



Volume 27, Number 4
October, 2020

ISSN 1117-4153



THE TROPICAL JOURNAL OF HEALTH SCIENCES

Published By

**COLLEGE OF HEALTH SCIENCES,
UNIVERSITY OF ILORIN**

(A WHO Collaborating Centre for Research and Manpower Development)

Available on African Journal Online (AJOL)

THE TROPICAL JOURNAL OF HEALTH SCIENCES

Volume 27 Number 4, October, 2020

CONTENTS

Editorial comments.....v

Research papers

- Antenatal Care Services Utilization and Factors Influencing it Among Pregnant Women in a Teaching Hospital, Lagos, Nigeria.
I.Y. Ademuyiwa, J.O Faronbi, O.O. Oyediran, C.U. Erundu 01
- Medical Admissions Among Geriatric Patients in a Teaching Hospital in South Eastern Nigeria: A 10- Year Review
M.O. Nkpozi, K.O. Ngwogu, E.T. Ugwu, I.F. Ogbonna, C.L. Uche 07
- Evaluation of Secretor Status of ABH Antigens in the Saliva of Sokoto Residents in Northern Nigeria: A complementary Evidence of ABO Blood Groups in Forensic Science.
M. Imoru, D. Ikhuenbor, A. Muhammad 14
- Prosopisafricana Seeds Extract Affects Lipid Profiles and Antioxidant levels in Serum and Brain Tissue of Wistar Rats
H.A. Abdulrahim, A.I.'R. Abioye, A.B. Nafiu, A.A. Feyitimi, N.A. Omeiza, A.Z Lawal..... 20
- Push Factors and Attitudes to Substance Abuse among Students of a Government Senior Secondary School in Kano State
H.H. Murtala, M.M. Haddad, A.S. Yahaya, A. Suberu, M. Ashiru, E.E. Anyebe, F. Balarabe..... 26
- Assessment of Perceived Family Psychological Support among Depressed Patients in two Psychiatric Hospitals Kaduna State,
H.O. Olorukooba, B.M. Tukur, T.L. Sheikh, E.E. Anyebe, A.A. Olorukooba, K.B. Okesina, G. Hayat. B.M. Ibitoye..... 32
- Disability and its Predictors among Glaucoma Patients in a Nigeria City
O.O. Oyewole, O.T. Bodunde, K.S. Oritogun, H.A. Ajibode, O.O. Onabolu, O.T.Otulana 39
- Oral Health Education and Advocacy Programme for Orphans and Vulnerable Children (OVC) – a Preliminary Retrospective Study
S.A. Okeigbemen, E.O.Okuonghae, T.O.Ojogwu.....48
- Knowledge and Practices of Menstrual Hygiene among Female Undergraduates of Babcock University, Ilishan-Remo, Ogun State
S.K Olubiyi, J.O.Maitanmi, O.M. Badaru, B.T. Maitanmi, M.A.Ibraheem.....53

THE TROPICAL JOURNAL OF HEALTH SCIENCES

Official Publication of the College of Health Sciences, University of Ilorin

EDITORIAL BOARD

EDITOR-IN-CHIEF

A.B. Okesina

ASSOCIATE EDITORS

K.W. Wahab
O.T. Adedoyin
O.B. Akinola

BUSINESS/CIRCULATION MANAGER

M.B. Uthman

CONSULTING EDITORS

Prof. Egon Amann	GERMANY
Rania Mohammed El'-Sharkawy	EGYPT
Prof. J.O. Obafunwa	NIGERIA
Prof. Akin Osibogun	NIGERIA
Prof. R. T. Erasmus	SOUTH AFRICA
Prof. Bappa Adamu	NIGERIA

Push Factors and Attitudes to Substance Abuse among Students of a Government Senior Secondary School in Kano State

¹H.H. Murtala, ²M.M. Haddad, ²A.S. Yahaya, ²A. Suberu, ²M. Ashiru, ³E.E. Anyebe, ⁴F. Balarabe

1. School of Nursing, College of Nursing and Midwifery, Birnin-Kudu, Jigawa State.
2. Department of Nursing Science, Faculty of Allied Health Science, College of Health Science, Bayero University Kano.
3. Department of Nursing Science, Faculty of Allied Health Science, University of Ilorin, Kwara State.
4. Department of Nursing Science, Faculty of Allied Health Sciences, College of Medical Sciences, Ahmadu Bello University Zaria, Kaduna State.

Abstract

Psychoactive substance use continues to be a major risk behavior among youths. It is on the increase and associated with physical and or mental health consequences. This study assessed the push factors towards psychoactive substances among students of Tarauni Government Senior Secondary School, Kano state. This cross sectional descriptive study employed the systematic sampling technique to select 247 participants from data was obtained, using a self-administered questionnaire. The data obtained were analyzed using SPSS version 20.0. The results revealed that, the main push factors for taking psychoactive substances are to feel relaxed or to sleep (68.1%, n=160), relieve stress (57.0%, n=134) and anxiety (54.0%, n=127), enhance alertness (48.5%, n=114), keep calm (52.0%, n=112), blend with peers (49.8%, n=117), gain more power (51.5%, n=121) and socialize (45.1%, n=106). It was therefore recommended that health education and sensitization programme on the effect of substance use for students and families via school curriculum, health and religious worship centers should be put in place

Key words: Attitude, Perception, Psychoactive substances, Push factors

Introduction

Psychoactive substance use among students is a major public health issue.¹ It is estimated that 1 in 20 adults, or a quarter of a billion people between the ages of 15 and 64 years, used at least one drug in 2014.² Globally, over 29 million people suffer from drug use disorders, 12 million of these inject drugs, 14.0% of whom live with HIV.³ The impact of drug use in terms of its health consequences continues to be devastating.

The global disease burden attributed to alcohol and drugs is estimated at 5.4% while 3.7% is attributed to tobacco use alone.⁴ Substance use has been regarded as a socio-economic challenge and an important public health problem.⁴

Several factors push students to consume drugs. The abuse of psychoactive substances was found to be multifactorial, implying psychological, biological and social factors. These are generally related to the curiosity to achieve pleasure and satisfaction, relaxation from psychological tensions, facilitate socialization, avoid social pressure from the group, social isolation, family dynamics, low self-esteem, inappropriate management of interventions about drugs, genetic influences and alcohol problems with relatives.⁵ Nevertheless, drugs' recreational character and students' natural curiosity constitute one of the most

influencing internal factors for experimental use.^{5, 6, 7 & 8} In addition to this factor, Gilet *et al.*,⁷ Chan *et al.*,⁹ added there is the wish to belong to a group, the opinion of friends, the social model, easy accessibility to drugs, idol models and the possibility of an environment tending to the experimental use of drugs. Brown *et al.*,⁶ Gil *et al.*,⁷ Oshikoya & Alli⁸ and Chan *et al.*,⁹ in their own subjective motivations, the wish for encouragement and risk seem to play an important role. Study conducted with adolescent students indicated that curiosity and the desire to try new sensations were the most frequent motivations marked for consumption of drugs. Similarly, search for risk and adventure, the curiosity and the desire to overcome boredom were the most frequent reasons indicated when young people were asked about the reason for their criminal behavior.^{10,11}

Substance use among adolescent age group, senior secondary school students included, is now progressively alarming especially in Kano state which is attributed mainly to experimental curiosity, peer, parental and celebrities influence as well as a coping strategy to stress or pressure.¹² Factors responsible for influencing senior secondary school students' substance use are also common nowadays such as parental deprivation, increase stress, imitating of role models and lack of awareness about the effects of substance use.^{13,14}

Correspondence to:

HH Murtala

School of Nursing, College of Nursing and Midwifery,
Birnin-Kudu, Jigawa State
murtalahh@gmail.com, +2348060102360

It was discovered that students who associate with peers engaging in substance use will have a positive attitude towards substance use and will be more likely to engage in the same behaviour their entire life. This is so because most students acquire their knowledge of substances from their peers and those peers shape their attitudes towards substance use.^{5,9,15&16} Higher perceptions of normal behavior can attribute to increased substance abuse in a group of students. Substance use can increase as individuals act in accordance to what they perceive as the norm, producing a self-fulfilling prophecy and a vicious cycle of misunderstanding and substance use. Perception of norm plays a major role in initiation of substance use in middle school. Students who perceive the majority of their friends to be using substances will most likely initiate use during the academic year. This is because students often feel pressure to conform to whatever is considered normal behavior within their peer groups, this distortion of norms by peers can actually lead to increased substance use.

The school admits different students from various socio-cultural background and States of the federation. Thus, the students who abused psychoactive substance could influence others as study affirmed that, friends are the major source of influence for, and socialization is among the reasons for, psychoactive substance abuse.¹¹ In view of this, the researcher seeks to investigate the push factors, attitude for, and perception toward substance abuse among student of Tarauni government senior secondary school, Kano state.

Materials and Methods

Setting: Government Senior Secondary School (GSSS) Tarauni was established on 5th of June 1989, by the then Military Administrator Col Idris Garba as a male Junior Secondary School (JGS). The school moved to its permanent site (which was located in No.1 Wudil Road) on 17th February 1990. In 1991/1992, the school was upgraded to male GSSS from which the first graduates of Senior Secondary School Certificate Examination (SSCE) examination passed out during the 1993/1994 session. Since then the graduates have been passing in great numbers. The school also has 33 classrooms, 11 toilets with improved water supply and sanitation systems. It has a population of 30240 students, and 73 teachers.

Research design: A descriptive cross sectional research design was used to identify the push factors, perception and attitude of students on, psychoactive substance uses in Tarauni Senior Secondary School, Kano.

Study population and Sampling: The study population consisted of all students of Tarauni Government senior secondary school Kano state. The

students were proportionately selected based on class population (SS1 148 and SS2 98 respondents). Systematic random sampling technique was employed for the selection of respondents and the list of all the registered students formed the sampling frame.

A total of 247 students were recruited for the study using the Yamane¹⁷ formula $n = N / (1 + N \times (e)^2)$.

Research Instrument: A Self-Administered Questionnaire (SAQ) developed by the researcher was used for the study. The research instrument was validated using the face and content validity method. The questionnaire was validated by four (4) experts who scrutinized and made some necessary corrections. A test-retest reliability method was done via a pilot study conducted on 10% of the sample size by the researcher at Giginyu Government Senior Secondary School, Kano state. Cronbach's Alpha was calculated from the result of pilot study (0.67) in order to ensure internal consistency reliability of the instrument.

Data analysis: The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 20 and the data were presented in simple statistical measures using frequencies and percentages. For positive statements, strongly agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly disagree (1) whereas, negative statement, strongly agree (1), Agree (2), Neutral (3), Disagree (4) and Strongly disagree (5). The mean used for decision making was 2.50. For positive statement, the mean scores from 2.5 and above was accepted while scores below 2.50 was rejected while for negative statement, the mean scores from 2.5 and above was rejected while scores below 2.50 was accepted. The response rate was 95.1%.

Ethical approval: The ethical clearance was obtained from the Secondary Schools Board ethical committee (Ethical approval number: KSSMB/ADM/003/VOL.I) and was submitted to the administrative of Tarauni Government Senior Secondary School seeking permission of the school to take part in the study. Before collecting the data, informed consent was obtained from each respondent. The researcher explained the aim of the study and assured the respondents that their responses will be held confidential and used only for the purpose of the study, hence no name or any means of identification was required. Participation in the study was voluntary and the respondent has the right to withdraw at any point in time.

Results

Socio-Demographic Characteristics of the Respondents

Result findings showed that more than half of the respondents, 133(56.6%) were SS1 students, majority of them practice Islam 219 (93.2%) and were

Table 1 SocioDemographic Characteristics of the Respondents (N=235)

Variables	Frequency	Percentages
Class		
SS1	133	56.6%
SS2	102	43.4%
Religion		
Islam	219	93.2%
Christianity	16	6.8%
Ethnicity		
Hausa/Fulani	219	93.2%
Yoruba	6	2.6%
Igbo	10	4.3%
Age (in years)		
14 and below	21	8.9%
15-18	168	71.5%
19-22	39	16.6%
23 and above	7	3.0%
Father's educational qualification		
No formal education	36	15.3%
Primary	22	9.4%
Secondary	94	40.0%
Tertiary	83	35.3%
Mother's educational qualification		
No formal education	42	17.9%
Primary	38	16.2%
Secondary	109	46.4%
Tertiary	46	19.6%
Living		
With parents	211	89.8%
With other caregivers	19	8.1%
In orphanage home	5	2.1%

Table 2: Respondents' Push Factors Towards Substance Abuse (N=235)

Variables	Frequency	Percentages
To relax or sleep	160	68.1%
To relieve stress	134	57.0%
To relieve anxiety	127	54.0%
To keep calm	122	52.0%
To gain more power	121	51.5%
Peer influence	117	49.8%
To enhance alertness	114	48.5%
To become more socialize	106	45.1%

Hausa/Fulani by tribe 219 (93.2%). About three-quarter 168 (71.5%) of the respondents were between the ages of 15-18 years, four in every ten 94 (40.0%) of the respondents which constitute the majority claimed that their father attained secondary level of education, similarly nearly a half 109 (46.4%) of them reported that their mother attained secondary level of education, majority 211 (89.9%) of them live with their parents (Table 1).

Push Factors Towards Substance Abuse use

From Table 2, the main push factors for taking psychoactive substance was to feel relaxed or to sleep (68.1%, n=160), then to relieve stress (57.0%, n=134), to relieve anxiety (54.0%, n=127), to enhance alertness (48.5%, n=114), to keep calm (52.0%, n=112), to blend with peers (49.8%, n=117), to gain more power (51.5%, n=121) and to become more socialized (45.1%, n=106) constituted the other proportion of the response.

Table 3: Respondents Attitude Toward Substance Abuse(N=235)

Variable	Strongly Agreed(%)	Agreed(%)	Neutral (%)	Disagreed(%)	Strongly Disagreed(%)	Mean/ SD
Usage should be against the law	94 (40.0)	58(24.7)	38 (16.2)	23 (9.8)	22 (9.4)	3.76 ±1.52
Addicts should be seen as criminal	86 (36.6)	64(27.2)	32 (13.6)	33 (14.0)	20 (8.5)	3.69 ±1.53
Usage even for once can be dangerous	75 (31.9)	68(28.9)	29 (12.3)	37 (15.7)	26 (11.1)	3.55 ±1.51
Money spent on prevention is money spent well	64 (27.2)	65(27.7)	40 (17.0)	32 (13.6)	34 (14.5)	3.39 ±1.44
It should be encouraged	53 (22.6)	49 (20.9)	34 (14.5)	47 (20.0)	52 (22.1)	2.98 ±1.48
Its use of should be accepted	46 (19.6)	40(17.0)	34 (14.5)	68 (28.9)	47 (20.0)	3.13 ±1.43
It should be easily accessible to users	31 (13.2)	34(14.5)	60 (25.5)	58 (24.7)	52 (22.1)	3.28 ±1.34
Should be encouraged to satisfy curiosity	25 (10.6)	30(12.8)	36 (15.3)	60 (25.5)	84 (35.7)	3.63 ±1.49

Table 4: Respondents Perception Toward Substance Abuse(N=235)

Variable	Yes (%)	No (%)	Not sure (%)
Individual can protect self from its use	186 (79.1)	30 (12.8)	19 (8.1)
Causes harm	178 (75.8)	35 (14.8)	22 (9.4)
Hinders student's progress at school	155 (66.0)	66 (28.0)	14 (6.0)
Over-dosage of prescribed drug is regarded as substance use	148 (63.0)	72 (30.6)	15 (6.4)
Serves as the gateway material to substance use	118 (50.3)	80 (34.0)	37 (15.7)
Has some potential benefit	113 (48.1)	91 (38.7)	31 (13.2)
Helps individual psychologically	96 (40.8)	79 (33.7)	60 (25.5)
Makes assimilation and Comprehension better	85 (36.2)	93 (39.5)	57 (24.3)

Attitude Toward Substance Abuse use

Table 3 indicated that the attitude of most students were positive as they rejected that, substance use should be accepted (3.13 ± 1.43), substance use should be encouraged (2.98 ± 1.48), made easily accessible to users (3.28 ± 1.34), addicts should be seen as criminal (3.69 ± 1.53) and considered usage even for once as dangerous (3.55 ± 1.51). There was also agreement that, drug abuse should be criminalized (3.76 ± 1.52) and money needed to be spent on prevention (3.39 ± 1.44). The overall mean (3.43) was found to be greater than the decision means (2.50), this implies that majority of the respondents shared similar view about substance use.

Perception Toward Substance Abuse use

Table 4 indicated the factors perceived to make students engage in the substance use. These included "psychological stability" (40.8%), "serves as the gateway material to substance use" (50.3%), "hinders students' progress at school" (66.0%), "individual can protect self from its use" (79.1%), "it causes harm" (75.8%). However, most of the students did not agree to substance use "facilitation of intellectual performance by improving assimilation and comprehension"

(39.5%).

Discussion

Findings from the study showed that majority (56.6%) of the respondents were SS1 students. This contradicts the findings of the study conducted by Haddad¹⁸ in Kano and Chukwuma¹⁹ Benue, who variously reported most (40.1%) and (46.4%) of the respondents were SS 3 students. Majority of them practice Islam (93.2%) and were Hausa/Fulani by tribe (93.2%). This is because the study was conducted in a Muslim dominant area and in northern part of the country. Most (71.5%) of the respondents were between the ages of 15-18 years. This supports the findings of study conducted by Bassiet al.,²⁰ in Kaduna state, who revealed that 84.75% of the respondents were within the age range of 15 to 19. Although, it contradicts the findings of Haddad¹⁸ in Kano, who reported 68.1% of the students were within the age range of 18 to 20. Majority reported secondary school leaving certification as the educational attainment for father (40.0%) and mother (46.4%). This contradicted to the findings of Bassi et al.,²⁰'s study, in Kaduna that indicated that tertiary education was the level of education for students' father (51.19%) and mother

(45.24%). However, Haddad¹⁸ supported the study findings. Majority (89.8%) of the students live with their parents. This supported the findings of research conducted by Chukwuma¹⁹ in Benue state, who identified that most (66%) of the students resides with their parents.

Findings from the study revealed that the main push factors for taking psychoactive substance was to feel relaxed or to sleep (68.1%, n=160), to relieve stress (57.0%, n=134), to relieve anxiety (54.0%, n=127), to enhance alertness (48.5%, n=114), to keep calm (52.0%, n=112), to blend with peers (49.8%, n=117), to gain more power (51.5%, n=121) while to become more socialized (45.1%, n=106) constituted the other proportion of the response. The study report is in line with the findings of Yunusa et al.,²¹ in Kano, who indicated that relaxation/sleep (84.8%), to relieve stress (81.0%), for pleasure and to relieve anxiety were the commonest push factors to drug use while Resko⁵ reported curiosity to achieve pleasure and satisfaction, relaxation from psychological tensions, facilitate socialization, avoid social pressure from the peer group, Chukwuma¹⁹ in Imo, identified increase in alertness (39.2%), increased energy level (33.6%) were among the push factors for psychoactive substance abuse. The similarities in the results is because all the respondents were students. Although, Chukwuma¹⁹ in Imo, indicated to relieve depression (53.6%), to keep awake at night (42.4%), to elevated mood (22.4%), to enhanced sexual performance (4.8%) restlessness (67.2%), confusion (19.2%) and depression (7.2%), Resko⁵ reported social isolation, family dynamics, low self-esteem, inappropriate management of interventions about drugs, genetic influences and alcohol problems with relatives as the contrary findings to the present study. This could be due to ethno-cultural variations among the respondents.

The study revealed that the attitude of most students were positive as they rejected that, substance use should be accepted (3.13 ± 1.43), substance use should be encouraged (2.98 ± 1.48), made easily accessible to users (3.28 ± 1.34), addicts should be seen as criminal (3.69 ± 1.53) and consider usage even for once as dangerous (3.55 ± 1.51). There was also agreement that, drug abuse has to be criminalized (3.76 ± 1.52) and money needed to be spent on prevention (3.39 ± 1.44). This was in contrary to the study conducted by Derya and Sevil²² on attitude of students related to drug abuse identified that psychological addiction is as important as physical addiction (68.5%), drug use could be controlled if desired (78.6%), drugs had negative effects on the nervous system and the lungs (96.9%), drug affected driving (94.1%), use of adhesives such as bali and thinner was harmful (88.7%), drugs caused aggressive behavior (90.8%), ecstasy caused addiction (45.8%), addictive substances never get away people's problems (69.7%), several use

of addictive substance would be harmful (73.9%), addictive substance could cause addiction (75.2%), curious about the effects of the addictive substances (41.6%). It supported the study conducted by Aliyu²³ which indicated that the students had a good attitude towards psycho active substance use

Findings from the study depicted that the factors perceived to make students engage in the substance use included psychological stability (40.8%), serves as the gateway material to substance use (50.3%), hinders student's progress at school (66.0%), individual can protect self from its use (79.1%), it causes harm (75.8%). However, most of the students did not agree substance use, facilitation of intellectual performance by improving assimilation and comprehension (39.5%). This supported the study conducted by Yunusa et al.,²¹ in Kano and Aliyu²³ in Kano, which indicated that the students had a Good perception on psychoactive substance use.

Conclusion

The main push factors for taking psychoactive substance was to feel relaxed or to sleep, to relieve stress, to relieve anxiety, to enhance alertness, to keep calm, to blend with peers, to gain more power and to become more socialize. The students also had positive attitudes toward substance abuse as the overall mean (3.43) was found to be greater than the decision means (2.50).

Recommendations

Based on the finding of the study, the following recommendations are offered. Effort of the school authority should be geared towards intensive use of print and electronic media for students' enlightenment on the danger of push factors towards substance abuse. Health education and sensitization programmes aimed at improving perception and attitude of students on substance use need to be put in place via school curriculum, health and religious worship centers.

References

1. Owoaje E, Bello J. Psychoactive substance use among undergraduate students of the University of Ibadan, Nigeria. *Tropical Journal of Health Science*.2010;17: 56-60.
2. United Nations Office on Drugs and Crime (UNODC). *World Drug Report 2017*: 29.5 University of Ghana. Use in Adolescents: Lessons from Experimental Evaluations of Programs, 2017. Accessed on 2 July, 2019 from <http://ugspace.ug.edu.gh>.
3. World Health Organisation. *Atlas on substance use, resources for the prevention and treatment of substance use disorders*. World Health Organization, Geneva, Switzerland, 2010. From <https://www.who.int/publications/i/item/9789241500616>

4. Simango E. Exploring the Level of Knowledge and Attitudes of Teenagers towards Substance Abuse in an Informal Settlement. University of South Africa, 2014. Available at <http://hdl.handle.net/10500/18763>
5. Resko SM. Public Perceptions and Attitudes Toward Adolescent Marijuana Use: Results of State Wide Survey, 2014. doi:10.1177/2158244013518055
6. Brown AA, Pereko KKA, Eliason S. Drug use in Ghana: Knowledge, Perceptions, and Attitudes in a small group of elite student sports persons. *Journal of Biomedical Human Kinetics*. 2013;5: 1-5.
7. Gil HLB, Mello DF, Ferriani MGC, Silva MAI. Perceptions of Adolescents Students on the Consumption of Drugs: A case study in Lima, Peru. *Rev. Latino*. 2018; 1518-8345.
8. Oshikoya KA, Alli A. Perception of Drug Abuse amongst Nigerian Undergraduate. *World Journal of Medical Science*. 2016;1(2):133-139.
9. Chan YF, Sidhu GK, Lim PC, Wee EH. Students' Perceptions of Substance Abuse among Secondary School Students in Malaysia. *Pertanika Journal of Social Science & Humanity*. 2016;24(2):555-572.
10. Luengo A, Gómez-Fraguela JA, Garra A. Romero E, y Lence M. La prevención del consumo de drogas y la conducta antisocial en la escuela: análisis y evaluación de un programa". Madrid: Ministerio de Educación y Cultura, Ministerio de Sanidad y Consumo y Ministerio del Interior. 1999. Available at <http://hdl.handle.net/10347/15497>
11. Murtala HH, Kamilu A, Haddad MM, Ibrahim AH, Bako DG, Bawa NS, Tajudeen SM, Usman A. Pattern of Psychoactive Substance Use among Undergraduate Students of Faculty of Engineering in a Nigerian University. *Sule Lamido University Journal of Science and Technology*. 2020; 1 (1): 112-121
12. Akannam T. North-West Rank Highest in Drug Addiction-Ndlea Boss: Nigerian Drug Statistics by Zone - Crime - Naira land, 2018. Available at <https://www.nairaland.com/203955/nigerian-drug-statistics-zone>
13. Akanbi MI, Augustina G, Theophilus AB, Murtala M, Ajiboye AS. Impact of Substance Abuse on Academic Performance among Adolescent Students of Colleges of Education in Kwara State, Nigeria. *Journal of Education and Practice* 2015;6(28): 108-112.
14. Alhyas L, Al-Ozaibi N, Elarabi H, El-Kashef A, Wanigaratne S, Almarzouqi A, Alhosani A. Policy on Substance Abuse among High School Students in Jordan. *Journal of Transcultural Nursing*. 2016;21(2): 143-150.
15. Ayu AP, De Jong CAJ, Pinxten L, Schellekens AFA. Illness Perceptions of Addiction and Substance Use Patterns among Psychology Students. *Journal of Child Adolescent Behavior*. 2016;4:279. doi:10.4172/2375-4494.1000279.
16. Stadtherr A. Adolescent Substance Use: Perceptions of Parents and Teenagers. Theses, Dissertations and other Capstone Projects. 2011, Paper 228.
17. Yamane T. *Statistics, An Introductory Analysis*, 2nd Ed., New York: Harper and Row, 1967.
18. Haddad L, Shotar A, Umlauf M, Al-Zyoud S. Knowledge of Substance Abuse among High School Students in Jordan. *Journal of Transcultural Nursing*. 2010;21(2): 143-150.
19. Chukwuma BD. Socio-Demographic Determinants of Psychoactive Substance Use among Students of Tertiary Institutions in Imo State, Nigeria *Journal of Addiction Research & Therapy*. 2017;8:5 DOI: 10.4172/2155-6105.1000345
20. Bassi AP. Substance Abuse and its Prevalence Among Secondary School Adolescents in Kagoro, Kaduna State, Nigeria. *World Journal of Research and Review*. 2017;5(1): 11-16.
21. Yunusa U, Umar LB, Idris M, Haddad MM, Adamu D. Determinants of Substance Abuse among Commercial Bus Drivers in Kano Metropolis, Kano State, Nigeria. *American Journal of Nursing Science*. 2017;6(2):125-130.
22. Derya A, Sevil O. Knowledge, Attitude and Behavior of Health College Students Related to Drug Abuse. *Ulutas medical journal*. 2016;2(2): 90-100
23. Aliyu AA. Prevalence of psychoactive substance use among Commercial motorcyclists and its health and social consequences in Zaria, Nigeria. *Annals of African Medicine*. 2018;7(2):67-71.

4. Simango E. Exploring the Level of Knowledge and Attitudes of Teenagers towards Substance Abuse in an Informal Settlement. University of South Africa, 2014. Available at <http://hdl.handle.net/10500/18763>
5. Resko SM. Public Perceptions and Attitudes Toward Adolescent Marijuana Use: Results of State Wide Survey, 2014. doi:10.1177/2158244013518055
6. Brown AA, Pereko KKA, Eliason S. Drug use in Ghana: Knowledge, Perceptions, and Attitudes in a small group of elite student sports persons. *Journal of Biomedical Human Kinetics*.2013;5: 1-5.
7. Gil HLB, Mello DF, Ferriani MGC, Silva MAI. Perceptions of Adolescents Students on the Consumption of Drugs: A case study in Lima, Peru. *Rev. Latino*. 2018; 1518-8345.
8. Oshikoya KA, Alli A. Perception of Drug Abuse amongst Nigerian Undergraduate. *World Journal of Medical Science*.2016;1(2):133-139.
9. Chan YF, Sidhu GK, Lim PC, Wee EH. Students' Perceptions of Substance Abuse among Secondary School Students in Malaysia. *Pertanika Journal of Social Science & Humanity*.2016;24(2):555-572.
10. Luengo A, Gómez-Fraguela JA, Garra A. Romero E, y Lence M. La prevención del consumo de drogas y la conducta antisocial en la escuela: análisis y evaluación de un programa". Madrid: Ministerio de Educación y Cultura, Ministerio de Sanidad y Consumo y Ministerio del Interior. 1999. Available at <http://hdl.handle.net/10347/15497>
11. Murtala HH, Kamilu A, Haddad MM, Ibrahim AH, Bako DG, Bawa NS, Tajudeen SM, Usman A. Pattern of Psychoactive Substance Use among Undergraduate Students of Faculty of Engineering in a Nigerian University. *Sule Lamido University Journal of Science and Technology*. 2020; 1 (1): 112-121
12. Akannam T. North-West Rank Highest in Drug Addiction-Ndlea Boss: Nigerian Drug Statistics by Zone - Crime - Naira land, 2018. Available at <https://www.nairaland.com/203955/nigerian-drug-statistics-zone>
13. Akanbi MI, Augustina G, Theophilus AB, Murtala M, Ajiboye AS. Impact of Substance Abuse on Academic Performance among Adolescent Students of Colleges of Education in Kwara State, Nigeria. *Journal of Education and Practice*.2015;6(28): 108-112.
14. Alhyas L, Al-Ozaibi N, Elarabi H, El-Kashef A, Wanigaratne S, Almarzouqi A, Alhosani A. Policy on Substance Abuse among High School Students in Jordan. *Journal of Transcultural Nursing*.2016;21(2): 143-150.
15. Ayu AP, De Jong CAJ, Pinxten L, Schellekens AFA. Illness Perceptions of Addiction and Substance Use Patterns among Psychology Students. *Journal of Child Adolescent Behavior*.2016;4:279. doi:10.4172/2375-4494.1000279.
16. Stadtherr A. Adolescent Substance Use: Perceptions of Parents and Teenagers. Theses, Dissertations and other Capstone Projects. 2011, Paper 228.
17. Yamane T. *Statistics, An Introductory Analysis*, 2nd Ed., New York: Harper and Row, 1967.
18. Haddad L, Shotar A, Umlauf M, Al-Zyoud S. Knowledge of Substance Abuse among High School Students in Jordan. *Journal of Transcultural Nursing*.2010;21(2): 143-150.
19. Chukwuma BD. Socio-Demographic Determinants of Psychoactive Substance Use among Students of Tertiary Institutions in Imo State, Nigeria *Journal of Addiction Research & Therapy*.2017;8:5 DOI: 10.4172/2155-6105.1000345
20. Bassi AP. Substance Abuse and its Prevalence Among Secondary School Adolescents in Kagoro, Kaduna State, Nigeria. *World Journal of Research and Review*.2017;5(1): 11-16.
21. Yunusa U, Umar LB, Idris M, Haddad MM, Adamu D. Determinants of Substance Abuse among Commercial Bus Drivers in Kano Metropolis, Kano State, Nigeria. *American Journal of Nursing Science*.2017;6(2):125-130.
22. Derya A, Sevil O. Knowledge, Attitude and Behavior of Health College Students Related to Drug Abuse. *Ulutas medical journal*.2016;2(2): 90-100
23. Aliyu AA. Prevalence of psychoactive substance use among Commercial motorcyclists and its health and social consequences in Zaria, Nigeria. *Annals of African Medicine*.2018;7(2):67-71.