



## **INFLUENCE OF DRUG ABUSE ON CHEMISTRY STUDENTS ACADEMIC PERFORMANCE IN SELECTED SECONDARY SCHOOLS IN ORO, KWARA STATE**

**\*AJANAKU Adeniyi, OLANREWAJU Olaide Kuburat and AKINWARE Omolayo Omotomiwa**

Department of Chemistry, Kwara State College of Education Oro, Kwara State, NIGERIA

### **\*Correspondence**

**AJANAKU Adeniyi**

Department of Chemistry, Kwara State College of Education Oro, Kwara State, NIGERIA

Ajanakuadeniyi9@gmail.com

### **ABSTRACT**

The upsurge in the use of drugs abuse as reported by various scholars appears to be global in nature. Although, everyone is at some risk of these drug related problems, students in secondary schools seem to be particularly vulnerable. This study focused not only on the risk taking behaviour involved in drug abuse but also investigated the influence of drug abuse on chemistry students' academic performance in selected secondary schools in Oro, Kwara State. The study adopted the survey research design. The sample consisted of 120 respondents who were sampled using multipurpose sampling technique. A set of questionnaire developed and validated by the researcher was used to collect data for the study. The data collected were analyzed using descriptive statistics and Chi-square Analysis. The two hypotheses generated were tested at 0.05 level of significance. The study revealed that a significant relationship existed between drug abuse and students' academic performance. The study showed excessive use of drugs leads to short time retention of specific content taught and lowering the academic performance of students. Based on the findings of this study, it was recommended that drug education should be integrated into the Secondary school curriculum in Nigeria.

**Keywords:** Drug abuse, academic performance, chemistry students, secondary schools

### **Introduction**

Man has used and abused certain substances since time immemorial. In almost all cultures, there has been the desire for man, consciously or unconsciously to escape from monotony, frustration and pains and to seek euphoria or a sense of well-being when taking part in different achievement tasks. Substances such as alcohol, marijuana and tobacco are no exception. These substances are included among the psychoactive substances (Awosusi & Joseph, 2013).

Drug abuse and crime constitute major security challenges in Nigeria in recent times. Such crimes like rape, murder, armed robbery are associated with the use of psychotic substances. No society is insulated from illicit drugs consumption and its negative consequences. Illicit drug consumption produces undesirable results which include mental disorder and deviant behaviours. It also encourages criminal activities. Contemporary security challenges in Nigeria which include

criminal activities such as armed robbery, kidnapping, cultism, hooliganism, prostitution, cybercrime and violence are also associated with illicit drug abuse (Yusuf, 2012).

Drug is referred to as a substance that could bring about a change in the biological function through its chemical actions. It is also considered as a substance that modifies perceptions, cognition, mood, behaviour and general body functions (Balogun, 2016). This could thus be considered as chemical modifiers of the living tissues that could bring about psychological and behavioural changes (Nnachi, 2017). The use of drugs in itself does not constitute any danger, because drugs correctly administered have been a blessing to bring healing. Unfortunately, in contemporary times certain drugs that initially produced effects such as ecstasy, sense of feeling good, serenity and power have grown into a problem of dependence and abuse (Ekpenyong, 2012).

Drug abuse can be defined as a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to them or others. Illicit drugs could be classified into gateway drugs, such as nicotine, alcohol and marijuana. They are called gateway drugs because they are the gateway or point of entrance that leads to the use of other substances (Yusuf, 2012). The other substances or higher drugs that follow the use of gateway drugs are amphetamine, cocaine, heroin, inhalants and steroids.

Adewale (2022) identified the types of drug abuse, according to him practically any substance whose ingestion can result in an exhilarated feeling can be abused. While some are aware of the abuse of legal substances like alcohol or illegal drugs like marijuana and cocaine. Well, it is known fact household cleaners most commonly abused drugs. Other form of drugs like Indian hemp, which is usually produced in Nigeria and others like methamphetamine, syrups and tablets with codeine capable of intoxicating are mostly found in schools, motor parks, and even with local traders that sell provisions in kiosks. It is noted that some of the drugs and types of drugs that are commonly abused result in dependence by students. The identified types of drug abused by Adewale (2022) are:

- **Alcohol:** a toxic substance, mainly to a developing fetus when a mother consumes this drug during pregnancy. One of the most common addictions, alcoholism can have distressing effects on the alcoholic individual's physical health, as well as his or her ability to function interpersonally and at work. Example of alcohol, beer, *ogogoro*, *burukutu*, *aspetesi*, *pito*, *palmwine*, *sapelewater*, *kaikai*.

- **Cocaine:** This is a drug that stimulates the nervous system; cocaine can be snorted in powder form, smoked when in the form of rocks, or injected when made into a liquid.
- **Nicotine:** The addictive substance found in cigarettes, nicotine is actually one of the most addictive substances that exist. In fact, nicotine addiction is often compared to the intense addictiveness associated with opiates like heroin.
- **Phencyclidine:** is referred to as PCP, this drug can cause the user to feel extremely obsessed, quite aggressive and have an unusual amount of physical strength. This can make the individual somewhat dangerous to others.
- **Sedative, hypnotic, or ant anxiety drugs:** As these substances quash the nervous system, they can cause death by respiratory arrest of the person who either uses these drugs in overdose or who mixes one or more of these drugs with another nervous system depressant drug.

Other types apart from listed above as identified by NAFDAC (2000) cited in King (2016) are

- **Stimulants:** These are substances that directly act and stimulate the central nervous system. Users at the initial stage experience pleasant effects such as energy increase. The major source of these comes from caffeine substance.
- **Hallucinogens:** These are drugs that allow the sensory processing unit in the brain. Thus, producing distorted perception, feeling of anxiety and euphoria, sadness and inner joy. They normally come from marijuana, SD and the likes.
- **Narcotics:** These drugs relieve pains, induce sleeping and they are addictive. They are found in heroin, codeine, and opium
- **Miscellaneous:** This is a group of volatile solvents or inhalants that provide euphoria, emotional disinhibition and perpetual distortion of thought to the user. The main sources are glues, spot removers, tube repair, perfumes, chemicals etc.
- **Tranquilizer:** They are believed to produce calmness without bringing drowsiness, they are chiefly derived from Librium, and valium.

The commonly abused substances in Nigeria as observed by Philip, Edna, & Samson (2016), are marijuana and amphetamines which have negative effects (such as aggressive and violent behaviour) on the youths, immediate society, and Nigeria at large. In the view of, many

categories of youths (male and female) are addicted to substance/drug abuse. Substance/drug abuse leads to a high rate of crime, fuel conflict, political thuggery, religious intolerance, rape, domestic violence, suicide, amongst others in the society

### **Causes of Drug Abused Among Students in Secondary Schools**

According to Akikwi (2022), the causes of drug abuse among students may be sociological, psychological, out of inquisitiveness, boredom, to ease fear, develop sexual and physical pleasures, or as a result of family background among other things (Ngesu, 2018). The sequence of usage ranges from tobacco, alcohol, marijuana and other higher substances. Undergraduate students are gradually engaging in prescribed drugs, particularly narcotics which are given to relieve severe pain and stimulant medications, which treat conditions like attention deficit disorder and narcolepsy (Turner in Dankano & Garba, 2020). A long-lasting effect in learning abilities of the user is common for those students who start using drugs at a younger age.

In the work of Adewale (2022), Haladu identified the following as some of the contributory factors that influences undergraduate students to the intake of drug abuse:

- ***Lack of parental supervision:*** Most parents have no time to supervise their children. Some parents have little or no interaction with family members, while others put pressure on their children to pass exams or perform better in their studies. These phenomena initialize and increases drug abuse.
- ***Experimental Curiosity:*** Curiosity to experiment the unknown facts about drugs thus motivates adolescents into drug use. The first experience in drug abuse produces a state of awakening such as happiness and pleasure which in turn motivate them to continue.
- ***Peer Group Influence:*** Peer pressure plays a major role in influencing many adolescents into drug abuse. This is because peer pressure is a fact of teenage and youth life. As they try to depend less on parents, they show more dependency on their friends. In Nigeria, as other parts of the world, one may not enjoy the company of others unless he conforms to their norms.
- ***Personality Problems due to socio-Economic Conditions:*** Adolescents with personality problems arising from social conditions have been found to abuse drugs. The social and economic status of most Nigerians is below average. Other causes of students involvement in drug abuse is attributed to high rate of poverty in the country, broken homes and

unemployment is on the increase, therefore our students roam the streets looking for employment. These situations have been aggravated by lack of skills, opportunities for training and re-training and lack of committed action to promote job creation by private and community entrepreneurs. Frustration arising from these problems lead to recourse in drug abuse for temporarily removing the tension and problems arising from it.

- ***The Need for Energy to Work for Long Hours:*** The increasing economic deterioration that leads to poverty and disempowerment of the people has driven many parents to send their children out in search of a means of earning something for contribution to family income. These children engage in bus conducting, hawking, head loading, scavenging, serving in food canteens and are prone to drug taking so as to gain more energy to work for long hours.
- ***Availability of the Drugs:*** In many countries, drugs have dropped in prices as supplies have increased.
- ***The Need to prevent the Occurrence of Withdrawal symptoms:*** If drug is stopped, the user experiences what is termed “withdrawal symptoms”. The inability of the drug user to tolerate the symptoms motivates him to continue (Ige, 2000).
- ***Advertisement:*** The social media has posed a devastating problem on the students. Students are sensitive to advertisement and copy quickly. The glamour in advertising alcohol and cigarette smoking make the youth want to be the way the advert depicts.
- ***Emotional and psychological stresses, includes:*** anxiety, frustration, and economic depression people always take drug or drink alcohol in order to forget their problem when they are provoked.

### Effects of Drug Abuse on Students

Drug abuse causes some areas of the brain not to develop properly leading to learning disabilities. Persistent abuse of drugs further leads to loss of memory and judgment. Many undergraduate students who engage in drug abuse tend to be forgetful and can hardly focus particularly in their studies; it can also lead to loss of short-term memory. Drug abuse may weaken memory by slowing down the co-ordination materials and may decrease student’s ability to remember such materials that was learned prior to using the drugs.

In a similar vein, Dankano and Garba (2020) reported that undergraduate students found in the acts of drug abuse are often times academically and socially less developed as they are not respected and recognized to make reasonable contributions to any development. This is because

drug abuse does not only downgrade the academic performance of students, but also affects the moral, physical and general buildup of the students. Thus, youths who are perceived as the leaders of tomorrow and are being trained in various tertiary institutions in diverse field have veered to the act of abusing drugs. This act does not in any way contribute to the development of the students and as such the expected output of these students can greatly diminish their academic performances because of their persistence to drug abuse (Staff, 2012).

Again, drug abuse may result to serious psychiatric implications; these include confusion, restlessness and sometimes serious abnormal behavior or outright madness. At least one out of the psychiatric cases is due to delirious effects of marijuana. Besides, statistics have shown that 70 percent of patients undergoing treatment for drug abuse in nation's psychiatric hospitals are undergraduates between the ages of 16 and 25 years. It may also lead to poor performance in school work and may ultimately result in school dropout. Apart from that, it leads to the development of aggressive behaviour and depression.

Adedeji (2013) observes that drug abuse may give rise to sudden mood swings, with unusual aggression and depression for no apparent reasons or warning interest in school, hobbies or friends. The adverse consequences of drug abuse can be divided into the following categories:

- **Physical:** Some of the effects of drugs include damage to important organs like brain, liver, pancreases, medical conditions like hypertension, chronic cough and above all some researches have shown that HIV infection associated with drugs addiction is becoming a significant socio pathological problem in Nigeria and other countries.
- **Psychological:** Drug abuse leads to depression, anxiety, dementia, Hallucination, moodiness and aggressiveness leading to the degeneration of the individual. Such individual with these characteristics is a waste to himself and the society at large.
- **Social:** Socially the consequences of drug abuse to nation are quite serious. The preponderance of youth addicts roaming the streets negatively affects the economy as a result of low productivity and shortage of efficient manpower. Public safety is subverted as drug addiction is leading to incitement of both sexes to prostitution and criminal behaviour. Attempts to establish a correlation between criminal violence and drug abuse had been made and there are claims that illicit drug users are higher in the population of criminals than non-drug user. Violence witnessed in various communities leading to bloodletting, arson, rape, stealing has a link with drug abuse.

Adewale (2020) further identified the following categories consequences of drug abuse among the students:

- **Academic effects of drug abuse:** Declining grades, absenteeism from school and other activities, and increased potential for dropping out of school are problems associated with adolescent substance abuse. Low level of commitment to education and higher truancy rates appear to be related to substance use among adolescents. Cognitive and behavioural problems experienced by alcohol- and drug-using youth may interfere with their academic performance and also present obstacles to learning for their classmates.
- **Medical effects of drug abuse:** Drug abuse not only weakens the immune system but linked to risky behaviours like needle sharing and unsafe sex. The combination greatly increases the likelihood of acquiring HIV-AIDS, hepatitis and many other infectious diseases. Transmission of HIV/AIDS primarily occurs through exposure to body fluids of an infected person during sexual contact or through sharing of unsterile drug injection equipment. Many substance-abusing youth engage in behaviour that places them at risk of contracting HIV/AIDS or other sexually transmitted diseases. This may include the actual use of psychoactive substances (particularly those that are injected) or behaviour resulting from poor judgment and impulse control while experiencing the effects of mood-altering substances.
- **Respiratory Problem:** Drug abuse can as well lead to a various respiratory problems. Smoking cigarettes, for example, has been shown to cause bronchitis, emphysema and lung cancer. Marijuana smoke may also cause respiratory problems. The use of some drugs may also cause breathing to slow, block air from entering the lungs or exacerbate asthma symptoms. Cardiovascular disease, stroke, cancer, HIV/AIDS, hepatitis, and lung disease can all be affected by drug abuse. Some of these effects occur when drugs are used at high doses or after prolonged use; however, some may occur after just one use.
- **Mental Health problem:** Mental health problems like depression, psychosocial dysfunctions frequently developmental lags, apathy, withdrawal, and other are linked to substance abuse among adolescents. Substance-abusing students are at higher risk than nonusers for mental health problems, including gloominess; conduct problems, personality disorders, suicidal thoughts and attempted suicide. Marijuana use, which is prevalent among youth, has been shown to interfere with short-term memory, learning, and



psychomotor skills. Motivation and psychosexual/emotional development also may be influenced (Bureau of Justice Statistics, 2014).

- **Separation from Peers, Friends and Families:** Adolescents using alcohol and other drugs also often separate from school and community activities, depriving their peers and communities of the positive contributions they might otherwise have made. The abuse of alcohol and other drugs by youth result in family crises and expose them to risk in life, sometimes resulting in family dysfunction. Both siblings and parents are greatly affected by alcohol and drug-involved youth. Substance abuse can drain a family's financial and emotional resource.
- **Social and Economic Consequences:** the social and economic costs related to drug abuse among youth are at a high rate. They result from the financial losses and distress suffered by alcohol and drug related crime victims, increased burdens for the support of adolescents and young adults who are not able to become self-supporting, and greater demands for medical and other treatment services for these youth. NDLEA operatives towards fighting the menace of illicit drugs production, circulation, marketing and consumption, more people are being recruited daily by drug barons to serve as couriers just as many more, especially students are increasingly becoming addicted to assorted drugs.

A capsule review of literature showed a divergent view as to whether drug abuse influence the academic performance of students. This is a question that needs to be answered and determined empirically. It is against this background that the present study is designed to find out if relationship exists between drug abuse academic performances of chemistry students in some selected secondary schools in Oro, Kwara state.

## Purpose

This study aimed to:

- i. Assess the academic performance of Chemistry students who abuse drugs compared to those who do not.
- ii. Examine differences in academic performance between male and female Chemistry students, considering their exposure to drug abuse.

## Research Questions

The following research questions guided the study:



1. What is the relationship between drug abuse and academic performance of Chemistry students?
2. Is there any relationship between drugs abuse and academic performance of chemistry students based on gender?

### **Research Hypotheses**

The following null hypotheses were tested at 0.05 significant level:

H<sub>01</sub>: There is no significant relationship between drug abuse and academic performance of Chemistry students.

H<sub>02</sub>: There is no significant relationship between drug abuse and academic performance of Chemistry students based on gender.

### **Methodology**

The study adopted descriptive research design of the survey type. The research design was considered appropriate because it described the existing situation regarding the drug abuse and the academic performance among the respondents. The population of the study is 4,580 comprises of all the secondary school students in Oro, Kwara State. A total of 120 (One hundred and twenty) students were selected through a random sampling techniques from four selected secondary schools in the study area. The researchers utilized a set of questionnaire for data collection. The questionnaire was subdivided into two sections. Section 'A' elicits information on the respondents' bio-data. Section 'B' gathered data on various statements as related to each of the research questions raised in chapters. These statements were rated on five point modified Likert scales of Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) and Not Sure (NS). The instrument was validated using Lawshe Content Validity. The reliability of the questionnaire was determined using test retest with a reliability coefficient of 0.89. The administration of the questionnaire was done by the researcher after obtaining permission from the schools' authority, teachers and the respondents. The questionnaire was administered to the respondents in the class rooms at different levels of the classes in the schools that were involved in the study. The respondents were given sufficient time to answer the questions in the instrument. The data collected were analyzed using descriptive statistics of frequency counts and percentages while Chi-

square Analysis was used to test the two research hypotheses formulated for the study. All the hypotheses formulated were tested at 0.05 level of significance.

## Results

**H<sub>01</sub>:** There is no significant relationship between drug abuse and Chemistry students performance.

**Table 1:** Summary of relationship between Chemistry students performance and drug abuse

<i>Variables</i>	<i>N</i>	<i>X<sup>2</sup></i>	<i>df</i>	<i>p</i>	<i>Remark</i>
<b>H<sub>01</sub></b> Chemistry students	24				
		54.356	2	0.008	Significant
Drug abuse	24				

\*P<0.05

Table 1 shows that the chi-square (**X<sup>2</sup>**) value of 54.346 is significant because the p-value (0.008) is lesser than (< 0.05) at 0.05 level of significance. This implies that null hypothesis is rejected. Hence, there is no significant relationship between the use of drug abuse by chemistry students and their academic performance.

**Table 2.** Relationship between Chemistry undergraduates and drug abuse based on gender

<i>Variables</i>	<i>N</i>	<i>X<sup>2</sup></i>	<i>df</i>	<i>p</i>	<i>Remark</i>
<b>H<sub>02</sub></b> Male	24				
		23.758	2	0.042	Significant
Female	24				

\*P<0.05

Table 2 shows that the chi-value of 23.758 is significant because the p-value (0.042) < 0.05 at 0.05 level of significance. This implies that null hypothesis is rejected. Hence, there is significant relationship in drug abuse by chemistry students based on gender.

## Discussion

Findings revealed that a significant relationship was observed between students that used drugs and their academic performance. This is similar to findings of a study conducted by Dankano and Garba (2020) reported that undergraduate students found in the acts of drug abuse are often times academically and socially less developed as they are not respected and recognized to make reasonable contributions to any development. The findings also corroborate the previous studies where Many students who engage in drug abuse tend to be forgetful and can hardly focus in their

studies thereby weaken memory by slowing down the co-ordination materials and may decrease student's ability to remember such materials that was learned prior to using the drugs (Magidson & Jessica, 2016).

The findings further showed that sex correlates with drug abuse on students the study showed males are more drug abusers as compared to females. The drug abuse ratio in male students is at high level compared to their female counterparts. In line with this finding is the finding of Akamai, et.al (2015) which revealed that substance abused are more common among male students than female students and that the effects of drugs could be significantly high on academic achievement of both male and female students. However, the finding disagreed with Adeniyi (2022) which stated that though drugs have negative effect in the body of students, the level of intake and effects is not significantly different based on gender. They further explained that the consequence, the aftermath of drugs abused on students irrespective of gender is abnormally behaviors while other fall sick bases on their body system even it affects their ability of reasoning.

## Conclusion

Based on the findings of this research work, it has become a known fact that drug abuse are paramount among the secondary school. Both male and female engaged in the intake of drugs in abused manners. This in turn affects their academic achievement.

## Recommendations

Based on the finding of this study, the following recommendations are made:

1. School authority should develop programmers that would educate student population in schools on the negative effects of drug abuse. Also, drug education should be integrated into the secondary school curriculum.
2. School authorities should develop education programmes such as workshops or enlightenment programmes in the schools using billboards or posters.

## References

- Abdullahi, L. O. (2015). Motivating learners for effective achievement in chemistry. *Nigerian Journal of Psychology Education*, 4(1), 27–34.
- Abikwi, M. I. (2022). Effect of drug abuse on the academic performance of undergraduate students in Edo State. *International Journal of Scientific & Engineering Research*, 13(4), 660–674.



- Abot, I. (2015). *Substance use among students and out-of-school youth in urban areas of Nigeria*. World Health Organization.
- Adamson, T. A., Ogunlesi, A. O., & Morakinyo, O. (2015). Descriptive national survey of substance use in Nigeria. *Journal of Addict Research*, 6, 234.
- Adesina, B. O., Adebayo, M. A., & Iken, O. F. (2020). Factors associated with psychoactive substance use among in-school adolescents in Zaria Local Government Area, Kaduna State, Nigeria: A cross-sectional study. *International Journal of School Health*, 7(1), 14–22.
- Adewale, O. A. (2022). Effect of drug abuse on the academic performance of secondary school students in Nigeria. *European Journal of Biology and Medical Science Research*, 10(3), 72–79.
- Ajayi, O. V. (2017). Effect of hands-on activities on senior secondary chemistry students' achievement and retention in stoichiometry in Zone C of Benue State. *SSRN Electronic Journal*, 2(2), 54–59. <https://doi.org/10.2139/ssrn.2992803>
- Amadi, E. C., & Akpelu, G. O. (2018). Effects of drug abuse on the academic performance of secondary school students in Emohua Local Government Area of Rivers State. *International Journal of Innovative Healthcare Research*, 6(1), 5–11.
- Aniodoh, I. (2018). *History of science of degree student*. Retrieved from <http://www.historyofscience.com/articleprint2.aspx?theatric=Art2009021517573768>
- Anyanwu, O. U., Ibekwe, R. C., & Ojinnaka, N. C. (2016). Pattern of substance abuse among adolescent secondary school students in Abakaliki. *Cogent Medicine*, 3(1), 1272160.
- Apuh, G. A. (2020). Factors affecting students' academic achievement in chemistry: A case of Obudu Local Government Area. Retrieved from <https://ssrn.com/abstract=3554319> or <http://dx.doi.org/10.2139/ssrn.3554319>
- Atanasov, A. G., Waltenberger, B., Pferschy-Wenzig, E. M., Linder, T., Wawrosch, C., Uhrin, P., Temml, V., Wang, L., Schwaiger, S., Heiss, E. H., Rollinger, J. M., Schuster, D., Breuss, J. M., Bochkov, V., Mihovilovic, M. D., Kopp, B., Bauer, R., Dirsch, V. M., & Stuppner, H. (2015). Discovery and resupply of pharmacologically active plant-derived natural products: A review. *Biotechnology Advances*, 33(8), 1582–1614.
- Awosusi, A., & Joseph, A. (2013). Knowledge of health effects and substance use among students of tertiary institutions in southwestern Nigeria. *Journal of Education and Practice*, 4(23), 134–139.
- Balogun, A. K. (2002). An exploratory survey of male and female learners' opinions on secondary school chemistry education. *South African Journal of Education*, 24(2), 105–107.



- Bergström, C. A. R., Andersson, S. B., Fagerberg, J. H., Ragnarsson, G., & Lindahl, A. (2014). Is the full potential of the biopharmaceutics classification system reached? *European Journal of Pharmaceutical Sciences*, 57, 24–31.
- Carroll, C. R. (2016). Drug abuse in Nigeria: Facts, causes, and remedies. Paper presented at the National Seminar on Drug Abuse Enforcement, Lagos, May 2016.
- Chebukaka, R. N. (2016). Drug abuse among students in public secondary schools in Kenya. Retrieved from <http://www.com.drugabuse>
- Chukwu, E. O., Pius, V. T., Fiase, T. M., Haruna, H., Terkuma, C., & Evangeline, A. C. (2017). Effects of substance/drug abuse on the academic achievement of secondary school students in Mkar Metropolis, Gboko, Benue State. *International Journal of Psychological and Brain Sciences*, 2(2), 40–45.
- Crocq, M. A. (2003). Alcohol, nicotine, caffeine, and mental disorders. *Dialogues in Clinical Neuroscience*, 5(2), 175–185.
- Dankano, E., & Garba, M. J. (2020). Drug abuse and its effects on academic performance of secondary school students in Bali Local Government Area of Taraba State, Nigeria. *Taraba State University Journal of Sociology*, 2(2), 117–126.
- Drug.com. (2023). Drug. Retrieved from <https://web.archive.org/web/20140502070849/http://www.drugs.com/dict/drug.html>
- Ekpenyong, S. N. (2012). Drug abuse in Nigerian schools: A study of selected secondary institutions in Bayelsa State, South-South, Nigeria. *International Journal of Scientific Research in Education*, 5(3), 260–268.
- Elizabeth, B. R., Susan, L. D., & Suman, A. R. (2013). *Preventing drug use among children and adolescents: A research-based guide for parents, educators, and community leaders* (2nd ed.). New York, NY: United States of America.
- Fagbe, A. O. (2019). Information behavior and substance use among undergraduates in Babcock University, Ogun State, Nigeria. *European Journal of Psychological Research*, 6, 2057–4794.
- Fawa, M. S. (2013). Drug abuse eradication program in schools: The relevance of team approach. In A. Garba (Ed.), *Youth and drug abuse in Nigeria: Strategies for counseling, management, and control* (pp. 120–135). Matasa Press.
- Fox, T. P., Oliver, G., & Ellis, S. M. (2013). The destructive capacity of drug abuse: An overview exploring the harmful potential of drug abuse both to the individual and to society.



- Gatumbi, A. H. (2003). Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare. *The Prison Journal*, 79(3), 294–320.
- Hawkins, J. D., & Catalano, R. F. (2012). *Communities that care: Action for drug abuse prevention*. San Francisco, CA: Jossey-Bass.
- Odebunmi, A. (2010). Drug problems and control. In I. A. Adalemo & A. B. Mamman (Eds.), *Nigeria: Giant in the tropics* (Vol. 1, pp. 349–354).
- Onega, M. O. (2010). Prevalence of substance abuse among secondary school students: A comparative study of government and private secondary schools in Jos, Nigeria. Retrieved from <https://nida.nih.gov/international/abstracts/prevalence-substance-abuse-among-secondary-school-students-comparative-study-government-private>
- Philip, A. A., Edna, B., & Samson, A. J. (2016). The effects of drug abuse and addiction on academic performance of students in Federal Polytechnic Idah, Kogi State, Nigeria. *International Journal of Democratic and Development Studies*, 2(2), 13–22.
- Turner, B. (2008). *Personal and community health*. New York, NY: Oxford University Press.
- World Health Organization. (2019). *Management of substance abuse: Facts and figures*. Retrieved from [https://www.who.int/substance\\_abuse/facts/en/](https://www.who.int/substance_abuse/facts/en/)
- Yusuf, F. A. (2010). Factors influencing substance abuse among undergraduate students in Osun State, Nigeria. *African Journal Online*, 4(4), 112–120.
- Yusuf, N. B. (2012). *Drugs, crimes and security challenges in Nigeria, 1960-2012*.