

Sociodemographic and Clinical Characteristics of Patients with Suicide Attempt to a Training and Research Hospital Emergency Department; A Retrospective Study

Bir Eğitim ve Araştırma Hastanesi Acil Servisine İntihar Girişimi Nedeni ile Başvuran Olguların Sosyodemografik ve Klinik Özellikleri; Retrospektif Bir Çalışma

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ABSTRACT

Objective: Suicide attempt is an important risk factor for completed suicide. Determining risky cases for suicide attempts is important in terms of protective and preventive approach. In this study, we aimed to investigate the sociodemographic and clinical characteristics of suicide attempted patients who applied to our emergency department.

Materials and Methods: This study was carried out on retrospective analysis of emergency medical clinic suicide attempt enrollment forms of 257 patients and psychiatric consultations who applied to our emergency department for the purpose of suicide attempt between September 2014 and December 2015.

Results: 156 cases (60.7%) were women and 101 (39.3%) cases were males. 42.8% were in the age range of 15-24 years and 51% were bachelor. 42.4% were unemployed and 136 (52.9%) were primary school graduates. In 30 cases (11.7%), there was recurrent suicide attempt. The most common psychiatric diagnosis was depression (n =14, 5.4%). The marriage rate of women was higher than that of men (p<.000). There was no difference between the genders in terms of recurrent suicide attempts (p> 0.057).

Conclusion: Suicide attempts are more common in young, low-educated and married women. Psychosocial interventions for those groups that are at risk for suicide attempts are important to prevent suicide attempts and completed suicides.

Key Words: Emergency service, suicide, risk factors

ÖZET

Amaç: İntihar girişimi tamamlanmış intihar için önemli bir risk etkenidir. İntihar girişimi için riskli olan olguların belirlenmesi koruyucu ve önleyici yaklaşım açısından önemlidir. Bu çalışmada amacımız, hastanemiz acil servisine başvuran intihar girişimi olgularının sosyodemografik ve klinik özelliklerini geriye dönük olarak araştırmaktır.

Gereç ve Yöntem: Bu çalışma, Eylül 2014-Aralık 2015 tarihleri arasında intihar girişimi nedeni ile acil servisimize başvuran 257 olgunun, acil tıp kliniği intihar girişimleri kayıt formunun ve psikiyatrik konsültasyonlarının geriye dönük olarak incelenmesi ile yapılmıştır.

Bulgular: Olguların 156'si (%60.7) kadın, 101'i (%39.3) erkekti. %42.8'si 15-24 yaş aralığındaydı ve %51'i bekarı. %42.4'ü işsiz, 136'sı (%52.9) ilkökul mezunuydu. 30 olguda (%11.7) tekrarlayıcı intihar girişimi vardı. En sık görülen psikiyatrik tanı, depresyondur (s=14, %5.4). Kadınların evlilik oranı erkeklerden yüksekti (p<.000). Tekrarlayıcı intihar girişimi açısından cinsiyetler arasında fark yoktu (p>0.057).

Sonuç: Genç, eğitim seviyesi düşük ve evli kadınlarda intihar girişimi daha sık görülmektedir. İntihar girişimi açısından riskli olan bu gruplara yönelik psikososyal müdahaleler intihar girişimi ve tamamlanmış intiharları önlemek açısından önemlidir.

Anahtar Kelimeler: Acil servis, intihar etme, risk faktörleri

Introduction

Suicide is that the individual will knowingly and willingly end his life (1). Suicide attempts involve all voluntary attempts that do not result in death by the individual to kill or harm himself. Nearly 800.000 people end their lives with suicide each year and those who attempted suicide are estimated to be much higher. (2). Every suicide and suicide attempt is a tragedy that affects both the person and the family and has long-lasting effects on the people who are left behind (1). The risk of suicide continues throughout life and is the second cause of death between age 15-29 in the year 2015 in worldwide (2). Suicide rates vary between countries. In our country, the rate of suicide, according to the statistical agency of Turkey; was reported at 3.86 per hundred thousand (3). In the whole world, this rate is 10.7 per hundred thousand (2).

Completed suicide attempts in men are two to three times more than women (1). Many sociodemographic and clinical features have been identified as risk factors for suicide. Presence of past suicide attempt, psychiatric diagnoses involving depressive, impulsive and aggressive symptoms, a history of physical-sexual abuse, loss of interpersonal relationships and occupational areas are defined as some of the factors that increase suicide risk (1-4). The strongest diagnostic risk factors were reported as mood disorders in high-income countries, but impulse control disorders in low- and middle income countries (5). The first observation sites for suicide attempts are emergency units (6). These cases of attempted self-harm are usually brought to the emergency services by relatives or law enforcement officers, and psychiatric evaluation cannot be performed on all cases despite important interventions have been made in terms of life (7). Suicide attempts are important for suicide risk. Cases with suicide attempts should be evaluated psychiatrically and given the necessary psychosocial support. Despite the importance of suicide attempts, the epidemiological characteristics of suicide attempts are not as well-known as completed suicides (6).

Our aim in this study is; to investigate the sociodemographic, clinical characteristics and psychiatric evaluation rates of cases who referred to emergency department with suicide attempt.

Materials and Methods

From September 2014 to December 2015, 257 cases who applied for emergency unit with suicide

attempt were evaluated. The study was a retrospective cross-sectional study. In these cases, "Suicide Attempt Enrollment Form" was filled by the psychologist in charge. Information that can be reached through this form and hospital information system was used in the research. In this form, data of cases were assessed in terms of age, gender, marital status, occupation, suicide attempt, existence of a suicide plan, duration of suicide plan, past suicide attempt, past psychiatric history and diagnosis, whether the psychiatric consultation was requested or not. Records of cases with psychiatric consultation were examined. The approval of the study was taken from the local ethics committee of hospital.

Statistical Analysis: SPSS 22 statistical package program was used for analysis of all data. In the evaluation of the data, mean, standard deviation and percentage distributions from descriptive statistical methods were used. Student-t test was used for parametric tests, categorical variables were compared using the chi-square test. Statistically, p-value <0.05 was considered as significant.

Results

Of the 257 suicide attempted patients who were referred to emergency unit, 156 (60.7%) were women and 101 (39.3%) were male. The mean age of the patients was 28.38 ± 11.19 years. The most frequent suicide attempt group was in the age range of 15-24 years (n=110, 42.8%). The vast majority were single (n=131, 51%). The mean duration of education was 8.76 ± 3.46 years. The majority were primary school graduates (n=136, 52.9%). 109 cases (42.4%) were unemployed. Details of the sociodemographic characteristics of the cases are given in table 1.

The most common method of suicide attempt was poisoning by drugs (n=252, 98.1%). There were 38 cases (14.8%) with a past psychiatric history. The majority had the first suicide attempts (n=227, 88.3%). When psychiatric examinations of the sample were evaluated, 19.1% of the cases (n=49) were consulted by the psychiatrist in the first 24 hours. The vast majority of this group was discharged from emergency services with simple medical intervention. 47.2% of the cases (n=122) were followed in the emergency intensive care unit for 24-48 hours, 80.7% of these patients had pre-discharge psychiatric evaluation. 33.7% of the cases (n=45) were admitted to internal medicine service and general intensive care unit (n=41), 92% of this group was requested psychiatric

Table 1. Sociodemographic characteristics of cases

		Cases (n=257)
Age		
	15y-24y	n=110(42.8%)
	25y-34y	n=71(27.6%)
	35y-49y	n=56(21.8%)
	Over 50y	n=15(5.8%)
Sex		
	Female	n=156(60.7%)
	Male	n=101(39.3%)
Education		
	Illiterate	n=1(0.4%)
	Primary School	n=136(52.9%)
	High School	n=107(41.6%)
	University	n=13(5.1%)
Marital Status		
	Single	n=131(51%)
	Married	n=90(35%)
	Widow/divorced	n=36(14%)
Job		
	Unemployed	n=109(42.4%)
	Housewife	n=30(11.7%)
	Worker	n=77(30%)
	Government officer	n=5(1.9%)
	Retired	n=4(1.6%)
	Student	n=32(12.5%)

counseling by the related physician. One patient with bipolar mood-disorder episode and four patients with unipolar depressive episode were admitted to the psychiatric clinic after the termination of their medical treatment. The most frequent psychiatric diagnosis in the emergency department was major depressive disorder (n=14, 5.4%). In the majority of cases, the thought of suicide was seen in less than 3 months (n=118, 46%), 77.8% of cases (n=200) had no suicide plan. Details of suicide attempts are given in (table 2).

There was no significant difference between sex groups in terms of age, education, and recurrent suicide attempts ($p > 0.05$). In terms of marital status, the majority of women were married ($p < .000$). The comparison of groups divided by sex is given in (table 3).

Discussion

In this study, the sociodemographic and clinical characteristics of suicide attempted patients who were referred to an emergency department of a

training and research hospital were examined retrospectively. According to the results of the studies conducted in our country; suicide attempts were reported mostly in women between 15-24 years of age with a low level of education (7-12). The results of our research are compatible with the literature in this respect.

The majority of the cases in our study were primary school graduates, single and unemployed. It has been reported that education level, marital status, having or not having a job are important risk factors for suicide attempt and completed suicide (13-16). The ability to cope with stress is a protective trait from suicidal behavior (17). As the level of education decreases, the ability of individuals coping with stress decreases too, this suggests that individuals tend to commit suicidal behavior as a solution method. Inability to find solutions to problems and lack of coping strategies to manage stressors are some of the characteristics of suicide attempters (18). Özdemir et al had reported that the suicide attempters had significantly lower scores for extroversion and

Table 2. Characteristics of suicide attempts and psychiatric aspects of cases

Suicide method	
Drug-Toxic Substance	n=252(98.1%)
Firearm	n=3(1.2%)
Firing	n=1(0.4%)
High Jump	n=1(0.4%)
Recurrent suicide attempt	
Yes	n=30(11.7%)
No	n=227(88.3%)
Duration of suicidal idea (month)	
In the last three months	n=118(46%)
Within the last 3-6 months	n=31(12%)
>6 months	n=108(42%)
Suicide plan	
Yes	n=57(22.2%)
No	n=200(77.8%)
Psychiatric History	
Yes	n=38(14.8%)
No	n=219(85.2%)
Psychiatric Diagnosis	
Depressive disorder	n=14(5.4%)
Alcohol-substance dependence	n=2(0.8%)
Bipolar affective disorder	n=1(0.4%)
Presence of the psychiatric consultation within the first 24 hours	
Yes	n=49(19.1%)
No	n=208(80.9%)

Table 3. Comparison of some characteristics of groups according to sex

	Female (n=156)	Male (n=101)	p
Age (mean±sd)	28.02±10.12	28.93±12.69	0.934
Education (year) (mean±sd)	8.58±3.0	9.05±3.98	0.563
Marital status (n,%)			
Sigle	65(41.7%)	66(65.3%)	
Married	62(39.7%)	28(27.7%)	<.000
Widow/divorced	29(18.6%)	7(6.9%)	
Recurrent suicide attempt			
Yes	23(14.7%)	7(6.9%)	0.057
No	133(85.3%)	94(93.1%)	

higher scores for neurosis and higher scores in all the subscales of Difficulties in Emotion Regulation Scale than non-attempters (19).

Research results related to the relationship between marital status and suicide attempt are contradictory. Although there are reports that marriage has a protective effect on suicide(16,20), there are also researches that reach the opposite result (14). It has been reported that living alone,

especially for men, is a risk factor for suicide and not for women (21). In our study, it was also found that the rate of married women who were attempting suicide was higher than men in accordance with the literature. The exposure to domestic violence, the lack of economic freedom, and the inability to find solutions to the problems they have experienced may have led married women to more suicide attempts. Due to different

patterns and sampling characteristics of the researches (sociocultural traits, outpatients, inpatients, community-based samples etc.), different results in marital status may have been reported. The frequency of suicidal behavior varies among societies. This is explained by the fact that many confounding factors are effective in the appearance of suicidal behavior (17).

As the most preferred method of suicidal attempt in our sample group, drug poisoning was found (98.10%). Clinical follow-up of cases with the recommendation of poison counseling is performed in emergency department of our hospital. The individual's ability to easily access drugs and the subsequent completion of emergency treatments may have increased suicidal rates with drugs in our study. Patients who applied with suicide methods such as high jump, firearm injuries were taken over quickly by related branches, so that the forms of these individuals could not be filled in during the period of emergency observation. Researchers that investigated suicide attempts in different sample groups except emergency unit reported suicide attempts at more variable rates (22), it was reported that the most frequent suicide attempt in the emergency sample was with drugs that were also found in our study (7-12). Although there is a difference in the incidence of suicide methods according to age group, social and cultural conditions, it has also been suggested that person basically chooses the method that one can reach most quickly (23).

The rates of psychiatric history were 14.8% in this study. This ratio was found to be similar to the rates of other studies in our country (7-12). It was also found that 42% of our sample had a long-term suicidal ideation of six months, but the rate of psychiatric admission was low. This finding was found to be similar in another study conducted in our country (24). The rate of diagnosis of depressive disorder in psychiatric consultation cases was 5.4%. A common feature of these studies, including our research; most of the cases in the sample had attempted suicide for the first time. It can be considered that the vast majority of cases have not yet met a psychiatrist, and attempted suicide without a diagnosis and treatment. In our study, most of the cases attempted suicide unplannedly. Because of the impulsive nature of suicide attempts, we may find the rates of psychiatric diagnosis low. As it is thought to be the strongest indicator of suicides resulting in death, suicide attempts should never be ignored, whether or not they are diagnosed

with any mental illness (1). For example, in the sample group of our study, only 19% of the cases seemed to have been requested a psychiatric consultation within 24 hours. Similar low rates have been reported by other researchers (7). These rates indicate that emergency professionals should be more careful about psychiatric consultation. If the cases had more serious medical intervention, the rate of counseling was increased in our study. Psychiatric counseling was requested from 92% of patients receiving treatment in unit of internal medicine and general intensive care.

One of the limitations of this study is the lack of evaluation of personality traits, emotion regulation and coping styles. The fact that our work is retrospective and that the errors that may occur in records could not be controlled and that detailed reports of cases could not be reached were the limitations of our research.

As a result, we found high rates of suicide attempts in married women with low income in 15-24 age range. In this respect, in this risk group; development of policies aimed at domestic problem areas (communication, economic etc.), teaching crisis management to individuals, training of family members are important issues. Interventions related to regulation of emotion and problem-solving training may be effective methods for preventing suicide. In suicide attempts, more attention should be paid to assessing cases by psychiatrists. Despite all of limitations, we think that this research is important for informing the sociodemographic characteristics of suicide attempts in our country and drawing attention to psychiatric interventions in suicide attempts in the emergency department. We think that longitudinal follow-up studies involving cases with first time suicide attempts is important in terms of finding reasons for individuals to have completed suicide.

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