

ASSESSMENT OF SUBSTANCE ABUSE KNOWLEDGE AND REFUSAL SKILLS ABILITY AMONG NEWLY ADMITTED UNDERGRADUATE STUDENTS IN THE UNIVERSITY OF LAGOS, NIGERIA

Jaiyeoba, Adejoke F. & Ademiju, Pauline U.

Department of Human Kinetics & Health Education

University of Lagos

Email: jokejaiye@gmail.com

Abstract

The transition from secondary school to university marks a critical period in a student's life as a result of exposures to new environments, and experiences outside the watch of parents including early independence and attachment to peer and friends as a stop gap. Based on these challenges being faced constantly by undergraduates, there is an increased likelihood of engaging in risky behaviours such as substance abuse. This study therefore aimed to assess the level of knowledge of substance abuse, and refusal skill ability among the newly admitted undergraduates in the University of Lagos, Nigeria. Using a descriptive research design, data was collected from a randomly selected 1200 sample of first-year university students across different academic disciplines. A validated and pretested self-structured questionnaire was administered to the participants. The results obtained revealed knowledge gaps in areas related to the potential consequences and the harmful effects associated with the use of substances, as well as the effects and workings of psychoactive substances on the brain. Lack of refusal skills ability was also discovered to be significant in the study with a significant number of the participants indicating their needs for a comprehensive drug education. Therefore, this study concluded that substance abuse knowledge and refusal skills ability are crucial components in the prevention of substance abuse among the young ones, and should be adequately developed through a comprehensive health education program among newly admitted undergraduates of various institutions to promote a safe and substance abuse free campus environment.

Keywords: Assessment, Knowledge, Refusal Skills, Substance Abuse

Introduction

Globally, there has been a general increase in the number of people who use drugs, however, much concern has been generated with the sharp rise in the number of youths and adolescents indulging in substance abuse. In Nigeria, the National Drug Law Enforcement Agency (NDLEA) revealed that forty percent of Nigerian youths are deeply involved in drug abuse, while the United Nations Office on Drugs and Crimes

(UNODC) survey report of 2018 reported youths and young adults between the ages of 17-39 now constitute the bulk of drug users in the country. The World Health Organization and the World Heart Foundation's data (2021) also revealed that 22.15% of school youth aged between 12 and 17 years use tobacco and alcohol and there is a decline by 40 percent of the adolescents who perceived cannabis as harmful. Substance abuse

refers to nonmedical use of drugs as well as other substances with the specific intent to create a desired alteration in mental state or physical performance. Medically, it refers to the use of any drug or substance in a way that it is harmful to the body, either by producing an immediate effect or a long-term effect, and it is also known by the term drug abuse (Jaiyeoba, 2023). This continuous rise in substance abuse among the youths and students has called for urgent educational intervention, which will increase the knowledge of drugs and the refusal ability for substance use among the tertiary institution students.

Substance abuse among tertiary institution students in Nigeria has become a great source of concern to educational authorities, government, parents, communities, and society at large. In recent years, diverse criminal activities instigated through the use of substances have been reported among tertiary institution students in national dailies. Sexual rape, unhealthy sexual behavior, poor academic performance, rustication from school, and mental illnesses are a few among the negative consequences of substance abuse often recorded on Nigerian campuses and among tertiary institution students in Nigeria (Jaiyeoba, 2023). In light of this current situation, this study was conceived to investigate the level of knowledge of substance abuse and refusal skill abilities possessed by the newly admitted undergraduate students with a view to examining their susceptibility, vulnerability, and predisposition to substance use in the course of study in the university. The study will also serve as a basis for developing an educational intervention program among the undergraduates in tertiary institutions.

Statement of the Problem

In spite of the numerous implications and several consequences of substance abuse, there has been a continuous rise in the number of students and youths engaging in the practice, especially among tertiary institution students. In the recent past, diverse criminal activities have been reported among the tertiary institution students in Nigeria, which were connected to substance abuse (Premium Times, 2021; Vanguard, 2020). Also, cases of sexual rape, unhealthy sexual acts, absenteeism from school, poor academic performance, rustication from school, substance use disorders, mental illnesses, behavioural disorders, and extrajudicial activities, among other negative consequences of substance abuse, are often recorded on campuses among tertiary institution students. It is against this backdrop that the study “Assessment of Drug knowledge and Refusal Skill Ability among the newly admitted students in University of Lagos was conceived to assess the level of drug knowledge and refusal skills ability for substance abuse among the newly admitted undergraduates in the University of Lagos, Nigeria with a view to understanding the knowledge gaps and barriers to refusal skill development among the newly admitted undergraduates.

Purpose of the study

The purpose of this study was to assess the level of drug knowledge and refusal skill ability among the newly admitted undergraduates. Consequently, the study aims to achieve the following objectives:

1. Examine the level of knowledge of substance abuse among the newly admitted undergraduate students
2. Assess the attitude of the newly admitted undergraduate students towards substance abuse

3. Determine the refusal skill ability of the newly admitted undergraduate students
4. Examine the need for educational intervention on drug knowledge and Refusal ability among the newly admitted undergraduate students

Research Questions

The study provided answers to these research questions, among the University of Lagos newly admitted undergraduates:

1. What level of knowledge of substance abuse is possessed by the newly admitted undergraduate students?
2. What is the attitude of the newly admitted undergraduate students towards substance abuse
3. What level of Refusal Skills Ability is possessed by the newly admitted undergraduate students?
4. Do the newly admitted undergraduate students perceive the need for educational intervention on drug knowledge and Refusal skill ability?

Research Hypotheses

The following research hypotheses were tested:

1. There is no significant knowledge inadequacy about substance abuse among the newly admitted undergraduates
2. There are no significant negative attitudes towards substance abuse among the newly admitted undergraduates
3. There is no significant inability in refusal skills among the newly admitted undergraduates
4. There is no significant perceived need for educational intervention on drug knowledge and refusal ability among the newly admitted undergraduates

Literature

Substance Abuse refers to the nonmedical use of drugs as well as other substances with the specific intent to create a desired alteration in mental state or physical performance. Medically, it refers to the use of any drug or substance in a way that is harmful to the body, either by producing an immediate effect or a long-term effect, and it is also called by the name drug abuse (Stedman, 2014).

Knowledge Enhancement for Substance Abuse

The knowledge of drug and substance abuse is an all-encompassing awareness, understanding, and adequate information on Drug and substance use, misuse, and abuse, which helps an individual to make informed choices. Enhancing the knowledge of substance abuse is a beneficial tool for an effective prevention strategy

Refusal Skills and strategies for substance Abuse

Refusal skills are methods and strategies of rejecting substance use and abuse offer as well as preventing a recovering addict from relapsing. Refusal skill is also required in preparation for unexpected pressure for substance abuse practice, especially when being surrounded by close people who are taking drugs.

Common refusal skills and techniques

The following common refusal skills were identified in the literature. However, their efficacy in generating refusal ability in individuals could differ due to individual peculiarities such as environmental factor, family and community, among others.

1. Saying no affirmatively and rapidly: Saying an affirmative NO to drug offer has been linked to less use of substances

- (Epstein, Griffin and Botvin 2011; Miller et.al 2000)
2. Giving a reason, fact or excuse: Explaining the reason why saying “NO” to drug offer or providing facts and excuses that could support the “NO” would help overcome alienation, confrontation and victimisation by the offerors. Explanation on substance use on negative consequences, health implications, interference with personal, spiritual, and academic obligations as well as getting into troubles with parents, school authorities and law enforcement agencies could send a deep message of rejection and need for reconsidering of behavior to the offeror instead of victimizing the person being offered the drug.
 3. Suggest an alternative: Suggesting an alternative such as watching of movies, playing games, taking of coffee and pizza provide a better means of getting out of the topic or offer, as the suggested alternative could imitate a response for better alternatives to drugs.
 4. Change the subject: Changing the subject could help to divert attention from the topic or redirect attention to a more beneficial topic, this skill has been proven effective as it is non-confrontational and enables social competence in handling the refusal.
 5. Avoid the place\situation: Places and times where and when pressure of offers for substance use by peers and friends should be strongly avoided. Situations such as a friend throwing a party where people are going to drink or smoke should be avoided especially if trying to prevent a relapse into the old behavior.
 6. Confide: Choosing a trusted friend, adult, family member or a spiritual leader with moral and spiritual stand against substance abuse can be helpful when undergoing continuous pressure for substance use. Confiding in such people can be highly beneficial especially when such pressure is coming from a family member in whom it is impossible to avoid or evade or dissociate from as there may be a lack of power, resources to evade them directly, therefore, choosing a trusted person to confide in could provide means of addressing such people and situations.

Methodology

The methodology presented the research method adopted, the population of the study, sampling and sampling techniques, research instrument, validity and reliability of the instrument, data collection procedure, ethical consideration and data analysis procedure.

A descriptive survey research design was adopted for this study and the study was conducted among the newly admitted undergraduates.

The population of the study comprised the 12800 newly admitted full time undergraduates for the 2021/2022 academic session of University of Lagos.

The sample for the study comprised 400 undergraduates who were drawn through simple random sampling technique. The sample size was determined using the Cochran's formula.

A self-structured questionnaire was used for the data collection. The questionnaire was structured into six sections to elicit information on the six variables stated in the hypotheses which are: knowledge, substance use prevalence, refusal ability, prevailing predisposing factors, and comprehensive drug education. The

questionnaire was captioned with the headings: socio-demographic information, knowledge of substance abuse, assessment of substance use, predisposing factors assessment, refusal skill ability assessment and intervention need assessment. The researcher's self-structured questionnaire was validated by experts in the field measurement and evaluation and statistics to ascertain the content, construct and face validity. A revalidation was also conducted through pilot testing.

A pilot testing was carried out among 20 participants who were not in the batch of the original respondents to ascertain the reliability of the instrument. Identified ambiguous questions were restructured and the flow of questions modified. With the help of three trained research assistants, questionnaires were administered to the participants having obtained an informed

consent with the assurances of anonymity and confidentiality of information provided. The questionnaires were retrieved on the spot to avoid loss or damage.

A letter of introduction was obtained from the department of human Kinetics and Health Education, University of Lagos and a letter of approval to conduct the study among the newly admitted students was obtained from the Dean of Student Affairs Division, University of Lagos. The completed questionnaires were sorted, checked for errors and coded with the help of a data analyst and statistics expert. The data was analyzed using the descriptive statistics of Percentages and frequency counts for the demographic data while the research data were analyzed using Cochran Q analysis and all stated hypotheses were tested at 0.05 alpha level.

Results

Table 1: Demographic analysis of student survey on drug knowledge and refusal ability assessment

Demographic Variables	Frequency (N)	Percentages (%)
<u>Gender</u>		
Male	180	45
Female	220	55
Total	400	100
<u>Age group</u>		
16 – 25 years	385	96.3
26 – 35 years	15	3.7
Total	400	100
<u>Religion</u>		
Christianity	289	72.25
Islam	111	27.75
Total	400	100
<u>Tribe</u>		
Yoruba	302	75.5
Igbo	52	13.0
Hausa	16	4.0
Others	30	7.5
Total	400	100

Table 1 shows that 45% of the respondents were male while 55% were female. The age brackets of those under this study was between 16 years to 35 years in which 96.3% fell within the age bracket of 16 to 25 years while just 3.7% fell within the age bracket of 26 years to 35 years. In terms of their religion, 72.25% were Christians while 27.75% were Muslims. The tribal analysis shows 75.5% of the respondents were Yoruba, 13.0% were Igbo, 4.0% were Hausa while 7.5% were from other tribes.

Data Analysis of Research Questions and Hypotheses

Research Question 1: What knowledge of substance abuse is possessed by the newly admitted undergraduates?

Table 1.1: Assessment of knowledge of substance abuse among the newly admitted undergraduates

Knowledge of Drug Abuse	YES	NO	NOT SURE
Received a comprehensive education on drugs and substance abuse	48 (12%)	262 (65.5%)	90 (22.5%)
Using drugs for mood or perception alteration is a practice of Substance Abuse	190 (47.5%)	170 (42.5%)	40 (10%)
Psychoactive substances can interfere with judgements, disrupt neurotransmitters and damage body organs	254 (63.5%)	107 (26.75%)	39 (9.75%)
Psychoactive substances have the capacity to change brain function and structure, reduce mental capacity and decrease brain volume	40 (10%)	240 (60%)	120 (30%)
The Centre of target for all psychoactive substances is the Central Nervous System	59 (14.75%)	221 (55.25%)	120 (30%)
Psychological conditions such as anxiety disorder, depression, schizophrenia, paranoia and psychosis could result from the use of psychoactive substances	79 (19.75%)	161 (40.25%)	160 (40%)LLi ne

Table 1.1 Assessment of the knowledge of substance abuse among the newly admitted undergraduates. The results show that only 12% of the respondents have received education on drugs and substance abuse while 65% indicated they have not received any comprehensive education on drugs and substance abuse and 22.5% were not sure of the level of knowledge they have received with regards to drug education and substance abuse. Also 47.5% believed that using drugs for mood or perception alteration is practice of substance abuse while 42.5% believed it wasn't and 10% were not sure. In the knowledge of the effect of psychoactive substances on the brain function, 40% knew that Psychoactive substances have the capacity to change brain function and structure, reduce mental capacity and decrease brain volume while 60% did not know and 30% were not sure. Also on the knowledge of the centre of target of all psychoactive substances, 14.75% knew that the the Centre of target for all psychoactive substances is the Central Nervous System, 55.25% did not know while 30% were not sure. Lastly, on the psychological effects of substance abuse, 19.75% knew that psychological conditions such as anxiety disorder, depression, schizophrenia, paranoia, and psychosis could result from the use of psychoactive substances, 40.25% did not know, while 40% were not sure.

Hypotheses Testing

Hypothesis 1: There is no significant knowledge inadequacy about substance abuse among the newly admitted undergraduates

Table 1.2: Cochran's Q analysis on students' inadequate knowledge of substance abuse

Variables	N	df	Cochran's Q	P-value	Remark
Substance abuse Knowledge	400	5	71.808	0.001	Significant
P < 0.05					

Table 1.2 shows the assessment of knowledge of substance abuse among the newly admitted students. The result is significant, implying a significant level of substance abuse knowledge inadequacy among the newly admitted students. Therefore, the null hypothesis, which states there is no significant knowledge inadequacy about substance abuse among the newly admitted undergraduates was rejected

Research Question 2: What is the attitude of the newly admitted undergraduates towards substance abuse?

Table 2: Assessment of attitude towards substance use.

Attitude towards substance use			
	Yes	No	Not sure
Substance use while studying on campus can help one to cope, mental, emotional and academic stress	58 (14.5%)	301 (75.25%)	41 (10.25%)
Substance use in moderate quantity may not cause serious damage to one's system.	258 (64.5%)	131 (32.75%)	11 (2.75%)
Substance use can cause spread of infectious diseases	161 (40.45%)	187 (46.75%)	52 (13%)
Substance use is a way of socializing with peers and displaying maturity	54 (13.5%)	327 (81.75%)	19 (4.75%)
Use of drug is a good option to relax and relieve stress	229 (57.25%)	93 (23.25%)	78 (19.5%)
Substance use can help to increase self-confidence and cause better acceptability by friends	77 (19.25%)	302 (75%)	21 (5.25%)

Table 2 shows the assessment of the respondents' attitude towards substance use. 14.5% of the respondents believe that substance use while studying on campus can help one to cope with mental, emotional and academic stress, 75.25% believe this will not while 10.25% were not sure. Also, 64.5% Of the respondents' believe that substance use in moderate quantity may not cause serious damage to one's system, while 32.75% believe this may cause serious damage and 2.75% were

not sure. In the assessments of respondent's attitude towards the spread of infection through substance use, 40.45% believe substance use can cause spread of infectious disease, while 46.75% believe it cannot and 13% were not sure. With regards to the respondents attitude towards the use of drugs as a good option to relax and relieve stress, 57.25% believe the use of drugs could be

a good option to relax and relieve stress, 23.25% believe this would not while 19.5% were not sure. Lastly in assessing respondents' attitude towards the use of substances to increase self-confidence and cause better acceptability by friends 19.25% believe this is true, 75% believe this is not true while 5.25% were not sure.

Hypothesis 2: There are no significant negative attitudes towards substance abuse among the newly admitted undergraduates

Table 2.1: Cochran's Q analysis on students' attitude towards substance abuse

Variables	N	df	Cochran's Q	P-value	Remark
Attitude towards Substance use	400	5	643.346	0.001	Significant

P < 0.05

Table 2.1 shows the displayed attitudes of the newly admitted students towards substance abuse. The result is significant, therefore the null hypothesis was rejected implying significant negative attitudes towards substance abuse among the newly admitted students.

Research Question 3: What level of refusal skills ability is possessed by the newly admitted undergraduates?

Table 3

Refusal Ability	Yes	No	Not sure
Have you ever been offered psychoactive drugs or substances in the past?	45 (11.2%)	355 (88.8%)	0 (0.0%)
What was your response?	16 (4.0%)	362 (90.5%)	22 (5.5%)
Ability to resist drug offers when pressurized requires specialized skills. Have you acquired these skills	226 (56.5%)	99 (24.8%)	75 (18.7%)

Table 3 shows the assessment of refusal skills ability of the respondents, it is seen from the survey that 11.2% have been offered psychoactive drugs in the past while 88.8% have not been offered psychoactive drugs at all. Amongst those offered psychoactive drugs, only 4% refused the psychoactive drugs while 5% of the respondents weren't sure of their response. In addition, 56.6% of the respondents have acquired some refusal skills to resist the influence to use drugs, while 24.8% had not acquired the skills 18.7% were not sure of their refusal ability skills.

Hypothesis 3: There is no significant inability in refusal skills among the newly admitted undergraduates

Table 3.1 Cochran's Q analysis on inadequate refusal skills ability of students

Variables	N	df	Cochran's Q	P-value	Remark
Refusal skill ability	400	5	71.808	0.001	Significant

P < 0.05

Table 3.1 shows the assessment of refusal skills ability among the newly admitted undergraduates. The result shows a significant level of inability in refusal skills among the newly admitted undergraduates. Therefore, the null hypothesis was rejected implying a significant inability in refusal skills among the newly admitted students.

Research Question 4: Do the newly admitted undergraduate students perceive the need for educational intervention on drug knowledge and Refusal skill ability?

Table 4

Perceived Need for Comprehensive Educational Intervention	Yes	No	Not sure
Do you think you need a comprehensive Drug Education to help you acquire adequate knowledge and skill to avoid substance use?	187 (46.8%)	193 (48.2%)	20 (5.0%)

Table 4 shows the assessment of the need for comprehensive drug education from among the participants. The result shows that out of the 400 respondents, 46.8% felt the need to acquire comprehensive drug education teaching in order to acquire adequate knowledge and skills to avoid substance use, 48.2% did not see a need to do so, while 5% weren't sure of their need for the training.

Hypothesis 4: There is no significant perceived need for educational intervention on drug knowledge and refusal ability among the newly admitted undergraduates

Table 4.1

Variables	N	df	Cochran's Q	P-value	Remark
Need for Educational Intervention for substance use	400	2	144.635	0.001	Significant

P < 0.05

Table 4.1 shows the testing of the perceived need for comprehensive drug education among the newly admitted students. The result shows a significant level, therefore the null hypothesis is rejected indicating a significant perceived need for comprehensive educational intervention on

drug knowledge and refusal ability among the newly admitted undergraduates.

Discussion

The assessment of substance abuse knowledge revealed a significant number of newly admitted undergraduate students possess inadequate knowledge regarding substance abuse. This findings aligned with the findings of Anetor & Oyekan-Thoma (2018) which established a substance abuse knowledge gap among the young ones. Additionally, assessment of attitude towards Substance Abuse revealed erroneous beliefs that could influence negative behaviours among the participants. A significant number of the respondents believed that use of substances in a moderate quantity may not cause serious damage to one's system and that the use of drug is a good option to relieve stress and pressure, hence a significant effect of attitudes and behaviours towards substance abuse was revealed among the newly admitted undergraduates. This finding is in line with study of Adekeye (2012) and Adenator & Oyekan-Thomas (2018) which indicated negative attitudes towards substance abuse among the young ones. Furthermore, the Refusal Skills Ability assessment revealed a significant number of the participants possessed inadequate refusal skills ability. This finding is supported with the findings of Adeyemo et al (2016) and Bolakale et al (2018) which emphasized the need for refusal skills in addition to acquisition of knowledge of substance abuse. The need for a comprehensive educational intervention on substance abuse knowledge and refusal skill ability was additionally assessed in this study and the finding revealed a significant need for Educational Intervention on Drug Knowledge and Refusal Ability among the newly admitted undergraduates. This finding is in agreement with the study of Kulis et al (2011) and Anetor

& Oyekan-Thomas which emphasized the need for a comprehensive drug education as a way of promoting drug abuse prevention among the young ones.

Conclusion

The findings from this study reveal significant gaps in both substance abuse knowledge and refusal skills ability among newly admitted undergraduate students. The results demonstrate that incoming students lack adequate understanding of substance abuse risks and consequences, while simultaneously showing deficiencies in their ability to effectively refuse drug offers. These shortfalls among the newly admitted undergraduate students create a higher risk of vulnerability to substance abuse during the critical transition period into university life, given that the university environment often presents increased exposure to substances and peer pressure situations. Therefore, students entering this environment without proper knowledge or coping strategies may be at substantially greater risk of engaging in substance abuse behaviors that could negatively impact their academic performance, health, and overall well-being. This study, therefore concludes that there is an urgent need for tertiary institutions to prioritize substance abuse prevention through targeted educational programming to serve as a fundamental component of student support services and a protective factor against substance abuse among the university student population.

Recommendations

Based on the findings, this study recommends the integration of comprehensive substance abuse education into organized orientation programs for newly admitted students. Additionally, interactive workshops for skills building should be considered for new students

while the university campus should ensure the establishment of Help centers solely dedicated to substance abuse prevention which will provide screening, training, interventions and referral

References

- Adekeye, O.A. (2012) Knowledge level and Attitude of School group male adolescents towards Drug use and Abuse. *Kotangora Journal of Education*.vol 12 122-130.
- Adekeye, O.A., Adeusi, S.O., Chenube, O.O., Ahmadu, F.O. and Sholarin, M.A. (2015) Assessment of Alcohol and Substance Use among Undergraduates in Selected Private Universities in Southwest Nigeria. *IOSR Journal of Humanities and Social Science*, 20, 1-7.
- Adeyemo, F.O., Ohaeri, B., Okpala, P.U., & Oghale, O. (2016). Prevalence of Drug abuse among University students in Benin city, Nigeria. *Public Health Research* 2016, 6(2):31-37. DOI: 10.5923/j.phr.20160602.01
- Anetor, G.O., & Oyekan-Thomas, F. (2018). Knowledge and attitude of youths to substance abuse in Alimosho Local Government Area of Lagos State. Category: Volume 12, Number 2, <https://www.ifgdg.org/volume-12-number-2-april-2018>
- Bolakale, A.S., Adamu, S., & Markus, B.Y.(2018) Drug factors influencing its use among undergraduate students of a tertiary institution in Nigeria. *Advance in Social Science Research Journal*-vol.5,No.5 DOI:1014738/assrj.ss4357
- Dustman, P & O'Neil, M (2014). Strategies to resist offers among urban American Indian youths of the southwest. An enumeration, classification and analysis by substance abuse and offeror.
- Jaiyeoba, A. F. (2023). Health Education Intervention Manual on Substance Abuse Prevention Strategies for Undergraduates. A book of research for the Department of Human Kinetics and Health Education, University of Lagos. ISBN No: 978-978-62079-7-1
- Kulis, S., Reeves, L. J., Dustman, P. A., & O'Neill, M. (2011). Strategies to Resist Drug Offers Among Urban American Indian Youth of the Southwest: An Enumeration, Classification, and Analysis by Substance and Offeror. *Substance Use & Misuse*, 46(11), 1395–1409. <https://doi.org/10.3109/10826084.2011.592433>
- National Drug Law Enforcement Agency [NDLEA], (2021) Forty percent of Nigerian Youth deeply involved in drug abuse. Atinuke Aduloju, *Premium Times*, 2021, August 19. www.premiumtimesng.com/news.
- National Institute on Drug Abuse [NIDA], (2003). Preventing drug use among children and adolescents: A research-based guide for parents, educators, and community leaders (2nd ed.). Bethesda, MD: US Department of Education, National Center for Educational Statistics.
- National Institute on Drug Abuse (NIDA), (2018) Drugs, Brains and Behaviour: The science of addiction. <https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/drugs-brain>
- Obiechina, G.O., & Isiguzo, B.C. (2016) Curbing the menace of Drug use among secondary school students in Nigeria. *European Journal of Research and Reflection in Educational sciences*. Vol 4, 2016 ISSN 2056-5852

- Oliha, J. (2014). Adolescent and Drug Abuse in Tertiary Institution Implication for Counseling. *British Journal of Education*, Vol.2, No1, pp 1-9, <https://eajournals.org/bje/>
- Onayase, A. (2019). An Evaluation of the prevalence of substance abuse among students of higher education institutions in Benue State, North-Central Nigeria: Implications for Counseling. *The International Journal of Psychological Studies*. Doi:10.5539/ijps.vii(3):39
- Rang, H.P., Dale, M.M., Ritter, J.M., Flower, R. J.& Henderson, G. (2011) What is Pharmacology, *Rang & Dale's pharmacology (7th edition)*. Edinburgh: Churchill Livingstone: p.1.ISBN 978-0-7020-3471-8
- Samuel, K. (2020) Drug Abuse among Nigerian Students; the Impact of Drugs in our Tertiary Institutions. Freedom Foundation
- Stedman (2014).DrugDefinitions. Stedman Dictionary retrieved from *wikipedia* <https://en.m.wikipedia.org/08/12:2020>
- Umukoro, O. L., Taiwo, A., Maroh, I., & Majekodunmi, M.(2016) Prevalence and Patterns of drug abuse among students of Tertiary Institutions in Abeokuta, Ogun state.
- United Nations Office on Drugs and Crime (UNODC) (2018) and government of Nigeria, Drug Use Survey in Nigeria 2018 (Vienna, 2019)