

Evaluation of Depression Score in Suicide Attempters Referring to Hospitals Affiliated to Shiraz University of Medical Sciences in 2018

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Abstract

Background: Since suicide attempt and its association with mental disorders such as depression in individuals is a major challenge in societies, this study aimed to investigate depression in suicide attempters referring to hospitals affiliated to Shiraz University of Medical Sciences in 2018.

Methods: This was a cross-sectional descriptive-analytical study. The study population included all suicide attempters referring to hospitals affiliated to Shiraz University of Medical Sciences in 2018. Some 74 patients were selected by convenience sampling method. Data were collected through demographic questionnaires and second version of Beck Depression Inventory. Finally, by defining the scores of the questionnaires, statistical analysis was performed and the results obtained from the study. Mann-Whitney, Kruskal-Wallis and Spearman correlation tests were used to analyze the relationship between the variables. The significance level was considered 5%.

Results: The mean age of the samples was 49.41±5.56 years. 28 (37.8%) of the samples were male, and the rest were female. The mean and standard deviation of depression were 30.38±11.52, which were in the category of severe depression. There was a meaningful relationship between marital status, education level, and depression ($P<0.05$).

Conclusion: Depression is one of the predictive variables of suicide attempts in individuals; therefore therapeutic and supportive interventions in such individuals can prevent a suicide attempt.

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Introduction

Suicide attempts are among the most important indicators of mental health in a community.¹ Suicidal behavior has a broad meaning and encompasses a range of phenomena, including suicidal ideation, suicide threat, suicide attempt, and suicide attempt.² WHO defines suicide as where a person deliberately and without the intervention of others performs abnormal behaviors such as self-harming or eating a substance in excess of the prescribed amount for treatment. His goal is to achieve the changes he expects.³ Suicide is, a non-lethal act in which a person

intentionally puts himself or herself at risk of death.⁴ Suicide is a cry for help.⁵ According to the World Health Organization's estimates by 2020, approximately 1.53 million people will die from suicide, and more than ten to twenty times as many will commit suicide worldwide. This means that on average, one suicide death occurs every twenty seconds, and one suicide attempt occurs within one to two seconds.⁶ The phenomenon of suicide in Iran has also become increasingly important. Suicide rates in our country are higher than in the Middle East countries, and suicide rates are on the rise.^{3,7-9} Suicide has different consequences such as disability, increasing the

Table 1: Depression status of the suicide attempters referring to hospitals affiliated to Shiraz University of Medical Sciences in 2018

Depression Score	Number	Percent
Minimum Depression (0-13)	0	0
Mild Depression (14-19)	15	20.30
Moderate Depression (20-28)	25	33.80
Severe depression (29-63)	34	45.90
Total	74	100

Table 2: Depression status of the suicide attempters according to demographic characteristics

Variable	Type of statistical test	P value
Age	Spearman	0.054
Gender	Mann-Whitney U	0.332
Marital status	Kruskal-Wallis	<0.001
Level of education	Kruskal-Wallis	<0.001

cost of treatment for these people and orphaned children at the community level, which leads to an increase in child delinquency and lack of education, which itself is a growing problem in society.⁶ However, neither the medical sciences nor the social and behavioral sciences have been able to answer the question of why some people commit suicide or attempt suicide.¹⁰ One approach about the etiology of a suicide is through the psychopathology. This approach suggests that there is a relationship between suicide attempts and mental illness.^{11, 12} Thus, by examining the psychopathology of individuals, causal relationships, or correlations between mental disorders and suicide are identified.¹³ Therefore, the purpose of this study was to assess the depression rate of suicide attempters referring to hospitals affiliated to Shiraz University of Medical Sciences in 2018.

Materials and Methods

This research is a cross-sectional descriptive-analytical study. The Ethics Committee approved this study of the Larestan University of Medical Sciences (IR.LARUMS.1396.3). The study population included all suicide attempters referring to hospitals affiliated to Shiraz University of Medical Sciences in 2018. Some 74 patients were selected by convenience sampling method. In this study, after obtaining consent and necessary explanations for the studied samples, data were collected. Data were collected through demographic questionnaires and the second version of the Beck Depression Inventory. Second version of the Beck Depression Inventory was introduced by Beck and Beck for the rapid screening of depressed patients.¹⁴ The latest version of the Beck Depression Inventory-2 Questionnaire in 1996 was developed by Beck et al., based on the Fourth Diagnostic and Statistical Manual of Mental Disorders.¹⁵ Finally, the data were analyzed.

This survey is a 21-item self-assessment questionnaire that measures the severity of depressive symptoms. Each Item is divided into four degrees according to its severity and scores from zero to three. A score of 0 indicates the lowest, and a score of 3 means the highest severity of experience of a symptom

of depression. The total score of each questionnaire can be between 0 and 63. A score of 0-13 indicates minimal depression, 14-19 mild depression, 20-28 moderate depression, and 29-63 severe depression.¹⁵

In Iran, this questionnaire has been standardized by Rahimi, who had good validity and reliability in their study.¹⁶ Inclusion criteria were informed consent to participate in the study, age between 40-60 years, and familiarity with the Persian language. Samples were excluded if they were reluctant to cooperate with the research, and they had a history of drug or alcohol abuse. Frequency (percent) and mean (standard deviation) were used to describe the descriptive statistics. The data was entered into SPSS software version 25 and then analyzed. To test the relationship between the variables, Mann-Whitney and Kruskal-Wallis tests and Spearman correlation coefficient were used. The significance level was considered 5%.

Results

The average age of the participants was 49.41±5.68 years. 28 (37.8%) of the samples were male, and the rest were female. In terms of education, 9 (12.2%) were illiterate, 15 (20.30%) elementary, 24 (32.40%) guidance, 22 (29.70%) high school and 4 (5.5%) had university education. In terms of marital status, 8 (10.80%) were single, 52 (70.30%) were married, 14 (19%) were widowed, or divorced. The mean and standard deviation of depression were 30.38±11.52. The data on depression rates of the samples are summarized in Table 1. Also, Table 2 summarizes the relationship between age, sex, education, and marital status with depression.

Discussion

In this study, depression in the studied units was evaluated. According to the findings of the study, most of the subjects had severe depression. Several factors have been identified in the etiology of suicide and suicide attempt, in which the results of the research indicate that mental disorders are involved in most suicides.¹⁷ Among the mental disorders, mood disorders have the

highest risk of suicide in both gender,¹⁸ and among the mood disorders, the highest risk of suicide is related to depression.^{19, 20} According to Beck's theory, there is a suicidal belief system that has four main themes. Modeling based on this theory has shown that these four issues are: disloyalty, dislike, intolerance of helplessness, and fatigue. This way of thinking leads the patient to believe that there is no solution to their problems. These people feel that their recent plight is unbearable and believe that there is no hope of change. This view leads to the suicide of a person with a depressive disorder, and the consequence of this way of thinking is suicide as the only solution that comes to their mind.²¹ The study by Bhuiyan shows that individuals experience shame and humiliation before attempting suicide, such as despair and loss of temper, aggression, and hostility.²² The results of Blasco-Fontecilla et al. study also show that Feeling empty is one of the strongest emotions associated with a suicide attempt, and this feeling often experienced by suicidal individuals before attempting suicide. Be.²³ Greenberg also writes: Suicide, such as blood sepsis caused by a bacterial infection, is the worst outcome of an unpleasant situation and occurs when one feels hopeless and worthless.²⁴ Lloyd-Richardson et al. write: There is little information on the underlying cause of this behavior. Studies show that these individuals aim to relieve their negative emotions such as depression, anxiety, guilt, aggression and anger, loneliness, disgust, and self-hatred, as well as getting rid of unpleasant thoughts and feelings. These emotional pressures trigger an attempt to suicide.²⁵ In support of this, the results of the study by Rodham et al., Madge et al., Scoliers et al. show that most suicidal individuals attempt to relieve their disturbed mental state.²⁶⁻²⁸

No significant relationship was found between age, gender, and suicide attempt in this study. A large group of predictors of suicide based on researches are demographic factors such as age and gender. Many studies have evaluated suicide rates at different ages, and most have found that the risk of suicide is higher in young people.²⁹ Other findings also indicate that demographic factors such as age and gender play an important role in thought and planning for suicide.³⁰ Although females are four times more likely than males to attempt suicide, males are four times more likely than females to commit suicide.³¹ The findings of this study are not consistent with those of other researchers, which may be due to the low number of samples in the present research.

In the present study, a significant relationship was found between marital status and suicide attempt, as most of the subjects studied were married. Many studies point to the high rate of suicide attempts as a result of violence in the family environment, harassment of relatives, marital discord, and addiction among family members and age difference with spouse.³²⁻³⁷

Also, there was a meaningful association between the level of education and suicide attempt in this study. The highest rate of suicide attempts was related to guidance education (32.40%) and diploma (29.70%). The findings of this study are congruent with other studies. The survey of Ansari et al. In Rafsanjan also found that the highest rate of suicide attempts was in high school (44.50%) and guidance (26.90%) individuals.³⁸

The mental status of the researched subjects was beyond the control of the researcher when answering the questions, which is one of the limitations of the present study. Also, the small number of samples limits the generalizability of the findings to the target population.

Conclusion

According to the findings of this study, depression can play a crucial role in a suicide attempt, so treatment and counseling interventions in people with depression can have a Protective role in this kind of harmful behavior.

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Conflict of Interest: None declared.

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