

ORIGINAL ARTICLE

Evaluation of Psychiatric Emergency Data of Adiyaman University Training and Research Hospital Between 2015-2017

Oguzhan Bekir Egilmez¹ , Mehmet Hamdi Orum² , Mahmut Zabit Kara³ 

¹ Adiyaman University, Faculty of Medicine, Department of Psychiatry, Adiyaman, Turkey

² Kahta State Hospital, Psychiatry, Adiyaman, Turkey

³ University of Health Sciences, Antalya Training and Research Hospital, Department of Child and Adolescent Psychiatry, Antalya, Turkey

Abstract

Objective: Knowing the psychiatric emergency profile will make the interventions more effective. In this study, we aimed to investigate the psychiatric consultations during the year 2015-2017.

Methods: Consultation requests were reviewed retrospectively via the patient registration system. Sociodemographic data such as age, gender, diagnosis of the main hospitalization in the emergency department, symptom of admission and psychiatric diagnoses were obtained.

Results: The total number of patients asked for consultation between 2015-2017 was 392 (male 159 (40.6%), female 233 (59.4%)). The mean age of the whole group was 32.30±14.29 years. The mean age was similar over the years ($p=0.469$). The most common main diagnoses and conditions were anxiety disorder in 101 cases (25.8%), attempt suicide 98 cases (25.0%), schizophrenia 50 cases (12.8%); the most common symptoms of admission were agitation-aggression 142 cases (36.2%), anxiety 98 cases (25.0%), and suicide attempt-thought 86 patients (21.9%); the most common psychiatric diagnoses were anxiety disorder 88 cases (22.4%), schizophrenia 64 cases (16.3%) and depression 63 cases (16.1%). The nine cases in 2015, 23 cases in 2016, 54 cases in 2017 were admitted with the suicide attempt-thought. Of the 86 suicides, 50 (58.1%) were female and 36 (41.9%) were male.

Conclusion: This is the first study examining psychiatric consultation data of the Emergency Department of Adiyaman Province. Considering that the anxiety and suicide attempt are the most common symptoms of admission and the anxiety disorder is the most common psychiatric diagnosis, in-service training of emergency service professionals should be increased.

Keywords: Consultation, Emergencies, Psychiatric Disorders

INTRODUCTION

Psychiatric emergency is defined as an acute deterioration in thought, behavior, mood and social relations reported by the person, his/her family or social environment, which require urgent intervention. In addition to mental health physicians, family physicians and physicians working in the emergency department often encounter psychiatric emergencies (1). The person under physical or emotional stress brought to the emergency is fragile. These people may have various expectations and fantasies that are far from reality, their presence affects their response to treatment and

their communication with health personnel. Psychiatric emergencies can be caused by many chronic mental illnesses, psychosocial stressors and negative life events. Self-poisoning, substance use, drug side effects, and drug-drug interactions may also develop (2).

The three-twelve percent of the patients in emergency departments of general hospitals are diagnosed with a psychiatric diagnosis. For this reason, emergency physicians should know the psychiatric disorders well and plan the right treatment algorithm accordingly. Psychiatric emergency services ensure that patients and their relatives are saved with the least loss from the material and spiritual burdens of the disease with the fast and correct orientation of the patients with effective measures in limited time (3). Emergency psychiatric help is also important for preventive psychiatry. Because a successful first aid can prevent a second emergency, it can also facilitate the patient's compliance with subsequent treatments. Considering that mental disorders are also affected by social and cultural variables, studies

Corresponding Author: Mehmet Hamdi Orum

Kahta State Hospital, Adiyaman, Turkey.

E-mail: mhorum@hotmail.com

Citation: Egilmez OB, Orum MH, Kara MZ. Evaluation of Psychiatric Emergency Data of Adiyaman University Training and Research Hospital Between 2015-2017. Psychiatry and Behavioral Sciences 2020;10(1):25-30.

Doi: 10.5455/PBS.20190716093118

Received: Jul 16, 2019

Accepted: Jan 09, 2020

investigating consultation-liaison psychiatry (CLP) data may also reflect regional trends (1, 4,5). It is thought that psychiatric consultations may show regional differences especially in terms of dissociative disorders and suicide attempts in admissions to emergency services (2). Regardless of what is done for this purpose, CLP data related to emergency services may lead health care professionals who provide service in this field to first-hand results, which enable them to evaluate themselves and direct them to planning.

Adiyaman is a province in the South East Anatolia Region where the role of the concept of gender in the family, the choices related to these roles and the patriarchal structure within the family are significant. It is clear that these sociocultural variables will have an impact on the emergence, maintenance, treatment and follow-up of mental disorders (6). On the other hand, Adiyaman is a province where there is no second hospital and no other hospital in the provincial center except the one education and research hospital where the existing education and research hospital functions as a university hospital. Therefore, psychiatric emergencies in this institution are important in terms of reflecting the state of the city center. In the literature review, it was observed that there was no CLP study on the psychiatric emergency data of Adiyaman province. The aim of this study is to evaluate the psychiatric consultation requests made by the adult emergency department of our hospital.

MATERIALS and METHODS

Our study was descriptive, had cross-sectional design and was planned retrospectively. Between January 1, 2015 and December 31, 2017, the psychiatry consultations requested from the emergency department were evaluated. Information was obtained from the hospital registry system. Consultation requests are made online in our hospital, and responses to consultations are also carried out via the online system. Psychiatric consultation of 392 cases was reached between the dates mentioned. The information about the age, gender, consultation date, consultation and psychiatric diagnosis of the patients were transferred to the statistical evaluation.

The diagnostic criteria of ICD-10 (International Statistical Classification of Diseases and Related Health Problems) are used in the patient registration system in our hospital. Therefore, the diagnoses mentioned in this study were called as in ICD-10. The present

psychiatric diagnoses and conditions were as follows: Anxiety disorder (AD), depression (D), bipolar affective disorder (BIPOLAR DISORDERS), schizophrenia, non-organic psychotic disorder (PDNOS), panic disorder (PD), substance withdrawal status, substance abuse, generalized psychiatric examination, delirium, acute stress response, conversion disorder (CD), obsessive-compulsive disorder (OCD), schizoaffective disorder (SAD). The main symptoms and conditions in the study were as follows: suicide attempt-thought, chest pain, hypertension, infections, abdominal pain, urticaria-itch, general condition disturbance, cerebrovascular event, traffic accident and related conditions, nausea-vomiting, epileptic seizure, headache, panic attack, head rotation.

SPSS 22.0 program was used for statistical analysis. Descriptive statistics and continuous variables were given as mean±standard deviation and categorical variables were given as frequency and percentage. Chi-square test was used for comparisons. Statistical significance was accepted as $p < 0.05$ for all values. Ethics committee approval was obtained from Non-Interventional Clinical Researches Ethics Committee of the School of Medicine of Adiyaman University (16/04/2019; 2019/3-4).

RESULTS

The total number of emergency consultations between 2015-2017 was 53150 (2015: 11690 consultations; 2016: 18384 consultations; 2017: 203076 consultations; Female: 20462 (38.49%) consultations, Male: 32688 consultations (61.51%)). The total number of psychiatric consultations within emergency consultations between 2015-2017 was 392 (0.0073%). The number of women was 159 (40.6%) and the number of men was 233 (59.4%). The mean age of the whole group was 32.30 ± 14.29 years (Min: 7 years, Max: 92 years). The total number of patients in 2015 was 88 (2015 Total: 11690 consultations; Female: 4804 (41.09%); Male: 6886 (48.91%)); in 2016 was 148 (2016 Total: 18384 consultations; Female: 7335 (39.9); Male: 11049 (61.1%)); in the 2017 was 156 (2017 Total: 23076 consultations; Female: 8323 (36.07%); Male: 14753 (63.93%)). In 2015, the number of women was 43 (48.9%) and the number of men was 45 (51.1%). The mean age of the whole group was 31.47 ± 13.19 years in 2015, the mean age of the whole group was 31.64 ± 13.78 years in 2016 and the mean age of the whole group was 33.39 ± 15.34 years in 2017. The mean age was similar over the years ($p = 0.469$). The sociodemographic data of the cases were shown in Table 1.

Table 1. Sociodemographic Data of the Study Group

	Year	Male	Female	Total	p
Gender	2015-2017	233 (59.4%)	159 (40.6%)	392 (100.0%)	0.012*
	2015	45 (51.1%)	43 (48.9%)	88 (100.0%)	0.562
	2016	103 (69.5%)	45 (30.5%)	148 (100.0%)	0.009*
	2017	85 (54.4%)	71 (45.6%)	156 (100.0%)	0.049*
Age (year)	2015-2017	33.78±14.84	31.98±14.03	32.30±14.29	0.312
	2015	30.53±11.50	32.46±14.83	31.47±13.19	0.496
	2016	32.87±14.04	28.84±12.86	31.64±13.78	0.102
	2017	30.71±12.27	36.60±17.92	33.39±15.34	0.016*

*p<0.05

The main diagnoses, symptoms and conditions were as follows: Anxiety disorders 101 cases (25.8%), suicide attempt-thought 98 cases (25.0%), schizophrenia 50 cases (12.8%), Psychotic Disorder: Not Otherwise Specified 31 cases (7.9%), bipolar affective disorder 21 cases (5.4%), depression 16 case (4.1%) (Table 2).

Table 2. The Main Diagnoses, Symptoms and Conditions in Emergency Department

Main Diagnosis	n	%
Anxiety Disorder	101	25.8
Bipolar Affective Disorder	21	5.4
Psychotic Disorder	31	7.9
Schizophrenia	50	12.8
Depression	16	4.1
Judicial	10	2.6
Suicide	98	25.0
Substance Withdrawal	3	0.8
Substance Toxicities	5	1.3
Chest Pain	6	1.5
Cerebrovascular Event	3	0.8
Hypertension	1	0.3
Stomachache	6	1.5
Infection	3	0.8
Traffic Accident	1	0.3
Conversion Disorder	2	0.5
Nausea-Vomiting	6	1.5
Epilepsy	3	0.8
Headache	5	1.3
Urticaria-Itch	1	0.3
General Condition Disturbance	4	1.0
Panic Disorder	15	3.8
Vertigo	1	0.3
Total	392	100.0

The frequency of psychiatric diagnosis was as follows: Anxiety Disorders 88 cases (22.4%), schizophrenia 64 cases (16.3%), depression 63 cases (16.1%), bipolar disorders 40 cases (10.2%), conversion disorder 32 cases (8.2%), PDNOS 26 cases (6.6%),panic disorder 16 cases (4.1%) (Table 3).

Table 3. The Psychiatric Diagnoses of Study Group

Psychiatric Diagnosis	n	%
Anxiety Disorders	88	22.4
Depression	63	16.1
Bipolar Affective Disorder	40	10.2
Schizophrenia	64	16.3
Psychotic Disorder	26	6.6
Panic Disorder	16	4.1
Substance Withdrawal	4	1.0
Substance Toxicities	7	1.8
General Psychiatric Examination	29	7.4
Delirium	5	1.3
Acute Stress Response	2	0.5
Conversion Disorder	32	8.2
Schizo-affective Disorder	13	3.3
Obsessive-Compulsive Disorder	3	0.8
Total	392	100.0

The admission symptoms were as follows: agitation-aggression 142 cases (36.2%), anxiety 98 cases (25.0%), and suicide-related conditions 86 cases (21.9%) (Table 4).

Table 4. The Symptoms and Conditions at Admission

Symptom	n	%
Agitation	142	36.2
Anxiety	98	25.0
Suicide Thought-Attempt	86	21.9
Depressive Nature	16	4.1
Conversive Nature	3	0.8
Organic Nature	28	7.1
Changes in Consciousness	6	1.5
No Symptom	13	3.3
Total	392	100.0

The distribution of psychiatric diagnoses by age and gender was shown in Table 5 and 6.

Table 5. The Distribution of Psychiatric Diagnoses by Age

Diagnoses	Age Groups (year)					Total (N/%)
	<18 (N/%)	18-25 (N/%)	25-40 (N/%)	40-65 (N/%)	>65 (N/%)	
Anxiety Disorder	11/22.0%	27/25.5%	30/19.6%	20/29.4%	0/0.0%	88/22.4%
Depression	9/18.0%	20/18.9%	25/16.3%	6/8.8%	3/20.0%	63/16.1%
Bipolar Affective Disorder	4/8.0%	7/6.6%	17/11.1%	10/14.7%	2/13.3%	40/10.2%
Schizophrenia	2/4.0%	9/8.5%	40/26.1%	12/17.6%	1/6.7%	64/16.3%
Psychotic Disorder	2/4.0%	9/8.5%	14/9.2%	1/1.5%	0/0.0%	26/6.6%
Panic Disorder	0/0.0%	2/1.9%	8/5.2%	5/7.4%	1/6.7%	16/4.1%
Substance Withdrawal	0/0.0%	4/3.8%	0/0.0%	0/0.0%	0/0.0%	4/1.0%
Substance Toxicities	2/4.0%	3/2.8%	2/1.3%	0/0.0%	0/0.0%	7/1.8%
Delirium	0/0.0%	0/0.0%	0/0.0%	2/2.9%	3/20.0%	5/1.3%
Conversion Disorder	13/26.0%	11/10.4%	3/2.0%	5/7.4%	0/0.0%	32/8.2%
Total	50/100.0%	106/100.0%	153/100.0%	68/100.0%	15/100.0%	392/100.0%

Note: Since the values of some diagnoses were very low, they were not added to the table but added to the total value.

Table 6. The Distribution of Psychiatric Diagnoses by Gender

Diagnoses	Female (N/%)	Male (N/%)	Total (N/%)
Anxiety Disorder	38/23.9%	50/21.5%	88/22.4%
Depression	34/21.4%	29/12.4%	63/16.1%
Bipolar Affective Disorder	15/9.4%	25/10.7%	40/10.2%
Schizophrenia	12/7.5%	52/22.3%	64/16.3%
Psychotic Disorder	8/5.0%	18/7.7%	26/6.6%
Panic Disorder	10/6.3%	6/2.6%	16/4.1%
Substance Withdrawal	0/0.0%	4/1.7%	4/1.0%
Substance Toxicities	0/0.0%	7/3.0%	7/1.8%
Delirium	1/0.6%	4/1.7%	5/1.3%
Conversion Disorder	18/11.3%	14/6.0%	32/8.2%
Total	159/100.0%	233/100.0%	392/100.0%

Note: Since the values of some diagnoses were very low, they were not added to the table but added to the total value.

Fifty-one patients were hospitalized in 2015 (51/88; 57.95%), 90 patients were hospitalized in 2016 (90/148; 60.81%) and 106 patients were hospitalized in 2017 (106/156; 67.94%) within emergency consultations.

There was no significant difference in the seasonal distribution of bipolar affective disorder and SAD diagnoses ($p=0.582$). The nine cases in 2015, 23 cases in 2016, 54 cases in 2017 were admitted with the suicide attempt-thought. Of the suicide cases, 47 (54.7%) had a depression, 19 (22.1%) had CD, 15 (17.4%) had anxiety disorders, 4 (4.7%) had bipolar disorders, 1 (1.2%) had substance abuse-toxicities. Of the 86 suicides, 50 (58.1%) were female and 36 (41.9%) were male. Thirty (34.9%) suicide attempts occurred in winter, 27 (31.4%) in autumn, 20 (23.3%) in summer and 9 (10.5%) in spring.

DISCUSSION

According to the results of our study, male gender was the majority in emergency service consultation requests and the mean age of admission was 30 years. While the majority of the main diagnoses were anxiety disorders and

suicide attempts, the majority of psychiatric diagnoses were anxiety disorders, schizophrenia and depression. Agitation and anxiety were the most common presenting symptoms. Considering the sociodemographic data of our study, it is seen that the applications are mostly between 30-35 years old. In the study of Sahingoz et al. (7), the average age of patients admitted to an emergency room of a university hospital in Konya was found as 34.3 years. Bahçeci et al. (8) reported that 28.4% of psychiatric emergencies were in the 31-40 age range. Our results were consistent with these findings.

It is known that some psychiatric disorders, especially mood disorders, show seasonal distribution. Seasonal affective disorders occur in autumn and winter due to the decrease in sunlight from November to March (9). Bipolar affective disorder is a mood disorder with manic and depressive episodes (10,11). In our analysis, we did not find any differences in terms of months in terms of BB or according to seasons. This was thought to be due to increased accessibility of outpatient services and directing patients with high psychiatric symptoms to closed treatment units in neighboring provinces.

When the main diagnoses of the patients who were consulted were examined, it was seen that anxiety disorders and suicide attempts were in the majority. The anxiety disorders were the first in psychiatric diagnoses. Bahçeci et al. (8) found the rate of diagnosis of the anxiety disorders were 75.6%, the rate of conversion disorder diagnosis was 11.4%, and the depression diagnosis rate was 6.1%. This result of our study is important because the diagnosis of the main hospitalization is skipped in many studies. Sahingoz et al. (7) reported the rates of psychiatric diagnosis as follows: Bipolar affective disorder 17.7%, psychotic disorders 12.3%, depression 11%, alcohol and drug addiction 8.5%, anxiety disorders 8.5%, conversion disorder 6%. As can be seen, the diagnoses

of anxiety disorders, depression and conversion disorder are frequently encountered in emergency services.

Agitation and aggression can be considered as one of the most common psychiatric symptoms in emergency departments. Agitation is an excessively inconsistent behavior that occurs as a result of behavioral and spiritual excitement due to the causes of mood disorders and the attitude of the environment. It is a common condition in the community. This situation does not occur as a disease alone. It usually occurs with other psychiatric problems. Agitated agitation is a verbal or destructive behavioral disorder that accompanies the clinical picture at certain times in psychiatric disorders. Although the cause and severity of agitation are interrelated, they may differ. Minor behavioral changes are generally ambiguous and tense. The patient has a continuous mobility, constantly moving his foot, correcting it, moving the hand, behaving like a constant movement in his seat. Treatment of agitation can be achieved by treating an underlying psychiatric disorder. For these reasons, patients should be directed to the existing disease and should be treated (12-14).

Psychiatric disorders are disability and their individual, familial and social consequences may be severe. Considering only self-destructive attempts, the possibility of the situation may arise (15,16). According to the 2017 data of the World Health Organization, 800,000 people die each year from suicide. Suicide is a phenomenon that comes from the past to the present and has more than one sub-cause (17). When analyzed by countries, the reasons are based on the cultural, economic, religious and social factors of the country concerned. Suicide; although an individual behavior, which affects the existence and order of the society, seems to be a phenomenon affecting the environment in which the person is living and living, it is an action that can be prevented with international dimensions as a result (17,18). In our study, it was seen that the number of women was higher in the self-mutilating attempts than in the emergency department. Considering that these patients are young patients and one of the most common causes of death during adolescence is the self-slaughter, the importance of the subject is increasing. The major limitation of this study is its retrospective design.

In conclusion, this study was the first to examine the emergency service CLP data of the Adiyaman province. Anxiety and suicide were the most common causes of admission. Progress in this field and making comparisons between years will ensure that the planning is healthier.

Conflict of interest and financial support: None declared.

REFERENCES

- [1] Flüchter P, Müller V, Bischof F, Pajonk FG. Emergency doctor training for psychiatric emergencies: Evaluation of an interactive training program. *Psychiatr Prax* 2017;44(2):105-7.
- [2] Faris N, Baroud E, Al Hariri M, Bachir R, El-Khoury J, Batley NJ. Characteristics and dispositional determinants of psychiatric emergencies in a University Hospital in Beirut. *Asian J Psychiatr* 2019;42:42-7.
- [3] Aydın T, Akköse-Aydın Ş, Köksal Ö, Özdemir F, Kulaç S, Bulut M. Evaluation of features of patients attending the emergency department of Uludag University Medicine Faculty Hospital and emergency department practices. *JAEM* 2010;9:163-8. [Turkish]
- [4] Egilmez OB, Örum MH, Kara MZ. Retrospective evaluation of the applications within the scope of probation implementation: The data of 2018. *Journal of Dependence* 2019;20(2):88-96. [Turkish]
- [5] Egilmez OB, Örum MH, Dumlupınar E, Egeli A. Retrospective evaluation of the applications within the scope of probation implementation: The data of 2018. *Journal of Dependence* 2019;20(2):80-7. [Turkish]
- [6] Alptekin K, Duyan V, Demirel S. Suicide attempts in Adiyaman. *Anadolu Psikiyatri Dergisi* 2006;7:140-9. [Turkish]
- [7] Şahingöz M, Kendirli K, Yılmaz E, Sönmez EÖ, Satan Y, Aksoy F, Dağistan A, Kaya N. Psychiatric emergencies in a university hospital. *Selçuk Tıp Derg* 2014;30(4):153-4. [Turkish]
- [8] Bahçeci B, Güveli H, Kandemir G, Aslan M, Köroğlu A. The evaluation of psychiatric pre-diagnoses diagnosed by nonpsychiatric doctors in adult emergency service. *J Kartal TR* 2011;22(2):65-9. [Turkish]
- [9] Wirz-Justice A. Seasonality in affective disorders. *Gen Comp Endocrinol* 2018;258:244-9.
- [10] Orum MH, Kalenderoglu A. Cotard and Capgras delusions in a patient with bipolar disorder: "I'll prove, I'm dead!". *Psychiatry Clin Psychopharmacol* 2018;28(1):110-2.
- [11] Özen ME, Örum, MH, Yılmaz MB, Kalenderoğlu A. Comparison of bipolar disorder patients with healthy controls in terms of inflammatory biomarkers. *Adiyaman Üni Sağlık Bilimleri Derg* 2019;5(1):1351-60. [Turkish]
- [12] Ozen ME, Kilicoglu U, Orum MH, Kalenderoglu A, Atmaca M. Differential diagnosis of psychotic process in adulthood autistic spectrum disorders: case series. *Psychiatry and Behavioral Sciences* 2018;8(3):132-6.
- [13] Kara MZ, Örum MH. Hyperekplexia or hereditary startle disease with psychiatric symptoms: Case reports of three siblings. *Firat Tıp Dergisi* 2019;24(1):57-9. [Turkish]
- [14] Kara MZ, Orum MH, Egilmez OB. Relationship between immune cells and violent/nonviolent suicide attempts and controls: What about the lymphocyte-related ratios and neutrophil-related parameters? *Kaohsiung J Med Sci* 2019;35(5):315-6.
- [15] Orum MH, Egilmez OB. Psychiatric presentation of hypoxic ischemic encephalopathy occurring after a violent suicide attempt: a case of hanging. *Dusunen Adam The Journal of Psychiatry and Neurological Sciences* 2018;31:228-30.
- [16] Orum MH, Kara MZ, Egilmez OB. Mean platelet volume and neutrophil to lymphocyte ratio as parameters to indicate the severity of suicide attempt. *J Immunoassay Immunochem*

2018;39(6):647-659.

[17] Brenes F. Hispanics, mental health, and suicide: Brief report. *Hisp Health Care Int* 2019;154.041.5319843072.

[18] Avcı S, Erdoğan HI. Evaluation of geriatric patients admitted to emergency service according to gender. *Kafkas J Med Sci* 2017;7(3):209-213.