

Original Research Article

Evaluating and Comparing the Prevalence and Types of Substances Commonly Abused by Male and Female Out of School Children in Kano Metropolis

Abdussalam F.¹, Gbaranor K. B.^{2*}, John E. E.³, Ekeng O. B.⁴, Etuk M. S.³, Okoish O. S.⁵, Timi-Oladipo A.⁶, Monday S. N.⁶, Fache M. M.⁷, Rabi F.⁸, Orukwou U.⁹, Barinua-Gbaranor N. P.¹⁰, Nmerukini C.¹¹, Sito O. K.¹², Peterside S. S.¹³, Ohaka J. C.¹⁴

¹Kano State Primary Health Care Board, Kano, Kano State, Nigeria

²Department of Human Physiology, College of Medical Sciences, Rivers State University, Port Harcourt, Rivers State, Nigeria

³Akwa Ibom State Ministry of Health, Uyo, Akwa Ibom State, Nigeria

⁴Department of Anaesthesia, Nile University, Abuja, Nigeria

⁵Department of Obstetrics and Gynaecology, University of Uyo Teaching Hospital, Uyo, Akwa Ibom State, Nigeria

⁶Cardinal Care Hospital and Maternity, Abuja, Nigeria

⁷Procare Hospital, life Camp, Abuja

⁸Department of Radiology, Nile University, Abuja, Nigeria

⁹Department of Nursing Sciences, College of Medical Sciences, Rivers State University, Port Harcourt, Rivers State, Nigeria

¹⁰Department of Office and Information Management, Faculty of Administration and Management, Rivers State University, Rivers State, South-South, Nigeria

¹¹Department of Internal Medicine, College of Medical Sciences, Rivers State University, Port Harcourt, Rivers State, Nigeria

¹²Department of Family Medicine, University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State, Nigeria

¹³Rivers State Primary Healthcare Management Board

¹⁴Department of Community Medicine, College of Medical Sciences, Rivers State University, Port Harcourt, Rivers State, Nigeria

***Corresponding Author:** Gbaranor K. B.

Department of Human Physiology, College of Medical Sciences, Rivers State University, Port Harcourt, Rivers State, Nigeria

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Abstract: The harmful or hazardous use of substances including illegal drugs, prescription medications used non-medically, alcohol, and inhalants is known as drug abuse. Males tend to have a higher prevalence and more varied substance use, often starting at a younger age than females. Drug abuse is emerging as a global public health issue. Youth are more vulnerable because their brains are still developing, which makes drug use potentially more harmful. Early drug exposure may lead to addiction, poor academic performance, risky behavior, and mental health issues. The aim of this study is to Evaluate and compare the prevalence and types of substances commonly abused by male and female out of school in Kano metropolis. This study was a cross-sectional study that assesses and compares the pattern of substance abuse among males and females out of school youths in Kano metropolis. A total of 463 (257 males and 206 females) out of school youths were taken from eight local governments in Kano metropolis, with age between 18 and 29 years. A multistage sampling technique was used to collect data using an adapted interview administered semi structured questionnaire, SPSS Version 24 was used to analyse the data. The study revealed that the substances abuse by males and females out of school youths in Kano metropolis includes: alcohol, cigarette and shisha, marijuana, syrups and tramadol, among others while males commonly abuse cigarette and shisha the female, abuse more of syrups. The male out of school youths abuses drugs mainly to do something un-usual while females abuse drugs due to friend influence.

Keywords: Evaluating, Compare, Prevalence, Substances Abuse.

INTRODUCTION

Substance abuse, is a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to themselves or others, and is a form of substance-related disorder (Otorokpa, 2019). Drug abuse is

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emerging as a global public health issue. The recent world drug report-2019 of the United Nations Office on Drugs and Crime (UNODC) estimated that 271 million (5.5%) of the global population (aged between 15 and 64 years), had used drugs in the previous year (Bay, *et al.*, 2018; Ilmu, *et al.*, 2021). Drug as defined by the World Health Organization (WHO) is a substance other than those required for maintenance of normal health, which when taken into the living organism, may modify one or more of its functions (State, *et al.*, 2022). Drugs can be legal or illegal. The non-medical use of drugs is referred to as drug abuse. When a substance is deliberately used to induce physiological or psychological effects or both for purpose other than therapeutic ones and when the use contributes to health risks or some combination of these, is referred to as abused of substance (Hammagabdo, *et al.*, 20218; Hamzeh, *et al.*, 2020; Bunu, *et al.*, 2023). A survey conducted by the National Drug Law Enforcement Agency (NDLEA) on the problem of drugs and substance abuse in Northern Nigeria ranked Kano as the state with the highest number of youths who engaged in drug abuse. Over 3 million bottles of codeine syrup were consumed daily in these State. Some of the widely abused drugs are cough syrup, cigarettes, inhalants, cannabis and alcohol (Ilmu, *et al.*, 2021; Attallal, *et al.*, 2020). In recent years there has been a higher involvement of female population in the use of illegal substances. In different countries it has been observed a high level of use among women and a trend of age of first use at earlier ages (Roble, *et al.*, 2020). In different countries research findings indicate a high level of use among young women that resembles the patterns of men; nevertheless, among women who are older the levels of use are relatively low (Jafari, *et al.*, 2022). The distinctions between men and women suffering from addiction stem from biological and sociological differences. Many researchers now explain gender differences between the two as a result of the impact of society (such as childcare responsibilities, addiction stigma, relationship dynamics (Roble, *et al.*, 2020). There are also biological differences between men and women, revolving primarily around testosterone and oestrogen production as well as average body size and composition that cause substances to diversely affect the body ((Hammagabdo, *et al.*, 20218; Adeniyi, *et al.*, 2017). Although, hormones may explain the biological differences between men and women with stimulant addictions, women tend to experience more cravings and are more likely to relapse, likely due to changes during the menstrual cycle and hormone production (Bunu, *et al.*, 2023), while men case is different. In Nigeria, the abuse of drugs among youths has escalated into one of the most troubling health-related phenomena, contributing to a range of mental health issues, social dysfunctions, and educational setbacks (Journal of Addictive Rehabilitation Pattern of Adolescent Substance Abuse, 2023). This alarming trend underscores the importance of understanding the specific factors driving drug abuse among Nigerian youths, particularly in regions like Kano metropolis. The prevalence of drug abuse among youths in Kano state is particularly concerning. Existing data, though limited, suggest that drug abuse in this region is not only widespread but also growing, contributing to a host of social and health problems (Study, *et al.*, 2024; Oyewole, *et al.*, 2018). For instance, studies have shown that adolescents and young adults in Nigeria are increasingly engaging in the use of substances like alcohol, tobacco, and cannabis, all of which have been linked to adverse health outcomes and social issues such as school dropout, delinquency, and even criminal behavior. Drug abuse and drug menace is the illicit, non-medical use of limited number of substances, most of drugs which have the properties of altering the mental state of a being in ways that are considered by social norms and defined by statute to be inappropriate, undesirable, harmful threatening to the life of youths and to the society at large. Alcohol, heroin, cannabis, cocaine, opium, marijuana, are some of the drugs abused (Idowu, *et al.*, 2023; John, *et al.*, 2023). Evidence from a descriptive cross-sectional study conducted among final year students of Olabisi Olabanjo University, in Ogun State, Southwestern Nigeria revealed that the prevalence of alcohol, cannabis and inhalant was significantly more in males but significantly lower among students who reported frequent participation in religious activities (Offie, *et al.*, 2022). Finding from the study conducted in Zaria Nigeria, reported that the current prevalence of psychoactive substances by young people was 46%. Study conducted reported that the proportion of alcohol use (39.7%) among 15–19 years was found to be higher than other age brackets (Jatau, *et al.*, 2021; Offie, *et al.*, 2022).

MATERIALS AND METHOD

Study Design

The study was a descriptive cross-sectional study design, which involved only male and female out-of-school youths in Kano Metropolitan Area.

Study Population

The study population were males and females out of school youths in Kano metropolis who have agreed to participate voluntarily based on their involvement in the use of drugs/substances.

Inclusion Criteria

1. Males and females aged 15 to 24 years who are out-of-schools. This age range was selected based on the fact that most of the people are within the age of secondary school or early university and are more prone to drugs/substance abuse.
2. Males and female youths who have abused drug in one way or the other.

Exclusion Criteria

1. Males and females who are above 24 years and not around during the study.
2. Male and female youths who have never abuse any substance.

Data Analysis

A structured and validated self-administered questionnaire was used for data collection. Data were entered into Microsoft Excel spreadsheet. Data was also coded, filtered, sorted and cleaned for missing values and then exported into IBM Statistical Package for the Social Sciences (SPSS) software version 24 (Chicago, IL, USA) for analysis. A descriptive analysis was performed using the Frequencies and percentages for categorical variables and means and standard deviation for continuous measures at univariate analysis level.

Ethical Considerations

Ethical clearance was obtained from the Research Ethics Committee of Kano State Ministry of Health for clearance to be obtained. Further permission was sought from each district heads of all metropolitan local government areas before commencement of questionnaire administration. Informed consent was also sought and obtained from each of the respondents using consent form before questionnaire administration.

RESULTS

The study revealed that found 81.9% and 72.2% of male were commonly known tramadol and tobacco products. More than half (63.9%) were commonly known codeine male respondents, while 68.0% among that of female respondents. Two third (74.9%) among female commonly known tobacco products (Table 1).

Also, the study shows the pattern of substances abused among male and female out of school youths in the study area. It was found majority of male (80.9%) and female (77.6%) were using drugs without doctor's prescription. It was found that 33.9% among male were taking such drugs one drugs at a sitting, 39.8% among female were taking one drug at a sitting. Other quantities were 31.9% among male were taking two drugs, 17.1% taking three drugs, 12.5% taking four drugs at a sitting and 4.7% taking five drugs at a sitting (Table 2). Again, the prevalence of each substance abused among male and female out of school youths. It was found that cigarette smoking has the highest prevalence (63.8%) among male and (68.0%) among female used in the last one month, 45.1% syrup among both male and female respondents respectively. 52.9% were taking shisha among female in the last one month. Only 3.1% and 1.5% were taking alcohol in the last one month among both male and female respectively. In the same vein, cigarette has the highest prevalence among both male (79.8%) and female (84.0%), 58.7% and 59.7% were taking shisha among female. Also, 60.7% were taking syrup among male, only 17% were taking cannabis among both male and female in the last twelve months (Table 2).

Table 1: Types of substances commonly known among study respondents

Variables	Male n=257 (%)	Female n=206 (%)	Total n=463 (%)
Tobacco products	156 (72.2)	131 (74.9)	287 (61.9)
Cannabis	128 (59.3)	103 (50.0)	131 (28.2)
Alcohol	109 (50.5)	98 (56.0)	207 (44.7)
Tramadol	177 (81.9)	133 (76.0)	310 (66.9)
Codeine	138 (63.9)	119 (68.0)	257 (55.5)
IDUs	4 (1.9)	2 (1.1)	6 (1.2)
CNS stimulants	12 (5.6)	14 (8.0)	26 (5.6)
Hypnotics	45 (20.8)	29 (16.6)	74 (15.9)
Hallucinogens	19 (8.8)	21 (12.0)	40 (8.6)
Volatile inhalants	9 (4.2)	10 (5.7)	19 (4.1)

Table 2: Prevalence and Pattern of substance abuse usage among male and female out of school youths

Variables	Male n=257 (%)	Female n=206 (%)	Total n=463 (%)
Usage of drugs without doctor's prescription			
Yes	208 (80.9)	160 (77.6)	368 (79.5)
No	49 (19.1)	46 (22.4)	95 (20.5)
Frequency of using drugs			
Daily	164 (63.8)	115 (55.8)	279 (60.2)
Weekly	68 (26.5)	69 (33.5)	137 (29.5)
Monthly	25 (9.7)	22 (10.7)	47 (10.1)
Quantities of drugs used at a sitting			
One	87 (33.9)	82 (39.8)	169 (36.5)

Variables	Male n=257 (%)	Female n=206 (%)	Total n=463 (%)
Two	82 (31.9)	55 (26.7)	137 (29.5)
Three	44 (17.1)	33 (16.0)	77 (16.6)
Four	32 (12.5)	20 (9.7)	52 (11.2)
Five	12 (4.7)	16 (7.8)	28 (6.0)
Drugs/substances used in the last one month			
Cigarette	164 (63.8)	140 (68.0)	304 (65.7)
Alcohol	8 (3.1)	3 (1.5)	11 (2.3)
Cannabis	37 (14.4)	34 (16.5)	71 (15.3)
CC/Syrup	116 (45.1)	93 (45.1)	209 (45.1)
Tramadol	88 (34.2)	53 (25.7)	141 (30.4)
Shisha	54 (21.0)	109 (52.9)	163 (35.2)
Drugs/substances used in the last twelve months			
Cigarette	205 (79.8)	173 (84.0)	378 (81.6)
Alcohol	36 (14.0)	31 (15.0)	67 (14.4)
Cannabis	46 (17.9)	35 (17.0)	81 (17.4)
CC/Syrup	156 (60.7)	123 (59.7)	279 (60.2)
Tramadol	131 (51.0)	83 (40.3)	214 (46.2)
Shisha	90 (35.0)	121 (58.7)	211 (45.5)

DISCUSSION

Findings in this study revealed that cigarette smoking has the highest prevalence among male (63.8%) and female (68.0%) used in the last one month, also the same substance (cigarette) has the highest prevalence among both male (79.8%) and female (84.0%) in the last one year respectively. This was higher when compared to a similar study conducted in Zaria Nigeria which reported 46% of prevalence of psychoactive substances by youths. Another similar study conducted reported that the proportion of alcohol use (39.7%) among 15–19 years was higher than other age brackets.^{5,36} Also, it was higher than a similar study conducted in Abakaliki, reporting alcohol as the most commonly used substance with a prevalence rate of 29% while cocaine was the least abused with a rate of 2.1%. In the same study, the rate of consumption of alcohol, cigarettes and kola-nuts was higher among students between the age of 15–19 years olds (90.8%, 44.6% and 76.9% respectively).

Also, on prevalence in this study, it was found that 45.1% were taking syrup among both male and female respondents respectively. Also 52.9% were taking shisha among female in the last one month. Only 3.1% and 1.5% were taking alcohol in the last one month among both male and female respectively. In the same vein, 58.7% and 59.7% were taking shisha among females. In addition, 60.7% were taking syrup among male, only 17% were taking cannabis among both male and female in the last one year. All these were found contrary to a similar study conducted in Enugu reported that alcohol, coffee, kola nut, cigarette, inhalants, tranquilizer, and cannabis as commonly abused with prevalence of 31.6%, 20.7%, 15.7%, 14.3%, 9.0%, 7.4% and 4.1% respectively (Bay, *et al.*, 2018; Idowu, *et al.*, 2018).

Also. Alcohol and nicotine are often reported as the most abused licit drugs. Evidence from a descriptive cross-sectional study conducted among final year students of Olabisi Olabanjo University, in Ogun State, Southwestern Nigeria revealed that the prevalence of alcohol, cannabis and inhalant was significantly more in male but significantly lower among students who reported frequent participation in religious activities (Offie, *et al.*, 2013).

In this study, it was revealed that prevalence among female is slightly higher in smoking cigarette (68.0%) than their male counterpart (63.8%). This is contrary to a community survey conducted in Hunan, Helongjiang, and Jiangsu in china showed that the percentage range of alcohol intake (58.3% to 82.6%) and smoking rates (64.9% to 68.1%) among men was higher when compared the women (16.3% to 31.4%) and (0.1% to 20.5%) for alcohol and cigarette smoking respectively.

When considering the prevalence of substances abuse in the six geo-political zone, North-west of Nigeria recorded the highest number (37.5%) of abusers. Southwest 17.3%, the South-East 13.5%, North-central 11.7%, and the North-east zone has 8.5% of the drug abusers in the country.^{4,30} Most abuse substance among the population found in both rural and urban areas are cannabis 10.8%, psychotropic drugs such as benzodiazepines and amphetamine-type stimulants 10.6%, followed by heroin with 1.6%, and cocaine 1.4% respectively. Males' populations are higher 94.2% among the substance users than females, and females are 5.8% (Ilmu, *et al.*, 2021). This shows lower prevalence than what is obtained in this study.

For types of substances commonly abused by youths, findings of this study revealed that cigarette were found to be the most commonly abused by youths in which 98.8% were among males and 99.5% were among females, all of which were contributed to 99.1% among all the study respondents. The reason why cigarette was found as the most common is due to its availability everywhere in shops and kiosks in the communities as well as youths can use it everywhere in public unlike other substances which will be taken indoors. This was found to be higher than what was found in a similar study in which revealed that alcohol was implicated as the substance most commonly abused among youths with a prevalence rate of 30.1%, followed by tobacco with a prevalence of 21.7% and finally cannabis, cocaine/amphetamine with a prevalence of 13.9% (Offie, *et al.*, 2013). It was also revealed that shisha (83.0%), tramadol (78.6%) and syrup (75.7%) were found to be the commonest substances abused among female youths. The same among male, tramadol (80.2%), and syrup/codeine (77.0%) found to be the commonest substances abused. This is higher when compare with a similar study which found that the rampant abuse of tramadol, marijuana and cigarette as the most widely abused drugs. It shows that tramadol users constituted the highest number 56.2 per cent, marijuana smokers were 463 per cent and cigarette smokers were 37.9 per cent.

CONCLUSION

The total prevalence of cigarette smoking found in this study among male and female out of youths was high. The study revealed that prevalence among female is slightly higher in smoking cigarette (68.0%) than their male counterpart (63.8%). It was also revealed that shisha (83.0%), tramadol (78.6%) and syrup (75.7%) were found to be the commonest substances abused among female youths. The same among male, tramadol (80.2%), and syrup/codeine (77.0%) found to be the commonest substances abused.

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