

## **Psychological Factors and Their Relationship to Suicidal Behavior Among Alcohol and Drug Addicts**

By

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### **Abstract**

**Objective(s):** This study aims to assess psychological factors including stress, depression, and anxiety, and their relationship to suicidal behavior among alcohol and drug addicts. **Methodology:** A quantitative descriptive-analytic study using an assessment approach with questionnaire items is conducted to explore Suicidal behavior and related factors among Alcohol and Drug Addicts for the periods of 5.11.2021 to 10.5.2022. Participants were informed that their participation was voluntary in the study. The purpose and the benefits of the study were explained by the researcher. After they agreed to participate in the study, an anonymous questionnaire was published for the patients to participate in the present study. A convenient sample of (N=100) alcohol and drug-addicted males are selected through the use of a convenient, non-probability sampling approach. The study sample is distributed at Ibn-Rushed psychiatric hospital, department of substance abuse (In-patient wards and consultancy department). A self-report questionnaire is developed from the literature, for assessing the prevalence of suicidal behavior among alcohol and drug addicts. After completing the required approvals, data was collected by the use of a self-report questionnaire (Hard copy) and interview technique. **Results:** Findings indicate that alcohol and drug addicts are at risk of suicide evidenced by problematic suicidal behavior among 37% of them. **Conclusion:** Alcohol and drug users are in danger of suicide, as one-third of them exhibit problematic suicidal behavior. Suicidal behavior is closely related to depressive symptoms and perceived stress among users **Recommendation:** Construct health-promoting programs to raise the population's awareness about the risk of alcohol and drug addiction and its relation to possible suicide. Support people who complain of stress, anxiety, depression, and lack of social support to minimize the risk of suicide.

**Keywords:** Psychological Factors, Suicidal Behavior, Alcohol, and Drug Addicts.

### **Introduction**

Suicide is a huge public health problem that affects both the general population and drug users alike. Suicide is the 11th highest cause of death in the United States, accounting for over 35,000 deaths each year on the continent. Individuals between the ages of 18 and 25 are more likely than those over the age of 26 to participate in suicide behavior, according to a study conducted by the University of Michigan (Vehbiu and Bodinaku, 2014).

Having suicidal ideation, or having thoughts of taking one's own life, is one of the most

significant risk factors for suicide (Wang et al., 2013). Substance misuse has been related to a wide range of mental health problems in the general population, including suicidal thoughts in certain instances. Substance addiction and mental health disorders may have a positive interaction that is mutually helpful (Lai et al., 2015; Poorolajal & Darvishi, 2016; Swendsen et al., 2010).

people who abuse alcohol have a higher risk of developing Generalized Anxiety Disorder. Individuals with signs of psychological distress describe using alcohol as a way to cope with or lessen their symptoms, according to studies of the mechanisms that drive these connections (Chao, 2011).

Previous research has consistently demonstrated that depression is substantially linked to the risk of suicide; nevertheless, the relationship between suicide and other risk variables in a depressed population is complicated, and depression severity alone is insufficient to reliably predict suicidal behavior (Handley et al., 2018). As a result, additional risk factors for suicide conduct in older persons with depression must be targeted to guide preventative efforts. Perceived stress is one such factor that has been linked to both heightened depression symptomatology and suicidal ideation (Bickford et al., 2020; Singh et al., 2021).

People suffering from mental illnesses such as alcoholism and drug addiction are the most common perpetrators of suicide and suicide attempts, according to statistics. When it comes to disability-adjusted life years related to mental and drug use problems, alcohol dependency was the second most common cause in 2010 (Bolanis et al., 2020).

In the last 45 years, suicide rates have risen (Pompili et al., 2010), and a history of suicide attempts is a strong predictor of suicide mortality (Bostwick et al., 2016). Therefore, research into suicide attempts and their causes is essential. Suicide has been linked to several characteristics, including violence and impulsivity, interpersonal difficulties, marital status, joblessness, poverty, and family psychiatric history (Chang et al., 2019).

With an estimated 80 million deaths each year, suicide is a huge public health issue. Suicide in the United States increased by 36.5% between 2010 and 2018. There are 20.4 million Americans who report having a substance use disorder (SUD) from the previous year, with 71.1 percent reporting alcohol use disorder and 40.7 percent reporting drug use disorder (Na et al., 2021; Müssig & Graupner, 2020; Takacs, Miri, & Kovach, 2020).

## **Methodology**

A quantitative descriptive-analytic study using an assessment approach with questionnaire items is conducted to explore Suicidal behavior and related factors among Alcohol and Drug Addicts for the periods of 5.11.2021 to 10.5.2022.

Participants were informed that their participation was voluntary in the study. The purpose and the benefits of the study were explained by the researcher. After they agreed to participate in the study, an anonymous questionnaire was published for the patients to participate in the present study.

A convenient sample of (N=100) alcohol and drug-addicted males are selected through the use of a convenient, non-probability sampling approach. The study sample is distributed at Ibn-Rushed psychiatric hospital, department of substance abuse (In-patient wards and consultancy department).

A self-report questionnaire is developed from the literature, Beck Anxiety Inventory (BAI) is a 21-question multiple-choice self-report inventory that is used for measuring the severity of anxiety in adolescents and adults ages 17 and older, PHQ-9 is one unit of the larger Patient Health Questionnaire, The PHQ-9 screens specifically for signs or symptoms of depression, The Perceived Stress Scale (PSS) is the most widely used psychological instrument for measuring the perception of stress and SENTIA: An Adolescent Suicidal Behavior Assessment Scale. The SENTIA scale is a self-report instrument designed for the assessment of suicidal behavior.

After completing the required approvals, data was collected by the use of a self-report questionnaire (Hard copy) and interview technique. The researcher introduced himself to the participants and explained the purpose of the study to get oral agreement. The questionnaire fills out an answer from the participants (Patients). The researcher gathered the questionnaire after participants' self-administration on individual bases. Approximately each self-report took (15 to 20) minutes. Data collection was performed for the period of 5.1.2022 to 15.2.2022.

## Results of the study

**Table (1):** *Distribution of Sample According to their Socio-demographic Characteristics*

List	Characteristics	f	%	
1	Age (year) M±SD= 27.12±8.775	14 –18	10	10
		19 – 23	35	35
		24 – 28	22	22
		29 – 33	12	12
		34 – 38	8	8
		39 – 43	7	7
		44 ≤	6	6
		<i>Total</i>	<i>100</i>	<i>100</i>
2	Level of education	Doesn't read & write	23	23
		Read and write	21	21
		Primary school	21	21
		Middle school	24	24
		Secondary school	8	8
		Institute/ College	3	3
<i>Total</i>	<i>100</i>	<i>100</i>		
3	Marital status	Unmarried	54	54
		Married	41	41
		Divorced	3	3
		Widower	0	0
		Separated	2	2
<i>Total</i>	<i>100</i>	<i>100</i>		
4	Occupational status	Doesn't working	49	49
		Working	51	51
		<i>Total</i>	<i>100</i>	<i>100</i>
5	Monthly income	Insufficient	44	44
		Barely sufficient	29	29
		Sufficient	27	27
		<i>Total</i>	<i>100</i>	<i>100</i>
6	Residency	Low class neighborhood	77	77
		High class neighborhood	6	6
		Sub high class neighbor.	17	17
		<i>Total</i>	<i>100</i>	<i>100</i>

This table shows that addicts are young with average age 27.12±8.775 years of which

35% of them are seen in the age group 19-23 years and 22% are in the age group 24-28 years.

Regarding the level of education, the highest percentage refers to middle school graduation (24%) followed by those who don't read and write (23%).

The marital status refers that 54% of addicts are still unmarried while 41% of them are married.

The occupational status refers that 51% of them are working and the remaining are doesn't work (49%).

Regarding monthly income, the highest percentage refers to 44% of addicts who perceived insufficient monthly income, 29% perceived barely sufficient income, and only 27% perceived sufficient income.

**Regarding residency, 77% of them reported they are living in a low-class neighborhood.**

**Table (2): Assessment of Suicidal Behavior among Alcohol and Substance Addicts**

Suicidal behavior	f	%	M	SD
Nonproblematic	63	63		
Problematic	37	37	5.37	5.136
<b>Total</b>	<b>100</b>	<b>100</b>		

f: Frequency, %: Percentage, M: Mean for the total score, SD: Standard Deviation for the total score

Non problematic= 0 – 8, Problematic= 9 – 16

This table indicates that alcohol and drug addicts are at risk of suicide evidenced by problematic suicidal behavior among 37% of them.

**Table (3): Assessment of Perceived Stress among Alcohol and Substance Addicts**

Stress	f	%	M	SD
Mild	9	9		
Moderate	47	47	22.65	3.633
Severe	44	44		
<b>Total</b>	<b>100</b>	<b>100</b>		

f: Frequency, %: Percentage

M: Mean for the total score, SD: Standard Deviation for the total score

Mild= 10-16.66, Moderate= 16.67- 2.33, Severe= 2.34-30

This table reveals that addicts perceive mild to moderate to severe levels of stress as reported by 47% of them with moderate and 44% of them with severe stress

**Table (4): Assessment of Depressive Symptoms Level (Patient Health Questionnaire) among Alcohol and Substance Addicts**

Depressive symptoms	f	%	M	SD
Mild	14	14		
Moderate	44	44	16.84	6.106
Severe	42	42		
<b>Total</b>	<b>100</b>	<b>100</b>		

f: Frequency, %: Percentage

M: Mean for the total score, SD: Standard Deviation for the total score

Mild= 0-9, Moderate= 9.1- 18, Severe= 18.1-27

This table shows that addicts are associated with moderate to severe depressive symptoms as reported 44% with moderate levels and 42% with severe levels according to the patient health questionnaire of depression.

**Table (5): Assessment of Anxiety Symptoms Level among Alcohol and Substance Addicts**

Anxiety symptoms	f	%	M	SD
Mild	34	34		
Moderate	44	44	29.10	15.330
Severe	22	22		
<b>Total</b>	<b>100</b>	<b>100</b>		

f: Frequency, %: Percentage

M: Mean for the total score, SD: Standard Deviation for the total score

Mild= 0-21, Moderate= 2.1- 42, Severe= 42.1-63

This table reveals that addict clients are experiencing a moderate level of anxiety symptoms as reported by 44% of them

**Table (6): Correlation among Suicidal Behavior and psychological Factors in Alcohol and Substance Addicts (N=100)**

Correlation	Anxiety symptoms	Depressive symptoms	Perceived stress	Suicidal behavior
<b>Dependence severity</b> Spearman Correlation Sig. (2-tailed)				
<b>Perceived social support</b> Spearman Correlation Sig. (2-tailed)				
<b>Anxiety symptoms</b> Spearman Correlation Sig. (2-tailed)	1			
<b>Depressive symptoms</b> Spearman Correlation Sig. (2-tailed)	.585**	1		
<b>Perceived stress</b> Spearman Correlation Sig. (2-tailed)	.368**	.548**	1	
<b>Suicidal behavior</b> Spearman Correlation Sig. (2-tailed)	.016	.260**	.354**	1
	.873	.005	.001	

This table displays that suicidal behavior is strongly associated with depressive symptoms and perceived stress among addicts evidenced by a positive correlation at p-values= .005 and .001.

**Table (7): Regression Analysis for Predication of Suicidal Behavior with Sociodemographic Variables of Alcohol and Substance Addicts (N=100)**

Suicidal behavior Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Age	-.038	.066	-.066	-.580	.563
Educational level	.468	.411	.127	1.141	.257
Marital status	-.001	.773	.000	-.001	.999
Occupational status	.211	1.102	.021	.192	.848
Monthly Income	.490	.649	.079	.754	.453
Residency	-.886	.737	-.132	-1.202	.232

*Dependent variable: Suicidal behavior*

The regression analysis in this table shows that sociodemographic variables of addicts are not predicted to suicide as indicated by an insignificant difference among suicidal behavior with sociodemographic characteristics of age, educational level, marital status, occupational status, monthly income, and residency

## Discussion

The present results showed that there is no statistically significant relationship between demographic characteristics and suicidal behavior. From the researchers' perspective substance use is a personal factor that is not limited to gender, age, or residency.

In the same context of our study, previous studies indicated that women receiving addiction treatment were more likely to report having suicidal thoughts and making attempts than males were. According to the findings of this study, being male is a protective factor against both suicidal ideation and conduct. According to the findings of other research, women are more likely to come out with their problems than men, who may be more reluctant to seek aid, which increases the likelihood of an incorrect diagnosis being made. Despite this, there is evidence from several studies that suggest men are more dangerous (Rodríguez-Cintas et al., 2018).

The findings demonstrate that alcohol and drug users are at risk of suicide evidenced by problematic suicidal behavior among 37% of them (table 2).

Many studies support this finding, our results are in agreement with Kennedy et al. (2015), who showed that the adjusted analyses of recurring events, risky/heavy alcohol use, daily injection cocaine use, and victimization were related to an elevated probability of suicide attempt. These findings are consistent with earlier research identifying heavy cocaine injection and violent victimization as risk factors for suicidal behavior in drug users. Our findings are also consistent with a large body of research documenting an association between heavy alcohol consumption and suicidal behavior among general populations, as well as other, albeit limited, studies identifying associations between alcohol consumption and negative health and social outcomes among drug users. To the best of our knowledge, ours is the first study to prospectively identify a connection between excessive drinking practices and suicidal behavior among a community-recruited group of drug users, after adjusting for intensive illicit drug use patterns. These data show that interventions designed to minimize high alcohol consumption among drug users may contribute to a decrease in suicidal conduct. This assumption is reinforced by current observational data that indicates addiction therapy may lessen suicide behavior among people with substance use disorders (Kennedy et al., 2015).

Addicts are perceiving mild to moderate to severe levels of stress as reported by 47% of them with moderate and 44% of them with severe stress (table3), and addicts are associated with moderate to severe depressive symptoms as reported by 44% with moderate level and 42% with severe level according to patient health questionnaire of depression, while anxiety reveals that addict clients are experiencing a moderate level of anxiety symptoms as reported among 44% of them.

Studies found a significant link between depression and suicidal ideation in a study of Greek nursing students. The results regarding depression are consistent with these findings. Similarly, it was observed in recent research on Taiwanese medical students that those who scored as depressed were considerably more likely to have suicide ideation (Aradilla-Herrero et al., 2014).

The evidence indicates that suicidal behavior is closely related to depressive symptoms and perceived stress among users. A significant difference between perceived stress and suicidal conduct indicates that addicts with perceived stress are suicidal. This result is expected according to the researcher, as these factors put a psychological, social, and economic burden on the patient, and pushed him to end his life.

Partially, these results were confirmed by different studies found in the literature, as a review focused on psychological and psychotherapy therapies to limit alcohol access and/or intake, and also examined if therapeutic method influenced treatment effectiveness, and whether treatment dose or length influenced treatment effectiveness. In two non-randomized non-controlled investigations, there was evidence of a reduction in suicidal ideation ratings. Due to the rarity of the incidence, suicide fatalities were under-reported in research. This is prevalent in suicide prevention studies. Suicidal ideation is more likely to be followed by self-harm or suicide attempts than by suicidal ideation. To illustrate how alcohol-related negative urgency and excessive drinking frequency distinguish between the two groups, current research suggests that volitional alcohol components may lead from self-harm ideation to behavior. The impact of these therapies on self-harm, suicide attempts, and suicidal thoughts may differ due to outcome measurability. Self-harm and suicide attempts are binary outcomes: they either happened or they didn't, whereas suicidal ideation is a more complex result to evaluate (Witt et al., 2021).

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## **Conclusion**

The result of my study highlights the complexity of suicidality and points towards the interaction of factors contributing to suicidal behavior and some various components and factors that may contribute to the risk/ development of suicidality and suicidal behavior in an addicted person, e.g., mood disorder, stress, and history of psychiatric illness. People with both high depression and high anxiety had a significantly greater risk for suicide compared to those with either high anxiety or high depression alone. Most alcohol and drug addicts complain of anxiety and depression. Most alcohol and drug addicts complain of different degrees of stress. Alcohol and drug users are in danger of suicide, as one-third of them exhibit problematic suicidal behavior.

## **Recommendations**

Constructing health-promoting programs to raise the population's awareness about the risk of alcohol and drug addiction and its relation to possible suicide.

Activate the role of group sessions therapy and rise the importance of consulting psychiatrists and minimize social stigma toward psychological consultations.

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