

Extent of Stimulant Drugs Abuse among Secondary School Students in Ebonyi State, Nigeria

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Abstract

This descriptive survey was carried out in order to determine the extent of stimulant drugs abuse among secondary school students in Ebonyi State, Nigeria. A random sample of 680 students completed a corresponding copies of questionnaire designed for the study. Out of this number, 672 copies of the questionnaire, representing about 98.8% return rate, were used for data analysis. Means and standard deviations were used to describe the extent of stimulant drugs abuse among the students. T-test was used to test the only hypothesis postulated in the study. Results showed that the respondents abused most stimulant drugs to a less extent, except in kola nut ($\bar{x} = 2.41$), bitter kola ($\bar{x} = 2.31$) and Lipton tea ($\bar{x} = 2.58$) in which abuse occurred to a great extent. T-test showed that significant differences existed in overall and most types of stimulant drugs inclining towards favouring the girls. The study supports the need for compulsory drug education in school to help educate the students about the dangers associated with drug abuse even at its lowest prevalence.

Keywords: Drug abuse, stimulant, students, Ebonyi State

1. Introduction

Common experience has shown that in order to allay boredom at work people of almost every culture have used some chemical agents. While one of the universal agents used for this purpose in a typical village setting among Nigerians is kola nut, other substances may be used among the elite for the same purpose. Some of these substances are not recognized as drugs in some local settings. Medically, these drugs are called stimulants. Deborah, Ellen-Gill, Robert-Segal, and Jeanne (2008) noted that stimulant drugs excite the nervous system. They noted that such drugs include nicotine, tobacco, cigarette, caffeine, coffee, bitter kola, kola nut, cocaine, crack, amphetamines, and lipton and these are either ingested, inhaled, smoked, injected, chewed, rubbed on the skin or absorbed.

Osa-Edoh and Egbochukwu (2012) submitted that stimulants are drugs which increase activity and what most people call alertness and their limited medical uses include the reduction of fatigue or mild depression and paradoxically for treatment of hyperactive children. They observed that stimulants often abused by students include Amphetamine, caffeine concentrates, kola nut, coffee, tea and lately cocaine. According to Osa-Edoh and Egbochukwu (2012), in general, these classes of drugs increase human alertness and decrease fatigue. Apart from their behavioural effects, some stimulant drugs present other important pharmacological properties. The health consequences of stimulant drugs are similar. Osa-Edoh and Egbochukwu (2012) noted that when taken in small doses, they may produce a sense of excitement, euphoria, increased alertness and reduction of fatigue and hunger. Larger doses intensify these feelings and may lead to bizarre erratic behaviour, hostility and violence. These behavioural disturbances are accompanied by physical symptoms of over stimulation of the sympathetic nervous system such as accelerated heart beat, raised blood pressure, temperature, and fast breathing. Taken in higher doses could lead to reactions such as agitation, restlessness, delirium, hallucination and even delusion and in serious muscle coordination.

Drug abuse is a major public health problem all over the world (United Nations Organizations on Drug Council, 2005). The use and abuse of drugs by adolescents have become one of the most disturbing health related phenomena in Nigeria and other parts of the world (National Drug Law Enforcement Agency, 1997). Several school going adolescents experience mental health problems, either temporarily or for a long period of time. Some become insane, maladjusted to school situations and eventually drop out of school. According to Fawa (2003), drug is defined as any substance, which is used for treatment or prevention of a disease in man and animals. Drug alters the body functions either positively or otherwise depending on the body composition of the user, the type of drug used, the amount used and whether used singly or with other drugs at the same time.

Haladu (2003) explained the term drug abuse as excessive and persistent self-administration of a drug without regard to the medically or culturally accepted patterns. It could also be viewed as the use of a drug to the extent that it interferes with the health and social function of an individual. Manbe (2008) defined drug abuse as the excessive, maladaptive or addictive use of drugs for non-medical purpose.

Abdulahi (2009) viewed drug abuse as the use of drugs to the extent that interferes with the health and social function of an individual. In essence, drug abuse may be defined as the arbitrary overdependence or misuse of one particular drug with or without a prior medical diagnosis from qualified health practitioners. It can also be viewed as the unlawful overdose in the use of drug(s).

Evidences (Olabisi, 2000; Egbochuku, Aluede, & Oizimende, 2009) abound in Nigeria and other parts

of the globe (Webb, Valasek & North, 2013) with regard to drug abuse generally but such are lacking in Ebonyi State, Nigeria. According to Larson and Simonis (2005), the incidence and extent of drug abuse often occurs among secondary school students. Okoza, Aluede, Fajoju and Okhiku (2009) submitted that drug abuse among adolescence can be determined using secondary schools students. They asserted that the extent of drug abuse among secondary school students is indeed high. Since adolescents who are mainly secondary school students share the same characteristics, common sense could show that students in secondary schools in Ebonyi State could be abusing stimulant drugs. The extent of this abuse is not yet established.

Pearson (2005) posited that secondary school children are between the ages of 10 to 19 years. This research therefore, considered secondary school students as students presently receiving post primary education. However, this research was delimited to students at the age of 14-19 years who are in the final year in secondary school. Certain socio-demographic factors tend to be associated with the drug abuse among secondary school students. These variables include age, gender and class of study. Studies (Ezedum, 1999; Linderberg, Boggess & Williams, 2000; Borowsky, Resnick, & Ireland, 2001; National Agency for the Campaign against Drug Abuse, 2002, 2004; World Health Organization, 2004; Springer, Selwyn & Kelder, 2006; Rongkavilit, Naar-King, Chuenyam, Wang, Wright, & Phanuphak, 2007) indicated that the aforementioned demographic characteristics are predictors of adolescent drug abuse. However, the present study was delimited to one of these demographic variables, namely gender. The research therefore was embarked on to determine gender differences in the extent of stimulant drugs abuse among secondary school students in Ebonyi State, Nigeria. One hypothesis was postulated in the study as follows: there is no significant difference in the extent of stimulant drugs abuse between boys and girls in secondary schools in Ebonyi State.

2. Theories of Drug Abuse

Theories of drug abuse indicate that some people truly depend on certain drugs for their survival due to a number of factors. The major emphasis of the theories is that people have their individual reasons for depending on one type of the drug or the other. Such reasons are explained by the personality theory of drug abuse, learning theory of drug abuse, biological theory of drug abuse and socio-cultural theories (Eze & Omeje, 1999).

Personality theories of drug abuse emphasize that there are certain traits or characteristics in the individuals that abuse drugs. Such personality characteristics, according to Eze and Omeje (1999), are inability to delay gratification, low tolerance for frustration, poor impulse control, and high emotional dependence on other people, poor coping ability and low self esteem. Individuals with these personality characteristics find it difficult to abstain from drug abuse. Learning theory of drug abuse maintains that abuse of drugs occurs as a result of learning. The learning could be by means of conditioning, instrumental learning or social learning (Bandura, 1986). Biological theory of drug abuse maintains that drug abuse is determined by the individuals biological or genetic factors which make them vulnerable to drug addiction. Socio-cultural theory of drug abuse maintains that abuse is determined by socio-cultural values of the people. For instance, while certain cultures permit the consumption of alcohol, cigarettes and marijuana, other cultures do not. Among the Urhobo, Ijaw, Ibibio, Edo, Igbo, Yoruba and Itsekiri tribes, alcohol (i.e., Odogoro) is used in cultural activities. In Northern Nigeria, alcohol is forbidden due to Sharia law but tobacco is commonly used by many people.

However, the Sharia law does not forbid cigarette consumption and thus nicotine dependence. It should be noted, however that no theory fully explains the etiology of drug abuse. This is due to individual differences. It then becomes obvious that the disorder (drug abuse) is an acquired one. The acquisition then is dependent on a host of personal inclinations and environmental factors, a situation explained suggestively by Bandura (1986) social cognitive theory (i.e., the triadic reciprocity involving behaviour, environment and the person).

3. Methods

3.1 Participants and setting

Between October and November 2012, a descriptive survey was carried out among 680 secondary school students of both genders randomly drawn from 20 secondary schools in the area under survey. In each school 34 students were selected using the multi-stage sampling procedure. The first stage involved randomly drawing 20 schools using systemic simple random sampling technique. Compiling a list of the schools facilitated the selection. The second stage involved drawing two streams of the newly promoted senior secondary three (SS III) students in each of the schools selected in the first stage, using simple random sampling technique of balloting without replacement. This process yielded a total of 20 streams. The third and final stage involved drawing of 17 students from each of the streams drawn in the second stage using simple balloting without replacement.

3.2 Instrument

The researchers used a self-developed questionnaire, the stimulant drugs abuse questionnaire (SDAQ), which consisted of 11 items arranged in two sections; A and B. Section A, contained one item about the gender of the participants. Section B, consisted of 10 items on stimulant drugs. The respondents were required to indicate on a

4-point scale, the extent they get involved in the use of the drugs using: to a very great extent (VGE), to a great extent (GE), to a less extent (LE) and to a very less extent (VLE).

Five experts in health education from two institutions of higher learning in Enugu State, not included in the study, were used for validating the SDAQ. Thirty secondary students of both genders in one secondary school, not included in the study were used for test of reliability. The data yielded a Cronbach alpha reliability coefficient of 0.76. The reliability coefficient was higher than Ogbazi and Okpala's (1994) criteria of 0.60 acceptable for good instruments.

3.3 Data collection

Permission was granted from the Principal of each secondary school participating in the study prior to data collection. A consent note with the explanation for the research purpose, method of response and assurance of anonymity was attached to each copy of the SDAQ. Six hundred and eighty copies of SDAQ were administered on the students during a break period and were collected immediately after completion.

3.4 Data analysis

The completed copies of the SDAQ were examined for completeness of responses and copies that had incomplete responses were discarded. Out of 680 copies of the SDAQ administered; 672 (Boys 381, Girls 291) representing about 98.8% return rate, were used for analysis. In describing the extent of stimulant drugs abuse among the students, mean (\bar{x}) of 3.1-4.0 implied that the students abused the drugs to a very great extent (VGE); 2.1-3.0 implied that the students abused the drugs to a great extent (GE); 1.1-2.0 implied that the students abused the drugs to a less extent (LE) and 0.1-1.0 implied that the students abused the drugs to a very less extent (VLE). Standard deviation was used to determine how the responses of the respondents vary. T-test statistic was used to analyze data in order to ascertain the differences in health risks behaviour profile between male and female respondents. An alpha level of 0.05 was set for the T-test. All data analyses were done with IBM Statistical Package for Social Sciences (SPSS) Version 20.0 for Windows.

4. Results

Table 1: Mean, standard deviation and t-values of extent of stimulant drugs abuse between boys and girls

Stimulant Drugs	Total (N = 672)		Boys (n = 381)		Girls (n = 291)		t-value	p-value
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD		
Cigarette	1.49	0.99	1.54	1.11	1.43	0.81	1.425	0.155
Crack	1.31	0.87	1.41	1.00	1.19	0.65	3.263*	0.001
Amphetamine	1.39	0.98	1.50	1.10	1.25	0.76	3.313*	0.001
Tobacco	1.57	1.03	1.57	1.08	1.56	0.96	0.151	0.901
Caffeine	1.68	1.20	1.51	1.09	1.78	1.16	3.094*	0.002
Coffee	2.01	1.30	1.94	1.29	2.10	1.32	1.577	0.115
Kola nut	2.41	1.35	2.62	1.43	2.13	1.18	4.741*	0.000
Bitter kola	2.31	1.31	2.45	1.42	2.12	1.20	3.189*	0.002
Cocaine	1.30	0.86	1.36	0.96	1.22	0.72	2.081*	0.038
Lipton tea	2.58	1.58	2.46	1.57	2.73	1.59	2.197*	0.028
Overall	1.81	0.48	1.84	0.49	1.75	0.51	2.318*	0.021

* $p < 0.05$

Mean stimulant drugs abuse and results of T-tests are listed in Table 1. It could be observed that the students abuse bitter kola ($\bar{x} = 2.31$), kola nut ($\bar{x} = 2.41$) and Lipton tea ($\bar{x} = 2.58$) to a great extent. It could also be observed that the students abuse other drugs to a less extent ($\bar{x} = 1.30$ -2.01). When boys were compared with girls, boys tended to abuse the drugs more than the girls. T-tests indicated all differences in the abuse of the stimulant drugs between boys and girls are significant ($p < 0.05$) except in the abuse of cigarette, tobacco and coffee where no significant ($p > 0.05$) differences are observed.

5. Discussion

Data in Table 1 showed that the students abused bitter kola, kola nut and Lipton tea to a great extent. These findings were anticipated and consequently not a surprise. Hence the socio-cultural activities such as traditional wrestling, traditional dances, masquerade cult, new yam festival and other festivals existing in the area, when ongoing, predispose adolescents, who by implication are mostly students, to be more vulnerable to excessive drug use and abuse. These findings are at variance with those of Egbochuku, Aluede, and Oizimende (2009) who reported that the students they studied rarely used or depended on stimulants. Though, a small segment of the students revealed that they have been taking kola nuts and caffeine for a long time, majority of the students reported that they hardly sustained the length of use of stimulants. However, the findings tend to be in line findings of Onyemachi (2004) who reported that secondary school students have used drugs including cigarette,

nicotine, tobacco, caffeine, coffee, bitter kola, cola nut, cocaine, crack, amphetamines, and Lipton to keep awake during examinations.

More so, it could be observed that when boys were compared with girls, boys tended to abuse the stimulants drugs more than the girls. This finding was anticipated and thus not a surprise for obvious reasons ranging from the fact that cultural activities in Ebonyi State that expose boys to drugs, especially stimulants, may not be undertaken by girls. Other studies in Nigeria reported results that tend to tow the line. For example, Lambo (1984) reported that more male students than female students smoke or abuse drugs. Similarly, Idowu (2004) and Adebisi, Faseru, Sangowawa, and Owoaje (2010) also reported that more male students than females smoke cigarette or abuse other drugs. In countries different from Nigeria, Graff Low and Gendaszek (2002) found that among college males and college females surveyed, more males than females had engaged in illicit prescription stimulant misuse and among the students who reported using stimulants without a prescription, greater frequency occurred in males compared with females.

In the same manner, Otieno, and Ofulla (2009) reported that more boys were found to be abusing drugs, especially tobacco, cannabis and cocaine compared to girls. The same trend was noted by Osa-Edoh and Egbochukwu (2012) when they reported that among the students they studied, male students were more susceptible to drug abuse than their female counterpart and observed that the students commonly abused drugs such as cigarettes, Indian hemp and kola nuts.

6. Conclusion and Recommendation

The findings of the present study provide evidence that male students abuse stimulant drugs more than females. The abuse of the stimulant drugs represents a high-risk behaviour that may require intervention efforts in secondary schools in the area under survey. The results of the study contribute to the accumulation of statistical data on the prevalence of risk behaviours among students and provide a reliable basis for planning preventive programme among students in the field of health protection and promoting healthy behaviour. As the data used in this study were cross-sectional, inferences about causality are limited and the study could not establish whether there were factors that preceded initiation of stimulant abuse among the subjects. More research is needed to establish whether the findings from this study could be used to generalize to other states in Nigeria in particular and other countries in sub-Saharan Africa.

Health educators can teach lessons to help students understand the dangers of stimulant drugs abuse and build students' skills to avoid illicit use of other drugs. Guest speakers can be invited to schools to address students. In Tazewell County, Virginia, US a community substance abuse task force developed a programme in which a police officer, a physician, a pharmacist, and a probation officer visit the classroom to talk about the risks of prescription drugs (Community Anti-Drug Coalition of America, 2008). The National Drug Law Enforcement Agency, in the case of Nigeria, can replicate such programme in schools.

References

- Abdulahi, Z. (2009). *Drug abuse among youths: Strategies for school counseling*. Jos: The Nigerian Society of Educational Psychologists.
- Adebisi, A.O., Faseru, B., Sangowawa, A.O., & Owoaje, E.T. (2010). Tobacco use amongst out of school adolescents in a Local Government Area in Nigeria. *Substance Abuse Treatment, Prevention, and Policy*, 5, 24. Retrieved July 6, 2015, from <http://www.substanceabusepolicy.com/content/5/1/24>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Engle wood Cliffs, NJ: Prentice Hall.
- Borowsky, I.W., Resnick, M.D., & Ireland, M. (2001). Suicide attempts among American Indian and Alaska native youth: Risk and protective factors. *Archives of Pediatric and Adolescent Medicine*, 153, 573-580.
- Community Anti-Drug Coalition of America. (2008). *Teen prescription drug abuse: An emerging threat*. Alexandria, VA: Community Anti-Drug Coalition of America.
- Deborah, C., Ellen-Gill, M.A., Robert-Segal, M.A., & Jeanne, S. (2011). *Drug abuse and addiction: Understanding the signs, symptoms, and effects*. Retrieved February 26, 2011, from <http://www.helpguide.org/mental/drug-substance-abuse-addiction-signs-effects-treatment>
- Egbochuku, E.O., Aluede, O., & Oizimende, P. (2009). Analysis of the use, dependence and source of knowledge of stimulants among Nigerian university undergraduates. *Anthropologist*, 11(3), 213-218.
- Eze, J.E., & Omeje, G. (1999). *Fundamentals of substance abuse*. Enugu: Snap Press Ltd.
- Ezedum, C.E. (2009). Self medications among typical Nigeria in school rural adolescents. *Nigeria Journal of Health Education*, 12(10), 28-36.
- Fawa, M.S. (2003). Drug abuse eradication programme in schools: The relevance of team, approach alternative. In A. Garba (Ed), *Youth and drug abuse in Nigeria: Strategies for counselling, management and control*. Kano: Matasa Press.

- Graff Low, K., & Gendaszek, A.E. (2002). Illicit use of psycho-stimulants among college students: A preliminary study. *Psychology of Health and Medicine*, 7, 283-287.
- Haladu, A.A. (2003). Outreach strategies for curbing drug abuse among out-of-school youth in Nigeria: A challenge for community based organization (CBOS). In A. Garba (Ed.), *Youth and drug abuse in Nigeria: Strategies for counselling, management and control*. Kano: Matosa Press.
- Idowu, A.I. (2004). *Prevalence of smoking and drug use among students in Ilorin metropolis: Implication for counseling*. Ilorin: University Press.
- Lambo, T.A. (1984). *Economic and social aspects of drug abuse*. Ibadan: United Nations.
- Larson, M.H., & Simonis, G.F. (2005). *Helping teens in trouble*. Benin: Awake.
- Lindberg, L. D., Boggess, S., & Williams, S. (2000). *Multiple threats: The co-occurrence of teen health risk behaviours*. New York: Office of the Assistant Secretary for Planning and Evaluation.
- Manbe, D.A. (2008). *Crime and drug abuse among Nigerian youths: A critical examination in World Health Organization (WHO)*. Geneva: Expert Committee on Drug Dependence.
- National Agency for the Campaign against Drug Abuse. (2004). *Alcohol and drug abuse in Kenya. Final national baseline survey on substance abuse*. Nairobi: Government Printers, Nairobi.
- National Agency for the Campaign against Drug Abuse. (2004). *Alcohol and drug abuse in Kenya: Final national baseline survey on substance abuse*. Nairobi: Government Printers, Nairobi.
- National Drug Law Enforcement Agency. (1997). *Drug data collection and research*. Lagos: Drug Demand Reduction Unit, National Drug Law Enforcement Agency.
- Ogbazi, J.N., & Okpala, J. (1994). *Writing research report: Guide for researchers in education, the social sciences and the humanities*. Enugu: Press Time Ltd.
- Okoza, J., Aluede, O., Fajolu, S., & Okhiku, I. (2009). Drug abuse among students of Ambrose Alli University, Ekpoma, Nigeria. *European Journal of Social Sciences*, 10(1), 85-92.
- Olabisi, O. (2000). Man hanged with attempted suicide. *Daily Times*, 2, 8.
- Onyemachi, O.B. (2004). The drug scourge in Nigeria. *Family Health Guide*, 8, 7-9.
- Osa-Edoh, G.I., & Egbochuku, E.O. (2012). Classification of frequency abused drugs amongst Nigerian youth and the social influences: Implications for counselling. *An International Journal of Science and Technology*, 1(3), 161-177.
- Otieno, A.O., & Ofulla, A.V.O. (2009). Drug abuse in Kisumu town western Kenya. *American Journal of Food, Agriculture, Nutrition and Development*, 9(3), 846-858.
- Pearson, E.L. (2005). *Longman dictionary of contemporary English: The living dictionary*. England: Longman.
- Rongkavilit, C., Naar-King, S., Chuenyam, T., Wang, B., Wright, K., & Phanuphak, P. (2007). Health risk behaviours among HIV-infected youth in Bangkok, Thailand. *Journal of Adolescent Health*, 40(4), 358-368.
- Springer, A.E., Selwyn, B.J., & Kelder, S.H. (2006). A descriptive study of youth risk behaviours in urban rural secondary school students in El Salvador. *Biomed Central International Health and Human Rights*, 6(3), 1000-1186.
- United Nations Organizations on Drug Council. (2005). *Fourteenth report urban adolescents and child development*. New York: United Nations Organizations on Drug Council.
- Webb, J.R., Valasek, M.A., & North, C.S. (2013). Prevalence of stimulant use in a sample of US medical students. *Annals of Clinical Psychiatry*, 25(1), 27-32.
- World Health Organization. (2004). *Street children, substance use and health: Monitoring and Evaluation of Streets children Projects*. Document No. WHO/PSA/ 95:13. Geneva: Bath Press, Great Britain.

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