Addiction Research

Pattern and Prevalence of Drug Use among a Population of Mentally III Patients attending the University of Port Harcourt Teaching Hospital

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ABSTRACT

Background: People with mental illness are at increased risk for substance use and individuals who experience a substance use disorder (SUD) during their lives may experience a co-occurring mental disorder and vice versa. The dual diagnosis often affects the illness course, worsens prognosis and presents a management difficulty.

Aim: This study aimed to look at the prevalence of psychoactive use among mentally ill patients at the University of Port Harcourt Teaching Hospital.

Materials and Methods: This was a descriptive cross-sectional study conducted among attendees of Neuropsychiatric Outpatient Clinic of the University of Port Harcourt Teaching Hospital (UPTH). A structured questionnaire covering socio-demographic characteristics and other factors were self-administered to 75 patients diagnosed with various psychiatric disorders by consultants Psychiatrists and attending the out-patient clinic via a systematic random sampling. Ethical approval was obtained from the ethical committee of the University of Port Harcourt Teaching Hospital and all other ethical provisions were followed. Descriptive statistics was used to analyze the data.

Results: Majority of the respondents were male (81%), single (76.0%), unemployed (36.0%), low income earners (73.4%) and between the ages of 21 and 30 (44%).. Majority had tertiary education (58.7%) followed by respondents with secondary education (33.3%). The prevalence of psychoactive substance use was 48% with Cannabis being the most reported consumed drug (24%), cocaine 16%, nicotine 14.7%, heroine 10.7%, alcohol 6.7%, then volatile substance and hypno-sedation 2.7% and 1.3% respectively. Majority of the Respondents had use drugs between 1-10 years.

Conclusion: Drug use is common among the persons suffering from mental disorders in UPTH. Better evaluation for and proper management of this dual diagnosis will help to improve their mental well-being and quality of life.

Introduction

Despite widespread concern and education about drug use, there is little knowledge about the prevalence and pattern of psychoactive substance use among individuals with mental illnesses [1]. For instance, the United Nations noted an increase in the use of psychoactive substances globally, with Nigeria experiencing a steady rise in the prevalence of drug addiction and its effects [2]. Many individuals who develop substance use disorders (SUD) are also diagnosed with mental disorders, and vice versa. Although there are fewer studies on comorbidity among youth, research suggests that adolescents with substance use disorders also have high rates of co-occurring mental illness; over 60 percent of adolescents in community-based substance use disorder treatment programs also meet diagnostic criteria for another mental illness. Data show high rates of comorbid substance use disorders and anxiety disorders, which include generalized anxiety disorder, panic disorder, and post-traumatic stress disorder. Substance use disorders also co-occur at high prevalence with mental disorders, such as depression and bipolar disorder, attention-deficit hyperactivity disorder (ADHD), psychotic illness, borderline personality disorder, and antisocial personality disorder. Patients with schizophrenia have higher rates of alcohol, tobacco, and drug use disorders than the general population.

Compared to people without bipolar or schizophrenia disorders, more than half of those with schizophrenia or bipolar affective disorder (BD) also present with lifetime use of psychoactive substances [3]. This phenomenon raises the possibility that there are additional risk factors for using psychoactive substances, particularly among those with schizophrenia and bipolar disorder (BD), in addition to those that affect the general population. These new elements could be connected to the reward pathway, which is faulty in patients with schizophrenia and bipolar disorder who also use drugs.

Although both schizophrenia and bipolar disorder (BD) use substances, the sub-pathways in the reward system may be different in the two diseases [1]. Studies have identified the pathways involved in the use of psychoactive substances in schizophrenia and bipolar disorder, but they have not yet identified which of these is more likely to predispose to the use and abuse of psychoactive substances [1,4,5]. Assume that the anomalies in the reward subpathway are distinct in schizophrenia and bipolar disorder (BD) and affect the risk of substance use in both conditions differently. If so, it may follow that there may be a considerable difference in the rates of substance usage in BD and schizophrenia [1]. From the aforementioned, it is crucial to determine whether this difference occurs.

In Nigeria, several studies have looked at the use of psychoactive substances among various groups, including hospital-based samples, communities, drivers, and convicts [1,6]. A review of the literature revealed, however, that little research had been carried out among individuals with serious mental illness (SMI), and no published studies were discovered that compared substance use among patients with schizophrenia and BD in Nigeria [7-9]. Psychoactive drug usage continues to be a problem in the care of people with schizophrenia and BD [10]. Therefore, future strategies should include regular substance use screening at the outpatient department to stem the flow of this threat.

This study aimed to understand the drug use patterns of a population of mentally ill patients enrolled at the University of Port Harcourt. This study used descriptive analysis to derive conclusions from primary sources to help the researchers examine the drug use patterns of a population of mentally ill patients enrolled at the University of Port Harcourt.

Materials and Methods

This was a descriptive cross-sectional study conducted among attendees of Neuropsychiatric Outpatient Clinic of the University

of Port Harcourt Teaching Hospital. A structured questionnaire covering socio-demographic characteristics and other factors were self-administered to patients diagnosed with various psychiatric disorders by consultants Psychiatrists and attending the outpatient clinic via a systematic random sampling. Ethical approval was obtained from the ethical committee of the University of Port Harcourt Teaching Hospital and all other ethical provisions were followed. Descriptive statistics was used to analyze the data.

Results and Data Analysis

Descriptive Statistics Analysis of the sample of people with mental illness (Socio- Demographic Analysis)

 Table 1: Socio-Demographic and Prevalence analysis of people with mental illness.

S/N	Variables	Sub-variables	Frequency
3/11	variabits	Sub-variables	(Percentage)
1		10-20yrs	7 (9.3%)
		21-30yrs	33 (44%)
	Age (Years) of the respondent	31-40yrs	24 (32%)
		41-50yrs	7 (9.3%)
		51-60yrs	2 (2.7%)
		>60yrs	2 (2.7)
2	Gandar	Male	61 (81%)
2	Gelidei	Female	14 (19%)
	Tribe (Ethnicity)	Igbo	28 (37.3%)
		Hausa	7 (9.3%)
		Yoruba	2 (2.7%)
3		Ikwerre	8 (10.7%)
		Ogoni	1 (1.3)
		Kalabari	1 (1.3%)
		Others	28 (37.3%)
		Primary	3 (4.0%)
4	Highest Level of Educational	Secondary	25 (33.3%)
		Tertiary	44 (58.7%)
		None	3 (4.0%)
	Marital status	Single	57 (76.0%)
		Married	14 (18.7%)
5		Divorced	1 (1.32%)
		Separated	2 (2.7%)
		Widowed	01 (1.3%)
	Religion	Christianity	70 (93.3%)
6		Islam	4 (5.3%)
0		Traditional	1 (1.3%)
		None	0 (0%)
	Employment Status	Unemployed	27 (36.0%)
		Student	14 (18.7%)
-		Apprentice	3 (4.0%)
/		Self-employed	25 (33.3%)
		Employed by govt	3 (4.0%)
		Employed by Private	2 (2.7%)
	Occupation	Unskilled Occupation	21 (22 69/)
8		Skilled Occupation	21(22.6%)
		Professional	23(24.7%)
		Occupation	23 (24.7%)
		No Response	20 (28.0%)
		0-50,000 Naira	55 (72 40/)
9	Average Monthly Income level	51-100,000Naira	55 (75.4%) 17 (24.7%)
		101-200,000Naira	1/(24.7%)
		201-500,000 Naira	2(2.7%)
		above	0 (0%)

Table 1 presents socio-demographic and prevalence data for a sample of people with mental illness. The table includes variables

such as age, gender, tribe (ethnicity), highest level of education, marital status, religion, employment status, occupation, and average monthly income level.

In terms of age, the majority of the respondents (44%) are between the ages of 21 and 30, followed by those between the ages of 31 and 40 (32%). There are relatively fewer respondents in the other age categories. With regard to gender, the majority of the respondents are male (81%), while a smaller percentage are female (19%).

The table also includes information on the respondents' tribes or ethnicities. The largest percentage of respondents are Igbo (37.3%), followed by those who belong to other tribes or ethnicities (37.3%). There are smaller percentages of respondents from other tribes, such as Hausa (9.3%), Yoruba (2.7%), Ikwerre (10.7%), Ogoni (1.3%), and Kalabari (1.3%). There are also other relatively fewer respondents in the other tribe categories

The highest level of education for the majority of respondents is tertiary (58.7%), followed by secondary education (33.3%). A small percentage of respondents have primary education (4.0%), and an even smaller percentage have no education (4.0%).

In terms of marital status, the majority of respondents are single (76.0%), followed by those who are married (18.7%). There are smaller percentages of respondents who are divorced (1.3%), separated (2.7%), or widowed (1.3%). The majority of respondents identify as Christian (93.3%), with a smaller percentage identifying as Muslim (5.3%) or traditional (1.3%). There are no respondents who identify as having no religion. With regard to employment status, the largest percentage of respondents are unemployed (36.0%), followed by those who are self-employed (33.3%), students (18.7%), or employed by the government (4.0%). A small percentage of respondents are employed by the private sector (2.7%), or are apprentices (4.0%).

The table also includes information on occupation, with the largest percentage of respondents in unskilled occupations (22.6%), followed by those in skilled occupations (24.7%) or professional occupations (24.7%). There is also a large percentage of respondents with no response in this category (28.0%). Finally, the table includes data on average monthly income level, with the majority of respondents earning between 0 and 50,000 Naira (73.4%), followed by those earning between 51,000 and 100,000 Naira (24.7%). There is a small percentage of respondents earning between 101,000 and 200,000 Naira (2.7%), and no respondents earning above 500,000 Naira.

Table 2: Current illness and Medication History analysis of people with mental illness.

S/N	Variables	Sub-variables	Frequency (Percentage)
1	Age at onset of current mental illness	<20yrs 21-40yrs 40-60yrs No response	23 (30.7%) 47 (62.7%) 2 (2.7%) 3 (4.0%)

2	Duration of diagnosis of mental illness	<5 years 5-10yrs 11-20yrs 21-30yrs >30yrs No response	24 (32%) 15 (20%) 7 (9.3%) 1 (1.3%) 2 (2.7%) 23 (30.7%)
3	Do you have any medical conditions?	Yes No No response	18 (24.0%) 45 (60.0%) 5 (6.7%)
	If Yes state the illness	Hypertension Diabetics Asthma No response	7 (9.3%) 1 (1.3%) 1 (1.3%) 56 (75.3%)
4		Anxiety disorder Depression	16 (21.3%) 19 (25.3%)
	What Mental illness were you diagnosed with?	BAD Substance abuse Sleep disorder Schizophrenia Personality disorder No response	12 (16.0%) 9 (12.0%) 1 (1.3%) 11 (14.7%) 1 (1.3%) 6 (8.0%)
5	How long ago was it diagnosed of the mental disorder?	0-12 months Above 1yr No Response	16 (21.3%) 18 (24.0%) 41 (2.7%)
6	Mode of getting medication:	Self-Purchase Government None response	46 (61.3%) 16 (21.3%) 13 (17.3%)
7	Any other source of financial support:	Relative Friends No Response	56 (74.7%) 13 (17.3%) 6 (8.0%)
8	Domestic situation: Living with partner	Living with partner Living with family Living with friends Living alone Others No response	12 (16.0%) 38 (50.7%) 7 (9.3%) 10 (13.3%) 5 (6.7%) 3 (4.0%)

From Table 2, it can be observed that the age of onset of mental illness was the highest for respondents from 21 to 40 years, which had the highest percentage of 44% representing the age level with the highest onset of mental illness; while above 60 years old had the lowest respondent representation with just 2%. The duration of diagnosis of mental illness was majorly within the last 5 years, which had the highest percentage representation of 32%. The duration of treatment of mental illness had majorly within the last 5 years with the highest percentage representation of 34.7%. In addition, followed by others.

Respondents with no medical condition constituted the majority of the sample with 60.0% forming this group. Mode of getting medication for the respondents was majorly those gotten by self as they had the highest percentage representations of 61.3%. The other sources of financial support for the respondents with mental illness are majorly relatives. This formed 56% of the sample. While the Domestic situation for the respondents with mental illness are those majorly living with family this formed 50.7%.

Table 3: Mental illness and Substance Abuse/Addiction.

S/N	Variables	Sub-variables	Frequency Percentage)
1	Do you take any psychoactive	Yes	36 (48.0%)
	substance (hard drugs)?	No	18 (24.0%)
		No response	21 (28.0%)
2	Psychoactive Drug Use	Alcohol	5 (6.7%)
		Nicotine	11 (14.7%)
		Cannabis	15 (20%)
		Cocaine	12 (16%)
		Heroin	8 (10.7%)
		Hypno-sedation	1 (1.3%)
		Volatile substance	2 (2.7%)
		No response	21 (28%)
	How long have you used the psychoactive substance	Less than 10yrs	36 (48%)
3		Above 10yrs	9 (12%0
		No response	30 (40%)
		Yes	26 (34.7%)
4	Reason To Increase Drug Quantity	No	26 (34.7%)
		No response	23 (30.7%)
		Yes	27 (36%)
5	Withdrawal Symptoms	No	27 (36%)
		No response	21 (28%)
6	Problem with Law Enforcement	Yes	14 (18.7%)
		No	41 (54.7%)
		No response	19 (25.3%)
7	Risky Drug Behaviour	Rape	6 (8%)
		Unprotected sex	16 (21.3%)
		Gambling	13 (17.3%)
		Theft	2 (2.7%)
		Middle shell	3 (4%)
		Thuggery	2 (2.7%)
		Bullying	2 (2.7%)
		Fraudster	1 (1.3%)
		No response	30 (40%)

The table further reveals that respondents with mental illness that take psychoactive substances (hard drugs) had highest percentage representations of 48% and those that do not had percentage representations of 24%. Respondents were mainly on psychoactive drugs like Cannabis 24%, cocaine 16%, nicotine 14.7%, heroine 10.7%, alcohol 6.7%, then volatile substance and hypno-sedation 2.7% and 1.3% respectively. Respondents who have used psychoactive substances (hard drugs) between 1- 10 years had the highest percentage representations of 48% while those above 10 years had a percentage representation of 12%.

Respondents who have had to increase the quantity and those who did not have to increase the quantity of the substance use both had the same percentage representations of 34.7%. Likewise, respondents who had withdrawal symptoms and those who did not both had the same percentage representations of 36%. Respondents who did not have problems with law enforcement agencies had the highest percentage representations of 54% while those who did had a percentage representation of 18.7%. Respondents reported on engaging in drug risky behaviors like unprotected sex 21.3%, gambling 17.3%, rape 8%, middle shell 4%, theft, thugery and bulling 2.7%, then fraudulent activities 1.3%.

Discussion

The focus of this study discussion will be on addressing questions

regarding the drug use patterns of a group of mentally ill patients enrolled at the University of Port Harcourt. To achieve the objective of this study, this study undergoes a descriptive cross-sectional study in the participants of the Neuropsychiatric Outpatient Clinic at the University of Port Harcourt Teaching Hospital. As a result, patients attending the outpatient clinic whose consultant psychiatrists had diagnosed one or more psychiatric disorders were randomly selected to complete a structured questionnaire about socio-demographic features and other criteria.

From the study, the common reported mental disorders include depression, anxiety, BAD, schizophrenia, and substance use disorders. A person has one or more mental or drug use disorders, according to Degenhardt et al. [11], who also confirmed that this number is about 1 in 7. Around 1 in 4 individuals with serious or severe mental illnesses (SMI) also have an SUD. Serious or severe mental illnesses include major depression, schizophrenia, and bipolar disorder, and other mental disorders that cause serious impairment. Data from a large nationally representative sample suggested that people with mental, personality, and substance use disorders were at increased risk for nonmedical use of prescription opioids. In this study, use of heroine among the respondents was common. This is in line with other research, which indicates that 43 percent of people in SUD treatment for nonmedical use of prescription painkillers have a diagnosis or symptoms of mental health disorders, particularly depression and anxiety.

According to this study's findings, the mental disease affects people of all ages, according to the descriptive statistics analysis of the sample of mentally ill individuals. Although drug use and addiction can happen at any time during a person's life, drug use typically starts in adolescence, a period when the first signs of mental illness commonly appear. This supports the finding in this study where for majority of the respondents, onset of mental illness was less than 20 years 23 (30.7%) and between 21 to 40 years constituting 47 (62.7%). According to Ahmed et al. [12], the opposite asserts that adults between the ages of 21 and 30 are more likely to suffer from mental diseases.

The brain continues to develop through adolescence. Circuits that control executive functions such as decision-making and impulse control are among the last to mature, which enhances vulnerability to drug use and the development of a substance use disorder. Early drug use is a strong risk factor for later development of substance use disorders, and it may also be a risk factor for the later occurrence of other mental illnesses. However, this link is not necessarily causative and may reflect shared risk factors including genetic vulnerability, psychosocial experiences, and/or general environmental influences. For example, frequent marijuana use during adolescence can increase the risk of psychosis in adulthood, specifically in individuals who carry a particular gene variant.

It is also true that having a mental disorder in childhood or adolescence can increase the risk of later drug use and the development of a substance use disorder. Some research has found that mental illness may precede a substance use disorder, suggesting that better diagnosis of youth mental illness may help reduce comorbidity. One study found that adolescent-onset bipolar disorder confers a greater risk of subsequent substance use disorder compared to adult-onset bipolar disorder. Similarly, other research suggests that youth develop internalizing disorders, including depression and anxiety, prior to developing substance use disorders.

In light of the psychoactive substances utilized by the study's subjects, it is clear that these substances come in liquid, powdered, and plant forms. Alcohol, nicotine, cannabis, cocaine, heroin, and hypno-sedation are the psychoactive substances reported in this study. Cannabis appears to be the psychoactive substance that people who participated in this research use the most frequently, accounting for 20% of all psychoactive substances used. This supports the conclusion of the National Institute on Drug Abuse [13] report, which was published to rank the most often used illicit substances. According to the study, marijuana (also known as cannabis) is one of the most used substances in the US, and young people frequently use it. As a result, in 2021, 35.4% of young adults (18 to 25) reported consuming marijuana in the previous year, totaling 11.8 million people. Furthermore, 6.3% of students in the 12th grade in 2022 reported smoking marijuana daily, while 30.7% said they had used it the previous year.

The use of psychoactive drugs is a factor in several mental diseases linked to it. For instance, a 2019 study by Gobbi et al. [14] confirms that regular cannabis usage can increase one's risk of anxiety or depression. Moreover, there is a connection between cannabis use and the risk of developing schizophrenia or psychosis [15]. This study identified several mental diseases linked to people's usage of psychoactive drugs. Among the illnesses addressed are anxiety disorders, depression, substance misuse, sleep disorders, schizophrenia, and personality disorders. Depression is the most common mental disorder among those studied, with a 21% prevalence, according to the report, and is the main factor in why people use psychoactive substances mainly to self-medicate their mood and feeling.

The risky behaviour that users of psychoactive substances are exposed to is another factor examined in this study. According to this study, persons who use psychoactive drugs are more likely to engage in dangerous behaviours like rape, unprotected sex, gambling, theft, middle shell, thugs, and bullying. Unprotected intercourse has the highest percentage (17%) of these dangerous behaviours. This implies that people in this study are most likely to engage in unprotected intercourse following the use of psychoactive substances. This agrees with the research done by Ssekamatte et al. [16] to investigate "Multiple sexual partnerships and associated determinants among adolescent psychoactive-substance users in informal communities in Kampala, Uganda." The authors claimed that using psychoactive substances increases the risk of unprotected sexual contact with people whose health condition is unknown and, as a result, sexually transmitted illnesses, especially among young people. The preceding is because drug usage enhanced sexual excitement and lowered inhibitions, which led to a decrease in condom use, and was particularly extensively documented in the context of sexual health among males who had sex with men [17].

Conclusion

A community of mentally ill patients attending the University of Port Harcourt was the subject of this study, which looked at drug use patterns. The participants of the Neuropsychiatric Outpatient Clinic at the University of Port Harcourt Teaching Hospital participated in a descriptive cross-sectional study for this research to fulfill its objectives.

All age groups are affected by mental illness, according to the study's findings. By extension, every person on the planet is susceptible to mental illness. Consequently, there can be no health without mental health." All people will struggle with their mental health at some point in their lives, even if they do not all develop a mental disease. In addition, this study confirms that although people use many other psychoactive substances, cannabis appears to be the one that is used the most frequently. Consistent cannabis usage may raise your risk of anxiety or depression, according to this study's findings. Furthermore, a link wager is available especially among young people, psychoactive substances increase the likelihood of unprotected sexual contact with others whose health status is unknown, resulting in sexually transmitted illnesses.

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