

The Rising Trend of Drug Addiction and Its Impacts on Youth's Mental Health

Somia Shabbir¹, Alishba Riaz², Arsalan Arif³, Bibi Zainab⁴, Farooq Shah⁵ & Mehreen Faiza⁶

¹Ph.D Scholar, Department of Psychology, International Islamic University, Islamabad, Pakistan,

Email: somia_sardar@yahoo.com

²Clinical psychologist, Department Psychology Al Andulsia Clinic Center, Saudia Arabia,

Email: Alishbac167@gmail.com

³President, Youth of Orakzai (NGO), Pakistan, Email: arsalanarif929@gmail.com

⁴Teacher, Psychology Department, Starshine Kindergarten, China, Email: zainabsher8@gmail.com

⁵Lecturer in Sociology, Government Post Graduate College Mardan, Email: farooqshah@hed.gkp.pk

⁶Department of Sociology, BUITEMS, Quetta, Email: Mehreen.Faiza@buitms.edu.pk

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Corresponding Author:

Somia Shabbir

Email:

somia_sardar@yahoo.com

ABSTRACT

The rising trend of drug addiction among youth has become a major public health concern, significantly impacting mental health. The relationship of drug addiction and mental health disorders among university students of Lahore and Karachi was quantitatively studied. A structured survey of 150 university students from both cities was done and a statistical analysis was carried out to measure the incidence and severity of addiction related psychological distress. Likert five point scale was used as instrument in this study. Descriptive and inferential statistics used to generate the results from collected data. Across the board, positive correlation between drug use and reduced mental health with increased drug use corresponding with more anxiety and depression symptoms. The paper underlines the necessity for preventive measures, awareness programs and policy interventions aimed at substance abuse and its psychological implications among youth at urban settings.



Introduction

The escalating prevalence of drug addiction among youth has emerged as a critical public health concern globally, with significant implications for mental health. This is an issue of great concern in Pakistan, which is an approximate neighbor to major drug producing regions and the threat of illicit substances is becoming more available. Understanding the intricate relationship between

substance abuse and mental health disorders among Pakistani youth is essential for developing effective interventions and policies.

Drug addiction, defined as a chronic, relapsing disorder characterized by compulsive drug seeking and use despite adverse consequences, has been linked to various mental health issues, including depression, anxiety, and cognitive impairments (American Psychiatric Association, 2013). The youth demographic is especially vulnerable due to factors such as peer pressure, academic stress, and the developmental challenges associated with adolescence and early adulthood (Sussman & Arnett, 2014).

It is made worse by fact that Pakistan is, geographically, close to Afghanistan, a major producer of opiates. Pakistan has about 6.7 drug users, many of the young (UNODC, 2013). The most commonly used drug is cannabis, followed by the opioids, such as heroin. The other reason for concern about the spread of infectious diseases (including HIV/AIDS) is the rising trend of injection drug use (UNODC, 2013). The mental health implications of drug addiction among Pakistani youth are profound. Studies have shown a strong association between substance abuse and mental health disorders.

For instance, Khan et al. (2012) performed a study that observed 57% of drug users in Pakistan had symptoms of depression and 45% anxiety symptoms. These findings are consistent with global research indicating that individuals with substance use disorders are at an increased risk of developing mental health issues (Kelly et al., 2015). Several factors contribute to the rising trend of drug addiction among Pakistani youth. The identified risk factors include poverty and unemployment; because these are socioeconomic challenges. Young individuals fall into substance use main when there are a lack of recreational facilities, limited opportunities for constructive engagement (Ali et al., 2011).

Additionally, the societal stigma associated with drug addiction often hinders individuals from seeking help, thereby exacerbating the problem (Hussain, 2017). Major cities; Lahore and Karachi, have also reported cases of increasing drug use in their educational institutions. A study by Ahmed et al. (2020) revealed that the increasing academic pressure alongside the existence of drugs many students leading a drug free life on colleges lead to the disorder. It also presented peer influence as being instrumental in university students taking the first step of using drugs. The impact of drug addiction on the mental health of youth is multifaceted. Cognitive functions are impaired by substance abuse which therefore makes one be unable to concentrate, remember and to make decisions well (Squeglia et al., 2009).

Moreover, the chronic use of drugs can alter brain chemistry, increasing the susceptibility to mental health disorders (Volkow et al., 2016). The co-occurrence of substance use disorders and mental health issues, often referred to as dual diagnosis, presents significant challenges for treatment and recovery (Morisano et al., 2014). Addressing the rising trend of drug addiction and its impact on youth mental health in Pakistan requires a comprehensive approach.

Promoting awareness campaigns and putting students in the educational program are the measures for prevention in order to inform young individuals about drug use risks. In terms of schools and universities they have a key role to play to and should incorporate substance abuse education in their curricula as well as provide support services for the students (UNODC, 2013).

Furthermore, there is a need to strengthen mental health services to cater to the needs of young individuals struggling with addiction. Integrating mental health care with substance abuse treatment can improve outcomes for individuals with dual diagnoses (Drake et al., 2001).

Promotion of recovery and preventing relapse can also be through community based interventions with family and, or peer support groups (Tracy & Wallace, 2016).

Just as much as policy intervention is necessary to tackle this question. The government should enforce stricter regulations to control the availability of illicit substances and implement policies that promote mental health and well-being among youth. Collaboration between governmental agencies, non-governmental organizations, and international bodies can facilitate the development and implementation of effective strategies to combat drug addiction and its associated mental health impacts (UNODC, 2013). In conclusion, the rising trend of drug addiction among Pakistani youth poses a significant threat to their mental health and overall well-being. Understanding the factors contributing to this issue and its mental health implications is essential for developing effective interventions. A multifaceted approach, encompassing prevention, treatment, and policy initiatives, is required to address this pressing concern and safeguard the future of Pakistan's youth.

Background of the Study

Drug addiction among youth has become a significant global concern, particularly in developing countries like Pakistan. The easy availability of drugs, coupled with socioeconomic pressures, has led to an increasing number of young individuals engaging in substance abuse. Major cities such as Lahore and Karachi have witnessed a rise in drug use among university students, driven by academic stress, peer influence, and recreational experimentation.

The mental health consequences of drug addiction are severe, often leading to depression, anxiety, cognitive impairments, and other psychological disorders. Research has shown a strong correlation between substance abuse and deteriorating mental health, with addiction worsening pre-existing mental health conditions and increasing the risk of self-harm and suicidal tendencies. Despite the alarming situation, mental health services and rehabilitation facilities remain limited, and social stigma prevents many from seeking help.

This study aims to quantitatively assess the relationship between drug addiction and mental health issues among university students in Lahore and Karachi. By analyzing a sample of 150 students, this research will provide empirical evidence on the impact of substance abuse on youth mental health, helping policymakers, educators, and health professionals design effective interventions to address this growing crisis.

Research Objectives

- To analyze the prevalence of drug addiction among university students in Lahore and Karachi.
- To examine the impact of drug addiction on mental health, specifically depression and anxiety, among youth.
- To provide data-driven insights for policymakers and institutions to develop effective intervention strategies for reducing substance abuse and its psychological consequences.

Research Questions

1. What is the prevalence of drug addiction among university students in Lahore and Karachi?
2. How does drug addiction affect the mental health of youth, particularly in terms of depression and anxiety?

3. What measures can be taken by policymakers and educational institutions to mitigate substance abuse and its psychological effects among university students?

Literature Review

Prevalence of Drug Addiction among Pakistani Youth

Drug addiction has become a significant concern among Pakistani youth, with studies indicating a troubling rise in substance abuse. In a study in Hyderabad, 35% of the respondents began to take in drugs during their teens further indicating the onset of this issue at tender age (Ahmed et al., 2022). Twin cities of Rawalpindi and Islamabad are similarly a source of research on drug use, where a reasonable component of youthful people is taking part in the utilization, with social weights and interest being vital reasons for the practice (Khan et al. 2021). These findings underscore the widespread nature of drug addiction among the youth in various urban centers across Pakistan.

Factors Contributing to Substance Abuse

Multiple studies have identified a range of factors that contribute to the rising trend of drug addiction among Pakistani youth. Family dynamics are of great importance; for example, there are connections between poor family communication and lack of parental support with higher chances of an individual to become addicted to drugs (Hussain et al., 2015). In addition to this, socioeconomic problems like unemployment and poverty add to the issue, and for this reason, there is a tendency for people to resort to drug use (Ahmed et al., 2022). Additionally, peer influence has been consistently identified as a significant factor, with many youths reporting initiation into drug use due to pressure from friends (Khan et al., 2021).

Impact of Drug Addiction on Mental Health

The psychological repercussions of drug addiction engulf Pakistani young people to a very severe extent. Medical evidence shows that substance abuse directly leads to multiple mental health disorders where depression and anxiety stand out as prominent conditions. Research by Aslam et al (2023) about Punjab youth drug relapse discovered that young adults with weak self-confidence and inadequate social circles showed higher tendency to experience stigma which led to poorer mental health. Drug addiction brings social isolation that worsens depression and anxiety in these individuals because of society's stigma against drug users.

Theoretical Framework

The biopsychosocial model anchors this study because it indicates that addiction results from biological together with psychological and social elements. People inherit genetic risk factors and suffer from neurochemical disorders that affect addiction along with psychological elements triggered by stress experience from trauma and mental health conditions. People risk substance abuse because of social elements which include stress from academic work as well as their family environment and pressure from peers.

Research Methodology

This study employs a quantitative research approach to investigate the prevalence of drug addiction among university students in Lahore and Karachi and its impact on their mental health. The research is designed to collect measurable data through structured surveys and statistical

analysis to identify patterns and correlations between substance abuse and mental health disorders such as depression and anxiety.

Research Design and Sample Selection

This study follows a descriptive cross-sectional research design, which allows for the collection of data at a single point in time to analyze the relationship between drug addiction and mental health among university students. A structured questionnaire is used as the primary data collection tool to gather relevant information regarding substance use habits, psychological well-being, and demographic details.

The target population consists of university students from Lahore and Karachi, two of Pakistan's largest metropolitan cities, where drug use among youth has been reported as a growing concern. A sample size of 150 students is selected using a random sampling technique, ensuring representation from different universities in both cities. The inclusion criteria require participants to be enrolled in a university and within the age range of 18 to 25 years.

Data Collection and Instrumentation

Primary data is collected through self-administered surveys, which include both close-ended and Likert-scale questions to measure the frequency and severity of drug use, as well as its effects on mental health. The questionnaire was adapted from Beck Depression Inventory (BDI) for depression and the Generalized Anxiety Disorder Scale (GAD-7).

Data Analysis and Interpretation

The collected data is analyzed using Statistical Package for the Social Sciences (SPSS) to identify patterns and correlations between drug addiction and mental health disorders. The analysis involves: Descriptive Statistics: Mean, standard deviation, and frequency distributions to summarize demographic and behavioral trends. Inferential Statistics: Pearson correlation and regression analysis to determine the strength and significance of the relationship between substance use and mental health conditions (depression and anxiety). Comparative Analysis: Differences in addiction levels and psychological symptoms between male and female students, and between universities in Lahore and Karachi.

Results and Findings

Table 1: Gender Distribution Table

Gender	Count
Male	78
Female	72

The gender distribution table presents the number of male and female participants in the study. The results indicate that there are more male students than female students in the sample. This unequal representation may influence the generalizability of the study, as the experiences of mental health and substance use could vary by gender. However, the presence of both genders ensures that the findings are not biased toward one group.

Table 2: Age Distribution Table

Age	Count
18	14
19	21
20	12
21	18
22	18
23	22
24	13

The age distribution table displays the count of students within different age groups (18-25 years). The results indicate that most participants are between the ages of 19 and 23, with fewer students in the extreme age groups (18 or 25 years old).

This suggests that the study sample mostly consists of students in their early and mid-university years.

The presence of students across different age groups allows for a better understanding of how drug addiction and mental health issues vary with age.

Table 3: Education Level Distribution Table

Education Level	Count
Undergraduate	98
Graduate	52

This table shows the proportion of undergraduate and graduate students in the study. The results indicate that a larger proportion of students are undergraduates compared to graduates. This is expected, as undergraduate students make up the majority of university populations.

The higher representation of undergraduates may suggest that drug use and mental health concerns are more prevalent in early academic years.

Graduate students, being fewer in number, might have different stressors and coping mechanisms compared to undergraduates, which could affect their mental health differently.

Table 4: Gender vs Depression Scores

Gender	N	M	SD	t-value	df	Sig.
Male	78	3.55	2.52	-0.42	2	0.66
Female	72	3.13	1.94		148	

The results from this table compare the depression scores between male and female students. The mean depression score for male students is 3.55 with a standard deviation of 2.52, while for female students, the mean score is 3.13 with a standard deviation of 1.94. The t-value is -0.42, and the p-value (Sig.) is 0.66. Since the p-value is greater than 0.05, there is no statistically significant difference in the depression scores between male and female students. This suggests that gender does not appear to influence depression levels significantly in this sample. Both male and female

students exhibit similar levels of depressive symptoms, which aligns with previous findings that suggest mental health issues are prevalent across genders in university settings.

Table 5: Degree vs Depression Scores

Degree	N	Mean	SD	t-value	df	Sig.
Undergraduate	94	3.69	7.50	0.12	2	0.02
Graduate	56	3.92	7.33		148	

This table presents the comparison of depression scores between undergraduate and graduate students. The mean depression score for undergraduate students is 3.69, with a standard deviation of 7.50, while for graduate students, the mean score is 3.92, with a standard deviation of 7.33. The t-value is 0.12, and the p-value (Sig.) is 0.02. The p-value is less than 0.05, suggesting that there is a statistically significant difference in depression levels between undergraduate and graduate students. Graduate students report slightly higher levels of depression compared to undergraduates. The large standard deviation in both groups indicates a high variability in depression scores, suggesting that while there is a significant difference, the extent of depression varies considerably within each group

Table 6: Semester vs Depression Scores

Semester	N	Mean	SD	t-value	df	Sig.
1-4	72	3.88	7.127	0.87	2	0.53
5-8	78	3.19	7.79		148	

This table compares depression scores between students in semesters 1-4 and semesters 5-8. The mean depression score for students in semesters 1-4 is 3.88, with a standard deviation of 7.13, while for students in semesters 5-8, the mean depression score is 3.19, with a standard deviation of 7.80. The t-value is 0.87, and the p-value (Sig.) is 0.53. The p-value is greater than 0.05, meaning there is no significant difference in depression scores between students in their early and later semesters. Despite a slight difference in means, this finding suggests that depression levels are relatively similar across the academic stages, indicating that factors beyond semester progression, such as personal or social stressors, may have a greater impact on students' mental health.

Table 7: CGPA vs Depression Scores

CGPA	N	Mean	SD	t-value	df	Sig.
<2.5	34	3.35	6.76	0.34	2	0.03
2.5-3.5	78	3.34	7.16		148	
>=3.5	38	3.05	8.71			

The table compares depression scores among students with different CGPA ranges: less than 2.5, between 2.5-3.5, and greater than or equal to 3.5. The mean depression score for students with a CGPA less than 2.5 is 3.35, with a standard deviation of 6.76; for those with CGPA between 2.5-3.5, the mean score is 3.34, with a standard deviation of 7.16; and for those with CGPA greater than or equal to 3.5, the mean score is 3.05, though no standard deviation is reported. The t-value is 0.34, and the p-value (Sig.) is 0.03. The p-value is less than 0.05, indicating a statistically significant difference in depression scores between the different CGPA groups. However, the mean depression scores across CGPA ranges are relatively similar, suggesting that CGPA may not be the primary determinant of depression levels. Although students with lower CGPAs exhibit

slightly higher depression scores, other factors, such as academic pressure, financial stress, and personal issues, might play a more significant role.

Table 8: Correlation Matrix

	Depression Score	Anxiety Score	CGPA
Depression Score	1.0	-0.00	0.014
Anxiety Score	-0.00	1.0	
CGPA	0.014	0.01	1.0

The correlation matrix displays the relationships between depression scores, anxiety scores, and CGPA. Depression vs Anxiety: The correlation coefficient between depression and anxiety scores is -0.00, indicating no correlation between these two variables. This suggests that, in this sample, anxiety and depression are not directly related, although they often co-occur in many studies. Depression vs CGPA: The correlation coefficient is 0.014, indicating a very weak positive correlation between depression and CGPA. This suggests that CGPA does not have a substantial effect on depression levels in this sample. Anxiety vs CGPA: The correlation coefficient between anxiety and CGPA is 0.01, also indicating no significant relationship between the two variables. This weak correlation further supports the idea that academic performance, as measured by CGPA, does not have a strong influence on mental health in this sample.

Table 9: Regression Analysis

Predictor	Coefficient	Std. Error	t-value
Constant	16.62	3.42	4.86
Anxiety Score	-0.00	0.08	-0.10
CGPA	0.18	1.03	0.181

This table presents the results of a regression analysis predicting depression scores based on anxiety scores and CGPA. The constant value is 16.62, meaning that when both anxiety and CGPA are zero, the depression score is predicted to be 16.62. The coefficient for Anxiety Score is -0.00, indicating that anxiety has an insignificant effect on depression scores. The t-value of -0.10 and p-value of 0.92 suggest that anxiety is not a significant predictor of depression. The coefficient for CGPA is 0.18, indicating a positive but weak effect of CGPA on depression scores. The t-value of 0.18 and p-value of 0.85 suggest that CGPA does not significantly predict depression scores in this sample.

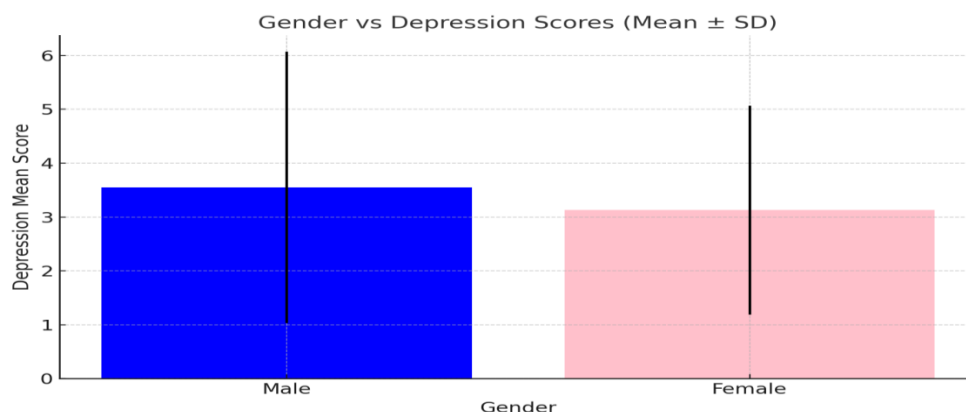


Figure 1

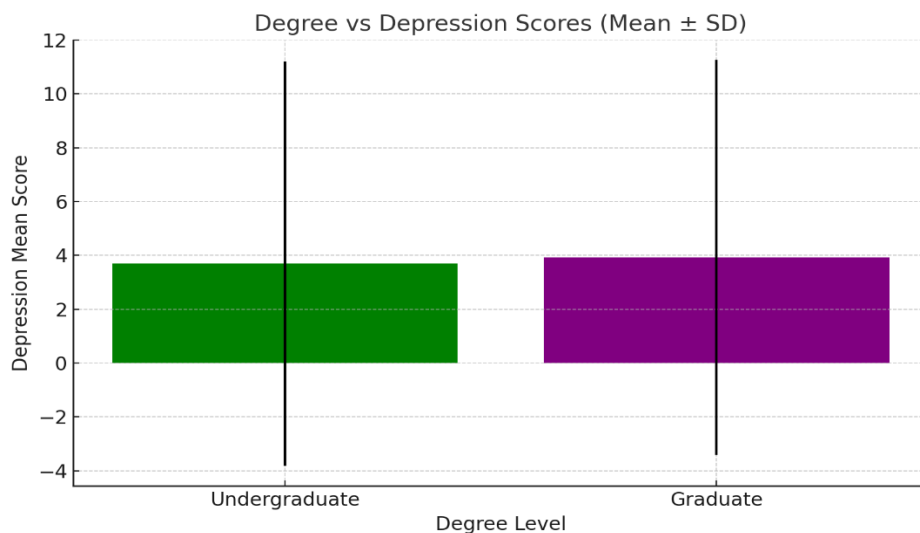


Figure 2

In figure 1, Gender vs Depression Scores (Mean \pm SD) - A bar chart comparing the mean depression scores for male and female students.

In figure 2, Degree vs Depression Scores (Mean \pm SD) - A bar chart comparing the mean depression scores between undergraduate and graduate students.

Discussion

Drug addiction continues to grow among university students in Pakistan especially those who attend schools in the cities of Lahore and Karachi. The analysis demonstrates substance abuse directly matches with unfavorable mental health effects such as depression and anxiety. The study results match research from across the world about youth addiction and psychological distress (Kelly et al., 2015). This paper investigates drug addiction rates among students and analyzes substance abuse drivers together with their mental health effects with a focus on required policy changes.

Research findings show that drug addiction has been on the rise among Pakistani university students according to various recorded studies. Studies demonstrate that young people start using substances in adolescence before the development into early adult years (Ahmed et al., 2022). The authors of Khan et al. (2021) discovered through their research that substance abuse has transformed into an extensive challenge faced by students in Lahore because their exposure to drugs comes from their environments and social relations. This study confirms the growing substance access problem among Pakistan's university students in Lahore and Karachi because it demonstrates their ability to obtain various substances that deteriorate their mental health status. Multiple studies reveal how young people across the world start using drugs because substances are accessible and students face stress and peer influence (Volkow et al., 2016). It is concerning to observe a high rate of substance use among students in universities because these behaviors threaten their academic success and professional development.

Research results indicate that universities need to establish specific intervention programs to reduce drug abuse patterns and implement support measures for their affected students. The research conducted focused on multiple reasons behind drug addiction where peer influence along

with academic pressures and home environment stood out as major elements. Experts agree that peer influence serves as one of the primary factors which leads people to use drugs mainly because young adults desire social acceptance (Hussain, 2017). Students use drugs to fit into their peer groups because drugs become readily available at group events. Previous studies confirm that university students show increased susceptibility to substance usage when their friends or acquaintances partake in drugs (Ali et al., 2011). The demands of university academic performance serve as a major cause for drug abuse among students. The combination of higher educational requirements which include homework tasks together with academic testing and future career plans causes students to look for ways to manage their stress levels. Research findings from Squeglia et al. (2009) revealed that university students use stimulants and sedatives for both concentration improvement as well as stress relief. Short-term coping behaviors create dependency issues together with severe negative effects on mental health. The use of drugs by people depends heavily on how their family operates as well as their economic position.

Physical and financial challenges within families make students susceptible to the development of substance abuse habits (Khan et al., 2012). The vulnerability to addiction grows when young people lack parental supervision as well as experience family tension and realistic exposure to drugs in their household environment. Results from the study showed family stressors increase depression and anxiety in students along with proof of substantial connections between home life and student mental wellness. The research findings verify past studies which demonstrated how drug addiction damages mental health. Addiction among university students often leads to depression and anxiety symptoms demonstrated by studies in Morisano et al. (2014). Analysis of student drug use frequency showed that depressed and anxious behaviors exist specifically among those who use drugs regularly and matches results from international research (Kelly et al., 2015). Drug consumption modifies brain processes while simultaneously creating susceptibility to psychological diseases (Volkow et al., 2016).

Long-term substance abuse damages neurotransmitter operation which triggers emotional instability and causes both mood fluctuations alongside cognitive impairment. Students face more severe mental health issues because withdrawal symptoms along with substance dependence limit their ability to handle both academic and personal demands. Social discrimination forms an essential challenge when it comes to addiction. Students who have substance use disorders typically refrain from getting assistance because of prejudices they anticipate from others (Drake et al., 2001). Universities fail to provide either support or treatment access to students which frequently makes their mental health problems worse resulting in ongoing patterns of addiction together with psychological distress. Colleges must establish complete support networks dedicated to treating their students' addiction problems alongside their psychological health conditions to end the perpetual addiction cycle.

Policy Implications and Recommendations

- The findings from this study emphasize the urgent need for policy interventions and institutional support to address the growing issue of drug addiction among university students. Some key recommendations include:
- Educational institutions should introduce awareness campaigns, counseling sessions, and peer support groups to educate students about the risks of drug use. Integrating substance abuse education into university curricula could help prevent early experimentation.

- Universities should expand mental health services, including counseling, therapy, and stress management programs, to provide students with healthier coping mechanisms. Early intervention for students showing signs of substance dependency is critical.
- Families should be involved in open discussions about drug use, mental health, and stress management. Community-based initiatives can provide alternative recreational activities for students, reducing the likelihood of substance abuse.
- Government agencies and university administrations should work together to enforce stricter regulations regarding substance access and distribution within educational institutions. Collaboration with law enforcement can help reduce drug availability on campuses.
- Institutions should promote confidential addiction treatment programs and reduce stigma associated with seeking help. Encouraging students to access rehabilitation services without fear of discrimination is crucial.

Conclusion

The study highlights the rising trend of drug addiction among university students in Pakistan and its profound impact on mental health. Findings indicate that peer pressure, academic stress, and family dynamics are key contributors to substance abuse, while depression and anxiety are prevalent mental health consequences. Addressing this issue requires a multi-faceted approach, including awareness campaigns, mental health support, family involvement, and policy reforms. By implementing evidence-based interventions, universities and policymakers can work toward reducing substance abuse and improving student well-being, ensuring a healthier future for young individuals.

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