

Analysis of the Use, Dependence and Source of Knowledge of Stimulants among Nigerian University Undergraduates

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ABSTRACT This study surveyed undergraduates' use, dependence and source of knowledge of stimulants at the University of Benin. The stratified random sampling technique was used to select eight hundred (800) students for the study. The findings revealed that the Nigerian undergraduates surveyed rarely use or depend on stimulants. Though, a small segment of the students revealed that they have been taking cola nuts and caffeine for a long time, majority of the students report that they hardly sustained the length of use of stimulants. Also, majority of the sampled undergraduates (64.4%) reported that it was from their peers they derived their source of knowledge of stimulants. Furthermore, the study also revealed that there was no significant difference between male and female university undergraduates in their knowledge of the use of stimulants ($t = 1.82$, $df = 792$, $p < .05$). Also, the study revealed no significant difference between male and female university undergraduates on their knowledge of the use of Amphetamine, Cocaine, Cola nuts and Tobacco. However, there was a significant difference between male and female university undergraduates on the knowledge of the use of caffeine ($t = 2.46$, $df = 794$, $p < .05$). The findings also revealed that there was a significant difference in the knowledge of use of stimulants among undergraduate students of different faculties ($F = (3/793) = 12.69$, $p < .05$). Based on the findings of this study, intervention strategies that include the use of aggressive and persuasive counselling on the students as a means to reducing the use and consumption of stimulants were advocated.

INTRODUCTION

Since the earliest times, man has sought through curiosity, the desire or need for any substance that will induce in him/her pleasant sensation to physical or mental pain. The motive for non-medical stimulant use may be sociological (status-seeking peer pressure, the news media or substance oriented society), psychological (to banish pain or discomfort, to attain states of euphoria, fantasy, or to escape from unpleasant reality), out of curiosity, boredom, alleviate fear, derive sexual and physical pleasures, or family background (Alan 2003). Stimulants, which are substances that cause an increase in the activity of an organ in the body are usually referred to as chemicals that excite certain activities of the central nervous system (Bayer 2001, as cited in Egbochuku and Akerele 2007).

Stimulant use and abuse behaviours are problems inducing. A common feature of abusive

behaviour is that it involves a loss of self-control. That is, the substance gains control over the individual's behaviour. "Out of control" behaviour is destructive of self and others, as well as the environment. As of today, many undergraduates in Nigeria continue to use stimulants for one or more of the following reasons that may include: They want a pleasurable change in their state of mind, stay awake, study for long hours, elevation of mood, increase confidence feeling, etc. Though, drug abuse has adverse effect on them, in that it changes their brain perception of difficulties and problems, the number of these undergraduates that use or abuse stimulants has steadily increased in recent years and will probably continue in coming years as new and powerful stimulants use and abuse appear with increasing frequency in the nations' scene (Alan 2003). This incessant use and abuse of stimulants has led governments, parents, counsellors, teachers and the larger society to become troubled (Egbochuku and Akerele 2007).

Stimulant use is a multi-faceted psychosocial problem as no single theory can sufficiently explain its nature and dimension. In the last decade, most parts of the world have experienced a growing interest in problems associated with

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the non-medical use of substance, specifically stimulant dependence. This heightened awareness has corresponded to a real growth in the extent, diversity and social impact of the use of stimulants in many societies (Adelekan et al. 2000). Recently, consumption of stimulants like Amphetamine commonly known as Speed, Cocaine, Colanuts, Tobacco and Caffeine has risen drastically in Nigeria. Adolescents and youths (of between ages 15-30 years) constitute the high risk groups with females getting more involved than they used to, most especially among university undergraduates (National Drug Law Enforcement Agency 2000). The reasons individuals, including students often give for stimulants use include the need to belong, expectancy, mental set, sex, certain drives, integrative use, ceremonial use, hedonistic use, utilitarian use, and disintegrative use (Rathod 1988).

In a study on the attitude of students towards stimulants use, Linhardt (2001) reports that students see the use of stimulants in positive terms for relief from pains and problems, elevation of mood, wakefulness, increased confidence, feeling and psychomotor activities and athletics and feeling of euphoria, etc. In addition, stimulants were also used for social-cultural purposes such as ceremonies, friendship and kingship activities in a culture, rituals and rites of births and burials, served to visitors in order to gain personal advantage than others, or obtain relief of self oriented needs and from medical ailments. Some of the negative effects of stimulants are dependence and addiction, hallucinations, depression, mood disturbances, loss of appetite, hypertension, fatigue, lung cancer, birth defects, illness, etc.

According to Donald (2001) and Glen (2003), amphetamine is a powerful stimulant that excites physical and mental activity of the central nervous system and is commonly known as "speed", "pep pills", "uppers" or "wake ups", which can be smoked, snorted, orally ingested or injected. Barbara (2001a) and Barbara (2001b) described caffeine as an odourless, slightly bitter solid stimulant found in small amounts in coffee, tea, and colas and it is administered orally. Jacob and Itan (2003) defines cocaine as white, crystalline, alkaloid powerful stimulant substance obtained from the leaves of the coca plant (*Erythroxylum coca*) which can be administered orally, through intranasal, intravenous, inhalation, chewing, snorting and smoking. Quarcoo (2003)

and Michael (2001) state that cola-nut is the seed of several types of evergreen trees that are native to West Africa and cultivated extensively in the American tropics. In Africa, cola-nut is readily available and chewed locally as a stimulant. Tobacco is a plant whose leaves are used chiefly in making cigarettes, cigars and snuffs that contain small amounts of nicotine.

The import of this study therefore, is predicated on resolving the following research questions: How often do Nigerian undergraduates use stimulants? To what extent are Nigerian university undergraduates dependent on stimulants? What is the duration of use of stimulants by Nigerian undergraduates? Where do Nigerian undergraduates obtain their knowledge about the use of stimulants? Is there no significant difference between male and female university undergraduates in their knowledge of the use of stimulants? Is there no significant difference between male and female university undergraduates in their knowledge of types of stimulants use? And is there no significant difference in the knowledge of use of Stimulants among students of different faculties.

METHOD OF STUDY

Participants: The study utilised a survey research design. The population of this study consisted of all the university undergraduates of the University of Benin, who were for the purpose of this study subdivided into four groups namely, Sciences, Education, Social Sciences and Arts groups. The stratified random sampling technique was used to select eight hundred students for the study. Four hundred of the respondents were male students, while the remaining respondents were female students.

Measures: The instrument used for this study was a questionnaire titled "Knowledge of, and the Use of Stimulants (KOTS)" that was developed by the current researchers. The questionnaire consisted of two sections: Section A sought personal demographic information of the respondents, while section B was made up of 37 items raised on a Four- point Likert- type scale. The items in section B contained questions that dwelt on knowledge of, and use of stimulants. Five stimulants were investigated in the study (Amphetamine, Caffeine, cocaine, Cola-nuts and Tobacco).

The questionnaire was content validated by

four professors in clinical psychology, psychiatry, counselling psychology and health education. The reliability of the instrument was established through the test- retest method on a sample of thirty students of the Benson Idahosa University, Benin city, Nigeria. The reliability test yielded a correlation co-efficient of 0.73.

Procedures: Copies of the questionnaire were personally administered by the current researchers to the sampled students of the University of Benin with the assistance of course lecturers and three graduate students of the faculty of education of the same university. Copies of the questionnaire were distributed during the last class before the Christmas break of the 2005/2006 academic session. With the assistance of course lecturers, current researchers were able to retrieve all the copies of the questionnaire distributed to the students.

RESULTS

The results of this study are presented and grouped under six research questions as follows:

1. How often do Nigerian undergraduates use stimulants? The results are presented in Table 1.

Based on the survey, it can be concluded that majority of Nigerian undergraduates rarely use any of the stimulants, even though a small segment (17.3%) indicated that they use cola nuts once in every month.

2. To what extent are Nigerian undergraduates dependent on Stimulants? The results are presented in Table 2.

Based on the survey, it can be concluded that majority of Nigerian undergraduates rarely depend on stimulants; though a sizeable number of 34.3% and 32.13% reported to often use cola nut and caffeine respectively.

3. What is the duration of Use of Stimulants by Undergraduates? The results are presented in Table 3.

Table 2: Undergraduates' dependence on stimulants

S. No.	Variable Types of stimulant	Dependence Rate		
		Not at all	Often	Most often
1	Amphetamine	484	67	194
2	Caffeine	347	257	170
3	Cocaine	472	82	193
4	Cola nut	323	274	175
5	Tobacco	462	72	205

Based on the survey, it can be concluded that majority of the sampled undergraduates reported that they hardly sustain the use of stimulants. As evident in the data, only 22.13% and 16.63% of the sampled undergraduates have used Cola nut and Caffeine respectively for an upward period of 10 years.

4. Where do Undergraduates obtain their of Knowledge about Stimulants? The results are presented in Table 4.

Based on the survey, it can be concluded that majority of the undergraduates (64.4%) reported that their peers are the source of their knowledge about the use of stimulants. However, though small, but a reasonable number of the students (13.6%) reported that their parents or guardians are their source of knowledge about the use of stimulants.

5. Is there any significant difference between male and female university undergraduates in their knowledge about the use of stimulants? The result indicated that male students ($M=47.87$, $SD=4.75$) and female students ($M=48.53$, $SD=5.39$) do not significantly differ in their knowledge about the use of stimulants ($t=0.79$, $P>.05$).

6. Is there any significant difference between male and female university undergraduates in their knowledge about the types of stimulants? The result indicated as follows: Male students ($M=11.11$, $SD=1.83$) and female students ($M=10.93$, $SD=1.76$) do not differ significantly in their knowledge of Amphetamine as a stimulant ($t=0.79$, $P>.05$), that male students ($N=10.47$,

Table 1: Frequency of use of stimulants by undergraduates

S. No.	Variable Types of stimulants	Frequency of use				
		Never	One month	Once a month	Once a week	Everyday
1	Caffeine	462	107	64	96	71
2	Cocaine	664	28	32	64	12
3	Colanut	418	138	59	108	77
4	Amphetamine	702	33	19	34	12
5	Tobacco	634	45	14	41	66

Table 3: Length of use of stimulants by undergraduates

S. No.	Variable Types of stimulant	Not at all	Length of use				
			1-2 yrs	3-4 Yrs	5-6 Yrs	7-8 Yrs	Over 10 Yrs
1	Amphetamine	677	63	19	9	4	28
2	Caffeine	454	78	79	35	21	133
3	Cocaine	646	89	32	4	1	28
4	Cola nut	423	85	66	29	20	177
5	Tobacco	622	75	42	9	4	48

Table 4: Undergraduates' source of knowledge about stimulants

S. No.	Variable Sources of knowledge	Response rate	
		Frequency	Percentage
1	Peer Group	515	64.4
2	Other Siblings	5	0.6
3	Parents and Guardians	109	13.6
4	Society	57	7.1
5	School	89	11.1
6.	Mass Media	25	3.1

SD=1.96) and female students (M= 10.80, SD= 1.79) differ significantly in their knowledge of Caffeine as a stimulant. In addition, the study also found that male students (M=12.10, SD=1.89) and female students (M=11.91, SD=2.08) do not differ significantly in their knowledge of Cocaine as a stimulant ($t=1.352$, $P>.05$). Furthermore, that male students (M=8.85, SD=1.53) and female students (M=8.72, SD=1.45) do not differ significantly in their knowledge about the use of Cola nut ($t= 1.21$, $P>.05$) as a stimulant, and that male students (M= 14.77, SD=2.07) and female students (M= 14.85, SD= 3.01) differed significantly in their knowledge about the use of tobacco as a stimulant ($t=4.39$, $P<.05$).

7. Is there any significant difference among students of different faculties in their knowledge of the use of stimulants? The result of the one-way ANOVA test indicated that a significant difference existed among the undergraduates of different faculties ($F= (3/793)=12.69$, $P<.05$). To determine the direction of the difference of the means, the Scheffe's multiple comparison of means method was further applied. The analysis indicated that the mean difference of 1.42 between Sciences and Education groups and the mean difference of 1.50 between Science and Social Sciences groups were significant at $p<.05$. Also the mean difference of 2.51 between Education and Arts groups and the mean difference of 2.59 between Social Sciences and Arts group were significant

at $p<.05$. These revealed that the mean score of science group is significantly higher than those of Education and Social Sciences groups. Also the mean score of Arts group is significantly higher than those of Education and Social Sciences groups. There were however no significant differences between the Sciences and Arts groups, Education and Social Sciences groups respectively.

DISCUSSION

The present study shows no significant difference between male and female university undergraduates in their knowledge of use of stimulants and knowledge about the types of stimulants use. This probably derives from the fact that both male and female university undergraduates are exposed to common life experiences as adolescents and young adults. This assertion agrees with the finding of Asunni and Pela (1986, as cited in Egbochuku and Akerele 2007) which says that both male and female adolescents cultivate and predominantly have knowledge of use of stimulants equally.

The finding of this study also shows that there was no significant difference between male and female university undergraduates in their knowledge of use of the stimulants. The finding also revealed that there was no significant difference between male and female university undergraduates on the knowledge of use of Amphetamine, cocaine, cola nuts and tobacco. This finding is in agreement with National Drug Law Enforcement Agency (2000), which had earlier reported that adolescents and young adults of between ages 15-30 years admitted taking various stimulants such as Amphetamine, Cola nuts, Tobacco and Cocaine.

This study also found that there was a significant difference in the knowledge of use of stimulants and in the types of stimulants use among students of different faculties. As in other

findings, Linhardt (2001) report that the knowledge of the types and use of stimulants has strong appeal to some persons who are beginning their struggle for independence as they search for self-identity, innate curiosity and test for new experience. This may partly explain why there are significant differences in the knowledge of the types and use of stimulants among the undergraduates of the different faculties surveyed. This finding is also in line with those of Glen (2003) and Linhardt (2001) who reported that increase in knowledge of stimulants use and knowledge of types of stimulants could be viewed as part of two rapidly developing revolutions. It could be that these groups that are higher than other groups in terms of knowledge of use of stimulants and knowledge of types of stimulants use must have had knowledge of these stimulants either through their background, peers, school, and careers or must have been prescribed for medical purposes and treatment by doctors in the hospitals. Moreover, some of these students may have had knowledge of types and use of stimulants from a number of underlining factors such as increasing their self esteem, self confidence and to be able to face the realities of life, feel high, stay awake and alleviate fear and boredom.

Counselling Interventions

The result of this study demands urgent attention of all stakeholders concerned including counsellors, psychologist, teachers, parents and the society in general. This is because stimulants use will continue to be amongst us as long as we continue to have young adults (adolescents) among us. Parents should learn to monitor their children's peer group as they exert considerable influence on one another. Talks, seminars and other recreational activities that could help students adjust to school environment without the use of stimulants should be organized from time to time by trained guidance counsellors and other experts in the field. Magazines and newspapers containing appropriate information should be kept in the university libraries for university undergraduates' use.

Research (i.e. Egbochuku and Adeleke, 2007) has revealed that the sources of knowledge of stimulant use, mostly come from the peer group, parents/guardians, the school, etc, and the possible ways of checking abuses should mostly

be through counselling. A counsellor presented with stimulants use problem, therefore, should be familiar with his/her client's source of emotional disturbance. In addition, the counsellor could focus on uncovering all other hidden emotions, by listening to the client and feel deeply with the client without experiencing emotional reactions. University students should be guided and trained in effective study skills, which is one of the reasons why university students use stimulants. The counsellor could be of great assistance to the students by motivating them to have high self-esteem, self-confidence and thereby alleviating their fears without the use of stimulants. The counsellor should present honest and factual materials about stimulants commonly used by university students. The counsellor would have to update his/her knowledge on stimulants use from time to time and information be disseminated during orientation and matriculation programmes in the various university system.

Stimulants use, dependence and abuse represent one of the life survival problems with which persons are confronted and which may be brought into counselling. Thus, counselling of stimulant use and dependent persons require an assessment of both the possible sources of help for the client or clients, as well as knowledge of factors that undermine the counselling relationships in this specific problem context. The source of help for clients could be single or multifaceted, involving the religious group, school system, social services, psychiatric agencies, and also a variety of treatment techniques (Uzoka 1988). In case the multi-faceted approach is adopted, the problem of stimulant use would be greatly reduced. This can be achieved by having parents, school systems; religious groups, social services, mass media, the government and the larger society get involved in the entire process of minimizing stimulant use among Nigerian undergraduates.

Alan (2003) stated that years of research have shown that use and dependence on any stimulant, illicit or prescribed, is a brain disease that can, like other diseases be effectively treated. He opined that no single type of treatment is appropriate for all individuals dependent on stimulants and that treatment must take into account the types of stimulant used and the needs of the individual. To be successful, treatment may need to incorporate several components, such as counselling in conjunction with a prescribed medication, and multiple courses of treatment. He

stated that two main categories of treatment are behavioural and pharmacological. Behavioural therapies teach people how to function without stimulants, how to handle cravings, how to avoid stimulants and situations that could lead to stimulants use, how to prevent relapse and how to handle relapse should it occur. When delivered effectively, behavioural therapies such as individual counselling, group counselling, contingency management and cognitive behavioural therapies can help patients improve their personal relationships and ability to function in the community.

In addition, Odebunmi (1994) suggested that counselling-Role playing is another effective way of managing stimulants use, dependence and abuse. He further maintained that all counsellors who work with stimulants dependence persons need to be familiar with their clients' source of emotional disturbance and once this is achieved, the counsellor should focus on uncovering all other hidden emotions before establishing the counselling relationship. The counselling relationship is established when the counsellor is able to listen to the clients and feels deeply with the client without experiencing emotional reactions. Once the individual realizes this, he or she is able to be completely honest with himself/herself. With such honesty, stimulant user and dependent is able to give up the false front he or she has been portraying to the world, accept himself/herself more completely and make changes in behaviour and attitude towards stimulants, which will improve his or her adjustment.

Orubu (1991) also report that the following should be the basic implications for counselling: Firstly, is the training in effective study skills, which is one of the reasons why university undergraduates use stimulants to help them keep awake for study. He opined that students in this category tend to leave their studies until a few weeks to the examination. Students need to be guided on allocation of time for their studies, drawing up of personal schedules of work, constant revision of work and the use of the library. Secondly, there is need to train students in interpersonal social skills. It is common knowledge that, some university undergraduates use stimulants to generate boldness. In this regard, counsellors need to train these students to develop interpersonal and social skills. Information on the use of stimulants should be incorporated into the existing information services

of the university guidance programme. The role of the counsellor in this regard should involve an honest presentation of factual materials about stimulants commonly used by students. The counsellors would have to update their knowledge on stimulants use from time to time and the information should be disseminated during orientation and matriculation programmes in the various universities system.

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