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PREVALENCE OF SUBSTANCE USE AND ASSOCIATION WITH PSYCHIATRIC ILLNESS AMONG PATIENTS IN UYO, NIGERIA

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ABSTRACT

The purpose of this study was to investigate the pattern of substance use among in-patients of a Psychiatric Hospital in Uyo, Nigeria, to determine the association with onset of psychiatric illness. A total of 124 inpatients admitted into a Psychiatric Unit of the University of Uyo Teaching Hospital were assessed for substance use, using a modified form of a 117-item self-report instrument based on the World Health Organization guidelines for students' substance-use surveys. Clinical interviews were also carried out with the patients and their relatives to corroborate the information volunteered by the patients in the questionnaire. A lifetime prevalence rate of 48.4% use of substances was found. The prevalence rate of current use of alcohol was 36.3%; cannabis 28.3%; cigarette 14.5%; Cocaine 0.8%; snuff/fumes 2.4%; Pain killers and kola nuts 1.6%. About 51.7% of the subjects used two or more substances. Substance use preceded first psychiatric episode in 29.6% of the participants; second in 42.9%; third in 50.0%; while 46.5% all relapses were preceded by alcohol/substance use. This study has shown that substance use is major risk factors for the development of psychiatric illnesses. Therefore, there is need for public enlightenment and routine assessment in order to prevent onset or exacerbation of psychiatric disorders.

Key words: Psychoactive substance; In-patients; Mental illness; Onset.

INTRODUCTION

There are increasing reports that Alcohol and other controlled substances are growing rapidly worldwide (WHO, 2004). Data from the United Nations Office on Drugs and Crime (UNODC) indicate large-scaled seizures of different types of habit-forming substances such cocaine, heroin, cannabis, amphetamine and other stimulants in different parts of the world. The use of these substances has been reported

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to contribute significantly to the burden of disease in many countries (WHO, 2012). There is evidence to suggest that in Nigeria use is highly correlated with psychiatric illnesses (Yunusa, Obembe, Ibrahim and Njoku (2011) and studies have also documented increasing use these substances among mentally ill patients. Previous have shown that that cannabis and alcohol accounted for 53.5% and 28.2% of patients treated for psychiatric problems in Nigeria (Adelekan & Adeniran 1991). Reports have also shown that schizophrenic symptoms are found in patients who indulged in Alcohol and cannabis (Ohaeri & Odejide, 1993).

Availability of some of these substances in many countries depends on the level of cultivation and success or failure of drug controlled agencies. In developing countries like Nigeria, the use of some of these substances such as alcohol, tobacco as well as traditional stimulants like kolanuts is not restricted because of their cultural importance. Despite the negative effects of these substances, there is a high prevalence of use and the attendant psychiatric morbidities associated with the use. Research has shown that continued use can result in addiction with hazardous consequences including disorganization and disruption of individuals, families and communities (). Evidence also suggests that they have drastic physical and psychological implications for growing youths and are associated with a marked burden of disease, disability, mortality, criminality and other social vices (Obot, 2011). Many of these substances are harmful. For example, evidence suggests that alcohol use leads to cirrhosis of the liver, physical violence, hypertension, and coronary heart disease (Finnish Foundation for Alcohol Studies, FFAS, 2002). Studies have also shown that drunkenness is a significant cause of death through depression, suicide, road traffic accidents, and ischemic heart disease (Makanjuola, 1992). Smoking has been seen as a marker for more severe mental disorders (De Leon, 1996) and it is estimated to be responsible for 3 million deaths annually or about 6% of all deaths (WHO, 2001). Currently, 50% of men and 9% of women in developing countries smoke cigarettes compared to 35% of men and 22% of women in developed countries (WHO, 2004). Tobacco smoking has been linked to apathy, social withdrawal, failure to thrive, and depression (Ogden, 2003). In 2008, tobacco smoking was estimated to have killed over 5 million people and by 2030, its death toll will exceed 8 million a year (WHO, 2008). It is clearly shown to be a causal factor in cardiovascular disorders, lung cancer, stroke, chronic obstructive airways diseases, tumours of the mouth, larynx, esophagus, and bladder (Centre for Disease Control and Prevention, CDCP, 2008). Cannabis intoxication impairs learning, driving and operational machinery and chronic use is associated with cancer, immune system dysfunction, and respiratory and cardiovascular dysfunctions (Obot, 2011). Students who smoke persistently suffer negative consequences including declining grades, lowered commitment to education, increased potential for drop-out and high truancy rate (Hawkins, Catalano, & Miller, 1992).

In Nigeria, the use of alcohol and substances is of the increase and associated problems are enormous (Yunusa, Obembe et al., 2011 Goar et al., 2011; Abayomi et al., 2012). The socio-cultural impacts resulting from these substances are difficult to estimate, but the involvement of youths in various antisocial activities,

such as kidnapping, armed robbery and prostitution is often linked to the influence of these substances. With the poor standard of health care facilities and services, the increasing use of these substances among mentally ill individuals is of major concern. This is because of the limited facilities for rehabilitation. This study was aimed at assessing the extent and nature of substance use among mentally ill-patients in Uyo, Nigeria to determine their association with onset of psychiatric illness.

METHOD

Location of the study: The study was carried out at the Psychiatric Unit of the University of Uyo Teaching Hospital. This is a 300-bed hospital established since 1996 and is situated on the outskirts of Uyo, capital of Akwa Ibom State. The state is one of the major oil producing states in Niger Delta Region. The hospital is the only tertiary health institution serving about 3.9 million people of Akwa Ibom State and its neighbouring states of Abia, Cross River and Rivers.

Participants: Participants were one hundred and twenty four patients, consisting of 77 males and 47 females admitted into the Psychiatric Unit of the University of Uyo Teaching Hospital between January and March 2013, as well as their relatives.

Data collection: A total of 124 patients admitted into the Psychiatric ward between February 2012 and January 2013, completed a self-report questionnaire adapted from a modified form of a 117-item self-report instrument based on the World Health organization guidelines for students' substance-use surveys (Smart et al., 1989). This was done after the consent was obtained. Information on biodata such as age, marital status, educational level and occupation were elicited through a semi-structured sociodemographic questionnaire. A clinical interview was also carried out on both the patients and their relatives to corroborate information volunteered by the patients in the questionnaire. Those with little or no education were assisted to fill the questionnaire. This self-report questionnaire has been used in several studies in many countries including Nigeria (Adelakan & Ndon, 1997; Fatoye & Morakinyo, 2002; Courtois et al., 2004; Abasiubong et al. 2008). This study received the approval of the Ethics and Research Committee of the hospital.

Data analysis: The results of the study were analyzed using Statistical Package for Social Sciences (SPSS 17.0). Sample means and percentages were calculated from which simple frequency tables were created. Standard deviations from the means were calculated and comparisons of categorical data were done using Chi-square. The p-value of less than or equal to 0.05 was used to determine the level of the statistical significance.

RESULTS

Analysis of the data as indicated in Table 1 showed that 77 (62.1%) of the patients were males and 47 (37.9%) females. Their ages ranged from 18 to 52 years, with a mean age of 32.72 years.

In terms of education, 2.4% had no formal education, 4.0% were drop-outs, 4.8% had primary education, and 50.8% had secondary education, while 37.9% had tertiary education.

Table 1. showing sociodemographic characteristics of the Respondents

Variables	Participants	
	Number	Percentage
Sex		
Males	77	62.1
Females	47	37.9
Age in years		
<20	11	8.9
21-30	65	52.4
31-40	41	33.1
41-50	7	5.6
> 50	-	-
Marital Status		
Single	63	44.4
Married	46	37.1
Separated/Divorced	8	6.5
Widowed	7	5.6
Education Level		
No formal education	3	2.4
School drop-out	5	4.0
Primary school	6	4.8
Secondary school	63	50.8
Tertiary education	47	37.9
Occupation		
Students	55	44.4
Applicants	26	21.0
Public sector workers	18	14.5
Private sector workers	23	18.5
Retirees	2	1.6

In Table 2, a total of 60 (48.4 %) inpatients reported using alcohol and other psychoactive substances while 64 (51.6 %) did not. The lifetime prevalence of substance use was 48.4%. A total of 36.3% of the inpatients were current users of alcohol; 28.3% cannabis; 14.5% cigarettes; 0.8% cocaine; 2.4% snuff/fumes; 1.6% pain and kolanuts.

About 51.7% of the patients used two or more substances; 7.3% used alcohol, cannabis and cigarette, 13.7% alcohol and cannabis; while 4.0% used alcohol and cigarette.

Table 3 shows the association between alcohol/other substance use and onset of psychiatric episode.

A total of 29.6% of first onset of psychiatric cases were preceded by substance use while other factors such non-medication compliance accounted for 70.4% of first episode. Alcohol/other substance use pre-

Table 2. Prevalence of psychoactive substances use among the respondents

Types of substances used	Participants	
	Frequency	Percentage
Alcohol	11	8.9
Cannabis	9	7.3
Cigarette	4	3.2
Cocaine	1	0.8
Pain killers	2	1.6
Kolanut	2	1.6
Snuff/Fumes	3	2.4
Alcohol + Cannabis +Cigarette	9	7.3
Alcohol + Cannabis	17	13.7
Alcohol +Cigarette	5	4.0
Total nos. users	60	48.4
Total of non-users	64	51.6

Table 3. showing factors associated with episodes of psychiatric disorders

Factors	Number of episodes of illness			
	1st	2nd	3rd	>3rd
	n (%)	n (%)	n (%)	n (%)
Alcohol and other substances	24 (19.4)	14 (11.3)	6 (4.8)	8 (6.5)
Non-compliance with medications	-	3 (2.4)	1 (0.8)	4 (3.2)
Other non identified factors	57 (46.0)	5 (4.0)	5 (4.0)	5 (4.0)

ceded psychiatric illness in 42.9% of cases, non-compliance to medication accounted for 21.4% while other factors accounted for 35.7% of cases. Also Alcohol/other substances were involved in 50.0% of third episodes, non-compliance to medication accounted for 8.3 % while other factors accounted for 41.6% of cases. In all relapses Alcohol/other substances preceded 46.5%. of cases, non-compliance to medication accounted for 18.6% while other factors accounted for 34.8% of cases.

Table 4 shows various reasons given by the patients why they were using substances though the majority of the patients (25.0%) could not give any possible reason.

Reasons given for use of alcohol and other substances were follows: 15.0% to cope with the stress, 8.3% to reduce negative emotions, 10.0% to enhance performance, 18.3% because they were readily available, 5.0% because other people also used them, and 3.3% used the substances because they were ignorant of the risks involved in use.

DISCUSSION

The results of this study indicate that there is high level of use of alcohol and other psychoactive substances among

Table 4. showing possible reasons for using psychoactive substances among the respondents

Reasons	Participants	
	Number	Percentage
To cope with stress	9	15.0
To reduce negative emotions	5	8.3
To get aroused	6	10.0
To enhance performance	9	15.0
Because they are ready available	11	18.3
Because other people are using them	3	5.0
Ignorant of the risks involved in their usage	2	3.3
No cogent reason	15	25.0
Total number of users	60	48.4

mentally ill people in Nigeria. This is demonstrated by the prevalence of current use of these substances: 36.3% for alcohol, 28.3% cannabis, 14.5% cigarette. This finding is similar to the findings in previous studies (Katz et al., 2000; Davis et al., 2003). Our study also showed a life time prevalence of 48.4% of these substances and that more than 51.7% of mentally ill patients used two or more substances. The high prevalence of alcohol and substance use in this study may not be unconnected with the widespread availability of these substances in our environment. For example, the use of some of these substances such as alcohol and cigarettes may not be unconnected with the custom that encourages their presence in traditional functions and ceremonies such as marriages and naming ceremonies. Availability of cannabis in Nigeria on the one hand may have arisen from expansion of drug trafficking and transit routes and increasing cultivation over the years (Awopetu & Ajonye, 2011). With the increasing disruption in family dynamics, less emphasis on long-held societal values in the midst of growing affluence, there is evidence that Nigeria will continue to witness increases in the use of these substances for a long time, except concerted efforts are made to control them. The findings of this study also demonstrate specifically the increased use of alcohol and cannabis among mentally ill patients. This finding is consistent with previous findings (Yunusa et al (2011), Awopetu and Ajonye (2011), and Abayomi et al (2012). Again this may be due to the fact that these substances are readily available in our environment.

One major finding of this study is the association of alcohol and other substances with the onset of first psychiatric episode. More than29.6% of first episode of psychiatric illness in this study were preceded by substance use. This is significant and a pointer to the need for holistic management of all drug cases. This finding is in line with those of Katz et al. (2008) and Dervaux et al. (2003). Another finding of the study was that 43 out of the 124 cases (34.7%) seen during the study period relapsed and 46.5% of the relapsed psychiatric cases were linked to the use of psychoactive substances; this is a serious matter and has implication for relapse

prevention programme popularized by Marlatt (1985), which highlights four psychosocial processes relevant to the addiction and relapse processes: self-efficacy, outcome expectations, attributions of causality, and decision making processes. Self-efficacy entails one being able to deal competently and effectively with high-risk, relapsed-provoking situations or cases. Outcome expectancies refer to one's expectations about the psychoactive effects of an addictive substance. Attribution of causality refers to one's pattern of beliefs that relapse to drug use is due to internal or external transient cause, such as allowing oneself to make exceptions when faced with what are judged to be unusual circumstances. Lastly, abuse of substances results from multiple decisions whose collective effects lead to the consumption of the intoxicant. Thus, cognitive-behavioural techniques should be incorporated into the treatment protocol.

On the high rate of relapse cases, the family is indicted for failing to exercise its good care-giving and regulatory role. Apart from five of the relapsed cases that were organic (epilepsy – 2 and Alzheimer's disease– 3), the rest of the relapsed cases were those that could be averted if the family helped patients to exercise due diligence in terms of compliance to medication and refraining from the use of psychoactive substances. In one of the epileptic cases, incessant relapse was due to psychoactive substances usage while in one of the Alzheimer's disease cases, it was due to non-compliance with medication. All these indict the family on neglecting its care-giving role. Furthermore, a series of studies initiated in London in the 1960s by Brown and colleagues and replicated by many scholars including Lopez, Nelson, Snyder & Mintz,(1999) and Weisman, Nuechterlein, Goldstein, and Snyder, (1998) indicated that the family has a crucial role on the adjustment of patients after discharge from the hospital in relation to expressed emotion (EE) (including being hostile, hypercritical, and overprotective). The pioneer work by Brown, Bone, Dalison, and Wing,(1966) indicated that at the end of the follow-up period, 10% of patients that returned to low-EE homes had relapsed whereas 58% of patients returning to high-EE homes had relapsed. This implies that family therapy on reducing expressed emotion should be a core treatment package for mental patients and their families before discharge and during follow-up. The overall purpose is calming things down for the patient by calming things down for the family (Davison & Neale, 2001).

On the widespread availability of psychoactive substances in the society, more effort should be intensified by the regulatory agencies to curb the maneuvering and sophistication of drug traffickers. Of course, there is high level corruption and abuse of psychoactive substances in these agencies. There are reported cases where psychoactive substances have been conveyed in vehicles of these agencies amidst heavily-armed personnel to prevent detection and confiscation. The bad eggs in the agencies should be fished out and punished.

On follow-up and social work services, mental health personnel in our mental health facility are highly inadequate. A situation where only three social workers are employed to service a whole Teaching Hospital is obtainable in UUTH is pathetic. For all intents and purposes, social workers at UUTH are supposed to attend ward rounds at the mental health ward but they don't because the three of them attend to emergencies in other departments and they seemed not to render services to men-

tally ill patients as expected. Thus, mental health facility should recruit enough mental health experts including psychiatrists, social workers, clinical psychologists, occupational therapists, psychiatric nurses and recreational therapists, among others, so that the facility could render appropriate mental health services to mental patients.

It is suggested that Nigerian government should take proactive measures to curb the unbridle availability of psychoactive substances in the society. A lot needs to be invested by way of advertisement and public enlightenment to counter the pro-adverts sponsored by Tobacco and Alcohol companies on the media. Also, more tax should be placed on tobacco and alcohol brewery companies so that their prices could go up and thereby discourage their usage since they serve as gate way drugs to other psychoactive substances.

There were limitations in this study. The study was a cross-sectional one and data were collected from self-report measures and interview data which have inherent limitations. However, such measures have been found to be reliable and valid in previous studies (Darke, 1998;Needle, Fisher, Weatherby, Brown, Cesari, Chitwood et al., 1995).Future researchers should use diagnostic measures to address the lapses of self-report measures. Furthermore, collaborative group study is suggested to get samples from most Nigerian tertiary facilities. Rehabilitation units should be made to function in our mental health facilities to take care of the needs of our ever-increasing psychoactive substance use patients

CONCLUSION

The results of this study have shown that use of psychoactive substances is prevalent among mentally ill inpatients, contributes to their morbidity and is a major factor in relapses. This implies that staff in mental health facilities should be trained on techniques of screening and detecting the use of psychoactive substances as well as on how to successfully rehabilitate substance use patients. Thus, intervention programmes in mental health facilities should include strategies for helping patients cope with drug use problems, and proper attention should be paid to rehabilitation so as to wean them of drug and its associated problems.

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