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Facility-Based Focus Group Exploration of Psychoactive Substance Use

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Abstract

The abuse of psychoactive substances significantly impacts individual behavior and perception, posing a substantial public health challenge, particularly in psychiatric hospitals, and negatively affecting treatment outcomes. This study employs a facility-based, cross-sectional design utilizing focus group discussions to gain insights into attitudes, beliefs, and practices. The study examined subjects' awareness of substance use, its consequences, and the relationship between psychoactive substance use and academic attainment. The results are as follows: N = 55; 76.4% (n = 44) are male and 23.6% (n = 23) are female. The mean age is 30.87 years with a standard deviation of 8.25. The modal age of onset for substance use is 17 years, with a mean of 18.18 and a standard deviation of 7.58. The presence of mental illness resulting from psychoactive substance use was observed in 58.2% (n = 32) of cases. The educational status of subjects was significantly lower than that of their parents, with Pearson $X^2 = 49.8$, df = 24, and p = 0.001 with a 95% confidence interval. The majority of participants indicated that they commenced substance use in schools, and the behavior continued despite awareness of the consequences, as evidenced by 94%. Consequently, educational institutions should implement extensive substance use preventive strategies, such as mandatory drug use screening prior to university admission, regular random drug testing within the university premises, and zero tolerance to substance-indulging behaviors.

Keywords: *Exploration, Facility-Based, Focus-Group, Psychoactive Substance.*

Introduction

Substance use, particularly the misuse and abuse of psychoactive substances, has a profound impact on individual behavior and perception. These substances affect the central nervous system, leading to alterations in cognitive processes and behavioral responses to environmental stimuli. Such changes can result in significant and far-reaching consequences for individuals and society [1, 2]. Understanding these effects is essential for promoting informed decision-making and public health initiatives. Recognizing this influence is crucial in comprehending the challenges individuals encounter and effectively addressing issues related to substance use. Substance use disorder is characterized by a problematic pattern of substance use that results in considerable distress or impairment in daily functioning. Psychoactive substances can elicit substantial changes in behavior, including heightened aggression and violence or, alternately, passivity and reckless behavior. Furthermore, these substances cannot only modify physical strength and sexual performance but can also compel individuals to engage in actions that profoundly contradict their personal values [3].

Understanding these effects is critical for making informed decisions regarding substance use. Acknowledging the emergence of substance use disorder necessitates an awareness of the significant risk and protective factors that influence drug misuse behaviors

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among youth. The complexities surrounding psychoactive substance use and its repercussions require ongoing examination, particularly concerning protective factors that may mitigate associated risk demand ongoing investigation, especially regarding protective factors that may reduce risks [4]. In public health, focus groups are often employed as an efficient and cost-effective method to collect data from specific segments of the target population, thereby meeting program objectives. To gain a deeper understanding of the attitudes, beliefs, practices, and values associated with a particular subject, such as psychoactive substance use, the process involves the meticulous planning and facilitation of a series of group discussions among individuals in similar circumstances. Substance abuse poses a significant public health challenge, particularly in Mental health facilities, it has a negative impact on the treatment outcome. Over 50% of individuals with mental illness present with co-occurring substance use disorder, highlighting the need for thorough screening for substance use in patient evaluations. Substance use frequently coexists with mental illness, where substances may initially function as a self-medication strategy to alleviate symptoms of mental disorders, thereby potentially heightening susceptibility to mental health issues. The interplay between substance use and mental health is influenced by causal relationships, correlation, and overlapping risk factors [5]. Addiction is characterized by a loss of control over drug use, initially thought to stem from disruptions in subcortical reward circuits and the prefrontal cortex. The prefrontal cortex plays a crucial role in modulating behaviors by regulating the limbic system and reward regions and contributing to higher-order executive functions such as self-control, salience attribution, and awareness [6]. Problematic behaviors, such as substance abuse, gambling, aggression, violence, and engagement in high-risk sexual activities, are closely associated with impulsivity. Impulsivity is characterized as "a tendency for swift and spontaneous reactions to internal or external stimuli, frequently occurring without consideration for the potentially adverse consequences that may affect the individual acting impulsively or others".

Research examining impulsive individuals suffering from drug addiction confirm the existence of a correlation between impulsivity and substance abuse. Those who engage in the abuse of multiple substances demonstrate a higher degree of impulsivity in comparison to individuals who abuse only a singular type of drug. Furthermore, individuals with a history of substance use exhibit a propensity for immediate gratification when confronted with various reward options, even if the rewards are minimal [7]. Impulsivity is a comprehensive and complex construct typically characterized in two ways. Impulsive action that is marked by a deficiency in behavioral inhibition, occurring without consideration of potential adverse outcomes. Secondly, impulsive choice that is characterized by a lack of self-control or an inability to postpone gratification [8].

Significance of Study

Nigeria encounters considerable public health challenges attributed to substance abuse, which warrants focused attention on the interplay between substance use and mental health disorders, the vulnerability of adolescents, the imperative for informed policy and interventions, and the enhancement of scientific understanding within this field. The risk and initiation of substance use are markedly elevated among peers in academic environments, particularly during university years. Consequently, targeted interventions are essential to alleviate risks correlated with substance use, particularly during pivotal developmental phases. Furthermore, substance abuse continues to pose a significant challenge despite the implementation of government policies, drug legislation, preventive strategies,

and regulatory measures. Initiatives aimed at combating substance use should focus on adolescents, young adults, students, educational institutions, parents, and religious organizations. The reinforcement of drug policies and legislation, the identification of associated risk factors, and addressing the sources of drug supply represent critical preventive measures [5].

Study Objectives include assessing the socio-demographic profile and clinical metrics of the respondents, to examined subjects' awareness of substance use, risks and its consequences, the relationship between psychoactive substance use and academic achievement, and to evaluate the utilization of psychoactive substance use, and the presence or absence of mental illness.

Methodology

Study Design – This is a cross-sectional, descriptive, facility-based focus group discussion, a method carefully selected for its ability to provide comprehensive insights into the target population's perspectives on psychoactive substance use [9].

Study Location - Research was conducted in Abuja, specifically at the Karu General Hospital of the Federal Capital Territory (FCT), a key public health facility in the North Central Nigeria. This location was chosen for its accessibility and relevance to the study's focus on psychoactive substance use.

Study Population- Subjects are persons in inpatient treatment, 58 Male and female of different background, 5 dropped out due to [specific reasons]-living a total of 55 study sample.

Procedure - Cross sectional FGD with Group Size of 9 participants per group, 5 homogeneous group is set, with 4 groups containing male only participants and a single group of 9 female participants. Each discussion lasted two hours and the study was conducted over a period of three days. The methodology involves organizing and conducting a series of group discussions, and recording this information from focus groups on paper, gathering insights into knowledge, attitudes, and behaviors towards psychoactive substance use through these discussions. Materials: The materials used included pens and notepads for participants, consent forms, a brief socio-demographic questionnaire, and refreshments to ensure comfort and relaxation during the discussions. The sessions began with a 5-minute welcome and introduction period for both the facilitator and participants, alongside a brief explanation of the purpose of the focus group discussion aimed at gathering insights into their knowledge, attitudes, and behaviors concerning psychoactive substance use. Ground rules were established for a respectful and open discussion, emphasizing honesty, orderliness in speaking, and respect for differing viewpoints. The consent form and a brief socio demographic questionnaire were applied to the subjects before discussions. Also, a semi-structured question guide was formulated for the facilitator, containing lists of items for discussion.

Inclusion and exclusion criteria – only those who signed the informed consent were included in the study, subjects are those in patient treatment at the facility. None of the individuals are excluded.

Results

The respondents' (N 55) age ranged from a minimum of 19 years to a maximum of 58 years, with a mean of 30 years and a standard deviation of 8.25. The study revealed that the age at which the respondents first used substances was 17 years, as seen among a more significant percentage, with a mean age of 18 years and a standard deviation of 7.580. These findings, detailed in Table 1 and Figure 1, have important implications for understanding the patterns of substance use initiation. The t-test demonstrated a significant difference between the group's mean age and the age at which psychoactive substance use began. These

findings are statistically significant, with an independent t-test value of 7.887, a p-value of 0.05, and a 95% confidence interval. Refer to Table 2 below.

Table 1. Descriptive Statistics

Age	N	Minimum	Maximum	Mean	Std. Deviation
Present Age	55	19.0	58.0	30.87	8.248
Age of First PAS Use	44	8	55	18.18	7.580

Foot Note; Table representing the Mean age of the subjects and that of their parents.

Table 2. T-Test of Independent Samples

Group	N	Mean	df	t-value	p-value	Remark
Present Age	55	30.873	97	7.887	0.001	Significant
Age of Onset of Substance Use	44	18.159				

Foot Note; Table showing the Significant T-test value of the Two Mean (Subjects and Parents)

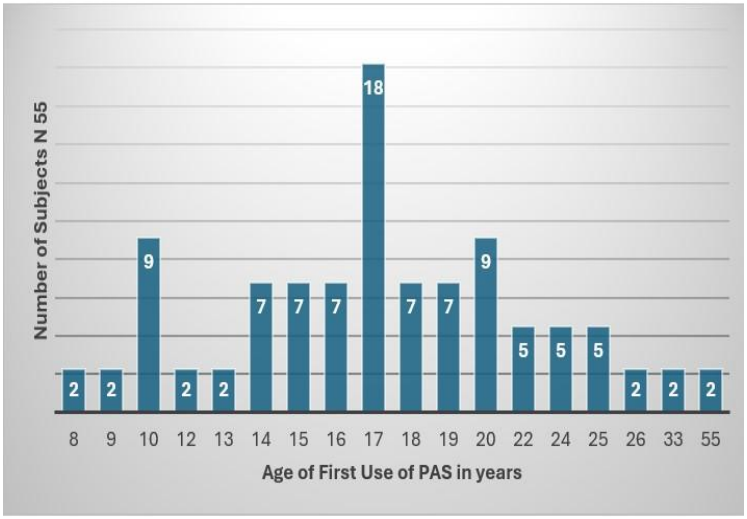

Figure 1. Frequency n (55) of Age of Onset of PAS Use in Years, the Modal Age is 17years.

Gender, Marital, and Employment Status

The gender distribution of the respondents is as follows: 42 (76%) are male, 9 (16%) are female, and 46 (84%) are single or unmarried, while 9 (16%) are married. Most participants are engaged in various jobs, with N31 (56%) employed and N23 (42%) unemployed.

Clinical Correlates: Awareness of psychoactive substance use, associated risks and consequences, and mental health issues

Ninety-four percent (N=52, 94%) are aware of psychoactive substance use and its consequences, and (N=43, 93%) reported knowledge of the significant risks associated with this use. Mental and behavioral disorders related to psychoactive substance use are

present among (N=32, 58%) of those receiving treatment at the time of the research. See Figure 2.

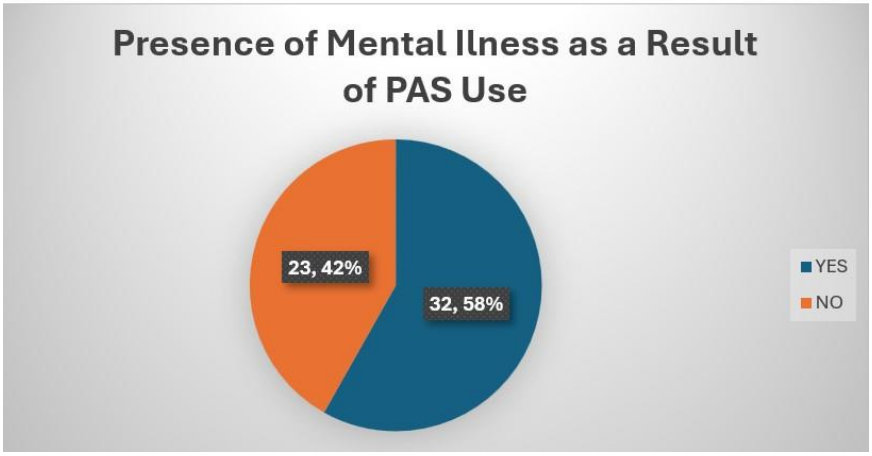

Figure 2. The Presence of Mental Illness due to Psycho Active Substance Use

Many indicated that the availability of substances and peer influence are the main reasons for starting to use substances. Cannabis remains the most commonly used substance, as indicated by (N=18, 32.7%), followed by tobacco use (N=11, 20%) and alcohol (N=9, 16.4%). Most respondents reported their favorite substance as Cannabis (N=14, 25.5%), followed by Crack Cocaine (N=9, 16.4%), Tobacco (N=4, 7.3%), New Psychoactive Substances (NPS-Loud and Arizona) (N=4, 7.3%), and Alcohol (N=2, 3.6%). The substances most difficult to abstain from are cannabis (N=14, 25%) and crack cocaine (N=14, 25%), with 50% of participants reporting challenges, followed by cigarettes (N=5, 9.1%) and alcohol (N=3, 5.5%). Eighty-six percent (N=38, 86.4%) reported having attempted to abstain from using substances in the past without success, while (N=6, 13.6%) have never tried to abstain. See Table 3-8.

Table 3. Reasons for Taking Psychoactive Substances

S/N	Values	Frequency	Percentage
1	For Fun	9	19.1%
2	Influence from friends/Peer Pressure	7	14.9%
3	No specified reason	11	23.4%
4	Death of a loved one	1	2.1%
5	Curiosity	4	8.5%
6	For Relaxation/recreation	9	19.1%
7	For Energy to work harder	2	4.3%
8	Depression	3	6.4%
9	For protection from Pile	1	2.1%
	Total	47	100%

Foot Note: Clinical Correlates of Psychoactive Substance Use FGD N=55

Table 4. Favorite Psycho Active Substance use

S/N	Values	Frequency	Percentage
1	Cannabis/ Marijuana	14	25.5%
2	Cigarettes	4	7.3%
3	Codeine	2	3.6%
4	Crack cocaine	9	16.4%
5	Alcohol	2	3.6%
6	Crystal Meth/molly	2	3.6%
7	NPS Loud &Arizona	4	7.3%
8	None	7	12.7%
9	Rohypnol Refnol	1	1.8%
10	Blunt	1	1.8%
	Total	46	83.6%
	Missing	9	16.3%
	Total	55	100%

Table 5. The Most Challenging Substance to Stop

S/N	Values	Frequency	Percentage
1	Cannabis/Marijuana	14	25.5%
2	Crack cocaine	14	25.5%
3	Crystal meth	2	3.6%
4	Alcohol	3	5.5%
5	Codeine	1	1.8%
6	Cigarettes	5	9.1%
	Total	39	70.9%
	Missing system	16	29.1%
	Total	55	100.0%

Table 6. Risk Factors Associated with Substance Us

S/N	Values	Frequency	Percentage
1	It can cause Dementia	3	5.5%
2	Turns youths to thief	1	1.8%
3	Can bring sickness/health issues	14	25.5%
4	Causes Over dependence	2	3.6%
5	Drugs and substances can damage the brain and cause mental illness	11	20.0%
6	Can lead to Poverty	4	7.3%
7	Lead to arrest by police/NDLEA	2	3.6%
8	Not sure of a risk factor	10	18.2%
9	Endangers the future of youths	7	12.7%
10	One can be poisoned	1	1.8%
	Total	52	100.0%

Foot Note: Clinical Correlates of Psychoactive Substance Use FGD N=55

Table 7. Perceived Consequences from PAS Use

S/N	Values	Frequency	Percentage
1	Mental health issues	29	52.7%
2	Psychosis	3	5.5%
3	Family issues	3	5.5%
4	Health issues	12	21.8%
5	Death	1	1.8%
6	Memory loss	2	3.6%
7	Eating too much	1	1.8%
8	Financial challenges	2	3.6%
9	Regrets/remorse	2	3.6%
	Total	55	100.0

Foot Note: Clinical Correlates of Psychoactive Substance Use FGD N=55

Table 8. Number of Psychoactive Substances Used

S/N	Values	Frequency	Percentage
1	Those taking single (only one) PAS	15	27.3%
2	Those Taking Multiple PAS	28	50.9%
	Total	43	78.2%
	Missing	12	21.8%
	Total	55	100%

The first instance of substance use predominantly occurred during secondary school period as reported by 45% of the respondents. Additionally, 32% indicated that their initial use took place at home or in the home environment, while 10% stated they first used substances at the university. Among the participants, N=25 (45%) have completed tertiary education, while N=12 (22%) dropped out of university due to issues related to substance use. Furthermore, N=6 (10%) holds postgraduate degrees, and N=8 (14%) have completed secondary education. See Table 9 & 10.

Table 9. Subject's Educational Status

S/N	items	Frequency	Percentage
1	Completed University Education	25	45.5%
2	Secondary Education completed	9	16.4%
3	Post-university Education	6	10.9%
4	Dropped out of the University	11	20.0%
5	Islamic Education	1	1.8%
	Total	52	94.5%
	Missing value	3	5.5%
	Total	55	100.0%

Table 10. Parents' Education Status

S/N	items	Frequency	Percentage
1	Completed University Education	24	43.6%
2	Secondary Education completed	8	14.5%
3	Post-university Education	14	25.5%
4	Dropped out of the university	2	3.6%
5	Islamic Education	3	5.5%
6	Primary School completed	1	1.8%
7	Secondary School incomplete	1	1.8%
	Total	53	96.4%
	Missing value	2	3.6%
	Total	55	100.0%

Participants' Educational Status Compared to that of their Parents

Forty-five percent (45%) of the subjects hold a university degree, while 43% of their parents do. Eleven percent (11%) have post-university degrees, compared to 25% of their parents. Additionally, 20% dropped out of university due to substance-related issues, whereas only 3.6% of their parents faced similar problems. Notably, the educational status of the subjects is significantly lower than that of their parents, with Pearson $X^2 = 49.8$, df = 24, and p = 0.001 at a 95% confidence interval.

Discussion

The age of onset of psychoactive substance use is observed to be 17 years of age in most respondents in this study. This data reveals a concerning trend, with most respondents beginning notably early. This fact is significant concerning the adolescent addiction theory; given their ongoing brain development, drug use during adolescence can lead to long-lasting changes in the brain [4, 10]. Table 2 presents the results of a t-test comparing the respondents' mean present age with their mean age at the onset of psychoactive substance use. Since the p-value is less than 0.05, there is a significant difference between the present age and the age at which respondents began using psychoactive substances. Consequently, we reject the null hypothesis in favor of the alternative hypothesis; therefore, there is a notable difference in the mean age of the respondents and their mean age at the onset of psychoactive substance use. There is strong evidence that alcohol, tobacco, and cannabis dependence problems manifest more quickly when drug use begins before adulthood. Several human research studies have examined early-onset difficulties related to drug, alcohol, tobacco, and cannabis use, with strong evidence. This highlights the need for further research to understand this phenomenon fully [1, 11].

Risk-taking, to some degree, is a standard part of teenage development. While the urge to explore new things and gain independence is praiseworthy, it can also lead to drug experimentation. It's crucial to understand that the brain's regions responsible for judgment and decision-making don't fully mature until the early to mid-20s [1, 4]. This means that teenagers may struggle to assess the risks of drug use and are particularly vulnerable to the influence of their peers [1, 12]. Researchers from the National Institute on Drug Abuse's Adolescent Brain Cognitive Development (ABCD) study are using state-of-the-art imaging technology to examine how childhood experiences—including drug use—interact with a child's evolving biology to influence brain development and various outcomes,

including social, behavioral, academic, and health. The study's findings have the potential to significantly influence policy and practice, providing critical new insights into the fundamental elements of adolescence that shape a person's future. Adolescent brain examined by MRI revealed early indications of internalizing and externalizing symptoms that are associated with psychoactive substance use behaviors and mental health difficulties [1, 13].

The knowledge and awareness of the risks and consequences of psychoactive substance use: In this study, 94 % of the subjects are aware of psychoactive substance use along with its risks and consequences. However, drug use persists despite this high level of awareness; this is a pressing issue that requires urgent attention. This can be attributed to theories explaining the concomitant loss of control in addiction. The loss of control over drug use is considered the hallmark of addiction. It is caused by abnormalities in the prefrontal brain, subcortical reward networks, and leads to the iRISA syndrome of impaired response inhibition and salient attribution in substance use. The prefrontal cortex is essential for behavior modification, controlling the limbic system, and rewarding areas involved in higher-order executive processes such as self-control, salience attribution, and awareness. This underscores the importance of self-control in addiction [14]. Similar theories of addiction among digital addicts depict the iRISA syndrome, characterized by severe and chronic effects on neurotransmitter systems, akin to those seen with chronic psychoactive substance use. It disrupts the cellular and molecular mechanisms of the GABAergic and glutamatergic neurotransmitter systems, thereby altering dopamine and serotonin synaptic plasticity. These alterations, crucial for impulse control, memory, and sleep function, show measurable changes. The full spectrum of behavioral symptoms in digital addicts, including eating disorders and withdrawal from outdoor and social activities, highlights the complexity of the issue. Evidence pointing to dysfunctional melatonin and vitamin D metabolism in digital addicts should be taken into account, necessitating a comprehensive approach to treatment [15].

It's concerning that a staggering 86% of respondents have attempted to abstain from substance use, yet without success. This underscores the urgent need for effective intervention strategies. Only 13.6% have never tried to quit. The most difficult substances to abstain from are cannabis and crack cocaine, with 50% of participants reporting challenges, followed by cigarettes (9.1%) and alcohol (5.5%). Studies of the direct effects of drug exposure assessed the effects of stimulant and non-stimulant drugs on the prefrontal cortex activity. The model predicts drug-induced activity enhancements in the prefrontal cortex areas involved in drug-related processes, including emotional responses, automatic behaviors, and higher-order executive involvement. For example, medial Occito Frontal Cortex (mOFC) and ventromedial prefrontal cortex activities in craving, Occito Frontal Cortex OFC in drug expectation, ACC (anterior cingulate cortex) in attention bias, and DLPFC in forming drug-related working memories [14].

Adolescents are more prone to addiction due to factors such as peer pressure, curiosity, experimentation, and the accessibility of drugs [4]. A similar finding is observed in this study: many respondents indicated the availability of the substance and the influence of peers as the main reasons for beginning substance use, underscoring the importance of peer education and support programs. The location of first substance use was reported to be in secondary school by 45% of respondents. Thirty-two percent (32%) reported using it at home, while ten percent (10%) revealed their first use occurred in university, highlighting the significant role of the home environment in initiating substance use. This emphasizes the need for early prevention and education in both

the university environments and in secondary schools.

The age at which individuals begin using psychoactive substances is essential, as it can influence their overall behavior and academic performance. Factors related to substance use, including peer influence and psychological theories of adolescent addiction, play a significant role in this context. Understanding the implications of early substance use, particularly during adolescence, is crucial. It can lead to addiction and may significantly affect academic activities and performance. Addressing these issues involves recognizing the importance of prevention and intervention strategies that target both early use and the factors leading to it [3, 11].

Most respondents identified their favorite substance as Cannabis (N=14, 25.5%), followed by Crack Cocaine (N=9, 16.4%), Tobacco (N=4, 7.3%), New Psychoactive Substances (NPS-Loud and Arizona) (N=4, 7.3%), and Alcohol (N=2, 3.6%). Cannabis remained the first substance of use among the subjects; a similar picture is seen in the UNODC Nigerian study of 2019, where Cannabis is the most commonly used drug [16]. Almost every country in the world grows cannabis. Nigeria harvests cannabis herbs, while Morocco and Afghanistan are major producers and exporters of cannabis resin. The crop contains over 400 chemicals, of which more than 60 are chemically unique and known as cannabinoids. Delta-9 THC tetrahydro cannabinoids cause the most psychoactive effects of cannabis [16].

The substances most difficult to abstain from are cannabis (N=14, 25%) and crack cocaine (N=14, 25%), with 50% of participants reporting challenges. They are followed by cigarettes (N=5, 9.1%) and alcohol (N=3, 5.5%). Eighty-six percent (N=38, 86.4%) reported having attempted to abstain from using substances in the past without success, while 13.6% (N=6) have never tried to abstain. A prevalence of 20–40% was obtained following a systematic search of the literature regarding drug abuse in Nigeria using the PubMed database in 2020.Among students and youths, a 20.9% prevalence was reported, with cannabis as the commonly abused drug. Others include cocaine, amphetamine, heroin, diazepam, codeine, cough syrup, and tramadol [4, 5].

The first instance of substance usage predominantly occurred during secondary school, as reported by 45% of respondents. Additionally, 32% indicated that their initial use took place at home or in a home environment, while 10% stated they first used substances at university. Among the participants, N=25 (45%) have completed tertiary education, whereas N=12 (22%) dropped out of university due to issues related to substance use. Furthermore, N=6 (10%) hold postgraduate degrees, and N=8 (14%) have completed secondary education. Mental and behavioral disorders related to psychoactive substance use are present among 32 (58%) of those receiving treatment during the research. See Figure 2. This situation can be attributed to polysubstance use, observed among 28 (50.9%), while single-substance use is noted in 15 (27.3%). Several studies have linked multiple substance use to a high risk of mental disorders caused by psychoactive substance use [17].

Conclusion

The complexity of psychoactive substance use and its ramifications necessitate continued exploration. Substantial evidence highlights the dangers of adolescent psychoactive substance use, particularly cannabis, which is crucial for mental health advocacy, especially in schools and among university students. Recognizing the onset of substance use disorder requires understanding the significant risk and protective factors influencing drug misuse behaviors among young individuals, particularly the protective factors that can mitigate risks. Effective communication strategies in schools and community-based

interventions will be vital in addressing this health concern.

Recommendation

To address the issue of psychoactive substance use among young people, it is essential to promote early detection and effective interventions. Additionally, increasing awareness among parents and peers regarding the clinical signs and emerging trends of substance use in youth is crucial. Policymakers and healthcare professionals should focus on education, prevention, and interventions that consider individual, family, and environmental factors linked to drug use. Implementing prevention strategies at all levels is vital. This raises the question: What should universities prioritize in this effort?

Public Health Prevention Measures, the primary prevention consists of health promotion, protection, and prevention. Health promotion activities include systemic organizational, political, educational, and regulatory measures that create favorable circumstances for individuals, communities, and groups. Health protection uses laws, rules, and governmental policies to protect the population's health from outside dangers. Disease preventive activities investigate and evaluate health hazards and create and test solutions to lessen harmful exposure, illness initiation, and progression across all life stages, populations, and circumstances [18-20].

School-Based Health Activities: such as those establish thorough health education programs in schools that support substance use, mental health, healthy habits, and access to medical treatment. These initiatives can empower students to make health-related decisions and help establish lifetime healthy habits. School-based health activities, including clubs and anti-drug use social initiatives, aim to inform peers within the university environment.

Prevention Strategies; Quaternary Prevention is implemented to identify patients at risk of overmedicalization, shield them from unnecessary medical procedures, and recommend ethically sound interventions. Tertiary Prevention forms of tertiary prevention are commonly rehabilitation efforts. Secondary Prevention early disease detection targets healthy-appearing individuals with subclinical forms of the disease, for example Urine Drug Test. Primary Prevention, such as tobacco cessation programs implement activities that reduce risk exposure or boost the immunity of at-risk individuals to prevent disease progression. Primordial Prevention involves government policy: Raising taxes on cigarettes, reducing cigarette and alcohol advertisements [21].

In Nigeria, various organizations and policies exist:

1. Comprehensive preventive strategies are implemented, such as the mandatory pre-university entrance drug use screening test and regular random drug use screenings within the university compound and during classes.
2. Health promotion and comprehensive battles against drug abuse programs (WADA War Against Drug Abuse) by the NDLEA, (National Drug Law Enforcement Agency), targeting primary, secondary, and tertiary schools, the Mothers Against Drug Abuse program).
3. Policies such as the zero tolerance for drug use in schools
4. Catch them young: Protect primary and secondary schools from drug use
5. Effective communication strategies and community-based interventions
6. Make adequate use of the impact of faith-based organizations.

Conflict of Interest

Author declares no Conflict of interest in the study.

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