Pattern of Substance Use among Patients Attending De-Addiction Unit in a Nigerian Tertiary Hospital

Adayonfo Ehigiator[1], Oderinde Kehinde[2], Ehimigbai Mary[2], Uwadiae Enobakhare[1] and Obi Andrew[3]

[1]*Department of Mental Health, University of Benin/University of Benin Teaching Hospital, Benin City Nigeria.*

[2]*Department of Mental Health, University of Benin Teaching Hospital, Benin City Nigeria.*

[3]*Department of Community Health, University of Benin/University of Benin Teaching Hospital, Benin City Nigeria.*

*****Correspondence:**
Adayonfo Ehigiator, Department of Mental Health, University of Benin Teaching Hospital, Benin City, Nigeria, Tel: +2348077417783.

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ABSTRACT

Substance use is a growing public health problem and the consequences of substance use disorder are costly to the community. The absence of data on the pattern of substance-use among drug using patients attending the University of Benin Teaching Hospital (UBTH) and other hospitals in south-south Nigeria and the negative consequences of substance use justified the study. Thus, the objectives of the study were to investigate the pattern of substance use, the socio-demographic characteristics and clinical indices associated with drug use among the patients attending the De-Addiction Unit in UBTH. It was a cross-sectional study that obtained data from casefiles of 48 patients. Cannabis was the most frequently used substance (52.1%), followed by alcohol (18.8%), tobacco (16.7%), tramadol (14.6%) and pentazocine (12.5%). Majority of the respondents were males 38 (79.2%), age group 18 to 27 years (75%), singles 38 (79.2%), multiple substance users 34 (70.8%), reported peer pressure influence 35 (72.9%) and reported 'smoking' as route of substance use 32 (66.7%). It was observed that prevalence of use of drugs among females was rising. The commonest psychiatric co-morbidity among them was depression 19 (39.6%), followed by bipolar affective disorder 10 (20.8%) and schizophrenia 7 (14.6%). Substance use prevention, treatment and control measures need to pay attention to males and female users, since the prevalence of substance use among female is rising. Such programs must bear in mind the adolescent and young adult age groups and measures to mitigate the use of common substances such as alcohol and cannabis must continue to enjoy priority. During screening/assessment for substance use, a high index of suspicion for comorbidities especially depression is important. Peer group influence and curiosity, which are identified reasons for initiating substance use, may be checked by targeted health education.

Keywords
De-Addiction, Nigerian, Patients, Pattern, Substance-use.

Introduction

Substance use is a growing public health problem and the consequences of substance use disorder are costly to the community [1]. It has been proven that substance use in various areas of the globe appears to be rising among young adults [2]. The use and abuse of substances are associated with psychological, economic and medical complications [3]. Substance use is the consumption or administration of any physical matter (solid, liquid or gaseous) ranging from alcohol, tobacco and caffeine to illicit drugs. Substances often influence or alter an individual's mood or cognitive functions.

It is generally a unanimous and universal consensus that the use of psychoactive substances is potentially harmful and hazardous to the users, as it interferes with their health, work and social life and relationships [4]. It ultimately impacts severely on the overall physical, psychological, social and economic well-being of the users [5]. The 2017 World Drug report estimates that globally about one quarter of a billion people (about 5% of the world's adult population) used psychoactive substances at least once in the year 2015, and about 29.5million of these people who used

psychoactive substance representing 0.6% of the global adult population suffered from substance use disorders, experiencing drug dependence and requiring treatment [6]. Established and documented sequelae of substance abuse include the development of dependence syndrome which is a cluster of behavioral, cognitive and physiological phenomena [7,8].

The health consequences of illicit drug use continue to be of global concern, this is more so because majority of people who have problematic drug use have limited access to treatment [9]. Community based study done in Nigeria showed that the commonly used psychoactive substances in the decreasing order are alcohol, tobacco, cannabis and stimulants [10]. In the hospital setting, the most commonly used psychoactive substance among inpatients in Nigerian psychiatric facilities is cannabis [11]. This may reflect the increasing availability of cannabis as well as its accessibility in the country with most people starting its use early in life [11].

In Nigeria, some regional differences in the use of substances exist. For example, kola nut is the most commonly used psychoactive substance in Northern Nigeria while alcohol is the most commonly used psychoactive substance in Southern Nigeria. This may be due to cultural influences on pattern of substance use such that northerners who are predominantly Muslims are less likely to use alcohol for religious reasons [12].

In recent times, substance use has become an increasingly topical issue in Nigeria, drawing attention from stakeholders within and outside the nation. This trend has become a growing concern and has assumed a worrisome dimension particularly among younger age groups. The absence of data on the pattern of substance use among drug using patients attending the University of Benin Teaching Hospital and other hospitals in south-south Nigeria and the negative consequences of persistent substance use justify the significance of investigating the pattern of substance use among patients attending the De-addiction unit of the Department of Mental Health, University of Benin Teaching Hospital, Benin City, Nigeria. The objectives of the study are to investigate the pattern of substance use, the socio-demographic characteristics and clinical indices associated with drug use among these patients. The outcome of the study will be invaluable in the formulation of prevention, treatment and control measures for use of substances.

Methodology
Setting of Study
The study was conducted in the Department of Mental Health of University of Benin Teaching Hospital, Benin City, Nigeria. The department has a De-Addiction Unit, which provides addiction prevention, treatment, recovery and rehabilitation services. The unit comprises of addiction experts and these professionals possess extensive clinical expertise in the treatment of a wide range of addiction disorders. They include psychiatrists, clinical psychologists, psychiatric social workers and occupational therapists etc.

Study Design
This is a retrospective cross-sectional study. A proforma was developed by the researchers to collect relevant information from the case notes of the patients. The data included socio-demographic, clinical and drug related information as well as the ICD-11 diagnoses of patients who attended the unit over a period of six months.

Study tools
The information was obtained using the parameters below from the medical records of the patients.
i. Socio-demographic variables such as gender, age of the patient, level of education, occupation, marital status etc.
ii. Clinical and drug related profile such as age at onset of use of psychoactive substance, number of substances used, mode of obtaining substances, reasons for substance use, how the patient was introduced to substance use, whether the patient has met the criteria for substance dependence etc.

Ethical Consideration
The study protocol was submitted to the Research and Ethical Committee of the University of Benin Teaching Hospital and approval was granted.

Data Analysis
The data collected was analyzed using the Statistical Package for Social Sciences (SPSS) version 26. Descriptive statistics such as frequencies, means and standard deviations were used. The statistics was set at 95% confidence interval, (95% C. I), two tailed.

Result
The data of the 48 patients who attended the unit over the period were analysed. Cannabis was the most frequently used substance (52.1%), followed by alcohol (18.8%), tobacco (16.7%), tramadol (14.6%) and pentazocine (12.5%). Majority of the respondents were males 38 (79.2%), age group 18 to 27 years (75%), singles 38 (79.2%), multiple substance users 34 (70.8%), reported peer pressure influence 35 (72.9%) and reported 'smoking' as route of substance use 32 (66.7%). The commonest psychiatric co-morbidity among them was depression 19 (39.6%), followed by bipolar affective disorder 10 (20.8%) and schizophrenia 7 (14.6%). See tables 1 and 2.

Table 1: Shows Characteristics of the Participants.

Variables	Groups	Frequency	Percent
Gender	Male	38	79.2
	Female	10	20.8
	Total	48	100.0
Age groups	18 – 22	16	33.3
	23 – 27	20	41.7
	28 – 32	5	10.4
	33 – 37	3	6.3
	38 – 42	3	6.3
	43 – 47	1	2.1
	Total	48	100.0

Marital status	Single	38	79.2
	Married	7	14.6
	Separated	2	4.2
	Cohabiting	1	2.1
	Total	48	100.0
Educational Status	No formal education	1	2.1
	Secondary	29	60.4
	Tertiary	18	37.5
	Total	48	100.0
Occupation	Student	27	56.3
	Civil servant	2	4.2
	Self employed	8	16.7
	Unemployed	11	22.9
	Total	48	100.0
Family Type	Polygamous	20	41.7
	Monogamous	28	58.3
	Total	48	100.0
Tramadol	No	41	85.4
	Yes	5	10.4
	Missing	2	4.2
	Total	48	100.0
Tobacco	No	40	83.3
	Yes	8	16.7
	Total	48	100.0
Cannabis	No	23	47.9
	Yes	25	52.1
	Total	48	100.0
Tranquilizers	No	47	97.9
	Yes	1	2.1
	Total	48	100.0
Cocaine	No	43	89.6
	Yes	5	10.4
	Total	48	100.0
Heroin	No	45	93.8
	Yes	2	4.2
	Missing	1	2.1
	Total	48	100.0
Petrol	No	47	97.9
	Yes	1	2.1
	Total	48	100.0
Inhalant	No	47	97.9
	Yes	1	2.1
	Total	48	100.0
Amphetamines	No	47	97.9
	Yes	1	2.1
	Total	48	100.0
Pentazocine	No	41	85.4
	Yes	6	12.5
	Missing	1	2.1
	Total	48	100.0
Alcohol	No	39	81.3
	Yes	9	18.8
	Total	48	100.0
Codeine	No	45	93.8
	Yes	3	6.3
	Total	48	100.0
Others	No	47	97.9
	Yes	1	2.1
	Total	48	100.0

Table 2: Shows Reasons for Substance Use.

Variables	Groups	Frequency	Percent
Improve Mood	No	35	72.9
	Yes	13	27.1
	Total	48	100.0
	No	35	72.9
Relieve pain	No	44	91.7
	Yes	4	8.3
	Total	48	100.0
Prevent Withdrawal	No	45	93.8
	Yes	2	4.2
	Total	47	97.9
Feel high	No	25	52.1
	Yes	23	47.9
	Total	48	100.0
Urge	No	38	79.2
	Yes	9	18.8
	Missing	1	2.1
	Total	48	100.0
Relieve Tiredness	No	46	95.8
	Yes	1	2.1
	Missing	1	2.1
	Total	48	100.0
Enhance sex	No	45	93.8
	Yes	3	6.3
	Total	48	100.0
Number of substances Used	Single substance use	14	29.2
	Multiples substance use	34	70.8
	Total	48	100.0
Comorbidity	Schizophrenia	7	14.6
	Bipolar disorder	10	20.8
	Mania	3	6.3
	Depression	19	39.6
	Personality disorder	1	2.1
	unspecified psychotic disorder	7	14.6
	Others	1	2.1
	Total	48	100.0
Cause of onset of use	Peer pressure influence	35	72.9
	Curiosity	10	20.8
	Prescribed by a health worker	1	2.1
	Others	1	2.1
	Missing	1	2.1
	Total	48	100.0
Frequency of substance Use	Once daily	4	8.3
	Multiple times daily	29	60.4
	Once weekly	1	2.1
	Multiple times weekly	14	29.2
	Total	48	100.0
Route of substance use	Smoking	32	66.7
	Swallowing	15	31.3
	Inhalation	1	2.1
	Total	48	100.0
Have friends who use	No	45	93.8
	Yes	3	6.3
	Total	48	100.0
Source of substances Street source	No	13	27.1
	Yes	35	72.9
	Total	48	100.0

Friends	No	33	68.8
	Yes	15	31.3
	Total	48	100.0
Others	No	45	93.8
	Yes	2	4.2
	Missing	1	2.1
	Total	48	100.0

Discussion

Findings from this study showed that the majority of the respondents were males (79.2%). This is in keeping with other studies which reported male predominance in psychoactive substance use [13-17]. This could be because the male gender is more adventurous. However, the percentage of female users, 20.8%, though much smaller than that of males in this study appear significant compared to previous studies that showed less than 10% of female drug users [13-16]. This could mean that there is a growing trend of substance use amongst females.

The majority of the drug users in this study, 75%, fell within the age range 18-27 years. This is in consonance with other studies that reported drug use to be commoner amongst people aged 30 years and below [15-18]. It is not surprising because as people grow older and take up increasing family and social responsibilities, the interest in using substances wanes as their concerns may shift to issues regarding survival and wellbeing of the family and integrity.

Cannabis and alcohol ranked highest as the most frequently used drugs in this study. This replicated previous studies that reported cannabis use to be most prevalent amongst respondents, followed by alcohol [14-17]. Another study reported amphetamine to be the next most popularly used drug second to cannabis [18]. Sample differences may account for the differences in results. However, the availability, (despite international and national efforts to reduce cannabis supply) and low cost of procurement could explain why cannabis is commoner in use. Heroin, cocaine, inhalants, amphetamine and pentazocine ranked low in frequency of use. This agrees with the findings in a previous study by Jegede et al. [19].

The majority of the respondents in this study, (70.8%) were multiple substance users. The possible reason for this pattern (poly-drug use) could be due to the fact that most of these drug users were ready to use any available substance at their disposal. These findings are consistent with other studies which reported that drug users often use more than one substance at a time [16-18,20-23]. This may indicate that substance users merely derive pleasure from experimenting with more than one category of substance or that there is easy availability of different substances. As most of the respondents were poly-substance users, they used multiple routes to take substances. Smoking was the route used by most (66.7%) respondents in this study. While 31.3% used oral, 2.1% reported inhalation as their routes of administration. In a study by Maruf et al, the majority of respondents reported smoking as the route of administration [16].

The commonest comorbidity with substance abuse was depressive followed by bipolar affective disorders. This is in support of a control study carried out to determine comorbid psychiatric disorders in substance dependence patients. The researchers found depression followed by bipolar affective disorder to be the commonest [23]. Another study done in a mental health facility in the Northern part of Nigeria also reported depression followed by bipolar affective disorder to be the commonest psychiatric comorbidity [17].

On seeking to determine the reasons for initiation of substance use, this study identified peer pressure, reported by 72.8% of the respondents, as the major influence for the initiation of substance use. This was followed by mere curiosity. This is in keeping with the findings of Parry et al. who identified peer pressure as a major index influencing psychoactive substance use. Another study found peer pressure (67%) and curiosity (15%) as the most common reasons for initiating substance use [24,25].

The majority of the respondents in this study reported being single. This is in keeping with previous studies [13,17,26,27]. Marriage appears to be a protective factor for substance abuse. This may be because of the amount of respect society accords to the marriage institution. There is a high level of freedom associated with singlehood together with the fact that singles may be generally lonely and bored which are known triggers for drug use.

Conclusion

Substance use prevention, treatment and control measures need to pay attention to males and female users, since the prevalence of substance use among female is rising. Such programmes must bear in mind the adolescent and young adult age groups and measures to mitigate the use of common substances such as alcohol and cannabis must continue to enjoy priority. During screening/assessment for substance use, a high index of suspicion for comorbidities especially depression is important. Peer group influence and curiosity which are identified reasons for initiating substance use may be checked by targeted health education.

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