

A STUDY ON SUICIDAL IDEATION AND SUICIDE ATTEMPTS AMONG SUBSTANCE ABUSERS

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Abstract

The present study was conducted to investigate the suicidal ideation and attempts to suicide among the substance abusers. The study sample was comprised of 100 substance abusers (70 males and 30 females among them 18 were adolescent males, 7 were adolescent females, 52 were adult males and 23 were adult females) and selection was made by using purposive sampling technique. The instruments used for collecting data were: (1) Personal information questionnaire and (2) Bangla version of the Beck scale for suicide ideation. The data were analyzed by one-way ANOVA and independent sample t test. Results indicated that there were significant differences among the substance abuser's suicidal ideation and suicide attempts. Yaba abusers had more suicidal ideation and took more suicide attempts than other substance abusers; adult abusers had more suicidal ideation and suicide attempts than adolescent abusers. Moreover, suicidal ideation was higher in males than females.

Introduction

Attempt to commit suicide is a self-destructive way of killing oneself. It is a tragic event for them who take their lives as well as to their family members. It also has a long-lasting devastating impact on ones dear and near ones, well-wishers and the society as a whole. Firstly, it is known to be a worldwide issue and secondly, it is the second leading cause of death among the teenagers and young adults of 15 - 29 years old⁽¹⁾. Adolescents and younger adults are more prone to commit suicidal action than any other age groups, although people attempt to commit suicide throughout the life span. Every 40 seconds, one person dies due to suicide, that means more than 800000 people die annually around the globe⁽¹⁾. Several factors, such as, previous suicide attempts, psychiatric disorders, substance abuse, psychological states, genetical reason, family and social status accelerate the risk of suicide⁽²⁾. Psychiatric disorder such as depression is considered as the key risk factor, and substance abuse is the second risk factor of suicide⁽³⁾.

The term suicidal ideation is defined as thoughts about taking one's own life with detailed planning⁽⁴⁾. It varies to a great extent from transient to comprehensive thoughts with specific planning, role-playing of the imagined scenario and incomplete attempts.

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This sometimes lead individuals to take steps and the ultimate result could be death, but the individual survives⁽⁵⁾. The lifetime prevalence rate of suicidal ideation is 9% as against 2% for the general global population^(6,7). Everyone has more or less suicidal thoughts throughout the life span, but some groups are more vulnerable than the others⁽⁸⁾. The rate is significantly higher for those who have a psychiatric illness like depression or bipolar disorder because suicidal ideation is a symptom of psychiatric disorders⁽⁹⁾.

Attempt to commit suicide is defined as when someone takes a step to harm himself with the intention of killing, but he is alive as a consequence of his action. It is also a strong predictor for later completion of suicide. Suicide attempt rate is comparatively higher among the teenagers of developing than the developed countries⁽¹⁰⁾. The ratio of attempts to completed suicide is relatively higher in the elder people than adolescents in the United States of America⁽¹¹⁾. In most of the cases the substance abusers attempt suicide due to overuse of drugs; while in some cases it is found that the substance abuse is not the actual cause of his attempt to commit suicide⁽¹²⁾. Despite the fact that there is a strong link between substance-induced disorder and suicidal action, a greater proportion of substance abusers do not take any suicide attempt. For this reason, it is difficult to identify those people with substance-induced disorder who are more vulnerable to commit suicide⁽¹³⁾.

Alcohol or other substance abusers attempt to commit suicide approximately six-folds more than non-abusers. The rate of completed suicide among male and female substance abusers are 2 - 3 and 6.5 - 9 times, respectively higher than males and females who were not drug abusers^(14,15). From the sample of those who attempt to commit suicide, researchers found that alcohol consumption was a predictor of later completion of suicide⁽¹⁶⁾. Kolves *et al.* (2006) found that nearly 70% of males and 29% of females who completed suicide matched the criterion for alcohol consumption or dependence. It is reported that alcohol consumption and suicide are positively correlated⁽¹⁷⁾.

Substance-induced disorders accelerate the risk of suicide. Investigation revealed that suicide hazard ratio for cocaine, psychostimulant, benzodiazepine, cannabis, and sedative users were 1.35, 2.10, 3.83, 3.89, 11.36, respectively⁽¹⁸⁾. Researchers found that both male and female cannabis users reported experiencing more major depressive episodes, psychological distress, suicidal attempts, and suicidal thoughts than non-users. Also, the females who consumed cannabis frequently experienced more suicidal thoughts or attempts than males⁽¹⁹⁾. However, it has been shown that substance abuse as a risk factor for suicide, rarely has been found to contribute to the inquiry of specific substance effects⁽²⁰⁾.

The concern about suicide around the globe has increased dramatically. Substance abusers are more vulnerable to suicidal ideation and attempt to commit suicide. This study aims at finding which age group and types of substance abusers have more

suicidal ideation and take more suicide attempts. So, the findings of this work will help mental health practitioners to take necessary intervention plan.

Material and Methods

Data were collected from substance abusers from various rehabilitation centres of Dhaka city. A total of 100 participants (70 males and 30 females) whose age ranged from 12 - 50 years were selected. Among them, 25 were adolescents (12 - 19 years), and 75 were adults (20 - 50 years). Purposive sampling technique was used to conduct the study. For data collection, the following materials were used.

A personal information questionnaire was used to collect data about the participants' age, gender, educational level, socio-economic status, marital status and number of suicide attempts.

Suicide ideation scale was originally developed by Beck⁽²¹⁾ and adapted by Sultana *et al.*⁽²²⁾. It consists of 21 items for identifying and assessing an individual's severity of suicidal thinking. Each item consists of three options graded to the intensity of the suicidal ideation ranging from 0 - 2. The total score of suicidal ideation is obtained by summing up the first 19 items (items 20 and 21 are excluded in the score). The highest and the lowest possible scores are 38 and 0, respectively. Cronbach's alpha reliability of this scale is 0.89 and validity coefficient is 0.41. Test-retest reliability coefficient and the convergent validity of the Bangla version scale were, respectively $r = 0.86$ ($p < 0.01$) and $r = 0.78$ ($p < 0.01$).

Firstly, ethical permission was taken from the 'Ethics Committee' of the Department of Educational and Counselling Psychology. The proper authorities of the rehabilitation centres were formally approached for permission. Then, necessary consents were taken from the participants and before administering the instruments rapport was established with each participant. Participants were informed about confidentiality and their rights to give up from this study at any time. The questionnaires were administered individually and made necessary clarifications regarding any item of the scale. Researchers read the questionnaire for the participants who were unable to read the statements and to record their responses. It took 15 - 20 minutes on an average to complete the task. After finishing the task, participants were thanked by the investigator for their kind cooperation and participation in the study.

Results and Discussion

Data were analyzed by one-way ANOVA and independent sample t test. From Table 1 one way ANOVA results indicate that there are significant differences in suicidal ideation among different substance abusers ($F = 4.46$, $p = 0.002$). Also, the results show that there are significant differences in suicide attempts with different substance abusers ($F = 5.34$, $p = 0.001$). Suicidal ideation mean score for marijuana abusers ($M = 3.31$, $Sd =$

3.50), yaba abusers (M = 4.22, Sd = 2.78), phensedyl abusers (M = 1.50, Sd = 1.01), alcohol abusers (M = 1.68, Sd = 1.10) and mixed abusers (M = 1.81, Sd = 2.14). So there are statistically significant differences in suicidal ideation among substance abusers. Also, suicide attempts mean score for marijuana abusers (M = 1.48, Sd = 1.09), yaba abusers (M = 1.83, Sd = 0.71), phensedyl abusers (M = 0.72, Sd = 0.67), alcohol abusers (M = 0.89, Sd = 0.87) and mixed abusers (M = 1.00, Sd = 0.73). So, there are statistically significant differences in suicide attempts among substance abusers.

Table 1. Mean differences in suicidal ideation and suicide attempts according to substance abuse.

Variables	Substance	N	Mean	Sd	df	f	Sig.
Suicidal ideation	Marijuana	29	3.31	3.50	4	4.46	0.002
	Yaba	18	4.22	2.78	95		
	Phensedyl	18	1.50	1.01			
	Alcohol	19	1.68	1.10			
	Mixed	16	1.81	2.14			
	Total	100	2.60	2.65	99		
Suicide attempts	Marijuana	29	1.48	1.09	4	5.34	0.001
	Yaba	18	1.83	0.71	95		
	Phensedyl	18	0.72	0.67			
	Alcohol	19	0.89	0.87			
	Mixed	16	1.00	0.73			
	Total	100	1.22	0.94	99		

*p < 0.01.

Table 2 indicates multiple comparisons of the results of the post hoc test. The result reveals that there is a significant mean difference between yaba and phensedyl (2.722), yaba and alcohol (2.538), yaba and mixed (2.41) substance abusers and suicidal ideation, but no significant difference among marijuana and other substance abusers and suicidal ideation. Results also show that there is a significant mean difference between marijuana and phensedyl (0.761), yaba and phensedyl (1.111), yaba and alcohol (0.939), yaba and mixed (0.833) substance abusers suicide attempts, but no significant difference among marijuana and other substance abusers and suicide attempts. So, the findings of the present study reveal that yaba users have more suicidal ideation and take more suicide attempts than other substance abusers.

Table 3 shows that there is statistically significant difference in the score obtained for adolescents (M = 1.56, Sd = 1.36) and adults (M = 2.95, Sd = 2.88). So, the results reveal that adults have more suicidal ideation than adolescents. Also, results show that there is significant difference between adolescents (M = 0.72, Sd = 0.74) and adults (M = 1.39, Sd = 0.94) suicide attempts. So, adult abusers take more suicide attempts than adolescent

Table 2. Multiple comparisons of suicidal ideation and suicide attempt basis on substance abuse.

Variable	Substance (I)	Substance (J)	Mean difference (I - J)	Sig.
Suicidal ideation	Marijuana	Yaba	-0.912	0.737
		Phensedyl	1.810	0.116
		Alcohol	1.626	0.181
		Mixed	1.498	0.304
	Yaba	Marijuana	0.912	0.737
		Phensedyl	2.722 [*]	0.012
		Alcohol	2.538 [*]	0.020
		Mixed	2.410 [*]	0.044
	Phensedyl	Marijuana	-1.810	0.116
		Yaba	-2.722 [*]	0.012
		Alcohol	-0.184	0.999
		Mixed	-0.313	0.996
	Alcohol	Marijuana	-1.626	0.181
		Yaba	-2.538 [*]	0.020
		Phensedyl	0.184	0.999
		Mixed	-0.128	1.00
Mixed	Marijuana	-1.498	0.304	
	Yaba	-2.410 [*]	0.044	
	Phensedyl	0.313	0.996	
	Alcohol	0.128	1.00	
Suicide attempts	Marijuana	Yaba	-0.351	0.661
		Phensedyl	0.761 [*]	0.034
		Alcohol	0.588	0.153
		Mixed	0.483	0.385
	Yaba	Marijuana	0.351	0.661
		Phensedyl	1.111 [*]	0.002
		Alcohol	0.939 [*]	0.012
		Mixed	0.833 [*]	0.047
	Phensedyl	Marijuana	-0.761 [*]	0.034
		Yaba	-1.111 [*]	0.002
		Alcohol	-0.173	0.974
		Mixed	-0.278	0.883
	Alcohol	Marijuana	-0.588	0.153
		Yaba	-0.939 [*]	0.012
		Phensedyl	0.173	0.974
		Mixed	-0.105	0.996
Mixed	Marijuana	-0.483	0.385	
	Yaba	-0.833 [*]	0.047	
	Phensedyl	0.278	0.883	
	Alcohol	0.105	0.996	

*p < 0.05.

abusers. This result is consistent with previous findings that older substance abusers were at higher risk of suicide attempts and completion of suicide than younger abusers⁽²³⁾.

Table 3. Mean differences of suicidal ideation and suicide attempts based on age.

Variable	Age wise	N	Mean	Sd	T	Sig.
Suicidal ideation	Adolescent	25	1.56	1.36	-2.32	0.023
	Adult	75	2.95	2.88		
Suicide attempts	Adolescent	25	0.72	0.74	-3.22	0.002
	Adult	75	1.39	0.94		

*p < 0.05.

Table 4 indicates that difference between males and females suicidal ideation is significant at 0.05 level. Males and females suicide attempts scores are not significant at 0.05 level. There is significant difference in the score obtained for males (M = 2.94, Sd = 2.93) and females (M = 1.80, Sd = 1.58). So, males have more suicidal ideation than females. Results also indicate that there is no significant difference between males (M = 1.29, Sd = 1.01) and females ((M = 1.07, Sd = 0.74) suicide attempts. Previously it is reported that alcoholic males took more suicide attempts and more suicidal ideation than females because males were affected by mood disorder and faced financial difficulties⁽²³⁾. In another study, it was revealed that among marijuana abusers, women took more suicide attempts than men⁽²⁴⁾.

Table 4. Mean differences in suicidal ideation and suicide attempts according to gender.

Variable	Gender	N	Mean	Sd	T	Sig.
Suicidal ideation	Male	70	2.94	2.93	2.01	0.047
	Female	30	1.80	1.58		
Suicide attempts	Male	70	1.29	1.01	1.07	0.287
	Female	30	1.07	0.74		

*p < 0.05.

Due to shortage of time and lack of funding, it was not possible to collect data from all other rehabilitation centres of Bangladesh except Dhaka city. So, the study recommends further research at a larger scale to make any definite recommendation.

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