

Clinics Following Patients' Suicide Attempt, Consultations Performed, and the Role of the Emergency Departments

© Sultan Tuna Akgol Gür¹, © Mehmet Cenk Turgut²

¹ Department of Emergency Medicine, Faculty of Medicine, University of Ataturk, Erzurum, Turkey

² Department of Orthopedics Surgery, Palandöken Hospital, Erzurum, Turkey

Abstract

Objectives: Intervention of patients after suicide attempt requires a multidisciplinary approach. Today, the treatment and follow-up of this patient group is mostly carried out in emergency departments and intensive care units. In this study, it was aimed to evaluate the consultations and follow-up clinics of the patients with suicide attempt.

Materials and Methods: Patients over 16 years of age who applied to our emergency department between January 2014 and January 2017 due to suicide attempt were examined prospectively.

Results: A total of 426 patients were included in this study. 285 (66.9%) of the patients included in the study were hospitalized and followed up in the emergency room. Psychiatric consultation was requested for 404 patients (94.8%) who were conscious and did not need urgent operation.

Conclusion: Emergency departments, psychiatry clinics, and surgical clinics, especially in patients requiring traumatic intervention, played an important role in the treatment of patients presenting with suicide attempt. Therefore, we think that developing and preparing the relevant clinics for the management of this patient group will increase the quality of care.

Keywords: emergency department; consultations; suicide attempt

Özet

Amaç: İntihar girişimi olan hastaların bakımı multidisipliner bir yaklaşım gerektirir. Günümüzde bu hasta grubunun tedavi ve takipleri büyük bir oranda acil servislerde ve yoğun bakım ünitelerinde yapılmaktadır. Biz bu çalışmamızda intihar girişimi ile hastanemiz acil servisine başvuran hastaların takip ve tedavilerinin hangi kliniklerde yapıldığını, acil serviste yapılan konsültasyonların incelemeyi amaçladık.

Gereç ve Yöntem: Acil servisimize Ocak 2014 - Ocak 2017 tarihleri arasında intihar girişimi sonrası başvuran 16 yaşından büyük hastalar prospektif olarak incelendi.

Bulgular: Toplam 426 hasta çalışmaya dahil edildi. Hastaların 285'i (%66,9) acil serviste gözlem odasında yatırılıp takip edildi. Şuuru açık ve acil operasyon ihtiyacı olmayan 404 hastaya (%94,8) psikiyatri konsültasyonu yapıldı.

Sonuç: İntihar girişimi ile başvuran hastaların tedavisinde acil servislerin, psikiyatri kliniğinin ve özellikle travmatik girişim varsa cerrahi servislerin önemli rol oynadığı görüldü. Bu nedenle ilgili kliniklerin bu hasta grubunun yönetimi için geliştirilmesinin ve hazır hale getirilmesinin bakım kalitesini arttıracacağı düşünülmektedir.

Anahtar kelimeler: acil servis; konsültasyonlar; intihar girişimi.

Introduction

Suicide is an important public health problem¹. According to the data of the World Health Organization, one of the ten leading causes of death in developed countries is suicide attempts². Patients with suicide attempt are a group of patients that require a multidisciplinary approach. Today, their treatments and follow-ups are mostly done in emergency departments and intensive care units³. Considering that most of the patients were taken to the hospital with the need for urgent care, it is understood how important this situation is for the emergency services⁴.

Suicide attempts are an important problem for emergency services. Suicide, defined as the voluntary ending of a person's life. It accounts for about 95% of all cases of poisoning. Suicides are one of the most important causes of death in psychiatric illness^{5,6}.

Apart from the emergency room, there is a need for surgical clinics, psychiatry clinics and intensive care units. In suicide attempts with traumatic methods, surgical services are needed especially for patients in cases such as hanging, self-mutilation by cutting-piercing tools, jumping from high places and firearm suicide, and intensive care units are

Corresponding Author: Sultan Tuna Akgol Gur **e-mail:** sultantuna@hotmail.com

Received: 10.07.2020 • **Accepted:** 08.09.2020

Cite this article as: Akgol Gur ST, Turgut MC. Clinics following patients' suicide attempt, consultations performed, and the role of the emergency departments. Eurasian J Tox. 2020;1(2):44-46

needed for cases of high risk of life⁷. These clinics are activated by the emergency room physicians with a consultation request. And also these clinics play a major role in the interventions of patients presenting with a suicide attempt. The beginning of psychiatric services is also performed in emergency departments in patients who are conscious and do not require urgent surgical intervention^{8,9}.

In this study, we aimed to investigate in which clinics the follow-up and treatment of patients who applied to the emergency department of our hospital with suicide attempt. We also aimed to evaluate consultations that were requested from the emergency room for these patients.

Materials and Methods

Patients over the age of 16 who were admitted to our emergency department between January 2014 and January 2017 after a suicide attempt were evaluated prospectively. Consultations and follow-up clinics were examined. Patients age, consulted clinics and outcome data about hospitalization status are recorded.

Patients were also asked for consultation in the emergency room such as psychiatry, general surgery, neurosurgery, thoracic surgery, cardiovascular surgery, internal medicine, cardiology, orthopedics, gynecology, anesthesia intensive care, and neurology. Patients hospitalized in these units were taken as “lay out of emergency” in our study. The follow-up and treatment of patients in the emergency room was carried out after the first inspection in the observation room with monitor.

Statistical Package for Social Sciences (SPSS.20) package program was used for statistical analysis. Paired-sample t test was used to compare dependent variables with normal distribution. For other analyzes, chi-square test was used. All data were expressed as mean ± standard deviation and p <0.05 value was considered statistically significant.

Results

A total of 450 patients applied to the emergency department with a suicide attempt. 24 patients were excluded from the study (10 patients are under 16 years old, 14 patients have missing data). A total of 426 patients were included in the study. The number of patients followed in the emergency room observation unit is 285 (66.9%), and the number of patients hospitalized and followed in the lay out of emergency are 141 (33.1%).

The patients were classified according to the hospitals and consultations. While the number of patients who applied with nontraumatic methods (drug drinking and gas inhalation) as a suicide method was 408, and the number of patients who applied with traumatic methods (hanging, self-mutilation by cutting-piercing tools, jumping from high places and firearm suicide) was evaluated as 18.

Considering the services that patients who applied with suicide attempt were generally hospitalized or treated, it was seen that more than half of them were followed up in the emergency department. The clinics of patients admitted with suicide attempt are shown in Table 1.

Table 1. Clinics where patients admitted with suicide attempt

Clinics	Patient number	Percentage (%)
Emergency Medicine	285	66,9
Internal Medicine	74	17,4
Intensive Care	9	2,1
Psychiatry	19	4,5
Other	13	3,1
Cardiology	3	0,7
Thoracic Surgery	2	0,5
Neurosurgery	2	0,5
General Surgery	8	1,9
Gynecology	2	0,5
Anesthesia	2	0,5
Orthopedics	5	1,2
Cardiovascular Surgery	1	0,2
Total	426	100

The hospitalization status to the emergency clinics was statistically significant compared to other departments (p <0.05). Psychiatric consultation was performed on 397 of the patients. There are 29 patients who can not have psychiatric consultations. Psychiatry consultation could not be done because these patients were unconscious and had a general condition or had an emergency operation. As 24 of the patients were pregnant and an obstetrics and gynecology clinic consultation was performed. Suicide attempt with traumatic methods is the priority of consultation of surgical clinics to patients. Consultations in emergency departments are summarized in Table-2.

Table 2. Consultations made in emergency departments

Consultation Clinics	Number of Consultations
Internal Medicine	100
Intensive Care	22
Psychiatry	397
Cardiology	9
Thoracic Surgery	13
Neurosurgery	24
General Surgery	13
Gynecology	24
Anesthesia	5
Orthopedics	16
Cardiovascular Surgery	8
Neurology	9

Discussion

In our study, it is seen that emergency services have an important role in the follow-up and treatment of patients who applied with suicide attempt. In cases of suicide attempt with traumatic methods, surgical clinics have an important place. A total of 66.9% (n = 285) of the patients were treated in the emergency department.

In our hospital, it was observed that most of the patients were followed up in emergency departments, and patients who attempted suicide by trauma went to surgical clinics. Most of the patients were conscious and their general condition was moderate. It is seen that patients who are admitted with suicide attempt are followed up and especially emergency services play an important role in the follow-up of these patients besides diagnosis and first intervention. Physicians working in the emergency units have sufficient theoretical and practical equipment. This may explain the reason for the high rate of hospitalization in our study.

The most common method of suicide is drug intake¹⁰. In our study, the number of patients who admitted to drug use and gas inhalation with non-traumatic methods as a suicide method was 408, and the number of patients who presented with traumatic methods, injuries, firearms and cutting tools, and jumping from a high place is 18. The majority of patients who attempted suicide by traumatic methods were hospitalized in non-emergency departments 33.1% (n = 141).

Assessment of risk factors of patients coming with suicide attempt by emergency doctors are important in reducing recurrent interventions¹¹. It is important for patients who are admitted to the intensive care units and other clinics to be consulted with psychiatry after medical and surgical treatments after the first intervention performed in the emergency department. Mental disorders rank first among risk factors that increase suicide attempt. Whether or not suicide attempt results in death, it causes serious psychological problems¹².

Emergency medicine systems should be analyzed well in order to provide the most effective and efficient presentation of emergency services. Keeping the records in digital and shareable systems will lead to future studies and increase the quality of emergency medical services¹³.

Conclusions

It was observed that emergency services, psychiatry and especially surgical services played an important role in the treatment of patients presenting with suicide attempt. Therefore, we think that the development of these departments related to this patient group and a good psychiatric follow-up will increase the quality of care. It was seen that emergency

departments had more role than expected in the follow-up and treatment of these patients. Since suicide attempts and especially intoxications related to drug use are always a medical problem, emergency services should have sufficient knowledge and equipment.

References

1. Mgaya E, Kazaura RM, Outwater A, Kinabo L. Suicide in the dar es salaamregion, Tanzania, 2005. *J Forensic Leg Med* 2007; 30: 2-5.
2. Yüksel N, Neurobiology of Suicide. *Journal of Clinical Psychiatry* 2001; 4: 5-15.
3. Joubert L, Petrakis M, Cementon E. Suicide attempt presentations at the emergency department: outcomes from a pilot study examining precipitating factors in deliberate self-harm and issues in primary care physician management. *Soc Work Health Care* 2012; 51: 66-76.
4. Bronstein AC, Spyker DA, Cantilena LR, Green JL, Rumack BH, Dart RC. 2010 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 28th Annual Report. *Clin Toxicol* 2011; 49: 910-941.
5. T Ayaz, Ö Bilir, G Ersunan, OZ Şahin, Ö Yavaş, H Rakıcı. Evaluation of Drug Intoxications for Suicide. *Konuralp Medical Journal* 2015; 7 (1): 53-56
6. Murphy GE. Why women are less likely than men, to commit suicide. *Compr Pschiatry* 1998; 39(4): 165-175
7. Saritemur M, Gür STS, Bayramoğlu A, Aköz A, Emet M. Patients with Altered Mental Status Due to Suicide Attempts: Follow-up Clinics and the Role of Emergency Departments. *Tr J Emerg Med* 2013; 13(1): 8-12
8. Mert E, Toros F, Gamsız Bilgin N, Çamdeviren H. Evaluation of patients who came to the emergency clinic due to poisoning from a sociodemographic and psychosocial perspective. *Anadolu Journal of Psychiatry* 2007; 8: 121-125.
9. Lee CA, Choi SC, Jung KY, Cho SH, Lim KY, Pai KS, et al. Characteristics of patients who visit the emergency department with self-inflicted injury. *J Korean Med Sci* 2012; 27: 307-312.
10. Keles A, Demircan A, Aygencel G, Karamercan A, Turanlı S. Retrospective analysis of poisoning cases admitted to GÜTF Emergency Department. *Academic Emergency Medicine Journal* 2003; 1: (2): 39-42.
11. Cooper JB, Lawlor MP, Hiroeh U, Kapur N, Appleby L. Factors that influence emergency department doctors' assessment of suicide risk in deliberate self-harm patients. *Eur J Emerg Med* 2003; 10: 283-287.
12. Mete B, Söyler V, Pehlivan E. Investigation of the relationship between psychiatric disorders and suicide: A retrospective research based on records for 2013-2018. *Clinical Psychiatry* 2020; 23: 92-100
13. Celikten OS. Bir üçüncü basamak hastane acil servisine başvuran hastaların demografik özellikleri ve acil servis klinik hizmetlerinin değerlendirilmesi: beş yıllık analiz. 2016. PhD Thesis. Selçuk Üniversitesi Tıp Fakültesi. <http://hdl.handle.net/123456789/4877.tez>. 2016