

## Literature Review

# Socioeconomic impacts of drug and substance abuse on secondary school students in Nigeria from 1980 to 2023: A narrative review of the extent of published studies

**Kwokori Christopher O<sup>1</sup>, Ogbonna Brian O<sup>1,2\*</sup>, Anetoh Maureen U<sup>1</sup>, Mbagwu Sonne I<sup>3</sup> and Offu Ogochukwu F<sup>1,4</sup>**

<sup>1</sup>Department of Clinical Pharmacy and Pharmacy Management, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University, Awka, Nigeria

<sup>2</sup>Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmacy, David Umahi University of Health Sciences, Uburu, Nigeria

<sup>3</sup>Department of Pharmacology and Toxicology, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University, Awka, Nigeria

<sup>4</sup>Department of Clinical Pharmacy and Bio-Pharmacy, Faculty of Pharmaceutical Sciences, Enugu State University of Science and Technology, Agbani, Nigeria

## Abstract

**Background:** The socioeconomic impact of drug and substance abuse on secondary school students in Nigeria is yet to be fully evaluated even in the face of the current surge in abuse of substances among the younger folks who constitute more than half of the entire population.

**Objective:** This study narratively reviewed the studies on the socioeconomic impacts of drug and substance abuse on secondary school students and studies by researchers in Nigeria.

**Methods:** The study was a narrative review of the literature covering the socioeconomic impacts of drug and substance abuse on secondary school students in Nigeria from 1980 to 2023. Data were extracted and summarized with descriptive statistics.

**Results:** All the studies took place between 2012 and 2023; 6 (100%). The studies carried out were all observational studies 6 (100%). All the studies fell below average in the benchmark for the hierarchy of evidence-based studies. The studies mostly took place in the South-West 3 (50.00%), while 1 (16.67%) took place in the South-East, North-West, and North-Central respective regions of Nigeria.

**Conclusion:** The available studies done on the impacts of drug and substance abuse focused more on the social impacts, with little or no attention to the economic effect. The available studies however remain at the observational level in the evidence-based ladder. Future Research on the reviewed theme should focus on the economic implications of the social effects of drug and substance abuse on secondary school students in Nigeria.

## Introduction

### Rationale/Background

Drug and substance use dates as far back as the beginning of human civilization activities, as archaeological studies have suggested that the use of medicinal substances mostly happened after the Neolithic Revolution era around 10,000

B.C. when humans invented farming and civilization [1]. In another study, the researchers argued that the use of medicinal plants predates the era of the beginning of human civilization to the era of ancient people [2]. The drug has been defined as “any substance (other than food) that is used to prevent, diagnose, treat, or relieve symptoms of a disease or abnormal condition” [3]. And drug and substance abuse has

### More Information

\*Address for correspondence: Ogbonna Brian O, Department of Clinical Pharmacy and Pharmacy Management, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University, Awka, Nigeria, Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmacy, David Umahi Federal University of Health Sciences, Uburu, Nigeria, Email: bo.ogbonna@unizik.edu.ng

Submitted: May 18, 2023

Approved: June 03, 2023

Published: June 05, 2023

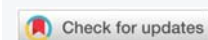
How to cite this article: Kwokori Christopher O, Ogbonna Brian O, Mbagwu Sonne I, Offu Ogochukwu F. Socioeconomic impacts of drug and substance abuse on secondary school students in Nigeria from 1980 to 2023: A narrative review of the extent of published studies. J Community Med Health Solut. 2023; 4: 030-035.

DOI: 10.29328/journal.jcmhs.1001032

Copyright license: © 2023 Kwokori Christopher O, et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Keywords: Public health; Social impacts; Economic impacts; Socioeconomic impact; Drug abuse; Substance abuse; Secondary school students; Adolescents; Narrative review

Abbreviations: UNODC: United Nations Office on Drug and Crime; WHO: World Health Organization





been defined as the “harmful or hazardous use of alcohol and illicit drugs” [4], as well as “an overindulgence in the use of medicinal substances for purposes not consistent with acceptable medical practice [5].

In the past century, the world has witnessed a remarkably harmful surge in the incidence and prevalence of drug and substance abuse which has brought the global society face-to-face with the enormous public health problems associated with drug and substance abuse. The problems experienced as a result of drug and substance abuse are either social or health-related and vary in magnitude from one geographical location to another [6]. These problems, whether social or health-related, have economic implications and consequences on the individuals who abuse these substances, on their family members, on the government, and on society at large. Nigeria has six geopolitical zones namely: southeast, southwest, south-south, north-central, northeast, and northwest.

According to the UNODC report, about 20 million Nigerians will be drug users by 2030. This is a projected forty percent (40%) increase in the 14.3 million users recorded as of the time of this report in 2021 [7]. Another study showed that the annual expenditures of thirty to thirty-five (30 – 35) million Nigerians on psychoactive drugs and alcohol were fifteen thousand USD (\$15,000) and thirty thousand USD (\$30,000) respectively [8]. Several studies have been conducted during the past four decades on the subject of drug and substance abuse with a focus on the causes, incidence and prevalence, contributing and influencing factors, social consequences on the academic performance of abusers, impacts on the family members of abusers, impacts on the government, and impacts on the larger societies of the world. However, we cannot tell the extent to which researchers have conducted studies with the view to determining the social and economic impacts of drug and substance abuse particularly on secondary school students in Nigeria.

The age distribution of the population of Nigeria in 2021 (with a population projection of 211.401 million as of July 1, 2021) had over half (about 53.9%) of the population with ages under 19 years old 27.5% of which were male [9]. Although research conducted in the United States of America showed no significant difference in the drug abuse pattern of male students compared with their female counterparts [10]. Several studies in Nigeria have shown a noteworthy difference in the manner male and female secondary school students abuse drugs [11-13].

The who reported in 2019 that over 2.6 million people in the age bracket of 10 years to years die every year as a consequence of drug and substance abuse [14]. This statistic is of worrisome concern, especially for the Nigerian population where the reported age bracket (10 - 24) accounts for about 31.9% of the population [9]. Furthermore, Nigeria being a society where a vast majority of secondary school students fall

within the age bracket of 10 to 24 years, it becomes a necessity to study the subject of drug and substance abuse with a focus on the topic under review. About 14% of girls and 18% of boys of age above 13 years were predominantly affected in the study carried out in Oyo state southwest Nigeria [13]. Given the obvious scarcity of information on the socioeconomic impacts of drug and substance abuse on secondary school students in Nigeria, this study, therefore, attempted to present an overview of the topic and generated information for additional interventions and policy formulation. This study narratively reviewed the studies on the socioeconomic impacts of drug and substance abuse on secondary school students and studies by researchers 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 causes, prevalence, contributing factors, and consequences on secondary school students.

### Study design

The study was a narrative review of all studies previously conducted on the socioeconomic impacts of drug and substance abuse on 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 within the review period.

**Exclusion criteria:** Studies with incomplete data and methodological flaws were eliminated.

### Risk of bias

The risk of bias was minimized by selecting studies without subjects, sampling selection, and reporting bias.

### Review questions

How many studies have been carried out in Nigeria on the socioeconomic impacts of drug and substance abuse on secondary school students in Nigeria? To what extent does drug and substance abuse impact secondary school students socially and economically?

### Article search process

The keywords related to the title of the study were used for the search, individually and in series using Boolean operators of AND/OR for the relevant keywords. Abstracts of relevant papers were also screened. A computerized search of all studies on drug and substance abuse published in PubMed,

Google Scholar, and Google Search, was carried out on the sites' databases. A manual search was also done for studies that met the inclusion criteria. The search was independently done. Only studies that met the criteria for the review were selected. The figure (Figure 1) below shows a diagrammatical illustration of how the search was conducted. The authors chose studies from 1980 because, from previous literature and independent searches, studies in the subject area were predominantly not visible before this period within the country.

### Articles selection process

A total of 89 articles were obtained, 79 from PubMed, 7 from Google Scholar, and 3 from Google Search on the elimination of duplicates. After a thorough assessment, 29 duplicate articles were further removed, and 53 articles were also excluded for not covering the scope of socioeconomic impacts of drug and substance abuse on secondary school students. Further screening ensured the exclusion of 1 article due to invalid and incomplete study design and incomplete follow-up data, leaving 6 studies left for use for the review.

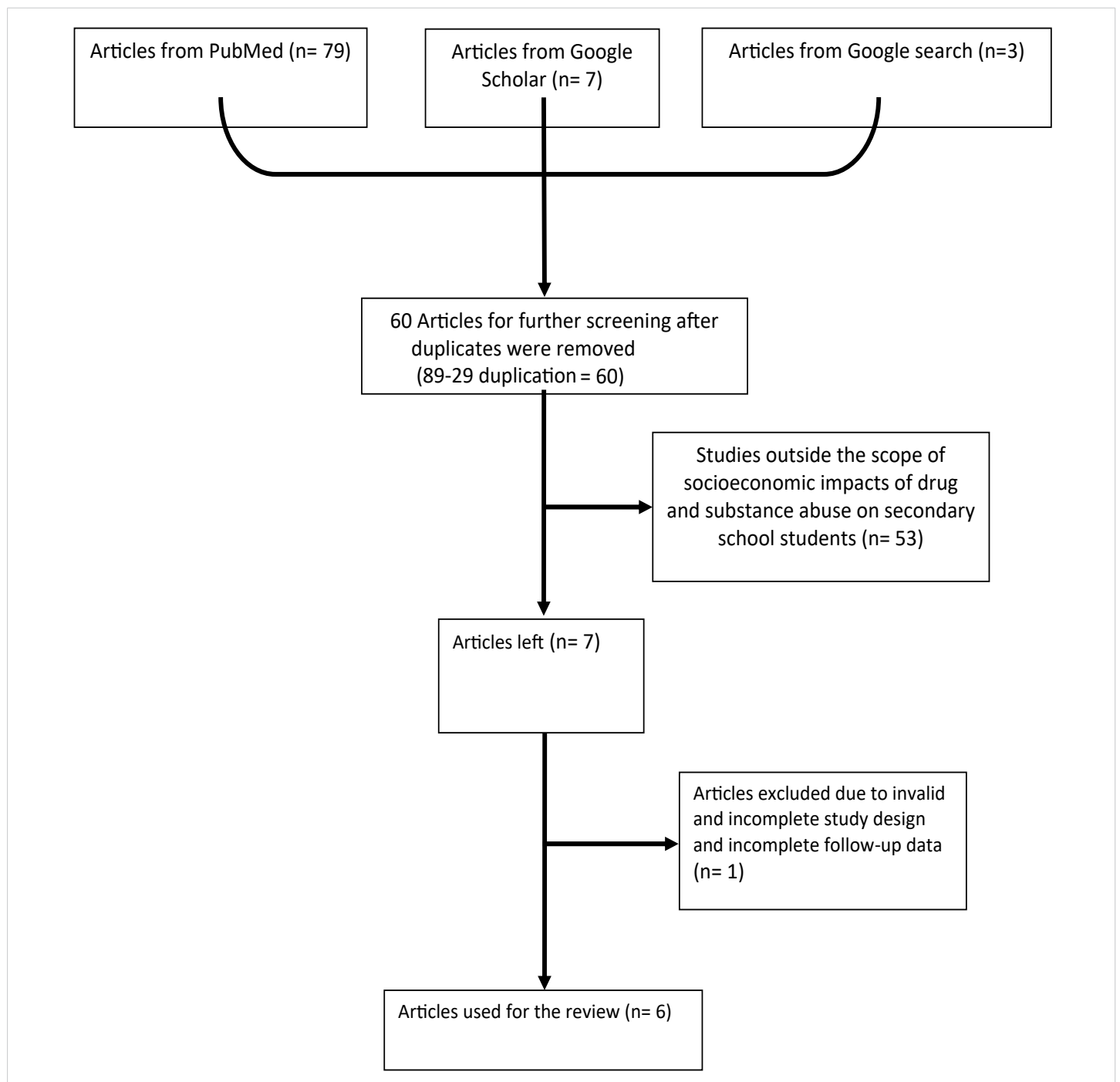


Figure 1: Showing the diagrammatical illustration of how the search was conducted.



**Ethical approval:** Although ethical approval is not required here. However, only studies with ethical approval were included and utilized in the review.

**Data analysis:** Simple descriptive statistical measurements were employed for data analysis.

**Data presentation:** Data were presented in evidence-based and simple tables.

## Results

The evidence-based table (Table 1) contains 6 articles that were finally selected for the study. The table also shows a summary of some relevant aspects of these studies that

made them stand out for selection for the study such as the design, year of study, sample size, and eligibility criteria. The information on the location of the studies was displayed at a glance.

## Discussion

### An Overview of the socioeconomic impacts of drug and substance abuse on secondary school students in Nigeria

The works are already done on the impacts of drug and substance abuse mostly had in perspective the effect of drug abuse in relation to the social well-being of the abusers, the effect on their relationships with family members, friends,

**Table 1:** Evidence-based table of selected articles.

Reference number	Authors	Title	Location	Design	Year of publication	Sample size	Inclusion	Exclusion	Study instrument
15	Emmanuel OC, et al. International Journal of Psychological and Brain Sciences. January 2017	Effects of Substance/ drug abuse on the academic achievement of secondary school students in Mkar Metropolis, Gboko, Benue State	North-Central, Gboko	Descriptive cross-sectional study	2017	220 students	Secondary school students	Nonsecondary school students	Questionnaire
16	Lapite AO, Adedokun KO, Baruwa FE. Journal of Professional Counselling	Involvement of Youths in Substance Abuse in Alimosho Local Government Area of Lagos State	South-West, Lagos	Survey	2022	50 male and 50 female students	Youths resident in Alimosho	Youths not resident in Alimosho	Questionnaire
17	Olatuyi TA, Abulude FO. Nigeria. <i>UBRU Journal for Public Health Research</i>	Influences of drug misuse on secondary school student's academic performance in Akure, Ondo State, Nigeria	South-West, Akure	Descriptive survey	2022	75 respondents	Secondary school students	Nonsecondary school students	Questionnaire
18	Samuel GA, George EO, Suleiman I, Olokoba OE, Ogbonna NC. <i>Global Journal of Pure and Applied Sciences</i> Vol. 27, 2021: 321-326.	Drugs Abuse, Civic Behaviour, and Students' Academic Performance: Perspectives of Senior Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria	North-West, Kaduna	Cross-sectional descriptive study	2021	365 students and 108 teachers	Senior Secondary Schools In Zaria Education Zone	Senior Secondary Schools not in Zaria Education Zone	Questionnaire
19	Melvina NA, Kingsley BA. <i>International Journal of Continuing Education and Development Studies (IJCEDS)</i> 133	Assessment of Substance Abuse Among Adolescents in Enugu State, Nigeria.	South-East, Nsukka	Descriptive survey	2016	1040 secondary school students	Adolescents in Nsukka	Adolescents outside Nsukka	Questionnaire
20	Abdu-Raheem BO. <i>Contemporary Issues In Education Research – Second Quarter 2013</i> Volume 6, Number 2 2013. The Clute Institute <a href="http://www.cluteinstitute.com/">http://www.cluteinstitute.com/</a> 233	Sociological Factors to Drug Abuse and The Effects on Secondary School Students' Academic Performance in Ekiti and Ondo States, Nigeria.	South-West, Ekiti, and Ondo	Descriptive study	2013	460 Secondary School Students	Public Secondary School Students	Non-Public secondary school students	Questionnaire



and the larger society, and how drug abuse negatively impacts the economy of the family of abusers and of the nation as a whole due to insecurity, loss of investments, loss of productive hours, and the cost of law enforcement by the government. The majority of the studies works have also looked at the health consequences of drug and substance abuse.

Evidence abounds of the adverse effects of substance/drug abuse on the academic performance of students, with a resulting impact on the students socially; such as lateness to class, exam malpractices, absenteeism, and another form of criminality both within the school environment and outside in the larger society [15].

Several works have attempted to answer the question which concerns the level of youth involvement in substance abuse. The results obtained in one of the studies showed that 58% of the respondents had a high involvement level in substance abuse, 24% with moderate involvement level in substance abuse, and 18% had a low level of involvement in substance abuse. It, therefore, inferred that the level of involvement of youths in substance abuse was high [16].

In another study, it was revealed that under the influence of drugs, students could: fight their teachers, sneak out of school, intentionally damage school property, and disobey school regulations [17]. Studies have also shown that students who abused drugs performed below average in their respective classes [18-20].

**Description of the socioeconomic impacts of drug and substance abuse on secondary school students and the extent and nature of work done in Nigeria**

The regional distribution of the articles and the study focus of each region are highlighted in Table 2. It showed that the highest number of studies were done in South-West 3

(50.00%), followed by the South-East, North-West, and North-Central 1 (16.67%) respectively for the regions of the country. No eligible study has been published on the review topic in the South-South and North-East regions of the country.

The common focus of the studies conducted in South-West, South-East, North-West, and North-Central consisted of the impact and influence of drug abuse on the academic performance of secondary school students. Additionally, the study in the South-East focused on the causes of substance abuse, the studies in the South-West focused on the level of involvement with drug abuse among students and contributing sociological factors for drug abuse among students, the study in North-West focused on the influence of drug abuse on civic behavior of students, and the study in North-Central focused on identifying most commonly abused substances and identifying ways to reduce drug abuse among students. Overall, the studies noted a high incidence of school dropout, social vices, and crime as the resultant effects of drug abuse among the population.

**Description of socioeconomic impacts of drug and substance abuse on secondary school students and comparisons of the 6 studies to the Oxford and Scottish benchmarks for the hierarchy of clinical**

Oxford and Scottish benchmarks rank studies based on their levels of evidence. Lowly ranked studies are considered as lacking in robustness with low quality or level of evidence. Studies at the lower rank are more predisposed to bias as they were non-randomized. As such, policies and decisions made based on the outcomes of such studies may be defective. The hierarchy of studies shows that all the studies 6 (100%) were observational. None of the studies was ranked in any of the higher categories above. Within the year 2012-2023, all six studies were recorded based on the inclusion criteria. Most of the studies cited were surveys carried out using questionnaires as the instrument of study. Based on the Oxford benchmark, case series, poor quality cohort, and case-control studies have the highest score of 6 (100%). This shows that the available information on the socioeconomic impacts of drug and substance abuse on secondary school students in Nigeria, based on available studies is not high quality and may not be relied on for decision making. Overall, this study suggested that public health studies in this area are poorly explored and largely untapped in Nigeria.

**Limitations**

There was a possibility that potentially valuable articles may have been omitted due to non-matching keywords used for the search. Some of the studies may have scaled through the elimination process even when they may have had some level of bias, and this could have impacted the outcome of the study. Although better presentation formats were available, simplicity and clarity were the reason the method of presenting the tables and data in this study was chosen.

**Table 2:** Focus of studies based on geo-political zones distribution.

S/N	Geopolitical zone	Number of Studies n (%)	Study Focus
1	South-east	1(16.67)	The causes of substance abuse and the effects on adolescents.
2	South-west	3(50.00)	Drug abuse: influence on academic performance, the level of involvement, contributing sociological factors.
3	South-south	0(0.00)	No related study was carried out in this region.
4	North-east	0(0.00)	No related study was carried out in this region.
5	North-west	1(16.67)	The influence on civic behavior, and how it influences their academic performances.
6	North-central	1(16.67)	Level of influence and effect on student's academic achievement, identifying most commonly abused substances, identifying ways to reduce the abuse of substances/drugs.
	Total	6(100)	





Since the study is a narrative review, it did not follow all the methodological details of the systematic review protocol.

## Conclusion

Due to the scarcity of studies on the socioeconomic impacts of drug and substance abuse on secondary school students from parts of the South-South and Northeast, the opportunity for more studies to be conducted in those regions remains. The studies already done fell short of the Oxford and Scottish benchmarks for the hierarchy of studies, implying that the socioeconomic impacts of drug and substance abuse on secondary school students/adolescents in Nigeria have not been effectively determined. Studies on the effects of drug and substance abuse on secondary school students in Nigeria began at the beginning of the 21<sup>st</sup> century. We did not get studies on the socioeconomic impacts of drug and substance abuse on secondary school students in the South-southern and northeastern regions of the country that qualified for inclusion in this study. The study articles on the socioeconomic impacts of drug and substance abuse on secondary school students in Nigeria fell below the higher upper half of the Hierarchy of Study Type Standard Benchmark of Oxford and Scottish benchmarks.

This area remains largely untapped in terms of the number and quality of published studies on the socioeconomic impacts of drug and substance abuse on secondary school students/adolescents.

## References

- Nicholas RL. The conversation. When did humans start experimenting with alcohol and drugs? Aug 21, 2021. <https://english.elpais.com/usa/2021-08-21/when-did-humans-start-experimenting-with-alcohol-and-drugs.html>
- Wadud A, Prasad PV, Rao MM, Narayana A. Evolution of drug: a historical perspective. *Bull Indian Inst Hist Med Hyderabad*. 2007 Jan-Jun;37(1):69-80. PMID: 19569453.
- National Cancer Institute, NCI Dictionary of Cancer Terms . Accessed on 5<sup>th</sup> April 2023 at <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/drug>
- WHO Factsheet 2006. Accessed on 5<sup>th</sup> April 2023 at <https://www.who.int/health-topics/drugs-psychoactive>
- WHO Expert Committee on Drug Dependence 16<sup>th</sup> Report (Geneva: World Health Organization, 1969) Tech. Rep. No: 407
- WHO Expert Committee on Drug Dependence 23<sup>rd</sup> Report (Geneva: World Health Organization, 1987) Tech. Rep. No: 741
- United Nations Office on Drugs and Crime. UNDOC World Drug Report 2021: pandemic effects ramp up drug risks, as youth underestimate cannabis dangers. Accessed on 5<sup>th</sup> April 2023 at <https://wdr.unodc.org/>
- Essen CF. Drug use and abuse among students in tertiary institutions- the case of Federal University of Technology, Minna. *Journal of Research in National Development*. 2010; 8:35-42.
- Age distribution of population in Nigeria by gender, 2021. Accessed 5<sup>th</sup> April 2023 at: <https://www.statistica.com/statistics/1121317/age-distribution-of-population-in-nigeria-by-gender/>
- Leonard NR, Gwadz MV, Ritchie A, Linick JL, Cleland CM, Elliott L, Grethel M. A multi-method exploratory study of stress, coping, and substance use among high school youth in private schools. *Front Psychol*. 2015 Jul 23;6:1028. doi: 10.3389/fpsyg.2015.01028. PMID: 26257685; PMCID: PMC4511824.
- Agu SA, Nwankwo BE, Obi C, Sydney Abgbor N, and Mgbenkemdi HE. Effects of Gender and Locality on Alcohol Abuse among Secondary School Students. *International Journal of Humanity and Social Sciences*. 2013;2(1): 049-053.
- Obogo GO, and Njoku J.N. Gender, Depression And Drug Abuse among Senior Secondary School Students in Calabar Education Zone of Cross River State, Nigeria. *European Journal of Education Studies*. 2017; 3(1): 387-396. Accessed on 15th March, 2023 at: <https://dx.doi.org/10.5281/zenodo.246256>
- Idowu A, Aremu AO, Olumide A, Ogunlaja AO. Substance abuse among students in selected secondary schools of an urban community of Oyo-state, South West Nigeria: implication for policy action. *Afr Health Sci*. 2018 Sep;18(3):776-785. doi: 10.4314/ahs.v18i3.36. PMID: 30603011; PMCID: PMC6307013.
- World Health Organization. Management of Substance Abuse: Facts and Figures. Retrieved from [https://www.who.int/substance\\_abuse/facts/en/9th](https://www.who.int/substance_abuse/facts/en/9th) November, 2019; 2019.
- Emmanuel OC, Valentine TP, Terna MF. 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*. 2017; 2(2): 40- 45.
- Lapite AO, Adedokun KO, and Baruwa FE. Involvement of Youths in Substance Abuse in Alimosho Local Government Area of Lagos State. *Journal of Professional Counselling*. 2022; 5(2):289-297.
- Samuel GA, George EO, Suleiman I, Olokoba OE and Ogbonna NC. Drugs Abuse, Civic Behaviour And Students' Academic Performance: Perspectives of Senior Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria. *Global Journal of Pure and Applied Sciences* 2021; 27 (3): 321-328.
- Olatuyi TA, Abulude FO. Influences of drug misuse on secondary school students' academic performance in Akure, Ondo State, Nigeria. *UBRU Journal for Public Health Research*. 2022; 11(2): 101-110. <https://he02.tci-thaijo.org/index.php/ubrphjou/article/view/255197>
- Melvina NA, Kingsley BA. Assessment of Substance Abuse among Adolescents in Enugu State, Nigeria. *International Journal of Continuing Education and Development Studies (IJCEDs)*. 2016; 133:1.
- Abdu-Raheem BO. Sociological Factors to Drug Abuse and the Effects on Secondary School Students' Academic Performance in Ekiti and Ondo States, Nigeria. *Contemporary Issues in Education Research – Second Quarter 2013*; 6. The Clute Institute. <http://www.cluteinstitute.com/233>.
- Patsopoulos NA, Analatos AA, Ioannidis JP. Relative citation impact of various study designs in the health sciences. *JAMA*. 2005 May 18;293(19):2362-6. doi: 10.1001/jama.293.19.2362. PMID: 15900006.
- Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, Haas A, Hegerl U, Lonnqvist J, Malone K, Marusic A, Mehlum L, Patton G, Phillips M, Rutz W, Rihmer Z, Schmidtke A, Shaffer D, Silverman M, Takahashi Y, Varnik A, Wasserman D, Yip P, Hendin H. Suicide prevention strategies: a systematic review. *JAMA*. 2005 Oct 26;294(16):2064-74. doi: 10.1001/jama.294.16.2064. PMID: 16249421.