DRUG AND SUBSTANCE USE DISORDERS AMONG UNIVERSITY STUDENTS

Okoye Nelyn Akunna[1]*, Rosemary Nneka Udeji[2], Onyinyechukwu Uzoamaka Oka[3], Tam'dayeofori Eminent Izumunna[4] and Chidimma Anthonia Azike[5]

[1] Department of Hospital Services, Rivers State University, Port Harcourt, Nigeria
[2] Ikate Primary Health Centre, Lagos State, Nigeria
[3] Alex Ekwueme Federal University Teaching Hospital, Abakaliki, Ebonyi State, Nigeria
[4] NNPC Hospital, Delta State, Nigeria
[5] Department of Medical Laboratory Science, Rivers State University, Port Harcourt, Nigeria

Corresponding author's email address: nelyn.okoyeagbo@gmail.com

Abstract

Drug and substance use among university students is a problematic pattern of substance abuse leading to impairment in academic, social, or personal functioning, and requires professional intervention and support. This comprehensive review critically examined drug and substance use among university students. Identified as a problematic pattern leading to academic, social, or personal impairment, necessitating professional intervention, the study meticulously classified prevalent substances: alcohol, marijuana, prescription medications, nicotine, illicit drugs, inhalants, and club drugs. A thorough analysis of 31 cited references was conducted to explore the substances' prevalence, contributing factors, and consequences. The review reveals evolving social contexts, accessibility challenges, and shifting legal frameworks as influential factors in substance use trends. Identifying critical research gaps, the study emphasizes the imperative for inclusive studies on underrepresented demographics and the intersection of substance abuse with mental health. The research underscores the potential of technology in interventions and underscores the value of ongoing research for adapting strategies. Furthermore, the review highlights proactive measures, community partnerships, and inclusive policies as essential components in fostering a campus climate that prioritizes student welfare. The findings from this review should guide future research and interventions, providing a comprehensive understanding of substance use disorders among university students.

Keywords: *Academic Performance, Prevention Strategies, Mental Health, Substance use, University Students*

1.1   Introduction

A major global health concern is drug and substance use disorders, which are typified by the harmful use of psychoactive substances. Substance misuse encompasses the improper use of substances like alcohol, prescription drugs, and illicit drugs, which can have negative impacts on one's social, psychological, and physical health [1, 2]. Concern over the prevalence of drug misuse among students in university settings, which is characterized by risky behaviors and possible long-term consequences, is on the rise [3]. In order to support university students' success and well-being, it is imperative that this issue be recognized and addressed.

Studies reveal a startlingly high rate of substance misuse among university students. A significant percentage of students engage in risky behaviors, with rates higher than those seen in the general population, according to the Monitoring the Future national survey [4, 5]. This increased susceptibility calls for a thorough investigation of the underlying causes and the ensuing effects on scholastic, social, and mental health.

It is imperative that drug and substance use among university students be addressed. First of all, young adults are particularly vulnerable to peer pressure and experimentation during their university years, which is a crucial developmental period [6]. During this time, substance misuse can have a long-lasting impact on one's future well-being, mental health, and academic achievement. Second, drug misuse is encouraged by the campus atmosphere, which is frequently marked by elevated stress and a sense of newly acquired independence [7, 8].

Proactive intervention is imperative due to the relationship between substance use and mental health problems, as well as the possibility of substance dependence extending into adulthood [9]. Ignoring these issues puts the future of the person in danger, but it also puts society's general health and productivity at risk. As a result, it is critical to have a thorough grasp of the goals and scope of the review of drug and substance use among university students.

The aim of this comprehensive review is to examine the different substances that university students misuse and associated disorders. Understanding the socio-environmental, psychological, and educational elements affecting the occurrence of substance use in this group is also a focus. The rationle is to provide a thorough synthesis of the body of literature that already exists, offering a detailed picture of the current situation with regard to drug and substance use among university students.

Essentially, by compiling data on the complex nature of drug and substance use among university students, we hope to add to the body of knowledge already in existence. By doing this, we hope to contribute to the formulation of policies, future research directions, and the deployment of successful interventions aimed at reducing the negative effects of substance use within the university context.

2.1   Methodology

This review ensured a rigorous examination of drug and substance use among university students. A thorough search of academic databases, including PubMed, PsycINFO, and Google Scholar was conducted to identify relevant studies. The initial search yielded a substantial pool of literature, from which 31 key studies were selected based on their relevance, methodological robustness, and contribution to understanding the patterns and consequences of substance use among university students.

Each selected study underwent a meticulous assessment, considering factors such as research design, sample size, methodology, and key findings. The inclusion criteria prioritized studies with a focus on prevalence, contributing factors, and consequences of substance use. Additionally, the assessment included a scrutiny of the identified research gaps within the existing literature.

The review process facilitated a comprehensive understanding of the nuances surrounding substance misuse in university settings. The identified research gaps informed the focus of this review, emphasizing the need for inclusive studies on underrepresented demographics and the inter-sectionalism of substance misuse with mental health. This methodology ensured a robust foundation for synthesizing key insights, guiding future research, and informing effective strategies to address substance misuse disorders among university students.

3.2   Epidemiology of Drug and Substance Use among University Students

An important factor in illuminating the frequency, trends, and variances of substance use in this population is the epidemiology of drug and substance misuse among university students. Creating focused interventions and policies

requires an understanding of the epidemiological landscape.

The prevalence of drug and substance use among university students has been the subject of numerous studies, which have found startling rates. According to the Monitoring the Future national survey [4], a significant proportion of college students use drugs or alcohol, which is more common than in the general population. These results highlight how critical it is to address substance misuse in the special setting of higher education.

Substance use trends among university students vary depending on the demographic. Gender disparities, for instance, gender differences play a role, with studies indicating variations in the types of substances used and the frequency of use between male and female students [9, 10]. Socioeconomic variables also play a role in explaining differences in substance misuse patterns; students from varying socioeconomic backgrounds tend to display different behaviors [3, 11].

Ethnic and cultural factors add more nuance to demographic variations. Studies have indicated that rates of substance use may differ between ethnic groups, highlighting the significance of taking cultural contexts into account when comprehending and resolving the problem [11, 12]. Additionally, foreign students could experience particular difficulties assimilating and integrating into society as a whole which could increase their risk of substance use [13, 14].

Analyzing trends over time shows how substance use in university settings is changing. Variations in drug availability, societal norms, and the introduction of novel substances are factors that influence patterns of usage [4]. Studies with a longitudinal design are better able to document these changes and offer insightful information about the variables influencing how university students behave when it comes to substance misuse.

4.1 Types of Drug and Substance Use among University Students

University students' drug and substance use is a varied landscape that includes a range of substances and is influenced by a complex interplay of factors like peer pressure, accessibility, and stress. It is essential to comprehend the various types of substances that are frequently used in order to create focused prevention and intervention plans.

4.1.1 Alcohol
One of the most popular drugs on university campuses around the world is alcohol. Its prevalence is influenced by cultural norms, social events, and peer pressure. Binge drinking, which is characterized as ingesting an excessive amount of alcohol in a brief period of time, is a serious issue that affects both academic performance and physical health [10].

4.1.2 Marijuana (Cannabis)
Students at universities frequently use marijuana for recreational purposes. The prevalence of it has been influenced by shifting legal environments in different areas. Although there is a perception of minimal harm, research suggests that regular use may have negative effects on cognition and academic performance [6, 15].

4.1.3 Prescription Medications
The misuse of prescription medications for non-medical purposes, including the use of stimulants for attention deficit hyperactivity disorder (ADHD) and sedatives for anxiety, is becoming more and more of a problem. Misuse puts one's physical and mental health at risk and is exacerbated by accessibility issues, academic pressures, and a sense of security [16].

4.1.4 Nicotine (Tobacco)
Smoking and vaping are the most common ways that university students consume tobacco. Significant health risks are associated with nicotine addiction, and the use of e-cigarettes and other new trends are changing the face of tobacco consumption [17].

4.1.5 Illicit Drugs (e.g., Cocaine, MDMA, Psychedelics)
Apart from the more widely used substances, students at universities might experiment with illegal drugs. Examples include cocaine, MDMA (Ecstasy), and different psychedelics. The use of these substances may be influenced by elements like curiosity, social settings, and low-risk perceptions [18].

4.1.6 Inhalants
Although less common, misusing inhalants like volatile solvents or nitrous oxide can have major

health consequences. Factors such as accessibility, boredom, or a lack of knowledge about the possible risks can all have an impact on inhalant use [19].

4.1.7   Club Drugs (e.g., GHB, Ketamine)
University environments can witness the use of club drugs like GHB and Ketamine, especially in social settings like parties and clubs. The use of these drugs is frequently connected to social and recreational settings, and they have the potential to have strong sedative or hallucinogenic effects [20].

5.1   Factors Contributing to Substance Misuse
There is a complex interaction between academic, social, and environmental factors that affect the rate of substance use among university students. This section sheds light on the complex nature of drug substance use within the university setting by thoroughly examining important contributors such as peer pressure, mental health, academic stress, and environmental factors.

Academic Stress: One important factor that contributes to drug and substance use among university students is academic stress. Students may use drugs as a coping strategy due to the demanding nature of their coursework and the pressure to perform academically [8]. Students start using drugs as a coping mechanism for stress, which can lead to a vicious cycle that gets worse over time.

Peer Pressure: University students' substance use behaviors are greatly influenced by their interactions with one another. Even though they may not have given it much thought at first, people may become involved in substance use due to peer pressure and the need for social acceptance [10]. Peer pressure has the power to normalize substance use in the social context of higher education by acting as a catalyst.

Mental Health: It is clear that substance use and mental health disorders are intricately related among college students. People who are experiencing mental health problems, like depression or anxiety, may use drugs as a kind of self-medication [14]. While substance misuse can momentarily ease symptoms, it also increases the risk of dependence and exacerbates pre-existing mental health issues.

Environmental Influences: Substance use is greatly exacerbated by the environment of universities, which combines a newfound freedom with independence. The availability of substances combined with social gatherings and parties fosters an environment that is favorable to experimentation [7, 21]. The acceptability of substance use in a university setting can also be influenced by cultural and societal norms. Moreover, the accessibility of substances both on and off-campus plays a pivotal role. The proximity of bars, clubs, and areas with high substance availability can increase the likelihood of experimentation and regular use [11, 22]. Understanding the environmental context is crucial for developing interventions that address the root causes of substance misuse among university students.

An in-depth examination of these factors reveals that drug and substance use is a complicated issue that is intricately linked to many facets of college life. Students are more vulnerable as a result of peer pressure, mental health issues, academic stress, and environmental factors combined. The creation of focused preventative and intervention strategies that cater to the unique needs of the university population requires a nuanced understanding of these factors and Surroundings.

6.1   Impact of Drug and Substance use on Academic Performance
The relationship between substance use and academic performance in university students is a significant area of study that requires an in-depth examination. This section examines research that has been done on the relationship between substance abuse and academic achievement, looking at both the short- and long-term impacts on learning outcomes.

6.1.1   Relationship between Substance Use and Academic Performance
The complex relationship between substance use and academic performance in university students has been the subject of numerous studies. Substance use is regularly associated with worse grades, higher absenteeism rates, and a greater chance of academic probation, according to research findings [3, 6, 23]. The effects are not substance-specific; prescription drugs, alcohol, and illegal drugs have all been linked to impeded academic achievement [13, 24].

Substance misuse has an impact on academic achievement that goes beyond grades. Substance-related cognitive impairments can affect memory, learning, and general academic functioning [14]. Furthermore, a general decline in academic achievement is attributed to the behavioral aspects of substance use, such as increased risk-taking and poor decision-making [4].

6.1.2   Long-Term Effects on Educational Outcomes

Substance use can have long-lasting consequences on a student's educational trajectory, extending beyond the short-term effects on academic performance. According to longitudinal studies, using drugs or alcohol while in university increases the risk of delayed graduation, increasing dropout rates, and not obtaining advanced degrees [11, 24]. Moreover, the adverse influence on academic achievements carries over into the workplace. Graduates who have struggled with substance abuse in the past may find it difficult to find work, grow in their careers, and keep stable jobs over the long term [25]. Substance use can lead to reduced cognitive functioning and compromised decision-making abilities, which can have long-term effects that go well beyond university.

Substance use and academic achievement interact in a complicated way that involve behavioral, psychological, and physiological aspects. Notably, minimizing long-term effects require addressing substance abuse in students at an early stage of their academic careers. Interventions that focus on the substance use itself as well as the related academic difficulties can enhance learning outcomes and open doors for future success in the classroom and in the workplace.

6.2   Psychosocial Consequences of Drug and Substance Use among University Students

The psychosocial ramifications of drug and substance abuse among university students comprise a wide range of interrelated difficulties that impact social interactions and mental health.

6.2.1   Psychological Consequences

Mental Health Disorders: The exacerbation of mental health disorders and substance use has been closely associated. Substance users may be more susceptible to severe conditions like psychosis as well as elevated levels of anxiety and depression [9]. The co-occurrence of mental health disorders and substance misuse presents a difficult situation because the severity of one condition frequently increases the other's severity [6].

Cognitive Impairment: Extended substance use can result in cognitive impairment, which impairs memory, attention, and judgment [26]. This is detrimental not only to academic achievement but also to people's ability to function and adapt in a university environment.

Emotional Regulation Challenges: Emotional regulation can be upset by substance use, which can result in erratic behavior, irritability, and trouble handling stress [13]. These emotional difficulties affect the person's mental health as well as their interpersonal connections and ability to use healthy coping strategies.

6.3   Social Consequences

Isolation and Stigmatization: People who misuse substances may experience stigmatization and isolation from their peers, which exacerbates the condition of their mental health [10]. Fear of being judged can prevent people from getting treatment, which feeds the cycle of social disengagement and ongoing drug use.

Impact on Relationships: Relationships with loved ones, friends, and romantic partners can be strained by substance use. Conflicts, problems with trust, and poor communication frequently occur, having an impact on the person as well as their larger social support system [3, 27].

Academic and Career Implications: Both the academic and professional spheres are affected by social consequences. Misuse of substances can result in missed classes, strained relationships with teachers and coworkers, and absenteeism. The unfavorable opinions that follow may have a long-lasting effect on a student's reputation in both their academic and professional fields [24].

Financial and Legal Difficulties: Misuse of drugs can result in arrests for drug-related offenses and other legal problems, which exacerbate social problems. Financial strain can also result from the price of drugs, court costs, or lost job opportunities [9].

7.1   Prevention and Intervention Strategies

The prevention and intervention of substance use among university students represent complex challenges that necessitate a thorough comprehension of the distinct factors affecting this demographic.

7.1.1   Examining Current Programs

Educational Campaigns: In university settings, educational campaigns are frequently used as preventive strategies. These campaigns typically include workshops, seminars, and informational materials [27]. These programs seek to dispel misconceptions about substance abuse, raise awareness, and encourage responsible decision-making.

Counseling and Support Services: Students who are struggling with substance use and misuse can receive confidential assistance from university counseling and support services. Individual counseling, group therapy, and referrals to outside treatment resources are few examples of these services [28]. The intention is to give students safe space to talk about their drug-related issues.

Campus Policies and Regulations: Another popular preventive tactic is the implementation and enforcement of stringent policies and regulations regarding substance use on campus. This includes living situations free of drugs and alcohol, limitations on the amount of alcohol consumed, and disciplinary actions against offenders [29].

7.2   Assessment of Efficiency

Educational Campaigns: Although they raise awareness, educational campaigns have varying degrees of success in changing behavior. The integration of interactive elements, peer-led initiatives, and consistent messaging across multiple platforms are frequently necessary for achieving long-term impact [30].

Counseling and Support Services: Although stigma and accessibility issues can make counseling services less effective, they are still useful in providing focused support. Their impact can be increased by maintaining confidentiality, raising awareness of services that are available, and incorporating mental health support into regular university health services [10].

Campus Policies and Regulations: Tight regulations and laws may act as disincentives, but they might not deal with the underlying issues that lead to drug misuse. In addition to regulatory measures, it is imperative to incorporate educational elements, provide support services, and prioritize the establishment of a campus culture that encourages responsible decision-making [23].

7.3   Potential Improvements

Integrated Approaches: Using integrated prevention strategies that incorporate counseling, education, and regulation components could provide a more comprehensive approach. Effectiveness can be increased by concerted efforts that target specific risk factors as well as more general environmental factors [9].

Peer-Led Initiatives: Research has indicated that peer-led interventions can have a positive impact on university students' behavior. Peer support networks, mentorship programs, and student-led projects can all be added to preventative efforts to increase their impact and relatability [26].

Early Intervention Programs: By identifying at-risk individuals early on and providing them with targeted intervention services, substance misuse can be stopped before it gets worse. Before problems have serious repercussions, they can be addressed by putting screening procedures into place and offering prompt, specialized interventions [31].

Online and Technology-Based Interventions: Technology-enabled prevention and intervention initiatives can boost accessibility and involvement. In order to reach a larger student population, online platforms, mobile apps, and virtual support networks can be used in addition to traditional strategies [25].

7.4   Support Systems: Handling Substance and Drug Misuse in Academic Environments

Support systems, which provide a comprehensive strategy that includes counseling services, awareness campaigns, and other resources targeted at prevention, intervention, and recovery, are essential in tackling substance abuse among college students.

7.4.1 Counseling Services

Privacy and Availability: Counseling services offered by universities provide students with a private, judgment-free environment in which they can seek help for concerns related to substance abuse. Maintaining the privacy of these services is essential to fostering an atmosphere in which people feel at ease talking about their difficulties [10]. Improving counseling services' accessibility in terms of their physical locations as well as their online platforms also helps to remove some of the possible obstacles to getting help.

Individual and Group Counseling: For students struggling with substance use, individual counseling sessions offer tailored support that addresses the underlying causes of their behavior [28]. Group counseling, on the other hand, gives participants the chance to learn from one another and create a support system by fostering a sense of community and shared experiences [26].

7.4.2 Integrated Mental Health Services

Given the interconnectedness of mental health and substance use disorders, it is imperative to integrate mental health services with support for substance misuse. A comprehensive strategy that addresses the symptoms and underlying causes of substance misuse is ensured when counseling for the condition is combined with mental health interventions [6].

7.4.3 Awareness Programs

Education and Prevention: By disseminating knowledge and resources, awareness campaigns act as a pro-active strategy to stop substance misuse. Students can learn about the dangers of substance abuse and gain the confidence to make wise decisions in an environment that is created by educational campaigns, workshops, and seminars [27].

Destigmatization Initiatives: Awareness campaigns about substance misuse also help to de-stigmatize the problem. These programs encourage people to seek help without fear of social isolation or judgment by promoting an open dialogue and dispelling myths surrounding substance abuse [30].

Peer-Led Initiatives: Peer-led initiatives to raise awareness make use of peers' ability to shape behavior. Peer support groups, mentorship programs, and student-led campaigns all produce relatable stories and encourage a sense of civic duty [23]. Peer educators possess the ability to proficiently convey preventive messages and offer support rooted in common experiences [26].

7.4.4 Role of Support Systems

Early Intervention: By identifying at-risk individuals and offering prompt assistance, support systems help to facilitate early intervention. Universities can mitigate potential long-term consequences by intervening before substance misuse escalates through proactive outreach and screening processes [31].

Community Building: The development of a supportive community is facilitated by support networks. Through the promotion of relationships between students, faculty, and staff, universities can create an atmosphere in which people feel [3].

7.4.5 Continuum of Care

Sustaining individuals with substance use requires a continuum of care, which is acknowledged by effective support systems. Universities need to provide a smooth transition between various levels of care, from prevention and early intervention to recovery and continuous support, in order to meet the changing needs of their diverse student body [9].

7.6 Policy and Legal Implications of Drug and Substance use among University students

In order to effectively address substance use in university settings, policies must strike a balance between intervention, support, and prevention while navigating ethical and legal issues.

7.6.1 Existing Policies

Code of Conduct: Substance misuse is specifically addressed in the codes of conduct of many universities. These regulations set expectations for how students should behave when it comes to using drugs and alcohol on campus and spell out the penalties for infractions [29]. However, the mechanisms for enforcing them and the uniformity of their application are frequently what determine how effective these policies are.

Educational Programs: As part of their policies, some universities carry out educational programs. These initiatives seek to educate students on the dangers of substance misuse, encourage them to make wise decisions, and cultivate a positive

culture [27]. Policies that incorporate evidence-based educational initiatives can aid in the prevention of problems.

Health and Counseling Services: The function of counseling and health services in addressing substance abuse may be outlined in policies. In order to address co-occurring issues, they might stress the confidentiality of counseling sessions, support early intervention, and push for the integration of mental health services [10, 28].

7.7   Legal Implications
Federal and State Laws: State and federal laws governing substance use must be complied with by universities in developing their policies. It is crucial to abide by laws like the Drug-Free Schools and Communities Act [9]. Federal funding may be withheld in the event of a violation, underscoring the serious legal consequences of non-compliance.

Student Privacy Laws: It's important to strike a balance between the need for intervention and students' right to privacy. Policies addressing substance abuse issues must respect legal boundaries set forth by the Family Educational Rights and Privacy Act (FERPA) [29].

Title IX and Gender-Based Violence: Drug and substance use policies and Title IX regulations frequently overlap, particularly when there is gender-based violence that is made possible by drugs or alcohol. These intersections should be covered by policies, guaranteeing a thorough approach to student safety.

7.8   Potential Policy Improvements
Holistic Approach: Beyond punitive measures, policies should take a holistic approach. A more all-encompassing and successful approach may include an emphasis on consequences along with prevention, early intervention, and support services [23].

Cooperation with External Agencies: Universities can improve their policies through working with outside organizations like law enforcement and nearby medical facilities. By combining community and on-campus resources, this partnership guarantees a coordinated response to substance abuse [30].

Restorative Justice Practices: It may be advantageous to incorporate restorative justice procedures into drug abuse regulations. This strategy emphasizes making amends, encouraging responsibility, and advancing the recovery of those engaged in drug abuse episodes [30].

Regular Policy Evaluation: Regular evaluations of policies are necessary to determine their efficacy, pinpoint areas for development, and ensure that they continue to conform to changing legal and social norms. Ongoing evaluation guarantees that regulations stay current and adaptable to the evolving nature of drug misuse issues on college campuses [9].

Conclusion
Our investigation into drug and substance use among university students has revealed a variety of dynamics, including prevalence and effects on psychosocial and academic functioning. Research gaps emphasize the need for studies on underrepresented populations and the relationship between substance use and mental health, despite advancements in the field. Sustained investigation is essential to improving our comprehension and modifying tactics. Fostering a campus culture that prioritizes well-being and addresses drug and substance use challenges requires a focus on inclusive policies, community collaboration, and proactive interventions.

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