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Brief Report / Kısa Araştırma

Evaluation of Suicide Attempts that Referred to a University Hospital Emergency Department

Mehmet Asoglu[1], Feridun Bulbul[2], Abdurrahman Altindag[3]

[1]Assist Prof. Dr., Harran University, Faculty of Medicine, Department of Psychiatry, Sanliurfa - Turkey
[2]Assist. Prof. Dr., [3]Prof. Dr., Gaziantep University, Faculty of Medicine, Department of Psychiatry, Gaziantep - Turkey

ABSTRACT

Evaluation of suicide attempts that referred to a university hospital emergency department

Objective: The aim of this study is to evaluate the clinical and sociodemographic variables of suicide attempt cases that referred to a university hospital at Sanliurfa.

Method: Ninty people who referred Emergency Department of Harran University, Faculty of Medicine with a suicide attempt participated in this study. The Supre-Miss Survey Form which was prepared by Crisis Center of Ankara University, Faculty of Medicine, Department of Psychiatry was used. The survey contains these subscales: The Sociodemographic and Clinical Data Form, WHO Well-Being Index, Beck Depression Inventory (BDI), Trait Anger Scale (TAS).

Results: Among the patients with suicide attempts, 55.7% were diagnosed with major depressive disorder, 14.1% with generalized anxiety disorder and 5.3% with intermittant explosive disorder. It was observed that the most common way of suicide attempt was chemicals-drugs intoxication. 88.9% of the patients were under 35 years old, 12.2% had a history of psychiatric medication, 66.2% had referred to a practitioner MD and 12.2% of these had told about their suicidal ideation to their doctor. Suicide attempt rate was found to be higher in, women, single people, youngsters, uneducated/poorly educated people. However, the rate was found to be lower in married people and well- educated people.

Conclusion: The physichiatrist should be more alert about women, single people, youngsters, uneducated/ poorly educated people over the course of psychiatric evaluation.

Key words: Psychiatric disorders, suicide attempt, suicide method

ÖZET

Bir üniversite hastanesi acil servisine başvuran intihar girişimi vakalarının değerlendirilmesi

Amaç: Bu çalışmanın amacı, Şanlıurfa'da bir üniversite hastanesine intihar girişimi nedeni ile başvuran hastaların klinik ve sosyodemografik verilerinin incelenmesidir.

Yöntem: Çalışma, Harran Üniversitesi Tıp Fakültesi Araştırma ve Uygulama Hastanesi Acil Servisine intihar girişimi nedeniyle müracaat eden 90 kişi üzerinde yapıldı. Çalışmada, Ankara Üniversitesi Tıp Fakültesi Psikiyatri Anabilim Dalı Kriz Merkezi tarafından hazırlanan Supre-Miss anket formu kullanıldı. Anketin içeriğinde şu alt ölçekler yer almakta idi: Sosyodemografik ve klinik veri formu, WHO İyilik Hali İndeksi, Beck Depresyon Envanteri (BDE), Sürekli Öfke Ölçeği (SÖÖ).

Bulgular: İntihar girişiminde bulunan kişilerin %55.7'sinde majör depresif bozukluk, %14.1'inde yaygın anksiyete bozukluğu, %5.3'ünde aralıklı patlayıcı bozukluk saptandı. İntihar girişimi yöntemi olarak en çok kimyasal madde-ilaç kullanımının tercih edildiği bulundu. Hastaların %88.9'unun 35 yaş altında olduğu tespit edildi. Hastaların %12.2'sinde psikiyatrik tedavi öyküsünün bulunduğu, %66.2'sinin pratisyen hekim başvurusunun olduğu, %12.2'sinin de pratisyen hekime intihar düşüncesinden bahsettiği saptandı. Eğitimsiz veya eğitim düzeyi düşük olan kişilerde, kadınlarda, bekarlarda, genç yaşta olanlarda intihar girişim oranı fazla bulundu; eğitim düzeyi yüksek kişilerde ve evlilerde intihar girişimi daha az oranda saptandı.

Sonuç: Psikiyatrik değerlendirme sırasında eğitim düzeyi düşük, kadın, bekar ve genç yaştaki hastalarda intihar riski açısından daha dikkatli olunmalıdır.

Anahtar kelimeler: Psikiyatrik bozukluklar, intihar girişimi, intihar yöntemi

Address reprint requests to / Yazışma adresi:
Assist. Prof. Dr. Feridun Bulbul
Gaziantep University, Faculty of Medicine, Department of Pscyhiatry, 27310 Sahinbey, Gaziantep - Turkey

Phone / Telefon: +90-342-360-6060/76362

Fax / Faks: +90-342-360-3928

E-mail address / Elektronik posta adresi: frdnblbl@yahoo.com

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INTRODUCTION

Suicidal behavior is a complex form of behavior, which effects the individual, his/her environment and the society, and in which biological, psychological and social factors interact (1). Suicidal behavior is a broad term, which points to prominent suicidal ideation and intent or an ongoing ambiguous situation between life and death, during which a lethal method is tried, directly or indirectly at times, while at other times which leads to intentional or unintentional acts that end in death (2,3). Currently, suicide is both an important public and mental health problem and a leading cause of death. This issue is likely to keep its importance in the following years (4).

Among the causes of suicide attemtps, mental disorders are a serious cause since it is seen more than 90% of the cases, other important causes include physical disorders, financial, social and family problems (5,6). Although our country has a low suicide rate, suicide and suicide attempts begin to attract attention, at least, of mental health professionals (7).

There are several factors effecting emergence of suicidal behavior. Evaluating mental disorders and sociodemographical data among individuals with suicidal behaviors is important to understand and prevent them. In this study, clinical and sociodemographical features of patients who applied to a university hospital with suicide attempt were examined.

METHOD

Sample

This study included 90 individuals who applied to Harran University Faculty of Medicine Research and Practice Hospital Emergency Service because of suicide attempt. Psychiatric interviews were conducted with these 90 patients and the study survey was administered. Age grouping of the sample was done according to Turkish Statistics Institute classification and age groupings in similar studies. Informed consent was obtained from the subjects. Harran University Faculty of Medicine Ethical Board approved the study.

Measures

Supre-Miss Survey Form, which was developed by Ankara University, Faculty of Medicine, Department of Psychiatry, Center of Crisis. Supre-Miss Survey Form includes, WHO Well Being Index, Beck Depression Inventory and Trait Anger Scale.

Sociodemografical and Clinical Data Form: In this section, data on sociodemographical, current suicide attempt, previous suicide attempt and family information, social support history, previous treatment attempts and connection with health services, mental status examinations and clinical diagnosis were included.

WHO Well Being Index: It is a 5 items Likert style scale. Score range is between 0 and 25. Low scores indicate worsening in well-being while high scores reflect improvement in well-being.

Beck Depression Inventory (BDI): Reliability and validity studies of this widely used scale to measure severity of depressive symptoms, which was developed by Beck et al. (8), was conducted by Hisli et al. (9) and cut-off score was reported as 17. This inventory is a 21 item self-report style scale. Items rate depression severity on a scale which changes between 0 and 3. Score range is 0-63.

Trait Anger Scale (TAS): Trait Anger Scale was developed by Spielberger and is a part of State-Trait Anger Scale (STAS). Reliability and validity of the Turkish form of STAS was conducted by Ozer (10). Scale includes trait anger, anger-in, anger-out and anger control subscales. It is a self-report form. Individual rates how much the given sentence reflects himself/herself as "1" not at all, "2" some, "3" quite and "4" completely. This scale can be used in adolescents and adults without a time-limit. Higher scores from trait anger scale indicate high level of anger (10).

Statistical Analysis

SPSS 18.0 software was used for data analysis. Descriptive statistical analysis were conducted and results are reported as percents, mean and standard deviations.

RESULTS

Sixty-five of the patients were female (72.2%) and 25 were male (27.8%). Mean age was 23.4±8.1 years. Some of the sociodemographical data were summarized in Table 1. Among patients with suicide attempt, 55.7% had major depression, 14.1% had generalized anxiety disorder, 5.3% had intermittent explosive disorder, 1.7% had schizophrenia, 0.9% had bipolar disorder, 0.9% had subtance abuse, 0.9% had post-traumatic stress disorder, 7.9% had borderline personality disorder and 12.3% had other psychiatric disorders. 23 of the 90 patients who attempted suicide had comorbid psychiatric disorders. 10% of individuals who attempted suicide had physical illnesses.

When marital status of those who attempted suicide was investigated, 61.2% were single, 32.2% were married, 2.2% were widowers, and 4.4% were divorced.

12.2% of the patients had history of psychiatric treatment, 66.2% had applied to general practitioners for physical and mental complaints and 11.2% talked about their suicidal ideations with the general practitioner.

When features of suicide attempt were taken into account, 94.5% ingested chemical materials or drugs, 2.2% hanged themselves, 1.1% cut themselves and 2.2% used other methods.

When age groups of the patients were investigated, 11.1% were in 0-15 years, 77.8% were in 16-35 years, and 11.1% were in 36-60 years age groups. We did not detect any suicidal behavior after 61 years of age. Psychometric test means of the patients were summarized in Table 2.

Table 1: Some sociodemographical data of the patients

	Number	Percent (%)
1. Marital Status		
Single	55	61.2
Married	29	32.2
Widow	2	2.2
Divorced	4	4.4
2. Employment		
Civil Servant	3	3.3
Worker	14	15.6
Craftsman	2	2.2
Housewife	63	70.0
Other	8	8.9
3. Education level		
Illiterate	25	27.8
Primary	27	30.0
Secondary	26	28.9
High school	9	10.0
University	3	3.3
	Mean years of education:5.9±3.9	
4. Substance use		
Smoking	41	45.6
Alcohol	15	16.7
Non-users	21	23.3
Other	13	14.4

Table 2: Psychometric measurements of the patients

	Mean±standard deviation
WHO Well Being Scale	8.7±6.7
Trait Anger Scale	22.1±7.5
Beck Depression Inventory	24.2±11.8
Number of people with 17 or higher score from BDI	56

BDI: Beck Depression Inventory, WHO: World Health Organization

DISCUSSION

In our study, we found higher rate of suicide attempt among women than men. Most of the studies in suicide attempt field have reported higher rate of suicide attempt in women when compared with men (11). Our study was consistent with the literature. Higher risk of suicide attempt in women has been explained with higher prevalence of major depressive disorder among women. Our finding that 55.7% of the patients had major depressive disorder supported this result.

77.8% of the patients who attempted suicide were in 16-35 years age group and 11.1% were in 0-15 years age group. We did not detect any suicide attempt among individuals who were 61 years or older. Literature reports that suicide attempt is particularly common among young population (12). It has been

reported that suicide attempts are clustered in the 15–34 years age group (13).

When the education level of patients who attempted suicide was investigated 27.8% were illiterate, 30.0%, 28.9%, 10.0%, and 3.3% were graduated from primary school, secondary school, high-school and university, respectively, while mean education was 5.9±3.9 years. As can be seen, suicide attempt increase with decreased education. On the contrary, it decreases with higher education. Besides, sum of illiterates and primary school graduates make a very large number, 86.7%. These values overlap with Turkey mean. 52.5% of suicide attempters in Turkey are primary school graduates (14). These results suggest that one of the most important strategies to prevent suicide attempt is to increase education.

In our study we found that housewives form 70% of the patients. This finding was not very similar to previous studies. This difference might be due to cultural differences which led to fewer social contexts and occupations, chronic problems at home and lack of economical independence. 1997 results from Diyarbakir showed that housewives ranked first among those who committed or attempted suicide (15). This was consistent with our results.

Several studies showed that major depression is one of the most important risk factors for suicide (16,17). Depression is associated with completed or attempted suicide, whether with or without comorbidity (18). In this study, we found that 55.7% of the patients had major depression. This shows the importance of treatment of major depression in prevention of suicide.

Results from our country shows that drug ingestion ranks first among methods of suicide attempt (11). In our study, suicide methods included ingestion of chemical materials and drugs (94.5%), hanging (2.2%), cutting (1.1%) and other methods (2.2%). Our results were consistent with the other study. Results from all studies indicate that readily and quickly obtainable methods are selected for suicide attempt. Therefore, in order to prevent suicide, precautions such as making drugs and firearms less available can be helpful.

In our study, 97.7% of the patients had a psychiatric diagnosis. However, only 12.2% received treatment. On the other hand, 66.2% applied to a general practitioner in the last year. These results show that psychiatric disorders are not diagnosed and treated appropriately among patients who applied to general practitioners with physical problems due to psychiatric disorders.

Lower rate of suicide attempt among married people than singles suggests that marriage is a powerful protective factor from suicide. These results are consistent generally with previous studies.

Limitations of our study included small sample size and being a single-center study. Single-center studies canbe influenced by local and cultural factors. This study is not sufficient to detect causal relations between risk factors and suicidal behaviors. Risk factors can be defined more thoroughly in multi-center studies with bigger samples which use advanced statistical methods.

We found higher rate in suicide attempt in illiterate or lowly-educated individuals, women, singles, and youngs while rate of suicide attempt was lower in highly-educated and married individuals. Based on these data, these risk groups must be more thoroughly evaluated during psychiatric examination.

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