

# Prevalence and Pattern of Male Adolescents Substance Abuse in Ibadan Metropolis

By

**Adegoke, A. A., Olasupo, M. O. & Ayeni, O. B**

Department of Psychology, Obafemi Awolowo University Ile-Ife, Nigeria

## Abstract

*The study investigated the prevalence and pattern of substance abuse among in-school adolescents in Ibadan metropolis. It also examined the influence of socio-economic background on substance abuse experience and effects. Data were collected from 917 male secondary school students within the age range of 12 to 20 years drawn from 20 secondary schools in Ibadan metropolis. Respondents completed 54-item questionnaire which measure exposure to psychoactive substance, frequency and quantity of substance consumed, personal experience after use, perceived social effects, and other drug related behaviours. The results of the analyses showed that alcohol is the most prevalent substance of abuse followed by cigarette smoking. The socio-demographic data of the adolescents revealed that 11.5% of the boys have taken one form of psychoactive substance by age ten. Abusers reported series of physical and psychological effects of alcohol and drug abuse. It was also found that age, socio-economic status, and parents' educational level did not exert significant influence on in-school male adolescents substance abuse.*

## 1. Introduction

The problem of drug misuse and abuse is evidently one of the most serious social problems facing our contemporary society. According to the World Health Organization (WHO, 2013) report, 320,000 young people between the ages of 15 and 29 years die annually from alcohol-related drugs, resulting in 9% of all deaths in that age category while the same report shows that at least 15.3 million persons have drug use disorders. In recent past, researchers have paid significant attention to the issue of drug abuse in Nigeria (Adelekan, Abiodun, Obayan, & Ogunremi, 1992; Odejide, 1997; Adewuya, Ola, & Aloba, 2006; Adebisi, Faseru, Sangowawa, & Owoaje, 2010; Chikere & Mayowa, 2011; Fareo, 2012). Despite this volume of work, the 2012 World Annual Drug Report failed to show any appreciable improvement in the fight against substance abuse.

Abuse of psychoactive substances portends a great danger for adolescent developments. Structurally speaking, the teenage years bridge the critical period of life from being a dependent child to an independent adult. As such, it is the life transition where the bulk of adult behaviours and responsibilities are developed. Adolescence by its very nature and demands is stressful. The period is the training ground for the acquisition of critical adult competencies and behavior which are necessary to navigate through life.

Drugs of abuse ranges from alcohol, club drugs (used by adolescents at bars, night clubs etc. For example ketamine), cocaine, fentanyl, heroine, inhalants, LSD, marijuana, MDMA (ecstasy), methamphetamine, tobacco, PCP, prescription drugs, anabolic steroids and the newly emerging drugs of abuse. The outlook depicted by Olutola (2012) shows cannabis consumption (10.8%), psychotropic substances – benzodiazepines (10.6%), heroine (1.6%), and cocaine (1.4%). In Nigeria, alcohol and tobacco constitute the most abused drugs among the adolescents (Olutola, 2012; Adebisi *et al*, 2010; Chikere & Mayowa, 2011; Gureje, Dengenhardt, Olley, Uwakwe, Udofia, Wakil, *et al* 2007; Okoza, Aluede, Fajoku, & Okhiku, 2009). Alcohol and tobacco are two of the most accessible drugs in Nigeria (unlike cocaine, heroin). Adolescents can obtain any of those drugs with minimum restriction.

Adolescents constitute the larger population sub-group of substance abusers in Nigeria (Fareo, 2012, Chikere & Mayowa, 2011; Adewuya *et al*, 2006). A number of reasons can be adduced for this. Generally, adolescence period is characterized by series of experimentation and trying outs. Adolescents may indulge in substance abuse while “trying out” (Abudu, 2008). Curiosity, boldness, friends-do-it, sound sleep, sexual-prowess and enhanced spirit performance peer pressure and social influence as significant factors that predisposes adolescents to substance use and abuse as identified by Mercken, Candel, Willems, & Vries (2009), Fareo (2012) and Odejide (1997).

Past studies (such as Adewuya *et al*, 2006; Gureje, Dengenhardt, Olley, Uwakwe, Udofia, Wakil, *et al* 2007; Chikere & Mayowa, 2011) had shown that male adolescents abuse drugs more than their female counterparts. This had been attributed to societal expectation from each gender. UNODC (2007) also reported that drug abuse appears to be more common among males (94.2%) than females (5.8%), and that the age of first use is 10 – 29 years. Adewuya *et al* (2006) noted that Nigerian societies forbid women from partaking in certain activities (such as cigarette smoking and alcohol consumption), and that women who abuse drugs are suffering from psychological and social damages.

Based on the foregoing, the study intends to answer the following research questions.

- i. How prevalent is the abuse of drug related substances among male adolescents?
- ii. What is the pattern of abuse among male adolescents
- iii. What influence does adolescents socioeconomic background has on substance abuse experience and effects?

## 2. Method

The sample consists of 917 Senior Secondary School male adolescents within ages 12-20years. They were selected from twenty secondary schools in five local government areas of Ibadan metropolis. The participants had a mean age of 16 years and a standard deviation of 1.49.

All the respondents completed a 54-item questionnaire which measure exposure to psychoactive substance, frequency and quantity of substance consumed, personal experience after use, perceived social effects and other drug related behaviours. The questionnaire is divided into five major parts. The first part derives information on the socio demographic characteristics of the participants. Part two assessed the level of exposure to the psychoactive substances. The third part was on the consumption and part four addressed the personal experience after use. The last part sought for information on the perceived social effects of the drugs on the users.

All the items have close-ended format for structured response. Copies of the questionnaires were administered by the field assistants recruited for the exercise, through the assistance of the class teachers in selected schools. The data generated were part of a survey on adolescents’ risk behaviour, which include drug use, and abuse of psychoactive substances. Statistical Package for the Social Sciences, (SPSS) version 16.0 was employed to analyze the data, using frequency counts, cross tabulation with chi-square, and 2-way Analysis of Variance (ANOVA).

## 3. Results

Table 1 present the list of the substance abuse by the male adolescents. The prevalence rate ranged from 3.9% to 23.3%. Alcohol tops the list with 23.3% prevalence rates, followed by Cigarette smoking (13.4%). Opiates and its derivatives (Heroin, Codeine, had the least rate, 3.9%, while abuse of amphetamines (7.0%). Marijuana (6.6%), Inhalants (5.7%), hallucinogens (5.1%), Cocaine (4.8%), and steroids (5.0%) were in between. The prevalence rate revealed the expected level of abuse, going by the level of availability and accessibility of the substances at the open market. There is no legal enforcement or restriction about the acquisition of the substances.

**Table 1: Prevalence of Substance Abuse among Male Adolescents**

Substance Abuse	% (n=917)
Tobacco	13.4
Alcohol	23.3
Marijuana	6.6
Cocaine	4.8
Amphetamines	7.0
Sedatives	4.9
Hallucinogens (LSD, PC)	5.1
Opiates (Heroin,	3.9
Inhalants (gluc, Solvent, gas)	5.7
Steroids	5.0

The socio-demographic data of the adolescents revealed that 11.5% of the boys have taken one form of psychoactive substance by age ten. Seven percent of the adolescents had smoke cigarette before age ten, while 25.3% of them had their first smoking experience when they were between 10-15 years, and by age twenty, 40% of the boys had experienced tobacco smoking.

On alcohol consumption, 33.3% reported to have ingested alcohol drinks, and 16% of them recounted occasions when drunk. Generally, 9.5% of respondents admitted to using drugs to feel high, and 6.7% reported the use of drug for enhancement of sexual experience.

**Table 2: Perceived Social Effects of Alcohol**

Substance Abuse	(% of n =917)	$\chi^2$	Df	p-val
Enhances social activity	54.1%	5.18	1	0.023***
Easy handle of stress	43.8%	4.98	1	0.026***
Gives people something to talk about	45.1%	9.63	1	0.002**
Allows people to have more fun	44.8%	16.78	1	0.001*
Gives people something to do	34.7%	7.94	1	0.005**
Facilitates sexual opportunities	42.3%	7.34	1	0.007**

\*p<0.001; \*\*p<0.01; \*\*\*p<0.05

Perceived social effects of alcohol consumption reported by the adolescents are presented in Table 2. A Significant proportion of these adolescents believes that alcohol enhances social activity (54.1%); gives people something to talk about (45.1%), reduce stress (43.8%), allow people to have fun (44.8%), facilitates sexual opportunities (42.3%), and gives people something to do (34.7%). All perceived social effects were significant when cross-tabulated against experience of substance abuse.

Abuse of the psychoactive substances is not without its physical and psycho social effects on the users. The reported physiological symptoms and social consequences of alcohol consumption by the adolescents are presented in Table 3.

**Table 3: Reported Symptoms/Consequences of alcohol/drugs with frequency of consumption**

Symptoms/Consequences	% (n=917)	$\chi^2$ (df=35)	p-val
Headache after gotten drink	7.0	34.08	0.513
Got nauseated or vomited	10.3	39.20	0.287
Had a memory loss	8.5	50.74	0.049*
Missed a class	9.0	53.63	0.023*
Performed poorly on a test	8.7	23.91	0.686
Done something later regretted about	9.8	52.54	0.029*
Damaged property	7.7	46.35	0.095
Criticized someone known	8.8	36.99	0.377
Got into argument or fights.	11.8	24.33	0.912
Been in trouble with police, school authorities	5.5	40.40	0.257
Being arrested by police for Driving under influence	7.9	47.40	0.079
Got hurt or injured	11.0	34.16	0.509
Have taken advantage another sexually	8.1	44.76	0.125
Thought about committing suicide	8.3	40.17	0.252

\* p<0.05

Physiologically, the abusers have experienced headache after being drunk (7.0%), nausea or vomit (10.3%), memory loss (8.5%) and suicidal thoughts (8.3%). Physically, the users had engaged in fight and hot arguments (11.8%), damaged property (7.7%) unnecessary criticism (8.8%), taking sexual advantage of opposite sex (8.1%), trouble with school authority (5.5), arrest by police (7.9%) and sustained injury (11.0%). Academically, the regular alcohol users reported missing of classes (9.0%), and poor performance in school work (8.7%). About ten percent (9.8%) of these students had also acted on impulse, the action which they later regret.

**Table 4: Cross tabulation of Alcohol Consumption experience and Drug related Behaviours**

Substance Abuse	% (n=917)	$\chi^2$ (df=1)	p-val
Experience peer pressure to drink	24.9	9.90	0.002*
Bragged about alcohol or drug use	32.3	21.55	0.001*
Carried a weapon, when drunk	32.3	11.76	0.001*
Bully of opposite sex	27.8	6.47	0.011***
Refused to turned down an offer of alcohol drink or other drugs	45.5	15.56	0.001*

\*p < 0.001; \*\* p < 0.01; \*\*\* p < 0.05

The sampled adolescents reported some drug related behaviours. The behaviours include inability to turn down on offer of alcoholic drinks and other drugs (45.5%), bragging about alcohol or any other drug use (32.3%), possession of weapon when drunk (32.1%), bullying of opposite sex (27.8%), and pressure from peers for drug or alcohol use (24.9%). (see table 4). All these behaviours were significant for male adolescents who engaged in substance abuse.

**Table 5: Two-Way Analysis of Variance on the Influence of Age, Socioeconomic Status and Parents' Education on Adolescent Substance Abuse**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	239.383	28	8.549	1.092	.341
Intercept	26124.680	1	26124.680	3336.558	.000
Parenteducation	13.264	2	6.632	.847	.429
SES	21.463	4	5.366	.685	.602
Age	4.352	1	4.352	.556	.456
Parenteducation * SES	53.531	8	6.691	.855	.555
Parenteducation * Age	1.989	2	.995	.127	.881
SES * Age	33.931	4	8.483	1.083	.364
Parenteducation * SES * Age	66.805	7	9.544	1.219	.290
Error	5347.773	683	7.830		
Total	278083.000	712			
Corrected Total	5587.156	711			

We hypothesized that age, socio-economic status of the family, and parents' educational level will have significant main and interaction effects on adolescents' substance abuse. The result of the Two-way analysis of variance presented in table 5 revealed that age of adolescent has no significant effect influence on their substance abuse [ $F(1,683) = 0.556; p > 0.05$ ]. Also, the socio economic status of the family [ $F(4,683) = 0.685, p > 0.05$ ], and parents' educational level [ $F(2,683) = 0.847, p > 0.05$ ] did not exert significant influence on male adolescent substance abuse.

#### 4. Discussion

The finding on the prevalence rate of substance abuse with alcohol having the highest percentage and Opiates and its derivatives having the least percentage is in line with the findings of Igwe, Ojinnaka, Ngozi, Ejiofor, Emechebe, & Ibe (2009) who investigated socio-demographic correlates of psychoactive substance abuse among Secondary School Students in Enugu, Nigeria using a modified WHO Student drug use questionnaire among a sample of 860 senior secondary school adolescents. They found that Alcohol was most commonly abused (31.6%), while cannabis was the least (4.1%).

In congruent with this findings are also those reported by Adelekan, Makanjuola, Ndom, Fayeye, Adegoke, Amusan, & Idowu (2001) who investigated 5-yearly monitoring trends of substance use among secondary school students in Illorin, Northwest, Nigeria, and the one obtained by Anochie & Nkanginieme (1999) from their study on drug abuse among school students in Port Harcourt, South-south Nigeria. Overall, alcohol was the most commonly used substance from these studies. The finding of this study is also in consonant with the results of the Igwe & Ojinnaka (2010) on the mental health of adolescents who abuse psychoactive substances in Enugu, Nigeria. The study found alcohol to be most commonly abused drugs. Also corroborating this finding is the findings of Gureje *et al* (2007) who also found alcohol as the most commonly abused drugs in Nigeria. The findings of Okoza (2009) on the drug

abuse among students of Ambrose Alli University Ekpoma, Nigeria also found alcohol as the most commonly abused drugs among the sampled population.

Contrast to this finding is that of Oshodi, Aina, Onajole (2010) who investigated the prevalence and associated factors of Substance use among secondary school students in an urban setting in Nigeria and found that the commonest substances used by the subjects were caffeine (kolanut and coffee).

On the onset of psychoactive substance use by the adolescents, the findings of this study is in line with that Adebisi *et al* (2010) who also found 11.6% of their sampled population to have taken drugs between 10 and 14 years of age. Chikere *et al* (2011) also discovered 16 – 20 years as the prevalent age of alcohol abuse. This finding also falls in line with the report of Thirlaway & Upton (2009) who found that the overall lifetime prevalence rates for the use of any illegal drug were highest among younger age groups (16 – 24year olds).

The perceived social effects of alcohol consumption reported in this study is in line with that of Chikere & Mayowa (2011) who investigated the prevalence and perceived health effects of alcohol use among 482 male undergraduate students of four higher institutions in Owerri, South-East Nigeria. Reasons given by their respondents for alcohol drinking include: makes them feel high (24.4%); makes them belong to the group of "most happening guys" on campus (6.6%); makes them feel relaxed (52.6%) while (16.4%), enhances pleasure during moment of sex (51.1%), drinks it because their best friends do. Also in congruent with this finding is that of Jolly, Oyaziwo, Samuel, & Idonijie (2009) who examined drug abuse among 414 university students drawn from four faculties of Ambrose Alli University. They found that the participants use substances to feel good, to keep awake, to sleep, or to enhance sex.

Depending on the age categories, Thirlaway and Upton (2009) obtained many reasons why adolescents abuse drugs which include serious anti-social behavior, weak parental attitude toward bad behavior, being in trouble at school, friend's drug use, minor antisocial behavior, being impulsive, belonging to few or no social groups.

The findings on the alcohol consumption experiences and drug related behaviours among the participants agreed with that of Omigbodun & Babalola (2004) who reviews the available data on drug use in Nigerian adolescents and utilises a qualitative method to explore the psychosocial dynamics of drug use among them. Surveys suggest that in both in-and out-of-school adolescents, the socially acceptable drugs like alcohol and cigarettes are commonly used. Psychological dynamics identified include peer pressure, experimentation and conduct problems while social factors include poverty, family problems, and social acceptability of local alcoholic drinks like palm-wine.

The pharmacological effects of alcohol and various other non-prescription substances tend to have the effect of reducing inhibitions, boosting confidence, intensifying emotions and increasing the importance of immediate cues such as sexual desire, at the expense of more future-oriented considerations (Thirlaway & Upton, 2009).

As shown from our findings on reported consequence of alcoholic and drug abuse, the psychoactive effects of various drugs can create changes and distortions in perception, sensory awareness, cognitive processing, memory loss, attentional control and directed behavior. All these lead to impaired functioning on the individual abuser's cognitive, affective and behavioural processes. This impairment may be evident in a variety of behavioural and psychological manifestations (Sadava, 1987).

Drug use may also have physical health consequences. Ingestion of various drug substances may interfere with natural metabolic processes and may degrade physical organs or systems. In cases of chronic alcohol abuser, great demand is placed on the stomach, liver, and other organs to process the ethanol in alcoholic substances, often resulting in cirrhosis of liver or stomach cancer.

The abuser may develop lifetime dependence (physical and psychological) on the drugs and may not be able to function well again except when on drugs. Long time effect of substance abuse may lead to permanent brain damage; amnesia, sleep loss, anxiety, depression, difficulty in movement and balance; heart, liver and kidney diseases. The psychological impact of drug abuse on the abuser may include inability to think well, sleep well and general emotional disturbance. The effect of substance abuse to the abuser, the family, government and the society at large are worrisome. Economically, the abuser has difficulty taking care of himself financially as he prefers spending on drugs than other necessities. The family of the abuser also pays part of the brunt as the abuser, due to excessive cravings for substance use, steal money from other members of the family to purchase drugs. To the society at large, the social consequences of substance abuse are also alarming. This includes crime, failure to meet school works; poor performance at school; absenteeism and abscondments, suspension and/or expulsion from school, environmental hazard such as vehicle accidents. On the part of the government, a significant portion of the national health budget goes to drug-related issues (Adebayo & Hussain, 2010).

## 5. Conclusion

Alcohol and cigarette top the list of the most commonly abused substances among the studied in-school adolescents. Several symptoms including fighting, injuries, vomiting et cetera were identified among the sampled population. Policy regulating substance use control among in-school adolescents would be desirable.

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