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KNOWLEDGE, ATTITUDE AND PRACTICE OF STIMULANT USE AMONG SECURITY PERSONNEL IN USMANU DANFODIYO UNIVERSITY, SOKOTO, NIGERIA

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Abstract

Background: The use and abuse of stimulants has become a serious public health problem resulting into both health and psycho-social negative effects.

Objectives: The study assessed the knowledge, attitude and practice of stimulants use among security personnel.

Methods: A cross sectional study conducted among 180 security personnel at Usmanu Danfodiyo University Sokoto, North-west Nigeria. Data was collected using a set of pre-tested, semi-structured, interviewer-administered questionnaire to obtain information on the socio-demographic characteristics of the study subjects, knowledge, attitude and practice of stimulants use. Data was analyzed using IBM SPSS version 20.

Results: Majority (96.1%) had ever heard of stimulant use. Most of the respondents (87.8%) had adequate knowledge of stimulant use. A large proportion of them new that its abuse can be harmful (74.4%). Majority (73.6%) have negative attitude toward the use of stimulants. Less than a quarter (19.4%) use stimulant daily, 77.2% strongly agree that a colleague has ever been involved in the use of stimulants.

Conclusion: Majority of the respondents demonstrated adequate knowledge of stimulant use and a large proportion of them new that when abused, it could be harmful. Majority have negative attitude towards use of stimulants. Security Personnel should be well informed on both the short and long term adverse effects of stimulants use.

Key words: awareness, use, stimulants, security personnel, Sokoto, Nigeria

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INTRODUCTION

Stimulant is any drug or substance that excites bodily function, but more specifically those that stimulate the brain and central nervous system. Stimulants induce alertness, elevated mood, wakefulness, increased speech and motor activity and decrease appetite.¹ The therapeutic use is limited, but their mood-elevating effects make some of them potent drugs of abuse.²

The use and abuse of stimulants has become a serious public health problem resulting into both health and psycho-social negative effects.³

The need to stay awake at workplace often drive many security personnel into use and abuse of stimulants.⁴ Similar to the situation in many countries in sub-Sahara Africa, stimulant use and abuse is on the rise.⁵ Stimulant abuse is currently influencing more people and broader age groups than ever before.⁶

The United Nations Office on Drugs and Crime reported in 2017 that a total of 286 million people

between the ages of 15 and 64 years used an illicit stimulants or drugs.⁶ Cannabis, cocaine and amphetamines are the most consumed illegal stimulants. Tobacco which contains nicotine, and caffeine which is found in coffee are commonly used as well but are legal and this further increase their chances of being abused.⁷

Crimes such as murder, rape, robbery, destruction of lives and properties are associated with substance abuse.⁸ The number of crimes committed under the influence of psychoactive substances is on the rise and this poses more challenges for the security of this nation.⁹ In order to keep up, stay alert and reduce fatigue, many personnel resort to the use of these stimulants despite its potential hazards.¹⁰ According to the United Nations International Drug and Crime control in 2016, large percentage of drug users are youths and they also form an appreciable number in the security sector.¹⁰

As such, the focus of this study is on the security personnel. In view of the huge burden associated with the abuse of stimulants and the socio-

economic consequences on the health of the general populace and the security personnel in particular, this prompted this study. The aim is to assess the awareness and use of stimulants use among security personnel in Usmanu Danfodiyo University, Sokoto, Nigeria. The specific objectives are to assess the knowledge, attitude, and practise of stimulants use among the security personnel.

MATERIAL AND METHODS

Setting/ study population

The study was carried out among 180 security personnel at the Usmanu Danfodiyo University, Sokoto, Nigeria, from August 2017 to March 2018.

Study design

The study was cross sectional and descriptive in nature in which 180 participants were selected by multistage sampling method. All the security personnel in the selected security division who gave their consent to participate were considered eligible for enrolment into the study.

Sample size and sampling technique

Sample size estimation was done using the formula for proportion¹¹:

$$n = \frac{Z^2 pq}{d^2}$$

Where;

n = minimum sample size

P = proportion of security personnel involved in substance abuse = (12.2% = 0.122) in a previous study conducted by Maccido HM. substance use among military personnel in Kaduna in 2015.

q = complementary probability = (1-p) = 1-0.122 = 0.88

Z = standard normal deviation = 1.96

d = degree of precision = 0.05

f = finite correction

$$\text{Thus } n = \frac{(1.96)^2 \times 0.122 \times 0.88}{(0.05)^2}$$

$$= \frac{3.8416 \times 0.106912}{0.0025}$$

$$0.0025$$

$$= \frac{0.41914}{0.0025}$$

$$0.0025$$

$$= 164.974$$

$$= 165.$$

A response rate of 90% was anticipated; hence the final sample size was determined by dividing the originally calculated size by the anticipated response rate as follows.¹¹

$$n_f = n / 0.90 = 165 / 0.90 = 183$$

Therefore sample size, n_f, approximate to a round figure

$$= 180.$$

A multistage sampling method was used to select the required calculated sample size.

Stage 1: One security division was selected (Dundaye security division) out of two divisions (Dundaye and City campus) by simple balloting (coin toss).

Stage 2: Selection of eligible security personnel at random using balloting technique until the sample size of 180 was obtained.

Instruments of data collection

Data was collected using a set of interviewer-administered, semi-structured, pre-tested questionnaire to obtain information on the socio-demographic characteristics of the study subjects, knowledge, attitude and practice of stimulant use. The questionnaire was adapted from World Health Organization International guideline on drug and substance use reviewed and updated.

Personnel and pre-testing

Four medical students assisted in questionnaire administration after pre-training on conduct of survey research, study objectives, selection of study subjects and questionnaire administration.

The questionnaire was pretested among 20 security personnel working in College of Education, Sokoto, appropriate modifications were made

based on the observations made during the pretest.

Data analysis

Data was analyzed using IBM SPSS version 20. Knowledge of stimulant use was scored on a 10 item scale, correct response was scored one and incorrect response or none- response was scored zero. Respondents scoring less than 65% were considered to have inadequate knowledge while those with scores of 65% and above were graded as having adequate knowledge.

Ethical consideration

Institutional ethical clearance was sought from the Ethical Committee of Usmanu Danfodiyo University, Sokoto and informed consent was also obtained from the participants before data collection.

RESULTS

The mean age of participants was 40.0 ± 7.5 years and age range were between 30 to >51 years. Most of them were males 152(84.4%), single 68(37.8%) and practiced Islam as religion 140(77.8%) as shown on Table I.

TABLE I: SOCIO DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Socio demographic Characteristics	Frequency (n=180)	Percentage% (%=100)
Age group (in years)		
30	71	39.4
31-40	57	31.7
41-50	38	21.1
>51	14	7.8
Sex		
Male	152	84.4
Female	28	15.6
Religion		
Islam	140	77.8
Christianity	40	22.2
Tribe		
Hausa	108	60.0
Igbo	15	8.3
Yoruba	29	16.1
Others	28	15.6
Marital status		
Single	68	38
Widowed	4	2.2
Divorced	3	1.7
Separated	3	1.7

Level of education

None	18	10.0
Qur'anic	11	6.1
Primary	45	25.0
Secondary	37	20.6
Tertiary	69	38.3

Years at work

1-3 years	54	30.0
4-6 years	62	34.4
7-10 years	20	11.1
Above 10years	24.4	4

Knowledge of stimulants use

Majority (96.1%) have ever heard of stimulant use. Most of the respondents (87.8%) have adequate knowledge of stimulant use.

Colleagues at work were the commonest source of information among respondents (71.2%)

Figure 1: Sources of information about stimulants used in percentage

Kolanut was the most known stimulant to the respondents (71.7%) while amphetamine is the least known (10.6%) (Figure II)

Figure 2: Different types of stimulants known to respondents in percentage.

Attitude toward stimulant use the by respondents

About (74.4%) of the respondents strongly agreed that use of stimulants could be harmful. One third (38.9%) of respondents believe the use of stimulants is beneficial. More than half (67.4%) of

the respondents agree that stimulants have positive effect on efficiency at work. About (9.4%) of respondents strongly agree that stimulants have effect on health of individuals. Majority (73.6%) have negative attitude towards use of stimulants while (26.1%) of respondents have positive attitude towards use of stimulants (Table II).

Table II: Attitude towards stimulants use

Variables (%=100)	Frequency (n=180)	Percentage
Stimulant use is beneficial		
Strongly agree	25	13.9
Agree	45	25.0
Strongly disagree	59	32.8
Don't know	4	2.3
Disagree	47	26.1
Stimulants have effect on efficiency at work.		
Strongly agree	43	23.0
Agree	80	44.4
Strongly disagree	21	12.1
Don't know	10	5.6
Disagree	25	13.9
Stimulants have effect on health of individuals.		
Strongly agree	74	41.1
Agree	58	32.2
Strongly disagree	13	7.2
Don't know	30	6.7
Agree	5	2.2

Practice of stimulants use by respondents.

More than half (56.1%) of the respondents used stimulants during their working hours. About one-fifth (20.6%) of the respondents used stimulants more than once daily More than one-third (36.7%) of the respondents believe that the use of stimulants is quite common. More than two-third (77.2%) of respondents knew of security personnel that engaged in stimulant use (Table III).

Table III: Practice of stimulant use by respondents

Variables (%=100)	Frequency (n=180)	Percent
How often do you use stimulants presently?		
More than once daily	37	20.6
Daily	35	19.4
More than 3times weekly	28	15.6
Thrice or less weekly	17	9.4
Monthly	6.0	3.3
Others	56.	31.1
How common is the use of stimulants among security personnel.		
Very common	62	34.4
Quite common	66	36.7
Not common	43	23.9
Don't know	9	5.0

DISCUSSION

Stimulant use is a phenomenon leading to various physical, social and economic harm, sometimes to the extent that the individual experiences serious decline in his/her individual or social functions.

The respondents were mainly males (84.4%) with the largest distribution of age among those less than 30 years (39. 4%).This is not surprising as the nature of the work demands more of male sex.

Out of the 180 respondents, 96.1% knew about stimulants which was a marked increase in this current study. The main source of information in this research work was colleagues at work (71.2%). This affirms the belief that colleagues at work play a major role in spreading information about stimulants as suggested in a study on use of stimulants by youth .¹² The stimulant that was most known to the respondents was kola-nut (71.7%), closely followed by nicotine/cigarette (69.4%) and this tallies with the findings of a study carried out in Kaduna, north-west Nigeria among military personnel where the most known stimulants were nicotine, marijuana and coffee. .¹³

The effect of use of stimulants with the highest frequency on the quality of service of respondents

at work was that respondents easily quarrel with their colleagues (48.3%) and this was closely followed by feeling lazy and weak after the effect of stimulant has waned off, this was reported by (37.2%) of respondents. This was similar to findings from previous studies which reported that some personnel skip work totally due to loss of interest or leave their duty posts to go and take stimulants.¹⁴

This present study has (56.1%) of respondents who have ever used stimulants, which was almost the same when compared to a similar study conducted by Makanjuola *et al* in 2007 in Ile-Ife, western Nigeria with 59.3%.¹⁵ The most commonly used stimulant by respondents in this present study was kola-nut (42.6%) followed by coffee (24.8%) and nicotine (14.9%).

CONCLUSION

Majority of the respondents demonstrated adequate knowledge of stimulant use, and a large proportion of them new that when abused, it could be harmful. Majority have negative attitude towards use of stimulants. In addition, majority of the respondents agreed to have ever used stimulants and most of them believe stimulants use is quite common among colleagues. Security Personnel should be well informed on both the short and long term adverse effects of stimulants. The Usmanu Danfodiyo University security unit should be running four shifts as this will reduce work stress and rate of demand for the use of stimulant by their personnel.

CONFLICT OF INTEREST

There was no conflict of interest among the researchers in this research work

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