of substance abuse among adolescents in Africa is as high as 41.6%. Alcohol is the most commonly used drug, and approximately 22.5 million adolescents aged 12–

19 years are current alcohol drinkers in Sub Saharan Africa, highlighting a serious burden of alcohol use among young people.

In Nigeria, drug use is a menace especially among youths. UNODC, (2019) reported 14.3 million drug users in Nigeria, aged 15-64 years, representing 14.4% of the population use psychoactive substances for non medical purposes within the previous years. While million Nigerian suffer from drug use. Therefore, this study seeks to investigate the prevalence of substance abuse, assess youths' knowledge regarding substance use and its consequences, and determine the factors influencing substance abuse among youths in tertiary institutions in Ika South Local Government Area. Findings from use disorders are times three the international prevalence of substance use and at least 11 million Cannabis users in Nigeria. Jatau *et al.* (2021) revealed a prevalence of drug abuse to be as high as 20-40% and 20.9% among Nigerian youths and students respectively, suggesting that substance use varies across different populations and settings in Nigeria. This reinforces the need to determine the prevalence of substance use among youths in tertiary institutions in Ika South LGA, where evidence of local data is limited.

Individual level of knowledge about substance use and its harmful effects is an important factor that influence health related decisions and behaviors. Substance abuse has been associated with increased risks of infectious diseases such as HIV and hepatitis, cardiovascular complications, respiratory illnesses, and several forms of cancer (Akunna and Lucyann, (2023). The youths who are knowledgeable enough on the dangers of substance abuse tend to make good decisions thereby minimizing the chances of drug abuse. Zhou *etal.* (2024) observed that even with an increasing number of public awareness campaigns through community and institutional health education programs, the incidence of substance abuse continues to increase and hence it becomes evident that just having knowledge alone is not adequate enough to bring behavioral changes. Hence the need to improve knowledge through health education programs to promote healthy living among youths (World Health Organization,(2024).

Factors that determine substance abuse among young people are various and connected. The determinants for substance abuse among youth are numerous and interlinked. There are various socio-economic issues, lack of employment opportunities, peer pressure, family environment, availability of the substances, cultural norms, insufficient parental control, stress, and genetics

listed in literature as determinants of substance use behavior (Ajayi and Somefun, 2020; Akunna and Lucyann, 2023).

In joining tertiary institutions, students get exposed to numerous circumstances that might make them vulnerable to substance use. Personal freedom, heavy academic demands, increasing social networks, personal discovery, and lack of parental control might increase the risks already present. As a result, some students may resort to substance use as a means of coping with academic stress, emotional difficulties, desire to gain social acceptance and fit into peer groups. These combine influence of these factors increases students vulnerability and may promote the initiation and continuation of substance use behaviors (Vander Wath *et al.*, 2024).

Although several determinants of substance use have been identified, their influence is not uniform across all settings. The factors associated with substance use among students are shaped by the social, cultural, economic and institutional characteristics of each environment. As thoroughly observed, the factors that encourages substance abuse is geographical location dependent and it differs from one location to another (Boden and Day, 2023). Although, substance use among young people continue to receive considerable attention from researchers and public health authorities worldwide, important knowledge gaps persist regarding its prevalence, the level of knowledge and determinants of substance use among youths in Ika South LGA. The limited available context specific empirical evidence restricts the ability of policy makers, institutional body and public health practitioners to develop effective evidence based policies, institutional interventions and preventive strategies. Therefore, this, study is designed to address these gaps by providing reliable local evidence that will inform policy formulation, strengthen health promotion initiatives and support the development of context specific interventions aimed at reducing substance abuse and improving youth wellbeing (WHO, 2024)

### **3. Conceptual Review**

This conceptual review seeks to examine briefly the various concepts, the objective of this study based on what is known, unknown and knowledge gaps to provide evidence to justify the study.

#### **3.1 Concept of prevalence of substance abuse.**

Several studies have shown that substance abuse is common among university students in different places. Wada *et al.* (2021) revealed the prevalence of substance abuse among the universities' students, indicating a health concern that should not be taken for granted in tertiary institution. In accordance to the investigation is the research carried out by Tebu *et al.* (2025) on the use of psychoactive substance among the Nigerian students. Not only in Nigeria but also international country like Egypt as Kabbashet *al.* (2022) concluded that university students in Egypt were involved in taking tobacco, cannabis, and alcohol.

### 3.2 Knowledge of Substance Abuse

The knowledge of substance abuse begins with understanding implications and creating of awareness to prevent the use of most of the psychoactive drugs. It is an important factor in shaping attitudes and behaviors related to substance use. Many undergraduate students possess a reasonable level of awareness regarding substance abuse and its consequences. Justifiably, Musa *et al.* (2021) and Chiejineet *al.* (2025) revealing that students were aware of the harmful effects and associated risk of substance abuse. Moreover, Kabbashet *al.* (2022) observed that despite the fact of awareness on the hazards that were connected to the consumption of drugs, the students continued to take part in such behaviors.

### 3.3 Concepts of commonly abused substance.

The abuses of drugs are reasons beyond their medicinal value due to their effects on one's mood, behaviors, perception, and psychological functioning. Such abused drugs include both legal drugs and controlled or illegal drugs, such drugs leads to dependency problems, poor performance academically, psychological problems, amongst others (World Health Organization [WHO], 2022). Alcohol, cigarettes, tramadol, cough syrups, shisha, and cannabis are the other drugs that were identified to be commonly abused and this trend in usage was blamed on the high availability and social acceptability of these drugs among youths (Jatau *et al.*, 2021; Olanrewaju *et al.* 2022). Ebrahim *et al.* (2024) revealed alcohol to be the commonest abuse substance majorly in Sub-Saharan Africa. The research stressed out that it was not only alcohol that were usually abuse but also khat, tobacco, cannabis, cocaine, inhalants, sedatives and shisha. As researches keep revealing the commonest drug abuse, understanding there effects

are important for designing effective health education and prevention programs targeted at young people. **3.4 Determinants of Substance Abuse**

World health organization (2021) noted that health behaviors are shaped by social, economic and environmental factors, while UNODC (2024) highlighted peer pressure, easy access and social surroundings as key drivers of young people to substance use. Kabbashet *al.* (2022) emphasized youthful exuberance, availability and accessibility of drugs as the determinants in the consumption rate of substances in the tertiary institutions. Similarly, Idowu *et al.* (2020) suggest that peer influence, stress, and family background contribute to the consumption of substances among students. Although several determinants have been identified, there is still little understanding of how these factors work together to influence substance use among undergraduate students, as most studies have examined these factors individually rather than as interrelated factors.

### **3.5 Concept of the Relationship between Knowledge and Prevalence of Substance Abuse.**

It is believed that a person's sufficient knowledge can help him/her make positive choices and avoid substance abuse. Nevertheless, a lack of knowledge may not necessarily prevent substance abuse, since there are various personal, social, and environmental factors affecting individual's behavior (World Health Organization [WHO], 2022). WHO (2022) stated that health education increases individual's awareness about the danger of substance abuse; however, there are other factors that can affect behavior, including social support, personal attitude, access to services, and appropriate environment. Thus, individuals who have enough knowledge can still use psychoactive substances when exposed to powerful social or environmental factors.

United Nations Office on Drugs and Crime (UNODC, 2023) pointed out that many adolescents know about the negative impact of drugs on their health but use substances regardless of it because of peer pressure, curiosity, stress, social acceptability, and access to psychoactive substances. In other words, good knowledge was not enough to prevent substance abuse completely since apart from knowledge, age, sex, marital status, and attitudes regarding substance abuse played an important role in the issue. Hence, the findings from Idowu *et al.* (2023) imply that even though proper knowledge can help reduce substance abuse to some

extent, it should be supported by other measures such as changing people's behaviors and preventing substance abuse programs to make a real difference.

Table 1 Summary of the conceptual review

| Author                           | Focus Variable(s)                             | Identified Gap                                                                                         |
|----------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Tenny & Hoffman (2023)           | Prevalence                                    | Did not focus specifically on substance abuse among undergraduate students.                            |
| Hassan Wada <i>et al.</i> (2021) | Prevalence of substance abuse                 | Did not examine knowledge and determinants alongside prevalence.                                       |
| Tebu <i>et al.</i> (2025)        | Prevalence of psychoactive substance use      | Focused mainly on prevalence without integrating knowledge and determinants.                           |
| Kabbashet <i>al.</i> (2022)      | Prevalence, knowledge and determinants        | Did not provide evidence from Nigerian tertiary institutions.                                          |
| Marke <i>et al.</i> (2026)       | Prevalence                                    | Did not investigate knowledge and determinants comprehensively.                                        |
| Musa <i>et al.</i> (2021)        | Knowledge                                     | Did not establish whether knowledge influences substance use behaviour.                                |
| Chiejineet <i>al.</i> (2025)     | Knowledge                                     | Examined knowledge independently without linking it to prevalence and determinants.                    |
| Olanrewaju <i>et al.</i> (2022)  | Commonly abused substances                    | Focused mainly on substances abused without examining prevalence, knowledge and determinants together. |
| Jatau <i>et al.</i> (2021)       | Commonly abused substances and relationship   | Did not provide localized evidence from Ika South LGA.                                                 |
| Ebrahim <i>et al.</i> (2024)     | Commonly abused substances and relationship   | Did not focus on Nigerian undergraduate students.                                                      |
| WHO (2021)                       | Determinants of health behaviour              | Did not specifically examine undergraduate students.                                                   |
| WHO (2022)                       | Commonly abused substances and relationship   | Provides general evidence rather than local findings.                                                  |
| UNODC (2023)                     | Commonly abused substances and relationship   | Did not focus specifically on Nigerian undergraduate students.                                         |
| UNODC (2024)                     | Determinants                                  | Provides broad evidence without local context.                                                         |
| Idowu <i>et al.</i> (2020)       | Determinants                                  | Examined determinants separately without integrating knowledge and prevalence.                         |
| Idowu <i>et al.</i> (2023)       | Relationship between knowledge and prevalence | Did not examine the relationship within Ika South LGA.                                                 |

#### 4.1. Empirical review Prevalence of substance abuse

A descriptive cross-sectional research on age group 15-24 years in Ejigbo community in Osun State, Nigeria shows 89% of the correspondent with good knowledge of substance abuse. Despite the high level of knowledge observed among the students, substance abuse remained a major public health concern among rural youths, hence, intensified public health education, community-based interventions, and stronger policy implementation are needed to reduce substance abuse among Nigerian youths (Idowu *et al.*, 2023). Other descriptive analysis by Olarenwaju *et al.* (2022) on prevalence and awareness of substance abuse among four different university in Nigeria revealed that desire to get euphoria, emotional problems, and socioeconomic issues were the main motives of substance use among the studied group. Thus, it can be concluded that substance abuse remains highly prevalent among undergraduate students in Nigeria, despite high levels of awareness of its negative impacts on health. Similar research carried out on secondary school students in Lagos State, Nigeria, shows lifetime prevalence of substance use to be 13.6%, whereas 6.9% of the respondents were current users of psychoactive substances, Kolawole *et al.* (2025) therefore concluded that substance use remains a major public health concern among adolescent and recommended stricter regulation of access to psychoactive, together with strengthened school based health education and awareness programs.

Table 2; Summary of Empirical Studies on the Prevalence (%) of Substance Abuse

| Author (Year)                   | Location     | Sample(n) | %    | Common Substance          |
|---------------------------------|--------------|-----------|------|---------------------------|
| Idowu <i>et al.</i> (2023)      | Osun State   | 420       | 12.3 | Alcohol, Shisha, Tramadol |
| Olanrewaju <i>et al.</i> (2022) | Southwest    | 400       | 45.7 | Alcohol, Cigarettes       |
| Afolabi <i>et al.</i> (2025)    | Lagos State  | 416       | 61.5 | Multiple substances       |
| Kolawole <i>et al.</i> (2025)   | Lagos State  | 800       | 13.6 | Tramadol, Marijuana       |
| Ojule and Te-Erebe (2022)       | Rivers State | 400       | 37.0 | Alcohol                   |
| Gift and Mweya (2024)           | Tanzania     | 300       | 19.7 | Cannabis, Alcohol         |
| Metugeet <i>et al.</i> (2022)   | Cameroon     | 625       | 89.9 | Tobacco, Alcohol          |
| Kabbashetal, (2022).            | Egypt.       | 2552      | 8.9% | Alchol,hashish            |

The reviewed studies show substantial variation in the prevalence of substance abuse, ranging from 12.3%to 89.9%.The highest prevalence was reported by Metugeet *et al.* (2022) in Cameroon, whereas kabbash, *et al.* (2022) reported the lowest prevalence among undergraduates in Egypt.

These variations suggest that prevalence differs across countries, populations, and educational settings.

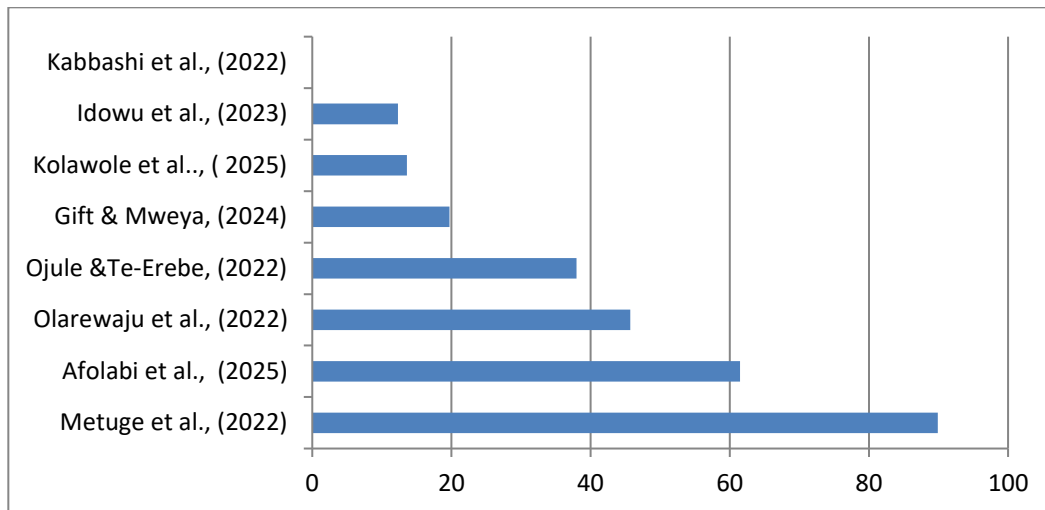


Fig 1; comparative bar chart.

The bar chart shows that the prevalence of substance abuse differs considerably across the studies reviewed. The highest prevalence reported by Metuge *et al.* (2022), who found that 89.9% of tertiary institution students in Cameroon engaged in substance use. Followed by Afolabi *et al.* (2025), that reported a prevalence of 61.5% among undergraduate students in Lagos State, Nigeria. Olanrewaju *et al.* (2022) documented a relatively high prevalence of 45.7% among students in four universities in Southwestern Nigeria. In contrast, Ojule and Te-Erebe (2022) reported a prevalence of 37% among secondary school students in Rivers State, while Gift and Mweya (2024) found a prevalence of 19.7% among secondary school students in Tanzania. Comparatively lower prevalence rates reported by Kolawole *et al.* (2025), who found 13.6% among secondary school students in Lagos State, Idowu *et al.* (2023), 12.3% in Osun community in Nigeria and Kabbash (2022) reported the lowest prevalence among undergraduate students in Egypt. Across different jurisdiction in Nigeria, substance abuse varies and the demographical impact, the environment and the socio cultural factors on the abuse of substance cannot be overly emphasized.

#### 4.2; empirical review on knowledge

Idowu *et al.* (2023) explored the knowledge level, prevalence, patterns, and predictors of substance abuse among young people in a rural area in Osun State, Nigeria. Idowu *et al.* (2023) utilized a descriptive cross-sectional research design whereby a sample of 420 youths aged 15-24 years was recruited from a rural community in Nigeria through cluster sampling technique. Data collection was carried out using an interview-based semi-structured questionnaire. The data collected were analyzed using descriptive and inferential statistics.

The results showed that 89% of the respondents had good knowledge level of substance abuse and its adverse effects. This is suggestive that most of the youths sampled in the study were knowledgeable on the dangers associated with psychoactive substance use. Even though most of the youths in the study had good knowledge of substance abuse, 12.3% practiced substance abuse. Therefore, it can be seen that knowledge did not act as a protective factor against the behavior. Despite the fact that the study produced important information, it is important to note that the study was done on youths within the community, but not on university students.

A study by Yusuf Umaru *et al.* (2023) looked at the knowledge of students regarding the impact of substance abuse among students enrolled in tertiary institutions in Katsina State, Nigeria. The study employed the descriptive survey design and collected data through a structured questionnaire administered to students enrolled in selected tertiary institutions.

The results indicated that most students lacked sufficient knowledge regarding the negative impacts of substance abuse on their health, social life, and academic performance. As a result, the researchers recommended health education, counseling programs, and anti-drug campaigns as ways of raising awareness about drug abuse. While the study offers valuable information regarding student awareness of drug abuse, the research was conducted in Katsina State. Therefore, its findings may not be directly applicable to students in tertiary institutions in Ika South Local Government Area, Delta State. This limitation justifies the present study.

In their descriptive cross-sectional study involving 400 undergraduate students at four universities in Southwestern Nigeria, Olanrewaju *et al.* (2022) sought to determine the awareness levels of the students regarding drug and substance abuse, as well as the prevalence of substance abuse. The results revealed that 94.6% of the participants had high awareness of the problem of

drug and substance abuse. However, despite having high levels of awareness of the problem, 45.7% of the participants were found to be involved in substance abuse. Alcohol abuse (61.5%) and cigarette smoking (54.5%) were the two most prevalent types of substance abuse, while other common drugs included codeine cough syrups and tramadol. The study suggested the need for strengthening behavioral interventions, counseling, and the enforcement of drug control policies within the institutions. This study is pertinent to this study in that it provides empirical proof that there is no direct relationship between knowledge and low prevalence of substance abuse such that a higher knowledge base is associated with higher substance abuse prevalence.

Abubakar *et al.* (2021) studied the knowledge on the health impacts and determinants of the usage of psychoactive substances by secondary school students in Sokoto Metropolis, Nigeria. The researchers used a descriptive cross-sectional research design where 430 students were sampled using a multistage sampling technique. Data collection was done using a questionnaire administered through an interview process.

The results revealed that only 38.1% of the respondents had good knowledge regarding the health impacts of psychoactive substance use. Additionally, it was discovered that respondents with poor knowledge engaged in substance use to a significantly higher extent. They suggested improving behavioral intervention strategies, counseling programs, and enforcement of institutional policies regarding drug control. This research is pertinent to the current study as it gives empirical evidence that high knowledge or awareness level does not necessarily mean low rate of substance use, thus, making it imperative to investigate the link between knowledge and the prevalence of substance abuse among undergraduates in tertiary institutions in Ika South Local Government Area, Delta State.

In this study, Abubakar *et al.* (2021) examined the level of knowledge on the health consequences and factors influencing the consumption of psychoactive substances among secondary school students in Sokoto Metropolis, Nigeria. A descriptive cross-sectional design was used, where 430 students were sampled through multistage sampling technique. The data was collected using interviewer-administered questionnaire. The results revealed that only 38.1% of the participants possessed good knowledge about the health consequences of psychoactive substance use. In addition, those who had poor knowledge were significantly associated with

substance use. The researchers suggested that there should be improved health education in schools in order to increase knowledge among students and reduce the use of psychoactive substance. Even though the study has been able to establish an association between knowledge and substance use, it is worth noting that the study was conducted among secondary school students and not tertiary institution students.

In a study of cross-sectional analytical design carried out on 771 undergraduate students of the University of Benin in Edo State, Nigeria, Obi *et al.* (2024) studied the association between knowledge and the prevalence of substance abuse. The findings of the study show that 97.2% of the subjects had adequate knowledge concerning substance abuse and their negative effects on health. Despite the high rate of knowledge in relation to substance abuse, the lifetime prevalence of the use of any substance was 44.4%, and 68.1% of those who have used any substance in life used them currently or in the past. Further analyses indicated that knowledge was a significant determinant of substance use (OR = 0.235; 95% CI: 0.075–0.740;  $p = 0.013$ ). This implies that people with good knowledge about substance abuse did not abuse the substance.

From the results, it is clear that while knowledge plays a crucial role in preventing substance abuse, knowledge alone is inadequate in eliminating substance use among undergraduates. The research is important to the current studies on substance abuse because it provides empirical facts that knowledge is significantly associated with the prevalence of substance abuse among undergraduates, thereby buttressing the need for more investigation among students in tertiary institution in Ika South Local Government Area, Delta State.

Wada *et al.* (2021) conducted a study on the prevalence, awareness, and effects of substance abuse of psychoactive drugs among undergraduate students in three universities located in Katsina State, Nigeria. The study was conducted using a descriptive cross-sectional research design whereby the researchers gathered data from 308 undergraduate students through a validated online survey tool. Data analysis was done using descriptive statistics and chi-square test by Pearson. It was established that most participants had previous knowledge about substance abuse, and many agreed that there is an impact of raising awareness about drug abuse. Nevertheless, 37% of the participants reported use of psychoactive substances implying that awareness was not enough to avoid substance abuse. The authors concluded that psychoactive

substance abuse remains one of the greatest public health problems among university students. Although the study provides valuable evidence on knowledge of substance abuse, it was conducted among adolescents rather than students in tertiary institutions. Therefore, the findings may not be directly apply to students in tertiary institutions in Ika South Local Government Area, Delta State, thereby justifying the present study

Ofiaeliet *al.* (2022) carried out a cross-sectional study involving 276 adolescents in Anambra State, Southeastern Nigeria, to examine their knowledge of and indulgence in substance abuse. The results of the study showed that 74.3% of the respondents possessed the right knowledge of what substance abuse means. Even though they had the right knowledge of substance abuse, 13.8% indicated that they abused substances, whereas 10.1% used them for pleasure. The substances involved were alcohol (67.9%), cigarette (25.0%), tramadol (10.7%), and cocaine (7.1%). According to Ofiaeliet *al.*, since the participants had the right knowledge of substance abuse; the researchers concluded that substance use was prevalent even when the knowledge is relatively high. Thus, the study suggests that knowledge is not enough for preventing substance abuse among adolescents. In order to reduce substance abuse, the researchers recommended improving health education and preventive measures. This study is related to the present study since it shows that the possession of good knowledge does not prevent substance abuse.

Table 3: Summary of empirical studies on knowledge of substance abuse

| Author(s)                   | Year | Study Area           | Sample     | Knowledge level (%) |
|-----------------------------|------|----------------------|------------|---------------------|
| Abubakar <i>et al.</i> ,    | 2021 | Sokoto State         | 430        | 38.1                |
| Wada <i>et al.</i> ,        | 2021 | Katsina State        | 308        | 37.0                |
| Ofiaeliet <i>al.</i> ,      | 2022 | Anambra State        | 276        | 74.3                |
| Olanrewaju <i>et al.</i> ,  | 2022 | Southwestern Nigeria | 400        | 94.6                |
| Idowu <i>et al.</i> ,       | 2023 | Osun State           | 420        | 89.0                |
| Yusuf Umaru <i>et al.</i> , | 2023 | Katsina State        | Not stated | Low awareness       |
| Obi <i>et al.</i> ,         | 2024 | University of Benin  | 771        | 97.2                |

The reviewed empirical studies indicate that knowledge of substance abuse is generally high among undergraduate students and youths in Nigeria. Obi *et al.* (2024) reported the highest level of knowledge (97.2%), followed by Olanrewaju *et al.* (2022) (94.6%) and Idowu *et al.* (2023) (89.0%). Ofiaeliet *al.* (2022) also found a relatively high knowledge level (74.3%). In contrast,

Abubakar *et al.* (2021) and Wada *et al.* (2021) reported comparatively lower knowledge levels of 38.1% and 37.0%, respectively. Yusuf Umaru *et al.* (2023) further observed that many students had limited awareness of the harmful effects of drug abuse. Overall, the evidence suggests that although knowledge has improved over time, it varies across different populations and study settings.

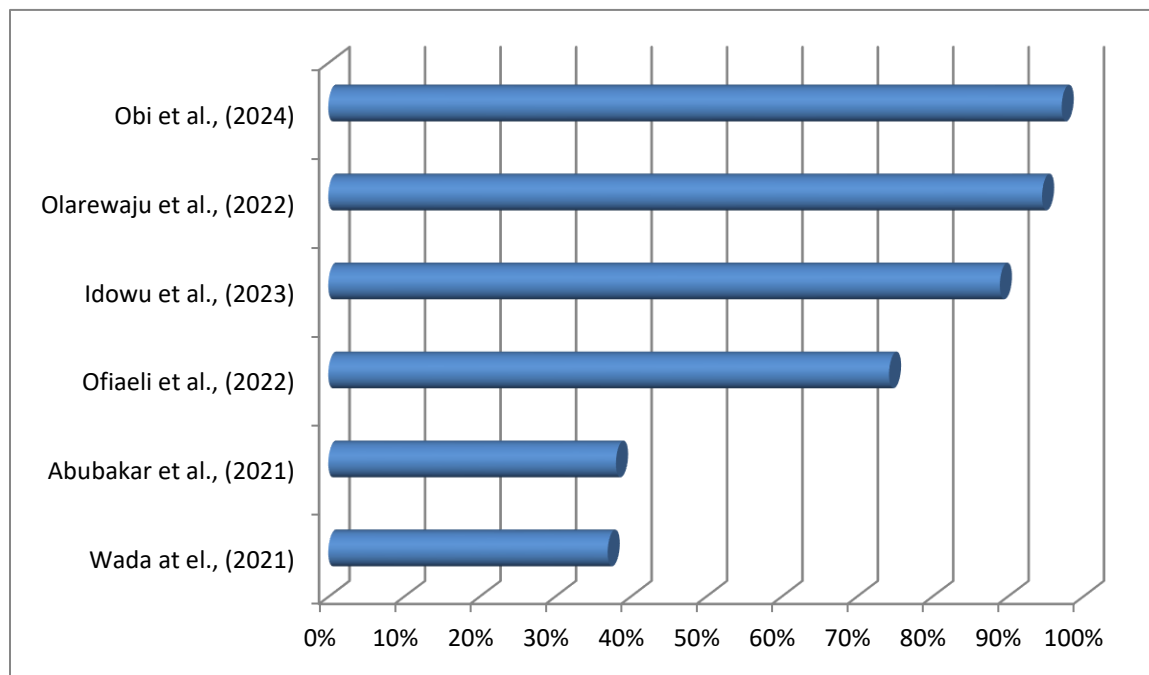


Fig 2; Horizontal bar chart of empirical study on knowledge.

The bar chart clearly shows variations in reported knowledge levels across the reviewed studies. Obi *et al.* (2024) recorded the highest knowledge level (97.2%), while Olanrewaju *et al.* (2022) and Idowu *et al.* (2023) also reported very high levels. Ofiaeli *et al.* (2022) showed a moderate level of knowledge, whereas Abubakar *et al.* (2021) and Wada *et al.* (2021) reported relatively low knowledge levels. Despite these differences, several studies consistently found that high knowledge alone did not eliminate substance abuse, suggesting that factors beyond knowledge contribute to continued substance use among students.

#### 4.3; Empirical Studies on Commonly Abused Substances.

Ebrahim *et al.* (2024) conducted a systematic review and meta-analysis of substance use among young people in sub-Saharan Africa. The review included 60 studies involving 83,859 participants aged 10-24 years.

The authors noted that alcohol was the most abused substance (40%), followed by khat (25%), stimulants (20%), and cigarette smoking (16%). Some other commonly abused substances are cannabis, cocaine, inhalants, sedatives, shisha, hallucinogen, anabolic steroids, and mastics. It should be mentioned that substance use was more prevalent among males compared to females and among youth residing in communities than institution-based populations.

The findings above serve as an empirical basis for examining the most abused substances among undergraduates in tertiary institutions in Ika South Local Government Area, Delta State. The authors stated that substance abuse is a serious public health concern in sub-Saharan Africa and suggested specific measures for the prevention and promotion of health of youths

Jatau *et al.* (2021) carried out a scoping review of 23 studies on substance abuse among students and young people in Nigeria. The study established the following range of prevalence of substance abuse: 20% to 40% among students and 20.9% among youths. The most commonly abused substances were the following: cannabis, tramadol, cough syrups with codeine, cocaine, heroin, amphetamines, and diazepam. The study indicated that cannabis, tramadol, and codeine were the most frequently abused substances among young people in Nigeria. The study is relevant to the present study because it provides national evidence on the pattern of commonly abused substances, which serves as a basis for examining the substances abused among undergraduates in tertiary institutions in Ika South Local Government Area, Delta State.

Idowu *et al.* (2023) performed a cross-sectional survey involving 420 youths from Osun State, Nigeria. According to the results of the study, 29.8% of the respondents used alcohol and 12.3% used substances. In terms of their prevalence, alcohol was the most popular substance followed by tramadol, shisha, cannabis, tobacco products, and codeine-based cough syrups. It is explained by their easy availability, peer influence, and curiosity. The study is relevant to the present one as it shows the substances most frequently abused by Nigerian youths to compare them with undergraduates from Ika South Local Government Area.

According to the United Nations Office on Drugs and Crime (UNODC, 2019), nearly 14.3 million Nigerians aged between 15 and 64 years have consumed psychoactive substances, comprising approximately 14.4% of that age group. As far as the consumption of the illicit substances is concerned, cannabis was the most frequently used substance, as there were 11 million of its users throughout the country. Besides, there was a wide-spread non-medical use of tramadol and codeine-based medicines. The report is relevant to the present study as it shows the burden and pattern of substance abuse in Nigeria.

According to Olawole-Isaac *et al.* (2018) through a systematic review, the highest prevalence of substance abuse among adolescents in Africa is 41.6% with alcohol being the most common psychoactive drug, followed by tobacco and cannabis. Alcohol continues to be the most common psychoactive substance among young individuals in many African countries, according to the researchers. This study is important in relation to the current study as it highlights the wide prevalence of alcohol abuse and abuse of other psychoactive substances among the youths in Africa and acts as a basis for comparison with the undergraduates from Ika South Local Government Area.

Table 4. Summary of empirical studies on commonly abused substances.

| Author(s)                     | Year | Study Area          | Most Commonly Abused Substance(s)                             |
|-------------------------------|------|---------------------|---------------------------------------------------------------|
| Ebrahim <i>et al.</i> ,       | 2024 | Sub-Saharan Africa  | Alcohol (40%), Khat (25%), Stimulants (20%), Cigarettes (16%) |
| Jatau <i>et al.</i> ,         | 2021 | Nigeria             | Cannabis, Tramadol, Codeine, Cocaine, Heroin, Amphetamines    |
| Idowu <i>et al.</i> ,         | 2023 | Osun State, Nigeria | Alcohol, Tramadol, Shisha, Cannabis, Tobacco, Codeine         |
| UNODC                         | 2019 | Nigeria             | Cannabis, Tramadol, Codeine                                   |
| Olawole-Isaac <i>et al.</i> , | 2018 | Africa              | Alcohol, Tobacco, Cannabis                                    |

In summary, all these empirical studies show that alcohol, cannabis, tramadol, tobacco products, codeine cough syrup, and other psychoactive drugs are the most abused by youths and undergraduates. These findings support the need for the present study to identify the substances

commonly abused by undergraduates in tertiary institutions in Ika South Local Government Area, Delta State.

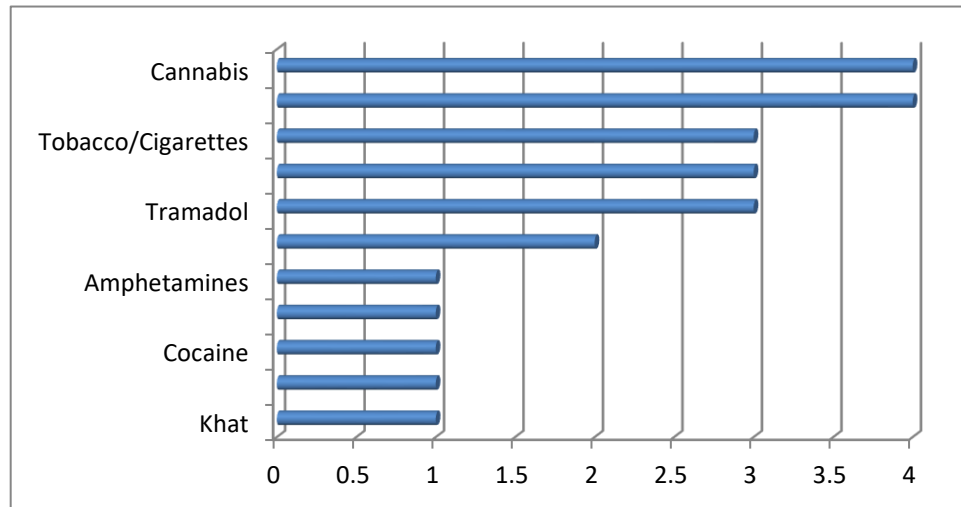


Fig 2; Horizontal Bar Chart (Frequency of Substance Reported)

From the reviewed studies alcohol was the most commonly abused substance. Psychoactive substance among youths and undergraduates across Sub-Saharan Africa and Nigeria. Cannabis ranked second in frequency, while tramadol and codeine-Containing medicines were also widely reported. Tobacco products and cigarettes were commonly abused, whereas substances such as khat, cocaine, heroin and amphetamines appeared less frequently. Overall, the evidence indicates that alcohol and cannabis remain the predominant substances abused by young people, highlighting the need for targeted prevention programs in tertiary institutions.

#### 4.4; Empirical review on determinants of substance abuse

Peer influence emerged as the predominant factor related to substance abuse with 82.7% of the students reporting that their peers encouraged them to take substances. In accordance to Metuge *et al.*, (2022), peer influence was an initiating source to abuse substance. Other factors included stress alleviation, modernization, use of substances to help in sleeping, coping with adverse experiences, and entertainment (Metuge *et al.*, 2022; Gift and Mweya, 2024).

Table 5: Summary of Determinants of Substance Abuse across reviewed studies

| Author(s)                | Study Area            | Major Determinants Identified                             | Key Recommendation                                       |
|--------------------------|-----------------------|-----------------------------------------------------------|----------------------------------------------------------|
| Gift & Mweya (2024)      | Tanzania              | Peer influence, modernization, stress, sleep aid          | School health education and parental involvement         |
| Afolabi et al. (2025)    | Lagos, Nigeria        | Family background, socialization                          | Strengthen family support and campus counseling          |
| Ojule&Te-Erebe (2022)    | Rivers State, Nigeria | Family structure, peer pressure, curiosity                | Improve parental supervision and community interventions |
| Kabbash et al. (2022)    | Egypt                 | Male gender, faculty type                                 | Target high-risk students through prevention programs    |
| Idowu et al. (2023)      | Osun State, Nigeria   | Age, gender, attitude, marital status                     | Behavioral change and community health education         |
| Olanrewaju et al. (2022) | Southwestern Nigeria  | Peer influence, emotional distress, socioeconomic factors | Counseling and campus-based prevention programs          |
| Metuge et al. (2022)     | Cameroon              | Stress, peer influence, male gender                       | Stress management and peer education programs            |

Notably, family background and socialization emerged as another important predictors of substance abuse among the respondents in prior research (Afolabi *et al.*, 2025). In particular, 60.1% of the respondents pointed out family background as the factor determining their substance abuse behavior while 84.6% identified socialization as the determinant. Besides, 61.5% of the participants indicated that they had used psychoactive substances while 26.2% of them were substance abusers. Obviously, peer relationships, family background among others significantly contribute to adolescent substance abuse. Therefore, strengthening family support systems, counseling services, and campus-based health education programs are pertinent in

reducing substance use among students. Demographically, Kabbashet *et al.* (2022) and Idowu *et al.* (2023) observed that male students were more likely than female students to smoke cigarettes, drink alcohol, and take hashish, tramadol, and bhang. Also, practical college students were more likely smoke cigarettes and take hashish compared to students in other colleges. Suggesting that gender and academic setting have significant impacts on substance use behavior among university students.

Table 5.1: Summary of Determinants of Substance Abuse

| Author (Year)                     | Major Determinants Identified                             |
|-----------------------------------|-----------------------------------------------------------|
| Idowu <i>et al.</i> , (2023)      | Age, gender, attitude, marital status                     |
| Olanrewaju <i>et al.</i> , (2022) | Peer influence, emotional distress, socioeconomic factors |
| Afolabi <i>et al.</i> , (2025)    | Family background, socialization                          |
| Gift and Mweya, (2024)            | Peer influence, modernization, stress                     |
| Metugeet <i>et al.</i> , (2022)   | Peer influence, stress, male gender                       |
| Kabbashet <i>et al.</i> , (2022)  | Male gender, faculty type                                 |
| Ojule and Te-Erebe, (2022)        | Family structure, peer pressure, curiosity                |

Table 5.2; Frequency of determinants

| Determinant           | Number of Studies |
|-----------------------|-------------------|
| Peer influence        | 5                 |
| Family background     | 3                 |
| Gender                | 4                 |
| Stress                | 3                 |
| Curiosity             | 2                 |
| Socialization         | 2                 |
| Socioeconomic factors | 2                 |
| Emotional distress    | 1                 |

The reviewed studies consistently identified peer influence as the leading determinant of substance abuse, followed by gender, family background, and stress. Other important

determinants included curiosity, socialization, socioeconomic factors, and emotional distress. Overall, the findings demonstrate that substance abuse among students is driven by an interaction of social, psychological, demographic, and environmental factors rather than a single cause. These findings support the need for comprehensive prevention strategies involving families, schools, communities, and tertiary institutions.

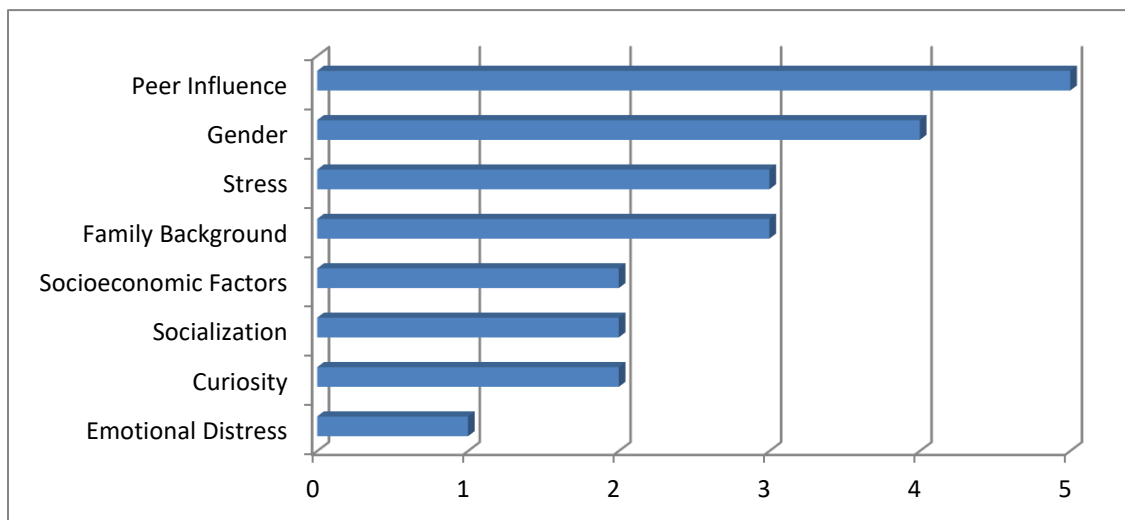


Fig 4: Frequency of Determinants Reported

The horizontal bar chart shows the frequencies of each determinant. Peer influence (5 studies) was the most frequently reported determinant across the reviewed literature. Gender (4 studies) ranked second, while family background and stress were each identified in three studies. Curiosity, socialization, and socioeconomic factors appeared in two studies each, whereas emotional distress was reported by one study. This pattern suggests that interventions should prioritize peer education, family involvement, and stress management, and gender-sensitive prevention programs.

### Overall Implications for the Present Study

- i. Peer influence remains the strongest determinant of substance abuse and should be a major focus in Ika South LGA.
- ii. Family support and supervision are essential protective factors.
- iii. Tertiary institution should ensure adequacy of stress management and mental health services.
- iv. Male students show higher prevalence in substance abuse, hence there is need for gender-specific interventions.
- v. The reviewed studies were conducted outside Ika South LGA, highlighting a geographical gap that justifies your present study.

#### 4.5; Relationship between knowledge and prevalence of substance abuse: Empirical review

The prevalence and awareness of drug and substance used among 400 undergraduates in four different university located in south west part of Nigeria was carried out by Olarenwaju *et al.* (2022). The results shows that higher percentage (94.6%) of the population studied were fully aware of the substance abuse despite the fact of prevalence rate (45.7%). In terms of the substances being abused, alcohol (61.5%) and cigarettes (54.5%) accounted for the greatest percentage, while codeine syrup and tramadol stood out as the most abused prescription drugs. From their findings, the researchers concluded that despite the fact that awareness was high, the levels of substance abuse were prevalent. This indicates that awareness alone cannot be enough in preventing substance abuse. It is worth noting that this study is related to the current study in that; it shows that high levels of awareness do not equate low levels of substance abuse among students, and thus the need for this study.

A cross-sectional study conducted by Otakhoigbogie *et al.* (2022) assesses the knowledge and prevalence of roughly 546 students smoking shisha in the University of Port Harcourt, Nigeria. The findings showed that the prevalence of shisha smoking was 24.7%. Only 14.8% of the participants had good knowledge on the contents and harmfulness of shisha. Poor knowledge was found to be a significant predictor of shisha smoking (OR = 4.48; 95% CI: 2.02 – 9.93;  $p = 0.001$ ). It was concluded that poor knowledge led to the increased tendency for shisha smoking and thus, it is important to increase the level of health education among university students. The

study is relevant to the present research as it demonstrates the influence of knowledge on the behavior concerning substance use. This is why it is necessary to analyze the association between knowledge and the prevalence of substance abuse among undergraduate students in tertiary institutions in Ika South Local Government Area, Delta State. Descriptive cross-sectional study of 420 youths aged 15-24 years in Ejigbo Community, Osun State, Nigeria on knowledge, attitude, and prevalence of substance abuse was conducted by Idowu *et al.* (2023). In addition, the study revealed that 89% of the participants had adequate knowledge about substance abuse while 4% had positive attitudes regarding substance use. Despite having adequate knowledge, 29.8% had used alcohol while 12.3% had abused substances. The authors were of the view that although the participants had adequate knowledge about the harmful effects of substance abuse, the problem of substance use was relatively high and hence indicated that knowledge alone would not suffice in preventing substance abuse. They suggested improving health education, along with other prevention methods. This study is pertinent to the current study as it shows that knowledge alone does not help in reducing substance abuse and therefore calls for an examination of the relationship between knowledge and substance abuse among undergraduates in tertiary institutions in Ika South Local Government Area, Delta State.

Also, Ekekezie *et al.* (2024) carried out studies on 404 undergraduate students from the University of Lagos assess knowledge, attitude, and substance use. They reported that 71% of the respondents had adequate knowledge regarding substance use while 65.4% had positive attitudes against substance use. However, the prevalence rate of substance use was 36.7%. It was further discovered from the study that knowledge and attitude had no significant effect on the substance abuse behavior, while peer pressure, age, gender, academic level, and tobacco smoking were some significant predictors. The findings of the study show that improving knowledge alone is not enough to reduce substance abuse practices without considering behavioral and social factors. This study is pertinent to the current study due to the fact that it provides empirical evidence that although knowledge is very vital, other factors might also play a more important role in determining the prevalence rate of substance abuse among undergraduates.

Another critical analysis was carried out on 771 undergraduate students in University of Benin, Edo State, Nigeria, the researches focuses on the relationship between the knowledge acquire and the prevalence of the substance abuse (Obi *et al.*, 2024). It was observed that 97.2% of the respondents were well-informed about substance abuse and their negative consequences. Despite the high degree of awareness of the subject matter, the lifetime prevalence of substance use among the respondents was 44.4%. Similarly, 68.1% of the respondents who had consumed any kind of substance in their lives had been using substances lately. The results from logistic regression analysis revealed that knowledge about substance abuse had a positive relationship with the use of substances (0.075–0.740;  $p = 0.013$ ). Nonetheless, the authors believed that just having knowledge was not enough to prevent substance use as many students were abusing despite being knowledgeable. The authors therefore suggested the need for more health education among other preventive actions. The study is relevant to the present study because it provides empirical evidence that knowledge is significantly associated with the prevalence of substance abuse among undergraduates, thereby supporting the need to examine this relationship among students in tertiary institutions in Ika South Local Government Area, Delta State.

Table 6; Relationship between knowledge and prevalence

| Author                             | Knowledge (%) | Prevalence (%) |
|------------------------------------|---------------|----------------|
| Olanrewaju <i>et al.</i> , (2022)  | 94.6          | 45.7           |
| Otakhoigbogiet <i>al.</i> , (2022) | 14.8          | 24.7           |
| Idowu <i>et al.</i> , (2023)       | 89.0          | 12.3           |
| Ekekezieet <i>al.</i> , (2024)     | 71.0          | 36.7           |
| Obi <i>et al.</i> , (2024)         | 97.2          | 44.4           |

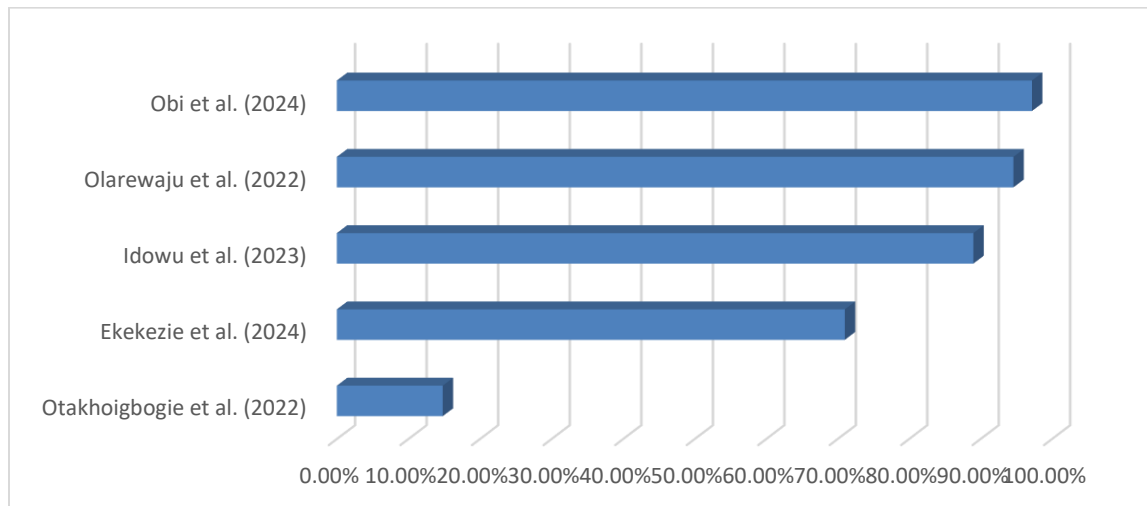


Fig 5; Horizontal Bar Chart (Knowledge Level)

The reviewed studies generally reported high knowledge of substance abuse among undergraduates, with values ranging from 71% to 97.2%, except for Otakhoigbogiet *al.* (2022), which reported only 14.8%. This suggests that awareness campaigns have improved students knowledge. However, high knowledge alone has not translated into a corresponding reduction in substance abuse.

## Summary

The reviewed empirical studies indicate that there is a relationship between knowledge and the prevalence of substance abuse among undergraduates, although the strength and direction of this relationship vary across studies. It was established by Obi *et al.* (2024) that those students with adequate knowledge and understanding of implications of substance abuse tends to flee and refuses to abuse it despite the prevalence of those drugs/substances. Contrary to is the misuse or abuses of those substances among students with limited knowledge and understanding of substance (Otakhoigbogiet *al.*, 2022). Idowu *et al.* (2023); Ekekezieet *al.* (2024) and Olarenwajuet *al.* (2024) stressed that inadequacy or limited knowledge is no longer the contributing factor to the abuses of substances. They found that despite most respondents having

good knowledge about the adverse effects of substance abuse, many were still involved in substance abuse. The conclusion drawn by these researchers was that lack of knowledge alone was not enough to stop substance abuse among undergraduate students due to various other factors including curiosity and accessibility of substances. On the whole, from the studies under review, it becomes clear that knowledge plays an important role in prevention of substance abuse; however, knowledge does not play an independent role in shaping the substance use behavior. Although enhanced knowledge may contribute to reduced chances of substance abuse, other determinants also affect whether students engage in substance use behavior or not. Such contradictory results make it essential to conduct additional research in the connection between knowledge and substance abuse among undergraduates in tertiary institutions in Ika South, Delta State.

**Areas of Agreement:** The reviewed studies consistently agree that substance abuse is highly prevalent among undergraduate students and continues to constitute a significant public health challenge. Most studies reported that alcohol, cannabis, tobacco, tramadol and codeine-containing medications are the substances most commonly abused by university students. The literature also consistently identifies peer influence as the strongest determinant of substance abuse, followed by family background, academic stress, psychological distress, curiosity, gender and the easy availability of psychoactive substances. Agreeably, most undergraduate students have adequate knowledge of substance abuse and full aware of psychological, physical and academic implications. Unfortunately, good knowledge alone won't prevent substance abuse. The reviewed studies further agree that comprehensive interventions involving health education, counselling, family support, peer-led programmes and institutional policies are more effective than health education alone.

**Areas of Disagreement:** Despite broad agreement regarding the burden of substance abuse, considerable differences exist among the reviewed studies. The reported prevalence of substance abuse varies widely across different countries and institutions, ranging from relatively low to very high prevalence. These differences may be attributed to variations in study populations, research methodologies, sample sizes, operational definitions of substance abuse, substances investigated and cultural contexts.

The studies also differ regarding the level of knowledge possessed by undergraduate students. As most studies emphasized on high levels of knowledge, others resolved at inadequacy of public awareness and misconception of psychoactive substances. Similarly, there is inconsistency regarding the relationship between knowledge and substance abuse. Some studies suggest that good knowledge is associated with lower substance abuse, whereas others report no statistically significant relationship, indicating that behavioral decisions are influenced by additional psychosocial and environmental factors beyond knowledge alone.

**Knowledge Gap:** Although numerous studies have investigated substance abuse among undergraduate students, relatively few have simultaneously examined the prevalence of substance abuse, students' knowledge, commonly abused substances, determinants of substance abuse and the relationship between knowledge and prevalence within a single study. Most previous studies focused on only one or two of these variables, thereby providing only a partial understanding of substance abuse among undergraduate students. The present study addresses this knowledge gap by examining these interrelated variables comprehensively within the same study population.

**Methodological Gap:** Most of the reviewed studies adopted descriptive cross-sectional research designs and relied primarily on self-administered questionnaires for data collection. Even though such designs can help in calculating the rate and determining the variables that may be associated with the same, they cannot help to establish any causal relationship between the variables under investigation. Further, most of the studies made use of quantitative approach only. The present study seeks to strengthen the existing evidence by employing a rigorous methodology capable of providing comprehensive data on the prevalence, knowledge and determinants of substance abuse among undergraduate students.

**Contextual Gap:** The reviewed studies were conducted under diverse social, cultural, institutional and economic conditions. Therefore, research done in universities in other states and countries will not necessarily give an accurate representation of what happens in higher education institutions within Ika South Local Government Area, Delta State owing to cultural differences, institution policies, behavioral patterns, and socioeconomic conditions.

**Geographical Gap:** Most studies on substances abuse has focused majorly on the south-west, south-east and north-central Nigeria with lesser attention on Delta State. More specifically, there is a scarcity of published empirical evidence on substance abuse among undergraduate students in tertiary institutions located in Ika South Local Government Area, Delta State. This geographical gap limits the availability of local evidence required for effective planning, policy formulation and program implementation. The present study therefore seeks to generate empirical data from this understudied area.

**Policy Gap:** Although Nigeria has implemented several policies and programs aimed at controlling substance abuse, including drug control regulations, public health campaigns and school-based health education initiatives, the reviewed literature indicates that substance abuse remains prevalent among undergraduate students. Many studies reported inadequate implementation of institutional substance abuse policies, insufficient counseling services, weak enforcement of regulations governing psychoactive substances and limited integration of substance abuse prevention into university health programs. These findings suggest the need for stronger policy implementation, enhanced collaboration among stakeholders and evidence-based interventions tailored to the needs of undergraduate students.

### **Implications for Public Health Practice**

The outcomes of this literature review have major implications for public health practice especially in the prevention and management of substance abuse among undergraduates. The findings show that substance abuse is still a serious public health problem despite the relative high level of knowledge on substance abuse among most of the students. The findings imply that there is need for an integrated approach to addressing substance abuse that should address all its various levels of determinants. First, the literature review shows that it is crucial for health promotion and education programs to be enhanced in the institutions of higher learning. There is a need for universities to conduct regular health education campaigns, seminars, peer education programs and behavioral change communication programs that not only enhance knowledge but also develop positive attitudes and healthy behavior among students. Secondly, the findings emphasize the need for provision of mental health services within university health centers. The fact that some of the determinants of substance abuse included psychological stressors and

mental issues means that there is need for institutions of higher learning to establish counseling centers manned by qualified mental health professionals.

Lastly, the review reveals the importance of family, friends, and the university setting in determining the drug usage patterns of the students. Therefore, the public health strategies to curb substance abuse should go beyond the individual, involving the parent or guardian of the students, the student bodies, the lecturers, community leaders and even the religious organizations. The peer-based health promotion programs should be intensified to promote positive behavior change and minimize the negative impact of peer pressure on the individuals. Furthermore, there is need for the development and enforcement of institutional and national-level policies to counter substance abuse among the undergraduate students. There is need for universities to come up with effective substance abuse prevention policies, referrals systems for students who need to undergo treatment and rehabilitation, and cooperation with other government agencies like NDLEA, Ministry of Health, etc. At the national level, there is need for stricter regulation of the sale of alcohol, tobacco, and prescription medications including Tramadol and Codeine preparations. Moreover, the gaps identified geographically and contextually have pointed out the need for intervention strategies that are context-specific in public health. The prevention programmes should not rely on only the findings from other geographical areas but should be developed from the evidence from the local epidemiology. The findings from the current study shall be important for the design of targeted interventions among tertiary institutions in Ika South Local Government Area in Delta State. Lastly, the review shows the need for constant research, surveillance, and program evaluation. Surveillance of the patterns and risk factors of substance abuse will enable health officials to come up with intervention strategies based on evidence. Also, it will enable the evaluation of the efficacy of the existing prevention programs to make necessary changes. In summary, the review shows that the reduction of substance abuse among undergraduates is a multi-faceted challenge that requires a public health strategy involving health promotion, behavioral change strategies, provision of mental health services, involvement of family and community members, institutional support, and the development and enforcement of policies.

### **Conclusion: Justification for the present study**

The synthesis of the literature demonstrates that substance abuse among undergraduate students remains a complex public health issue influenced by multiple interacting factors. The identified knowledge, methodological, contextual, and geographical and policy gaps provide a strong justification for the present study. By investigating the prevalence of substance abuse, assessing students' knowledge, identifying the commonly abused substances, examining the determinants of substance abuse and determining the relationship between knowledge and the prevalence of substance abuse among undergraduate students in tertiary institutions in Ika South Local Government Area, Delta State, and this study will contribute context-specific evidence to the existing body of knowledge. The findings are expected to support evidence-based public health interventions, strengthen institutional policies and contribute to the design of effective prevention and control strategies aimed at reducing substance abuse among undergraduate students.

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**Reference**Abubakar, A. U., Abubakar, A. A., Sufiyan, M. B., Balogun, M. S., Awosan, K. J., Raji, I. A., Usman, A. B., Abdullahi, A. M., Njidda, A. M., Bala, H. A., Kaoje, A. U., Nguku, P. M. and Shehu, A. U. (2021). Knowledge of health effects and determinants of

- psychoactive substance use among secondary school students in Sokoto Metropolis, Nigeria. *Pan African Medical Journal*, 40, 109. <https://doi.org/10.11604/pamj.2021.40.109.22000>
- Afolabi, F. M., Ikulayo, B. O. and Oladeji, M. O. (2025). Assessing substance use and its contributory factors among university undergraduates in Lagos State, Nigeria. *International Journal of Nursing, Midwife and Health Related Cases*, 11(2), 28–36. <https://doi.org/10.37745/ijnmh.15/vol11n22836>
- Ajayi, A. I. and Somefun, O. D. (2020). Recreational drug use among Nigerian university students: Prevalence, correlates and frequency of use. *PLOS ONE*, 15(5), e0232964. <https://doi.org/10.1371/journal.pone.0232964>
- Akunna, G. G. and Lucyann, C. A. (2023). Nigeria's war against drug abuse: Prevalence, patterns, ramifications, policy and multispectral response, strategies and solutions. *Studies in Social Science & Humanities*, 2(10), 35–55. <https://doi.org/10.56397/sssh.2023.10.06>
- Boden, M. and Day, E. (2023). Illicit drug use in university students in the UK and Ireland: A PRISMA-guided scoping review. *Substance Abuse Treatment, Prevention, and Policy*, 18(1), 18. <https://doi.org/10.1186/s13011-023-00526-1>
- Chiejine, G. I., Duluora, N. C., Isenalumhe, A. S., Afekhobe, J. B., Akubue, N. E., Ogbiti, M. I., Nwamaka, C. B.-U., Umeugoji, C. P., Owheru, J. O., Chigbo, C. G. and Okereke, U. C. (2025). Awareness, knowledge and attitude to substance abuse among students in tertiary institutions in Nigeria. *African Journal of Humanities and Contemporary Education Research*, 19(1), 274–286. <https://doi.org/10.62154/ajhcer.2025.019.01026>
- Compton, W. M. and Volkow, N. D. (2024). Reductions in substance use as outcome targets for treatment development. *American Journal of Psychiatry*, 181(11), 947–948. <https://doi.org/10.1176/appi.ajp.20240841>
- Ebrahim, J., Adams, J. and Demant, D. (2024). Substance use among young people in sub-Saharan Africa: A systematic review and meta-analysis. *Frontiers in Psychiatry*, 15, 1328318. <https://doi.org/10.3389/fpsy.2024.1328318>

- Ekpenyong, M. S., Jagun, H., Stephen, H. A., Bakre, A. T., Odejimi, O., Miller, E., Nyashanu, M. and Bosun-Arije, S. F. (2024). Investigation of the prevalence and factors influencing tobacco and alcohol use among adolescents in Nigeria: A systematic literature review. *Drug and Alcohol Dependence*, 256, 111091. <https://doi.org/10.1016/j.drugalcdep.2024.111091>
- Gift, A. and Mweya, C. N. (2024). Prevalence and factors influencing substance abuse among secondary school students in Mbeya City, Tanzania. *African Health Sciences*, 24(3), 430–437. <https://doi.org/10.4314/ahs.v24i3.47>
- Idowu, A., Aremu, A. O., Akanbi, I. M., Esegbe, G., Adewale, V., Awubite, L., Adebayo, O., Arisa, D., Adetona, B., Olaniyan, A., Olafisoye, E., Olorunshola, O., Eyitayo, J., Ogunlana, O., Aboloye, O., Mayor, A. and Olatunde, E. (2023). Prevalence, pattern and determinants of substance abuse among youths in a rural community of Osun State, Southwest Nigeria. *African Health Sciences*, 23(4), 563–574. <https://doi.org/10.4314/ahs.v23i4.59>
- Jatau, A. I., Sha'aban, A., Gulma, K. A., Shitu, Z., Khalid, G. M., Isa, A., Wada, A. S. and Mustapha, M. (2021). The burden of drug abuse in Nigeria: A scoping review of epidemiological studies and drug laws. *Pharmaceutical Research and Perspectives*, 9(2), e00759. <https://doi.org/10.1002/prp2.759>
- Jatau, A. I., Sha'aban, A., Gulma, K. A., Shitu, Z., Khalid, G. M., Isa, A., Wada, A. S. and Mustapha, M. (2021). The burden of drug abuse in Nigeria: A scoping review of epidemiological studies and drug laws. *Public Health Reviews*, 42, 1603960. <https://doi.org/10.3389/phrs.2021.1603960>
- Kabbash, I., Zidan, O. and Saied, S. (2022). Substance abuse among university students in Egypt: Prevalence and correlates. *Eastern Mediterranean Health Journal*, 28(1), 31–40. <https://doi.org/10.26719/emhj.22.001>
- Kolawole, T. O., Ogunyemi, A. O. and Lucas, A. R. (2025). Prevalence of substance use and knowledge of its effects among secondary school students in Lagos, Nigeria. *South African Journal of Psychiatry*, 31, Article a2370. <https://doi.org/10.4102/sajpsychiatry.v31i0.2370>

- Malami, K., Alkanchi, N. A., Ajibade, B. L., Sarkingobir, K., Binji, A. H., Muhammad, B. S., Oyewumi, Z. and Yusuf, H. A. (2025). Determinants of substance abuse among youth in Kanwuri Area of Sokoto Metropolis. *Sahel Journal of Life Sciences FUDMA*, 3(2), 390–398. <https://doi.org/10.33003/sajols-2025-0302-44>
- Marke, C., Jegede, O., Mukhtar, H., Ojo, A., Boman, Y., Yakasai, B. and Dike, C. (2026). Substance use disorders among young adults in North-Western Nigeria: Descriptive survey of patterns of use. *BJPsych International*. Advance online publication. <https://doi.org/10.1192/bji.2025.10092>
- Metuge, C. E., Dzudie, A., Ebasone, P. V., Assob, J. C. N., Ngowe, M. N., Njang, E., Mabouna, S. and Eyoun, C. (2022). Prevalence and factors associated with substance use among students in tertiary institutions in Buea, Cameroon. *Pan African Medical Journal*, 41, Article 103. <https://doi.org/10.11604/pamj.2022.41.103.29272>
- Musa, A. A., Abdullahi, Y. M., Salihu, M. N., Lawal, M. M., Joseph, S. A., Umar, M. D. and Muhammad, F. (2021). Assessment of knowledge and prevalence of drugs and substance abuse among the students of a selected tertiary health institution in Kano, Nigeria. *International Journal of Advances in Medicine*, 8(8), 1032–1037. <https://doi.org/10.18203/2349-3933.ijam20212854>
- Nath, A., Choudhari, S. G., Dakhode, S. U., Rannaware, A. and Gaidhane, A. M. (2022). Substance abuse amongst adolescents: An issue of public health significance. *Cureus*, 14(11), e31193. <https://doi.org/10.7759/cureus.31193>
- National Bureau of Statistics (NBS), and United Nations Office on Drugs and Crime (UNODC). (2019). *Drug use in Nigeria: National survey on drug use and health 2018*. United Nations Office on Drugs and Crime.
- Obi, A. I., Udume, I. I., Adayonfo, E., Obi, J. N., Obi, R. U. and Nkwagu, D. I. (2024). Knowledge and prevalence of substance abuse among undergraduate students of a Nigerian university. *Journal of Medicine and Biomedical Research*, 23(1), 53–61. <https://doi.org/10.4314/jmbr.v23i1.9>



- Ofiaeli, O. C., Udigwe, I. B., Ndukwu, C. I. and Emelumadu, O. F. (2022). Knowledge and indulgence in substance abuse among adolescents in Anambra State, South-East Nigeria. *African Health Sciences*, 22(1), 227–233. <https://doi.org/10.4314/ahs.v22i1.29>
- Olanrewaju, J. A., Hamzat, E. O., Enya, J. I., Udekwu, M. O., Osuoya, Q., Bamidele, R., Johnson, O. F., Johnson, B. S., Olanrewaju, I. and Owolabi, J. O. (2022). An assessment of drug and substance abuse prevalence: A cross-sectional study among undergraduates in selected southwestern universities in Nigeria. *Journal of International Medical Research*, 50(10), Article 03000605221130039. <https://doi.org/10.1177/03000605221130039>
- Olawole-Isaac, A., Ogundipe, O., Amoo, E. O. and Adeloye, D. (2018). Substance use among adolescents in sub-Saharan Africa: A systematic review and meta-analysis. *South African Journal of Child Health*, 12(Special Issue), S79–S84. <https://doi.org/10.7196/SAJCH.2018.v12i2.1524>
- Ojule, I. N. and Te-Erebe, H. B. (2022). Prevalence and predictors of substance use disorder among urban and rural secondary school students of Khana, Rivers State, Nigeria. *European Journal of Public Health Studies*, 5(2), 83–97. <https://doi.org/10.46827/ejphs.v5i2.128>
- Tebu, O., Ojule, I. N. and Chinda, H. (2025). Prevalence and determinants of substance use among students attending tertiary institutions in Rivers State, Nigeria. *Journal of the Medical Women's Association of Nigeria*, 10(1). <https://doi.org/10.71526/jmwan.v10i1.68>
- Tenny, S. and Hoffman, M. R. (2023). Prevalence. In *StatPearls*. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK430867/>
- United Nations Office on Drugs and Crime. (2021). *World drug report 2021*. United Nations Office on Drugs and Crime.
- Van der Wath, A. E., Moagi, M. M. and Van der Wath, E. (2024). Risk factors for harm caused by alcohol use among students at higher education institutions: An integrative literature review. *Journal of Substance Use*, 29(5), 927–938. <https://doi.org/10.1080/14659891.2023.2217249>
- United Nations Office on Drugs and Crime. (2023). *World Drug Report 2023*.



- World Health Organization. (2022). *Global status report on alcohol and health 2022*.
- Wada, Y. H., Khalid, G. M., Shitu, Z. and Ibrahim, U. I. (2021). Prevalence and impacts of psychoactive substance abuse amongst undergraduate university students in Katsina State, Nigeria. *Addict Health*, 13(4), 221–231. <https://doi.org/10.22122/ahj.v13i4.1197>
- World Health Organization. (2024). *Global status report on alcohol and health and treatment of substance use disorders 2024*. World Health Organization.
- Yusuf, U., Abubakar, U. and Muhammad, M. H. (2023). Awareness on the effect of drug abuse among tertiary schools' students in Katsina State, Nigeria. *International Journal of Innovative Human Ecology & Nature Studies*, 11(2), 1–8.
- Zhou, B., Tan, J., Li, W. and Yu, C. (2024). A study on the mediating-moderate effect of the types of illicit drugs on mental health in China. *Frontiers in Public Health*, 12, 1431854.