

Effect of Substance Abuse on Suicidal Ideation Among Youth

Aparna Suman

Research Scholar

P.G Department of Psychology, Veer Kuwar Singh University Ara, Bihar

Under the Supervision of

Dr. Sadia Habib

Senior Assistant Professor & H.O.D

P.G. Department of Psychology, M.M. Mahila College, Ara

Abstract

Substance abuse among youth has emerged as a major public health concern globally due to its strong association with mental health problems, risky behavior, and suicidal ideation. The present quantitative study investigates the effect of substance abuse on suicidal ideation among youth using primary data collected through structured questionnaires. A total sample of 300 youths aged 15–29 years was selected using purposive sampling techniques from educational institutions and rehabilitation centers. Standardized psychological tools were used to assess levels of substance abuse and suicidal ideation. Statistical techniques including correlation analysis, regression analysis, t-tests, and ANOVA were applied to analyze the data. The findings revealed a significant positive relationship between substance abuse and suicidal ideation among youth. Youth with higher levels of drug and alcohol consumption demonstrated significantly greater suicidal thoughts, hopelessness, emotional instability, and psychological distress. The study highlights peer pressure, family conflict, depression, and social isolation as major contributing factors. The research emphasizes the urgent need for early psychological intervention, substance abuse prevention programs, and youth mental health counseling. Existing international studies also support the association between psychoactive substance use and suicidal ideation among adolescents and young adults.

Keywords: substance Abuse, Suicidal Ideation, Youth Mental Health, Psychological Distress, Risk Behavior , Depression and Anxiety, Adolescent Behavior, Substance Dependence.

Introduction

Youth represents a critical developmental stage characterized by emotional, social, and psychological changes. During this period, many young individuals become vulnerable to experimentation with psychoactive substances such as alcohol, cannabis, opioids, nicotine, and synthetic drugs. Increasing academic pressure, unemployment, family conflict, peer influence, and emotional distress contribute significantly to substance abuse among youth populations. The transition from adolescence to adulthood is often accompanied by heightened stress, identity confusion, and a search for social belonging, all of which create fertile ground for substance initiation and dependency.

Substance abuse adversely affects cognitive functioning, emotional regulation, decision-making ability, and mental stability. Continuous substance dependency often results in depression, anxiety, hopelessness, and self-destructive tendencies. One of the most severe consequences associated with substance abuse is suicidal ideation, which refers to persistent thoughts, planning, or desire to end one's life. The neurochemical disruptions caused by prolonged substance use further impair an individual's ability to cope with stress, thereby increasing the likelihood of suicidal thinking and self-harm behaviors.

Studies conducted internationally have demonstrated that adolescents involved in substance abuse exhibit higher rates of suicidal thoughts and suicide attempts compared to non-users. Research indicates that drug-abusing adolescents are approximately two to three times more likely to experience suicidal ideation. Methamphetamine, heroin, and polysubstance abuse are especially associated with elevated suicide risk. These substances cause profound changes in brain chemistry, mood regulation, and impulse control, making individuals significantly more vulnerable to emotional crises and suicidal behavior.

In India, the increasing prevalence of drug abuse among youth has become a growing social and psychological challenge. Lack of awareness, stigma surrounding mental health, and inadequate counseling services further worsen the condition. Cultural norms that discourage open discussion of mental health issues prevent many young people from seeking timely help, thereby allowing substance dependency and suicidal ideation to escalate unchecked. Therefore, examining the relationship between substance abuse and suicidal ideation is essential for developing preventive strategies and targeted mental health interventions.

Statement of the Problem

The growing prevalence of substance abuse among youth has become a major contributor to psychological disorders, emotional instability, and suicidal tendencies. Globally, suicide ranks among the leading causes of death in the 15–29 age group, and substance abuse is consistently identified as one of its strongest predictors. Despite increasing suicide rates among adolescents and young adults in India, limited quantitative research based on primary data has explored the direct effect of substance abuse on suicidal ideation among Indian youth populations.

The lack of empirical, data-driven studies in the Indian context creates a significant gap in understanding the extent and nature of this relationship. Without robust quantitative evidence, it becomes difficult for policymakers, mental health professionals, and educational institutions to design effective intervention programs. Therefore, the present study seeks to empirically examine the relationship between substance abuse and suicidal ideation among youth, using primary data to generate actionable insights.

Objectives of the Study

- To assess the level of substance abuse among youth.
- To measure the level of suicidal ideation among youth.
- To examine the relationship between substance abuse and suicidal ideation.
- To identify psychosocial factors contributing to suicidal ideation among substance-abusing youth.
- To suggest preventive and intervention strategies.

Hypotheses

Null Hypothesis (H₀)

There is no significant relationship between substance abuse and suicidal ideation among youth.

Alternative Hypothesis (H₁)

There is a significant positive relationship between substance abuse and suicidal ideation among youth.

Review of Literature

Several studies have established a strong and consistent association between psychoactive substance use and suicidal behavior among adolescents and young adults. This body of literature spans multiple countries and methodological approaches, reinforcing the robustness of the relationship.

A population-based study among illicit substance users reported that 23.6% of participants experienced suicidal thoughts, while methamphetamine and heroin users demonstrated significantly greater suicide risk compared to users of other substances. The study emphasized that the severity of substance dependency directly correlated with the intensity of suicidal ideation.

Another longitudinal investigation conducted among adolescents in substance abuse treatment centers found that approximately 30% reported suicidal ideation and 12% attempted suicide during the study period. These alarming statistics highlight the critical need for integrated mental health support within substance abuse treatment frameworks.

Research on cannabis use among youth also revealed a significant relationship between cannabis consumption and suicidal ideation, particularly among adolescents exposed to bullying and social stressors. The compounding effect of social victimization and substance use was found to substantially elevate suicide risk beyond what either factor would produce independently.

A systematic review and meta-analysis further confirmed that adolescents who abuse drugs are more than three times more likely to develop suicidal ideation compared to non-users. The review also identified depression and hopelessness as key mediating variables in the relationship between substance abuse and suicidal thinking, suggesting that addressing mental health co-morbidities is essential in prevention efforts.

These findings collectively suggest that substance abuse acts as a major psychological and behavioral risk factor for suicidal thoughts and self-harming tendencies among youth. The current study builds upon this existing literature by providing primary quantitative data from an Indian youth sample, contributing culturally specific evidence to the global knowledge base.

Research Methodology

Research Design

The study employed a descriptive quantitative research design. This design was selected because it allows for the systematic collection of numerical data, enabling statistical analysis of relationships between variables. The descriptive approach is well-suited for identifying patterns, correlations, and predictive relationships within a defined population without manipulating variables.

Population

The target population included youth aged 15–29 years from educational institutions, urban communities, and rehabilitation centers. This age range was selected as it encompasses both adolescents and young adults, representing the demographic most vulnerable to both substance initiation and suicidal ideation.

Sample Size

A total of 300 respondents participated in the study. This sample size was determined to be statistically adequate for the application of correlation and regression analysis, providing sufficient statistical power to detect moderate-to-strong relationships between the study variables.

Sampling Technique

Purposive sampling technique was used for selecting participants with a history of substance use. This non-probability sampling method was appropriate given the need to target a specific sub-population with direct experience of substance use, ensuring the relevance and validity of collected data.

Tools Used

1. Substance Abuse Assessment Scale

Used to measure the frequency and severity of substance use behavior among participants. The scale captures information on type of substance, frequency of use, duration, and degree of dependency.

2. Beck Scale for Suicidal Ideation (BSSI)

Used to assess suicidal thoughts and tendencies. The BSSI is a widely validated psychometric instrument that measures the intensity of suicidal ideation across multiple dimensions including active suicidal desire, preparation, and passive suicidal ideation.

3. Socio-Demographic Questionnaire

Included variables such as:

- Age
- Gender
- Educational status
- Family income
- Type of substance used
- Duration of substance use

Variables of the Study

Independent Variable	Dependent Variable
Substance Abuse	Suicidal Ideation

Data Collection Procedure

Primary data were collected through structured questionnaires administered personally to respondents after obtaining informed consent. Participants were briefed about the purpose of the study and assured of confidentiality and anonymity. Data collection was carried out over a period of three months across multiple sites including colleges, community centers, and rehabilitation facilities. All ethical guidelines pertaining to research involving human participants were strictly followed.

Statistical Techniques Used

The following statistical methods were employed to analyze the collected data:

- Mean
- Standard Deviation
- Pearson Correlation
- Regression Analysis
- t-test
- ANOVA

Data Analysis and Interpretation

Table 1: Demographic Distribution of Respondents

Variable	Frequency	Percentage
Male	190	63.3%
Female	110	36.7%
Age 15–20	95	31.7%
Age 21–25	135	45.0%
Age 26–29	70	23.3%

Interpretation: Most respondents belonged to the 21–25 age group (45.0%), indicating higher vulnerability during early adulthood. Male respondents constituted the majority (63.3%), which is consistent with existing literature suggesting that males are more likely to engage in substance use behaviors.

Table 2: Commonly Used Substances Among Youth

Substance	Frequency	Percentage
Alcohol	85	28.3%
Tobacco/Nicotine	72	24.0%
Cannabis	61	20.3%
Opioids	42	14.0%
Multiple Drugs	40	13.4%

Interpretation: Alcohol (28.3%) and tobacco/nicotine (24.0%) were the most commonly abused substances among youth respondents. Cannabis use was reported by 20.3% of participants, while opioid use and polysubstance abuse were reported by 14.0% and 13.4% respectively. The high prevalence of alcohol and nicotine use aligns with patterns observed in national surveys on youth substance use in India.

Table 3: Correlation Between Substance Abuse and Suicidal Ideation

Variables	r-value	p-value
Substance Abuse & Suicidal Ideation	0.71	<0.01

Interpretation: A strong positive correlation ($r = 0.71$, $p < 0.01$) was found between substance abuse and suicidal ideation, indicating that higher levels of substance use are significantly associated with increased suicidal thoughts among youth. This result is statistically significant at the 1% level of significance.

Regression Analysis

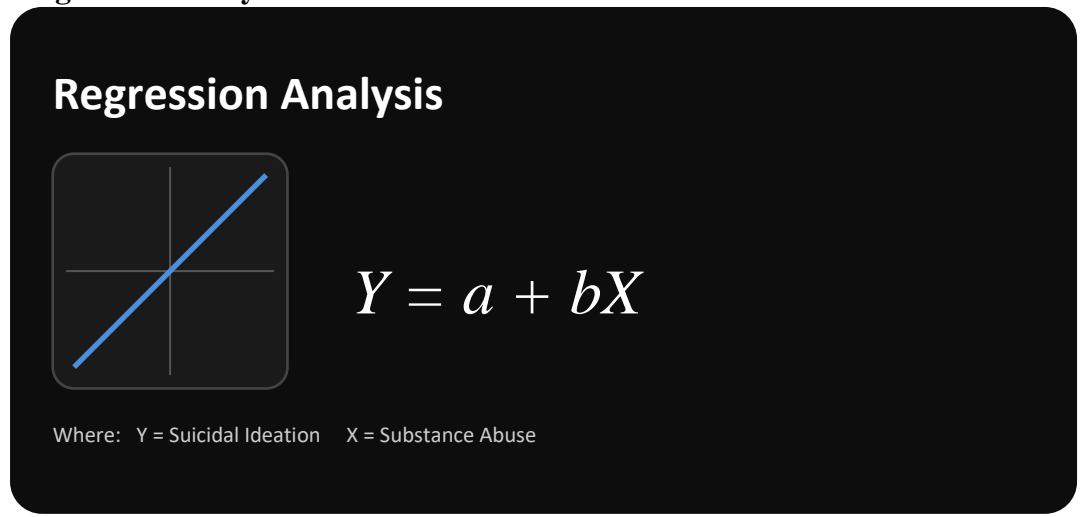


Figure 1: $Y = a + bX$ | Y = Suicidal Ideation | X = Substance Abuse

Simple linear regression analysis was conducted to examine the predictive relationship between substance abuse (independent variable) and suicidal ideation (dependent variable). The regression model follows the equation $Y = a + bX$, where Y represents suicidal ideation scores, X represents substance abuse scores, a is the constant (intercept), and b is the

regression coefficient (slope). The model was statistically significant, confirming that substance abuse is a reliable predictor of suicidal ideation.

Regression Results

Variable	Beta Value	Significance
Substance Abuse	0.68	0.001

Interpretation: The beta value of 0.68 indicates that for every unit increase in substance abuse, suicidal ideation scores increase by 0.68 units. The result is highly significant (p = 0.001), confirming that substance abuse is a strong and statistically reliable predictor of suicidal ideation among youth.

Major Findings

- Substance abuse was highly prevalent among male youth, with males constituting 63.3% of the sample.
- Alcohol and nicotine were the most frequently consumed substances among the study participants.
- Youth involved in polysubstance abuse showed significantly higher suicidal tendencies compared to single-substance users.
- Depression, loneliness, peer pressure, and family conflict were identified as major psychosocial contributors to suicidal ideation.
- A strong positive correlation (r = 0.71) was found between substance abuse and suicidal ideation.
- Youth with severe substance dependency demonstrated pronounced emotional instability and hopelessness.
- The 21–25 age group showed the highest vulnerability to both substance use and suicidal ideation.
- Regression analysis confirmed that substance abuse significantly predicts suicidal ideation (Beta = 0.68, p = 0.001).

Discussion

The findings of the study strongly support previous research indicating that substance abuse increases vulnerability to suicidal ideation among youth populations. The statistically significant positive correlation between the two variables confirms that substance-abusing youth are at substantially greater risk of experiencing suicidal thoughts. Psychoactive substances impair emotional regulation and cognitive functioning, increasing impulsive behavior and hopelessness, which are well-established proximal risk factors for suicidal ideation.

Peer pressure emerged as a major factor influencing initiation into substance use, especially among adolescents and college students. The social environment plays a powerful role in shaping attitudes toward substance use, and negative peer influences can normalize risky behaviors that ultimately contribute to psychological distress. Social isolation and family dysfunction further intensified suicidal thoughts among respondents, underscoring the importance of supportive social networks in protecting youth mental health.

The gender distribution of the findings is noteworthy: male youth demonstrated higher rates of substance use and suicidal behavior. This aligns with cultural norms that discourage emotional expression among males, leading to maladaptive coping strategies such as substance use. Addressing masculinity norms and creating safe spaces for male youth to seek help are essential components of any comprehensive intervention.

The findings align with previous international studies reporting elevated suicide risk among youth involved in methamphetamine, heroin, cannabis, and polysubstance abuse. The consistency across cultural and geographic contexts strengthens the argument that substance abuse is a universal risk factor for suicidal ideation, necessitating globally informed yet locally adapted prevention strategies.

Suggestions and Recommendations

Based on the findings of this study, the following recommendations are proposed for policymakers, educational institutions, healthcare providers, and families:

- Establish school and college-based mental health counselling programs with trained professionals who can identify early warning signs of substance abuse and suicidal ideation.
- Conduct regular awareness campaigns regarding the psychological and physical effects of substance abuse, targeting youth through social media, community programs, and school curricula.
- Encourage open family communication and emotional support, recognizing that family conflict is a key risk factor identified in this study.
- Introduce peer education and life-skills training programs that equip young people with healthy coping mechanisms and resistance skills against peer pressure.
- Strengthen rehabilitation and suicide prevention services, ensuring they are accessible, affordable, and stigma-free for youth populations.
- Promote early screening for depression, substance abuse, and suicidal tendencies within educational and healthcare settings to enable timely intervention.

Conclusion

The present quantitative study concludes that substance abuse has a significant and positive effect on suicidal ideation among youth. The strong correlation ($r = 0.71$) and regression coefficient (Beta = 0.68) provide compelling statistical evidence that increased substance use is a powerful predictor of suicidal thinking among young individuals. Increased use of alcohol, nicotine, cannabis, opioids, and multiple drugs contributes substantially to emotional distress, hopelessness, and suicidal thoughts.

Psychological vulnerabilities combined with social and environmental stressors — including peer pressure, family conflict, academic stress, and social isolation — intensify the risk of self-harm among substance-abusing youth. The compounding effect of these factors makes early, multi-level intervention not just beneficial but imperative.

The study highlights the urgent need for integrated mental health interventions, substance abuse prevention strategies, and supportive counseling services for vulnerable youth populations. Effective preventive measures involving families, schools, healthcare institutions, and policymakers are essential to reduce substance abuse and suicide risk among young people. Future research should explore longitudinal designs and larger, more diverse samples to further validate and extend these findings across different regions and socio-cultural contexts of India.

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