

Assessment of Suicidal Cases Among Emergency Department Applicants Kütahya Evliya Çelebi Training and Research Hospital Experience

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Abstract

Aim: Our work is aim at sharing our experiences in suicide cases which constitute a significant part of the psychiatric emergency cases. We hope to draw attention to the factors involved in suicide attempts. This is intended to contribute to taking precautions and prevent suicide attempts by determining the possible risk factors.

Materials and Methods: This study was conducted by retrospectively reviewing records of 292 cases filed at Dumlupınar University, Kütahya Training Research Hospital Emergency Service as suicide attempts between January 01 and December 31, 2016, in which the "Suicide Attempt Registration Form" was completed.

Results: Suicide attempts were found to occur more frequently in females within the ages of 15-24 years, particularly in cases with family problems, psychiatric diseases, and problems with the opposite sex.

Conclusion: In this study, we evaluated demographic and risk factors of suicide attempts in our hospital. Local government, non-governmental organizations, and health service providers need to cooperate in developing policies which seeks to prevent suicidal behavior. In addition, because psychiatric diseases has an important place in the etiology of suicide attempts, it is important that these patients are followed up closely and that symptoms indicative of suicide are treated and an absolute psychiatric evaluation and follow-up be done before discharge of the emergency patients.

Keywords: Suicide, attempts, risk factors, emergency department, demography

Introduction

Suicide attempts are acts undertaken to end an individual's life voluntarily but do not result in death, whereas if death is the outcome, it is called suicide. Suicide and suicide attempts are serious causes of morbidity and mortality, particularly in psychiatric emergencies (1). According to the World Health Organization, approximately one million people die every year worldwide because of suicide (2). According to the statistics of the Turkish Statistical Institute, this number was 3,212 in our country in 2015, an increase by 1.3%, from the 3,169 deaths in 2014. It means that four people die from suicide out of every one hundred thousand people (3).

Suicide attempts have an important place in the fields of psychiatry and crime intervention because of their urgency and life-threatening aspects. The first conscious intervention that should be performed is for this reason of great importance in terms of lifting life-threatening situations. In view of this situation, there is a need for systematic information about suicide attempts, particularly in terms of public health. It is crucial to determine the risk groups and their characteristics when deciding on which policies should be established for response and intervention (4,5).

We aimed to evaluate socio-demographic and clinical characteristics of patients who used our emergency service because if a suicide attempt. We think that our work is important in determining the risk factors in our region because ours is the only tertiary hospital in the city center.



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Materials and Methods

This study was conducted by examining retrospective records of 292 patients who applied to the Emergency Department of Dumlupınar University Kütahya Evliya Çelebi Training and Research Hospital because of a suicide attempt between January 01 and December 31, 2016, and filled in a "suicide attempt registration form." In this form, information including gender, age, marital status, educational status, profession, suicide method, reason for suicide, history of previous suicide attempts, and whether or not they had been treated psychiatrically in the last 6 months is recorded. The study was approved by the Dumlupınar University Faculty of Medicine Ethics Committee and was conducted in accordance with the principles of the Declaration of Helsinki (protocol no: 2017/02-7).

Statistical Analysis

The data were analyzed in SPSS (Social Sciences Statistical Package) version 20. Results are presented as mean and standard deviation for quantitative variables and as percentages for qualitative variables.

Results

Socio-demographic characteristics of these cases are provided in Table 1. Of the cases, 73.28% were female and 26.72% were

		Number, n	Percentage, %
Gender	Female	214	73.28
	Male	78	26.72
Age groups	15-24	161	55.13
	25-34	71	24.33
	35-49	43	14.72
	50 and over	17	5.82
Marital status	Married	114	30.05
	Single	165	56.50
	Other (widowed, divorced, separated living)	13	4.45
Educational status	Primary school	121	41.43
	High school	98	33.56
	University	55	18.83
	Illiterate	11	3.76
	Unknown	7	2.39
Work status	Working	70	23.97
	Non-working	70	23.97
	Student	82	28.20
	Housewife	63	21.70
	Unknown	6	2.06

male. When suicide attempts were examined according to the age group, most suicide attempts were in the age range of 15-24 years, with 55.13% cases. With respect to the marital status, 165 were single and 114 were married and 13 were other marital status. In cases that were married, this highest rate was found in the age group of 24-35 years. Among women who attempted suicide, 55.14% (n=118) were single. When the educational status was evaluated, the group that most frequently attempted suicide was found to be primary school graduates (41.43%; n=121). It was determined that 23.97% (n=70) of the cases did not work and 28.20% (n=82) of the cases were students. The gender distribution was 62.86% (n=44) women and 37.14% (n=26) male. Approximately 49.53% (n=106) of all women who were in non-working women group and housewives attempting to commit suicide. It was found that among males 46.75% (n=36) had a job.

The analysis of the methods applied and the reasons for suicide cases are given in Table 2. According to this, most suicide attempts in both genders were performed by poisoning with drugs (96.23%, n=281). The most common causes of suicide were family problems in 40.07% (n=117), mental illness in 19.52% (n=57) and mental illness in 11.30% (n=33). When the reasons according to gender were evaluated, this situation did not change in women, while in men the third reason was found to be work-

Table 2. The analysis of the methods applied and reasons for suicide

		Number, n	Percentage, %
Suicidal attempt	Drugs	281	96.23
	Cutter drill injury	5	1.70
	Hang	3	1.05
	High jump	2	0.68
	Firearm injury	1	0.34
Causes of suicide	Family problems	117	40.07
	Mental illness	57	19.52
	Opposite sex problems	33	11.30
	School and test concerns	22	7.54
	Business and economic reasons	20	6.85
	Contact problems	18	6.17
	Loneliness	18	6.17
	Developmental problems	5	1.70
	Substance dependence	2	0.68
Previously attempted suicide	Yes	56	19.18
	No	236	80.82
History of psychiatric illness	Yes	54	18.50
	No	238	81.50

related. A total of 56% (n=56) had previously attempted suicide and 18.50% (n=54) of the patients were found to have no history of psychiatric illness before making the attempt. When we look at all suicide attempts, particularly drug poisoning, there is no peak for a particular time period. However, it was found that attempts occurred most commonly between 4.00 p.m. and 12.00 a.m. in both gender (Figure 1).

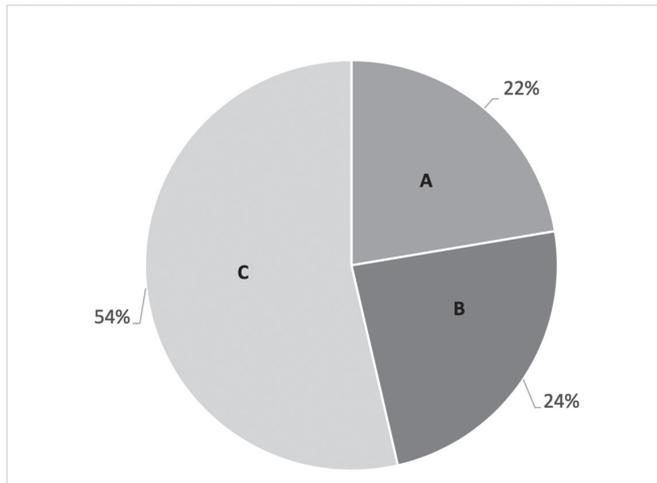


Figure 1. Time period of suicide attempts A: 00.00-07.59, B: 08.00-15.59, C: 16.00-23.59

Discussion

In studies examining suicide attempts, it has been pointed out that women attempt suicide at a higher rate than men (6,7). In our sample, the female to male ratio was found to be 2.74, which is in accordance with the literature. This may be related to the fact that women are influenced by events to a greater extent than men, and that the situation in society is also related to the compulsive nature of the women in the community and the negative conditions that women make over traditional practices.

The age group in which suicide was attempted most frequently in our study was found to be 15-24 years, as was found in similar studies in which the age group distribution was examined (8,9). Physical and mental changes due to adolescence as well as the desire to live independently and problems related to school and test anxiety may be seen as a frequent occurrence in this age group. Several studies have shown that suicide attempts are more prevalent among married couples (10,11).

Similarly, in our study, suicide attempts were more common than successful suicides. The age group in which suicide attempts occurred most frequently was determined to be the student age group. Because the level of education increases, suicidal tendency decrease. Factors such as harmony, communication,

and self-expression can be held responsible for this situation. When the work situation is taken into consideration, the risk groups are students, housewives, and individuals who do not work at all. This situation was found to be consistent with that observed in similar studies (12,13). When we look at the sociodemographic characteristics of our study, we believe that the sociocultural and socioeconomic development of the region is a parameter to be considered. In a separate analysis, we evaluated cases according to the method used for the attempt. According to this, the most frequent suicide method was the intake of drugs and toxic substances. In studies conducted in this aspect both in Turkey and in other countries, it is stated that most of the suicide attempts are by chemical substance intake. The most frequently identified substances were found to be prescription drugs found at home (14-16).

In this case, we think that measures taken by the competent authorities against this phenomenon will be effective in reducing suicide attempts and will contribute to the country's economy. Psychiatric illnesses have been found to be closely related to issues such as adverse family conditions and socioeconomic and sociocultural factors (17-19). The most common cause of suicide in our study was family problems. In our country, domestic problems and incompatibility are considered to be among the most frequent causes of suicide in most studies (20-22). In such cases, it is suggested that individuals who have attempted suicide should be interviewed with their families, and risk-bearing individuals should be identified and counselled within family communication settings. In other studies, on this issue, intervention has been counterproductive as a factor, actually increasing the risk of suicide (23). In our study, recurrent intervention was observed to have taken place in a proportion of children (19.18%). Care should be taken that this may pose a risk of suicide or death in individuals prone to attempt suicide. Studies have also revealed that people with a history of psychiatric treatment constitute a high-risk group in terms of new suicide attempts (23). Our work partially supports this observation. Therefore, psychiatric consultation should be made available both during the intervention and follow-up of cases with a history of psychiatric illness that attempt suicide and use emergency services.

Another parameter that should be discussed here is the increased frequency of suicide cases between 4.00 p.m. and 12.00 a.m. Studies in this field are generally consistent (20,21). If you look at this situation, this is the time zone when family members stay together. As the most common reason for suicide is related to family problems, attempts are expected to be concentrated in this period.

Conclusion

We evaluated some features that might be a risk factor for suicide attempts. However, eliminating these factors is not enough to prevent suicide attempts. With the help of the resulting data, preventive strategies should be developed and implemented, such as developing screening programs for risk groups, providing psychosocial support, preventing stigmatization in the community, and raising awareness (increasing social awareness).

Ethics

Ethics Committee Approval: The study was approved by the Dumlupınar University Faculty of Medicine Ethics Committee and was conducted in accordance with the principles of the Declaration of Helsinki (protocol no: 2017/02-7).

Informed Consent: Retrospective study.

Peer-review: Internally peer-reviewed.

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