

Drug Abuse among Secondary School Students in Nigeria from 1980 to 2023: A Narrative Review of Literatures

Ogbonna O Brian ^{2,3*}, Anietoh Maureen U ³, Daniel U Eze ², Eze S Amarachi ³, Victor U Chigozie ², Osuafor Nkeiruka G ⁴, Ighorodje E Austine ¹

¹Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmaceutical Sciences, Madonna University Elele, River State, Nigeria.

² Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmaceutical Sciences, David Umahi Federal University of Health Sciences, Uburu, Ebonyi State, Nigeria.

³Department of Clinical Pharmacy and Pharmacy Management, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University Awka, Anambra State, Nigeria.

⁴Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmaceutical Sciences, University of Abuja.

***Corresponding Author:** Ogbonna O Brian, Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmaceutical Sciences, Madonna University Elele, River State, Nigeria.

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Abstract

Drugs play a crucial role in modern medicine, aiding in the treatment and management of various illnesses and conditions, thereby contributing to improved health and well-being. When used appropriately under the guidance of healthcare professionals, drugs can be highly beneficial and even life-saving. This study narratively reviewed the occurrence, trends, and potential risk factors linked with substance use among secondary school students in Nigeria to generate evidence for interventions and policy. The study design was a narrative review of published studies. Fourteen articles met the inclusion criteria for this review. Table 1 shows the characteristics and findings of the studies reviewed. All of the papers included in the review were published in journals. The majority of these studies (n = 13, 92.8%) examined the prevalence rate of drug abuse, the pattern of drugs being abused, and the precipitating factors that trigger this abuse while one examined just the prevalence of drug abuse and the drugs. All of them employed quantitative methodology utilizing self-report instruments. Substance use is widespread among secondary school students in Nigeria and usually starts at a young age. Various risk factors include gender, age, parental influences, peer dynamics, individual characteristics, and lack of awareness of the consequences of the substances involved.

Key words: drug abuse; drug use; secondary school; high school; peer pressure; nigeria

Introduction

Drugs can indeed be effective substances for promoting health and well-being. However, it's essential to ensure that they are used responsibly and by medical guidelines to prevent the harm that can result from their misuse and abuse. The misuse and abuse of drugs, especially among young people, have become significant concerns in many societies. Instead of being used for their intended therapeutic purposes, drugs are often illegally obtained and consumed in ways that pose serious risks to both physical and mental health. This misuse can lead to addiction, overdose, and a range of other harmful consequences. "Drug abuse" is defined as any use of drugs for non-medical purposes almost always for altering consciousness. Drug abuse denotes substances that change the

mental or physical state of a person and that may be used repeatedly for that effect leading to abnormality [1].

Drug abuse can lead to abnormalities in both mental and physical functioning. This can manifest as changes in behavior, mood disturbances, cognitive impairment, and physical health problems. Over time, drug abuse can have profound and detrimental effects on various aspects of an individual's life, including their relationships, academic or occupational performance, and overall quality of life. The use and misuse of drugs, particularly among young people, represent significant and growing concerns worldwide. Drug abuse among young people is rising in many Western countries, making it increasingly difficult to ignore the fact. [2,3]. According to a report by the United Nations Office on Drugs

and Crime (UNODC) in 2005 [4], approximately 200 million people, constituting 5 percent of the world's population aged 15 to 64 years, had used drugs at least once within a year. This figure represented an increase of about 15 million compared to the previous year's estimate.

Similarly, the World Drug Report indicated that the use of illicit drugs has increased in all nations in recent years. The report further highlights that the growing availability of a diverse range of drugs to an increasingly broad socio-economic spectrum of consumers is concerning [5]. The global impact of alcohol misuse alone is significant, with an estimated 3.3 million deaths attributed to its harmful use annually. Furthermore, at least 15.3 million individuals worldwide have been diagnosed with drug use disorders, underscoring the pervasive nature of substance abuse issues [6].

In 2012, an estimated 162 to 324 million people globally were found to have used psychoactive substances, this corresponds to between 3.5% to 7.0% of the global population aged 15-64, who had used illicit drugs and also an estimated 183,000 drug-related deaths were reported in 2012, ranging from 95,000 to 226,000, among the population aged 15-64 years [4]. In 2014, nearly one out of every 20 adults worldwide, aged between 15 and 64 years, were identified as drug abusers. This amounted to over 29 million people worldwide suffering from drug abuse disorders [5].

Another research indicates that at least 14% of adolescent girls and 18% of boys aged 13–15 years in low- and middle-income countries have reported consuming alcoholic beverages [6]. By the time they reach their senior years in high school, almost 70% of adolescents will have experimented with alcohol, while half will have used an illegal drug. Additionally, nearly 40% will have smoked a cigarette, and more than 20% will have misused a prescription drug for nonmedical purposes [6]. The prevalence of illicit drug use among adolescents in the United States of America, Canada, and the United Kingdom has been on the increase [7]. According to the British Office for National Statistics, 12% of pupils aged 11–15 had used drugs [8]. The prevalence of substance use is on the rise across numerous African countries [9]. Research indicates that the onset of drug abuse often commences during adolescence [10]. This increase in prevalence rate among adolescents in African countries includes high rates of alcohol use, cigarette smoking, and cannabis consumption [11, 12].

Adolescence is a time of transition from infancy to adulthood, marked by various physical, psychological, and social changes. During this critical developmental period, individuals experience rapid physical growth, cognitive development, and emotional changes. Adolescents, aged 14 to 25, comprise a significant part of Nigeria's population. Many students in Nigerian schools are in this age group [13], the Nigerian National Drug Law Enforcement Agency (NDLEA) has emphasized that drug abuse constitutes a significant challenge within schools. For example, research by Alemika revealed that over 20% of the student population in Lagos State, Nigeria, had experimented with psychoactive drugs at least once in their lives [14]. Substance abuse among adolescents is a growing concern, with significant implications for their overall well-being. Despite the limited data on alcohol consumption, Nigeria still ranks second in alcohol consumption among youths in Africa [15]. Research consistently demonstrates that students who consume alcohol often use other psychoactive substances as well [16,17].

Several research done have also reported the use of licit drugs among both adolescents in school and out-of-school adolescents [18-21]. These studies have indicated a differ prevalence rate of substance abuse among students. The use and abuse of drugs by adolescents have emerged as one of the most concerning health-related phenomena in Nigeria and other regions across the globe. However, there are disagreements among researchers regarding the prevalence, patterns, and factors that predict the consumption of substances. The prevalence of substance abuse has been stems from various factors, including social, economic, and psychological influences. Peer pressure, stress, curiosity, and accessibility to drugs are among the factors that can contribute to drug experimentation and misuse

among adolescents. Understanding the causes and risk factors associated with adolescent substance abuse is essential in developing effective intervention strategies.

Despite this, there is currently no comprehensive review on drug abuse among secondary school students in Nigeria. In this narrative review, we will explore the prevalence of substance abuse among adolescents, delve into the root causes and contributing factors, and discuss the type and pattern of drug abuse. By shedding light on the complexities surrounding adolescent substance abuse, this review aims to provide valuable insights for professionals and educators working with this vulnerable population. It is against this backdrop that this article has been written. This study evaluated the occurrence, trends, and potential risk factors linked with drug abuse among secondary school students in Nigeria.

Methods

Study area:

The scope of the study covered all published studies carried out in Nigeria from 1980 to 2023, on drug and substance abuse: its prevalence, pattern, and causes of drug abuse in secondary school students.

Study design:

The study was a narrative review of all studies previously conducted on the prevalence, pattern, and causes of substance abuse among secondary school students in Nigeria within the period under review.

Study setting:

Only studies carried out in Nigeria were used for this study.

- Inclusion criteria: Criteria for inclusion were based on studies carried out in Nigeria and published in English Language within the review period.
- Exclusion criteria: Studies within the period under review but with incomplete data and methodological flaws were eliminated

Review questions:

- a. How many studies have been carried out on the prevalence, pattern, and causes of drug and substance abuse among secondary school students in Nigeria?
- b. What is the occurrence, trends, and potential risk factors linked with drug abuse among secondary school students in Nigeria?

Article search process:

The review explains and synthesizes results from various studies that met inclusion criteria and conclusions were drawn from these findings. The keywords related to the title of the study were used for the search, both individually and in combination, employing Boolean operators such as AND/OR to ensure comprehensive coverage of relevant literature. A computerized search of all studies on drug and substance abuse among secondary school students was conducted using electronic databases such as PubMed, Google, and Google Scholar searched from January to March 2024 to identify published studies from 1980 to December 2023. A manual search was also conducted to identify studies that met the inclusion criteria.

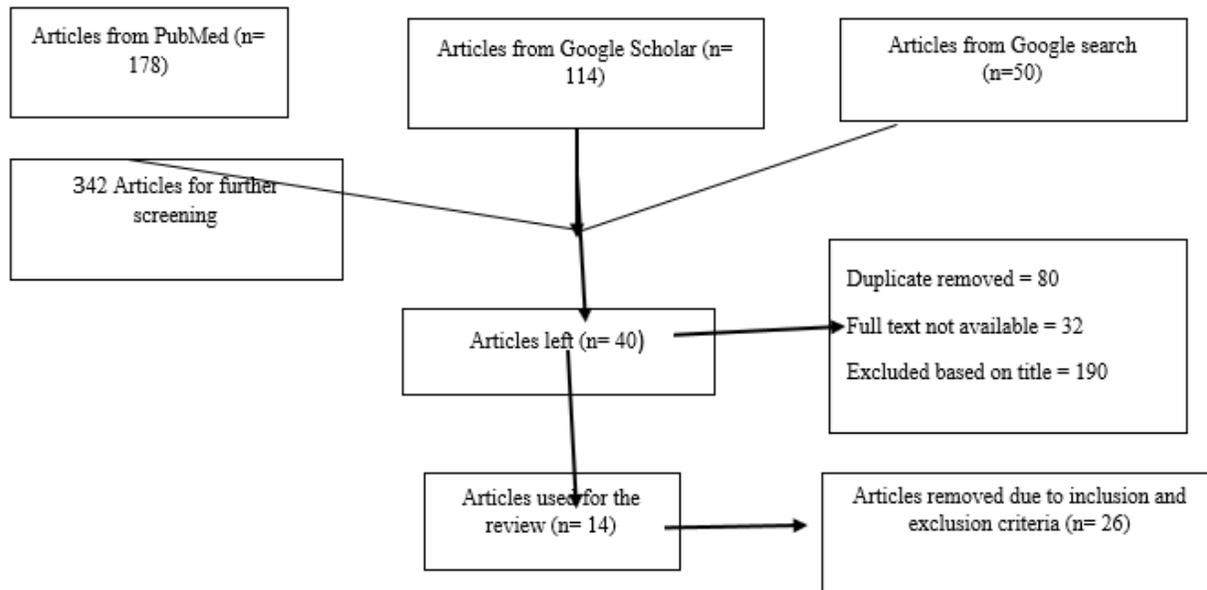
During the search, relevant studies on English Language databases were searched with the combination of keywords such as: “prevalence of drug use among secondary school students”, “the pattern of drug use in secondary school”, “Causes of drug use among secondary school students”. Other search terms included: “Determinant of drug abuse in secondary/high school”, “Factors that encourage drug abuse in secondary school students”, “psychoactive substance use among adolescents in secondary school”. The authors chose studies from 1980 onwards because previous literature and independent searches revealed that studies in the subject area were predominantly not visible before this period within the country.

Articles selection process

After a careful search and screening of the literature, 342 studies were identified and 328 studies were excluded after a thorough assessment based on duplicates, incomplete articles texts and not meeting the inclusion criteria and covering the scope of prevalence, pattern, and

factors of drug and substance abuse on secondary school students. This left 14 studies available for inclusion in the review. The figure (Figure 1) is a diagrammatical illustration of the search process conducted for the study

Figure 1



Reference number	Title and author	Location / year of publication	Study design / instrument	Sample size	Prevalence rate	Pattern of drug abused	Causes of abused
22	Substance abuse among students in selected secondary schools of an urban community of oyo-state, south west nigeria: implication for policy action. Idowu A, et al.	Southwest / 2018	Cross sectional / Questionnaire	270	26.3%	Tramadol Caffeine	Enhance intellectual More active For fun
23	Substance use among secondary school students in an urban setting in Nigeria: prevalence and associated factors Oshodi OY, et al.	Southwest / 2010	Descriptive cross sectional / The WHO Students' Drug use Questionnaire	420	87.3%	Caffeine (kola nut) hypnosedative Alcohol	Relief from stress To treat illnesses To stay awake
24	Substance abuse and its prevalence among secondary school adolescents in kagoro, kaduna state, Nigeria Bassi AP, et al.	North / 2017	Cross sectional, Descriptive / Questionnaire	400	21%	Alcohol Tramadol	Curiosity peer pressure
25	Pattern of Substance Abuse among Senior Secondary School Students in a Southwestern Nigerian City. Atoyebi AO, et al.	South west / 2013	Cross sectional, Descriptive / Questionnaire	450	52.1%	Analgesics Cannabis Tobacco	Parental influences
26	Substance abuse among secondary school adolescents in Enugu Okwaraji, FE	South East / 2006	Cross sectional study/ Questionnaire	300	71.7	Alcohol 35.9	To facilitate social activities Relieve Anxiety

Reference number	Title and author	Location / year of publication	Study design / instrument	Sample size	Prevalence rate	Pattern of drug abused	Causes of abused
27	Pattern of Drug Use Among Adolescents In Selected Secondary Schools In Ibadan North Local Government Area, Ibadan Oyo State Nigeria Ajala, R.O, et al.	South West / 2018	Cross sectional Descriptive / Questionnaire	100	25%	Analgesic Alcohol Marijuana cocaine	Peer Pressure Ignorance
28	Pattern of substance abuse among adolescent secondary school students in Abakaliki Anyanwu O.U. et al.	South East / 2018	Cross sectional / WHO Students Drug Use Questionnaire	620	32.9%	Alcohol Kolanut coffee cigarrete	Curiosity Dysfunctional homes
29	Prevalence and perception of drug use amongst secondary school students in two local government areas of Lagos State, Nigeria Soremekun RO, et al.	South West / 2020	Cross sectional / WHO Students Drug Use Questionnaire	1048	40.3%	Alcohol Pharmaceutical opioid	Relief of stress. Treat illness. Performance enhancement.
30	Factors Associated with Psychoactive Substance Use among In-School Adolescents in Zaria Local Government Area, Kaduna State, Nigeria. Adesina BO, et al.	North / 2019	Descriptive, Cross-sectional study / Questionnaire	443	46	Kola-nut Sedatives Alcohol Tobacco	Curiosity, Peer pressure Depression Academic problems
Reference number	Title and author	Location / year of publication	Study design / instrument	Sample size	Prevalence rate	Pattern of drug abused	Causes of abused
31	Drug Abuse in Nigerian Schools: A Study of Selected Secondary Institutions in Bayelsa State, South-South, Nigeria. Ekpenyongi SN, et al.	South South / 2012	Cross sectional / Questionnaire	338	33.8%	Alcohol Cigarettes Marijuana	Peer Pressure
32	Survey of Drug use Among Young People in Ife, Nigeria. Afolabi MO, et al.	South West / 2012	Cross sectional, Descriptive / United Nation Questionnaire	800	65.3%	Caffeine Alcohol Cigarette	To stay awake for studies To altered sense of wellbeing
33	Substance Abuse: Awareness and Attitude among Secondary School Students in Sapele, Nigeria Umukoro EK, et al.	South South / 2021	Cross sectional / Questionnaire	315	19.37%	Alcohol Tramadol	Peer pressure Depression Confidence booster
34	Substance use among Secondary School Adolescents in Gwagwalada Area Council, Abuja, Nigeria. Ekop EE, et al.	North Central / 2019	Cross sectional descriptive / Questionnaire	1194	72.7%	Kola nut Alcohol Sniffed substance Tobacco	NIL
35	Psychoactive substance use among secondary school students in a semi-urban setting in Nigeria: Prevalence, pattern and socio-demographic correlates. Eriyo Williams	South south / 2021	Descriptive / WHO student drug use Questionnaire	348	42.5	Stimulant (coffee, kola-nut) Alcohol Hypnotic sedative (diazepam)	parental influence Peers pressure

Results

Study Characteristics

Fourteen articles met the inclusion criteria for this review. Table 1 shows the characteristics and findings of the studies reviewed. All of the papers included in the review were published in journals. The majority of these studies (n = 13, 92.8%) examined the prevalence rate of drug abuse, the pattern of drugs being abused, and the precipitating factors that trigger this abuse while one (Ekop EE, et al) examined just the prevalence of drug abuse and the drugs. All of them employed quantitative methodology utilizing self-report instruments. Among the fourteen studies examined, six (Oshodi, et al,2012; Bassi AP, et al,2017;Ajala, R.O, et al. 2018; Afolabi MO, et al, 2021; Ekop EE, et al, 2019; Adesina BO, et al, 2020) employed cross-sectional and descriptive designs, five (Idowu A, et al 2018; Atoyebi AO, et al, 2012;Anyanwu O.U. et al. 2018; ; Soremekun RO, et al, 2020; Umukoro EK, et al, 2021) adopted cross-sectional survey designs, and three(Okwaraji FE,2006;Ekpenyongi SN, et al, 2012; Eriyo William, 2021) did not provide study design details.

Data Collection Instruments

Four authors used a modified World Health Organization (WHO) Student Drug Use questionnaire as their data collection tool (Eriyo William et al; Soremekun, et al.; Anyanwu et al.; Oshodi et al) one author used the United Nations questionnaire for conducting school surveys on drug abuse (Afolabi et al). The remaining authors structured their questionnaires (Ekop EE, et al.; Umukoro EK, et al; Ekpenyongi et al.; Adesina et al.; Ajala, et al.; Bass, et al.; Atoyebi et al.; Okwaraji et al; Idowu et al)

Study Location

Collectively, there were two studies (14.2%) carried out in south-eastern Nigeria (Anyanwu O.U. et al. 2018,Okwaraji FE,2006), three (21.4%) in the south-south region (Eriyo William, 2021,Ekpenyongi SN, et al, 2012,Umukoro EK, et al, 2021), three (21.4%) from the northern region (Bassi AP, et al,2017, Ekop EE, et al, 2019,Adesina BO, et al, 2020) and six (42.9%) in south-western Nigeria (Idowu A, et al 2018; Atoyebi AO, et al, 2012;Oshodi, et al,2012;Ajala, R.O, et al. 2018; Afolabi MO, et al, 2021; Soremekun RO, et al, 2020). It is pertinent to note the study locations due to Nigeria's diverse ethnic, cultural, and religious landscape, with over 250 different native languages. These diversities may influence prevalence,patterns, and factors contributing to substance use in each region.

Prevalence rate

The prevalence of drug use among secondary students was reported in all fourteen (Idowu A, et al 2018; Atoyebi AO, et al, 2012; Oshodi, et al, 2012; Ajala, R.O, et al. 2018; Afolabi MO, et al, 2021; Soremekun RO, et al., 2020; Bassi AP, et al,2017, Eriyo William, 2021, Adesina BO, et al, 2020, Ekpenyongi SN, et al, 2012, Ekop EE, et al, 2019; Anyanwu O.U. et al. 2018, Okwaraji FE, 2006, Umukoro EK, et al, 2021) studies. The prevalence rate of substance abuse was found to be high among secondary school students ranging from the highest recorded rate of 87.3% from a study in the southwestern (Oshodi, et al, 2012), to the lowest recorded rate of 19.4 % in the south-southern region (Umukoro EK, et al, 2021). Similarly, a high prevalence rate of 72% was also recorded for young adults in a study in the southwestern region [36], Idris and Sambo in 2009, reported that 56% of in-school adolescents in Zaria, North Western Nigeria had used at least one psycho-active substance [37].

Pattern of Drug Use

Fourteen of the studies revealed that a large number of students use multiple substances, among these studies, eight (57.1%) reported that alcohol was the most used and abused substance in terms of lifetime and current use. four (28.6%) studies revealed that caffeine was the most commonly abused substance by secondary students. Similarly, two

(14.3%) studies indicated that out of all the abuse drugs measured analgesic was the most used drug.

Influence of drug abuse

This represents factors that influence and drive drug abuse among secondary school students in Nigeria. Several studies drew on the strong effect of peer pressure on drug abuse as it was consistently reported by six (Bassi AP, et al,2017; Ajala, R.O, et al. 2018; Ekpenyongi SN, et al, 2012; Umukoro EK, et al, 2021; Eriyo William, 2021; Adesina BO, et al, 2020) studies.

Curiosity was recognized by three (Adesina et al., 2020, Bassi AP, et al,2017; Anyanwu O.U. et al. 2018) of the articles as one of the strongest predictors for initiation to abuse of drugs.

Three (Soremekun RO, et al., 2020; Adesina et al., 2020; Afolabi MO, et al, 2021) of the articles included identified pleasure as a factor in drug abuse. Perceived feelings experienced after abuse may be related to why students continue abusing drugs. Similarly, three (Okwaraji FE, 2006, Adesina et al., 2020; Umukoro EK, et al, 2021) studies highlighted socializing as a factor in drug abuse by secondary students. During adolescence, individuals often experience heightened engagement with peers, socializing, and seeking acceptance within desired social groups

Oshodi, et al. (2012), Anyanwu et al. (2016), Afolabi MO, et al. (2021), Umukoro EK, et al. (2021), Adesina et al. (2020), Okwaraji FE, (2006) and Soremekun RO, et al. (2020) identified from their respective studies that dealing with anxiety and relieves stress can predict and influence alcohol and tobacco use.

Discussion

The objective of this research was to evaluate the occurrence, trends, and potential risk factors linked with substance use among secondary school students in Nigeria. There were variations in the definitions of substance use in different studies, but the utilization of the WHO Student Drug Use questionnaire provided a consistent and standardized approach to measuring and defining substance use thus facilitating easier comparison between studies.

In this review, the high prevalence of substance abuse among secondary school students is a cause for concern due to the potential long-lasting and detrimental health effects associated with substance use [38, 39]. Notably, there has been a significant increase in the prevalence of alcohol and caffeine use, with alcohol being the most commonly consumed substance among adolescents in Nigeria, as reported in other studies [40]. Additionally, Erumi in 2002, identified alcohol and energy drinks as among the substances commonly abused based on an empirical survey conducted among adolescents and young adults in the Warri metropolis [41].

In Nigeria, it concerning to hear that some alcoholic beverage companies enlist celebrities who serve as role models to adolescents to promote and endorse their products. It is also troubling to learn that there is presently no established alcohol control policy aimed at regulating the availability and accessibility of alcoholic beverages to adolescents [42]. This could potentially contribute to underage drinking and its associated negative consequences.

The use of caffeine (kola nuts) among Nigerian secondary school students was notably high and a cause for concern, although not as prevalent as alcohol consumption. Caffeine consumption, known for its addictive properties and association with insomnia and anxiety, was also reported in another study conducted within the country [43]. Thus, highlighting the need to address this issue and raise awareness about its potential risks and adverse effects, particularly among secondary school students.

According to studies, adolescence is a critical age for drug abuse initiation and experimentation, which can sometimes lead to risky behaviors such as drug abuse. Research has shown that the use of one drug, often referred

to as a gateway drug can increase the likelihood of trying other substances as well [44]. Adolescents are more likely to experiment with other substances following their initial abuse of one drug, making it crucial to address the use of these gateway drugs among young people.

According to this review, the prominent risk factor associated with drug abuse among school students, as reported by the majority of the reviewed articles, is having peers who use psychoactive substances. Peer pressure or the desire to please friends was identified as the primary reason for the involvement of secondary school students in substance use (Bassi AP, et al., 2017; Ajala, R.O, et al., 2018; Ekpenyongi SN, et al., 2012; Umukoro EK, et al., 2021; Okwaraji FE, 2006; Eriyo William, 2021; Adesina BO, et al., 2020). Adolescents tend to place more importance on peer approval during their teenage years, and in secondary schools, they spend more time with their peers than any other group [45]. Consequently, they are likely to adopt similar habits or may feel pressured into adopting such behaviors to fit into social groups.

Furthermore, the reviewed studies indicated that students engage in drug abuse due to misconceptions, such as the belief that it enhances intelligence (Ajibola I, et al., 2018; Dowu et al., 2018), provides stress relief, or helps avoid worries (Soremekun RO, et al., 2020; Oshodi et al., 2010). Some even resort to drugs as a way to stay awake (Afolabi MO, et al., 2021; Atoyebi & Atoyebi, 2013; Oshodi et al., 2010). These beliefs underscore the need for proper education on psychoactive substances in schools.

Additionally, students cited curiosity about the effects of drugs (Bassi AP, et al., 2017; Onyinye U. et al., 2018; Adesina BO, et al., 2020) as a reason for drug abuse and the desire to have a good time (fun) with friends are also cited as reasons for drug abuse (Afolabi MO, et al., 2021; Umukoro EK, et al., 2021; Okwaraji FE, 2006). It is essential to promote alternative, positive, and healthy ways of having fun and avenues to express their playful and creative sides in alleviating the stress associated with academic learning in school to discourage students from resorting to drug

Limitation

The study had some limitations. Firstly, some valuable articles could have been left out due to the use of non-matching keywords during the search process. Secondly, some studies with potential biases may have passed through the selection process despite potential biases, which could have influenced the study's outcomes. This narrative study opted for the use of tables and flowcharts to present data for easy understanding and clarity and also it did not adhere to all the methodological details outlined in a systematic review protocol

The choice of using self-administered instruments and quantitative designs in some of the reviewed studies had significant implications on the quality of their outcomes, particularly due to the inherent flaws associated with self-report questionnaires.

Conclusion

Drug abuse is a condition where an individual habitually uses drugs and it is characterized as a self-destructive behavior. Several authors indicate that drug abuse is not caused by a single factor rather it is influenced by multiple factors. Moreover, drug abuse has evolved beyond individual circumstances to become a universal, cultural, and mental health concern

Substance use is widespread among secondary school students in Nigeria and usually starts at a young age. Various risk factors contribute to this, including gender, age, parental influences, peer dynamics, individual characteristics, and Lack of awareness. To address this issue, effective interventions within schools should encompass a range of strategies, including peer education, family-based support, health education, and engaging activities. There is a pressing need for additional research into substance abuse among Nigerian secondary school students to provide an understanding of adolescents' attitudes, knowledge of the health

implications of drug abuse and measure other psychological and school-related factors.

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