



Sociodemographic Characteristics of Persons Treated in the High Security Forensic Psychiatry Service: A Retrospective Study

Makale Başlığı: Yüksek Güvenlikli Bir Adli Psikiyatri Servisinde Tedavi Gören Kişilerin Sosyodemografik Özellikleri: Retrospektif Bir Çalışma

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Abstract

Aim: In the study, it is aimed to analyze the sociodemographic characteristics of the convicted patients, who were treated in the High-Security Forensic Psychiatry Services (HSFPS) of Elazığ Fethi Sekin City Hospital within a period of one year.

Material and Methods: 409 convicted psychiatric patients, who applied to Elazığ Fethi Sekin City Hospital High-Security Forensic Psychiatry Service were included in this study between March 2020 and March 2021. Personal data pertaining to these patients were obtained from hospital archive records. A general information questionnaire including sociodemographic data prepared by the authors, was used in the study. The sociodemography data form consists of 20 questions in total.

Results: The analysis of the collected data revealed that the convicted psychiatric patients were mostly single or divorced, that they lived mostly in the city, that 51.1% of them have not worked at any job, that 40.7% of them had a psychiatric disorder with psychotic features, that 84.4% of them committed a crime for the first time and that these crimes were mostly directed at other individuals.

Conclusion: In our study, it was observed that the diagnosis of schizophrenia or other psychotic disorders was more common in the convicted group. The high unemployment rate shows the importance of vocational rehabilitation, and the high number of untreated patients shows that closer follow-up will be beneficial. This study shows that applications to high-security forensic psychiatry services are high and it may be beneficial to increase their number throughout the country.

Keywords: High-security forensic psychiatry service, prophylactic treatment, medical observation, sociodemographic characteristics

Öz

Amaç: Bir yıl içerisinde Fethi Sekin Şehir Hastanesi Yüksek Güvenlikli Adli Psikiyatri (YGAP) servisinde tedavi gören kişilerin sosyodemografik özelliklerini incelemeyi amaçladık.

Materyal Metot: Çalışmaya Elazığ Fethi Sekin Şehir Hastanesi Yüksek Güvenlikli Adli Psikiyatri Servisine Mart 2020 ve Mart 2021 tarihleri arasında başvuran 409 hüküm giymiş psikiyatri hastası dahil edildi. Kişilere ait bilgiler hastane arşiv kayıtlarından elde edildi. Veri toplanmasında sosyodemografi verileri de kapsayan tarafımızca hazırlanan genel bilgi formu kullanıldı. Form toplamda 20 adet sorudan oluştu.

Bulgular: Suç işleyen psikiyatri hastalarının daha çok bekâr ya da boşanmış olduğu, şehir merkezlerinde yaşadığı, %51,1'inin hiçbir işte çalışmadığı, %40,7'sinin psikotik özellikli psikiyatrik bozukluğu olduğu, %84,4'ünün ilk kez suç işlediği, bu suçların daha çok kişiye yönelik olduğu bulunmuştur.

Sonuç: Çalışmamızda suç işleyen grupta şizofreni veya diğer psikotik bozukluklar tanısının daha sık olduğu görülmüştür. İşsizlik oranının yüksek olması mesleki rehabilitasyonun önemini, tedavisiz hastaların yüksek olması daha yakın takibin faydalı olacağını göstermektedir. Bu çalışma yüksek güvenlikli adli psikiyatri servislerine müracaatların çok olduğunu ve sayılarının ülke genelinde arttırılmasının faydalı olabileceğini göstermektedir.

Anahtar Kelimeler: Yüksek güvenlikli adli psikiyatri servisi, koruyucu tedavi, tıbbi gözlem, sosyodemografik özellikler

INTRODUCTION

Forensic psychiatry is the field of study that provides expertise in the the medical arrangements and procedures pertaining to the diagnosis, treatment and rehabilitation

of psychiatric patients who have committed crimes (1, 2). The convicted patients, whose criminal capacities for the respective offenses are concluded to be fully or partially non-existent within the scope of Article 32 of the Turkish

Geliş Tarihi / Received: 10.07.2021 **Kabul Tarihi / Accepted:** 01.09.2021

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Penal Code (TPC), are restricted by being placed under protection and treatment (3). In this way, it is aimed to prevent them from committing crimes and to eliminate their "dangerousness" by ensuring that they are under the control of the health team and not in prison conditions (4).

The care and treatment of forensic patients should be carried out in specialized treatment centers (high, medium or low security hospitals) that are safe for both such patients and the society (5). The convicted patients, whose criminal capacities for the respective offenses are concluded to be fully or partially non-existent due to a mental disorder, are referred to secured hospitals pursuant to a court decision in order to receive treatment compulsorily and ensure community safety (6). The previous practice in Turkey in respect of such patients was that they were being kept under observation, evaluated and assessed in specific departments located within the Mental Health and Diseases Hospitals under the Ministry of Health. However, as of 2005, the treatment and care of forensic patients began to be carried out in high-security hospitals within the scope of the 1st paragraph of Article 57 of TPC. The first HSFPS Hospital was established within the body of Adana City Hospital in 2018 to accommodate mentally ill convicts. As of 2020, there are five HSFPS hospitals established under City Hospitals across Turkey (7). One of these five HSFPS hospitals, the HSFPS in Elazig Fethi Sekin City Hospital became operational in 2018.

There are studies available in the literature which retrospectively analyzed the forensic psychiatry data. The general characteristics of the forensic patients admitted to the psychiatry outpatient clinics analyzed within the scope of these studies seem to be affected by different variables such as the specific location and the geographical region of the psychiatry outpatient clinic, demographic, social and cultural structure of the population that inhabit the region where the psychiatry outpatient clinic is located, and the distance of the psychiatry outpatient clinic to the nearest institution it is affiliated with (8, 9). A comprehensive review of the literature in respect thereof did not reveal any study that addressed the sociodemographic characteristics of the convicted patients admitted to the Elazig Fethi Sekin City Hospital High-Security Forensic Psychiatry Service (HSFPS), an HSFPS that admits convicted patients from many provinces in the Eastern Anatolia region. In view of the foregoing, it is aimed in this study to determine the sociodemographic and clinical characteristics and the psychiatric diagnoses of, and the actual crimes committed by, the convicted patients, whose criminal capacities for the respective offenses were concluded to be fully or partially non-existent due to their psychiatric disorders.

MATERIAL AND METHOD

Prior to the start of the study, the related ethics committee approval was obtained from the Firat University Non-Interventional Ethics Committee with the approval number E-97132852-050.01.04-40884 dated 03.05.2021 and the

related hospital permission was obtained from the Elazig Fethi Sekin City Hospital. 409 forensic patients, who were referred to the Elazig Fethi Sekin City Hospital High Security Forensic Psychiatry Service (HSFPS) between March 2020 and March 2021 by judicial authorities and were kept under observation or protection and treatment in accordance with the crimes they committed, were included in this retrospective study. Of the said 409 forensic patients, it was determined that 217 patients have been admitted to the Elazig Fethi Sekin City Hospital HSFPS to be kept under observation, whereas that the remaining 192 patients have been admitted to the Elazig Fethi Sekin City Hospital HSFPS to be placed under protection and treatment. All the patients included in this study were male, as the women's section of the HSFPS service was not active at that time. Elazig Fethi Sekin City Hospital HSFPS serves to many provinces in the Eastern Anatolia region and is responsible for the protection and treatment of all convicts with psychiatric disorders that have committed crimes in these provinces. In addition, Elazig Fethi Sekin City Hospital HSFPS provides expertise on whether the judicial cases, which are generally referred by the courts of the Eastern Anatolia region and by the courts from all over Turkey from time to time, have criminal liability or not. The information specific to each forensic case included in this study, such as age, educational status, economical status, clinical diagnosis, substance use status, an additional organic disease, psychiatric drug use, psychiatric diagnosis, psychiatric diagnosis time, history of previous psychiatric treatment, suicide attempt, alcohol/substance use, reason for being in YGAP, the crime that caused it to be found in YGAP, how many times were treated in YGAP, inpatient treatment in non-YGAP psychiatry, childhood trauma were obtained from the hospital database and analyzed retrospectively.

Statistical Analysis

Windows SPSS 22.0 (IBM Statistical Package for Social Sciences version 22.0) software package was used for the statistical analyses of the research data. Continuous variables such as descriptive statistics and age were expressed as mean \pm standard deviation, whereas categorical variables such as sex and diagnosis were expressed as frequency (n) and percentage (%).

RESULTS

409 forensic patients treated in the Elazig Fethi Sekin City Hospital High-Security Forensic Psychiatry Service between 01.03.2020 and 01.03.2021 were included in the study. The mean age of these patients was calculated as 36.4 \pm 11.7 years (min. 18 years and max. 83 years). Of these 409 forensic patients, 243 (59.4%) were single, 142 (34.7%) were married, and 24 (5.9%) were widowed/divorced.

In terms of educational status of the forensic patients included in this study, it was determined that 72 (17.6%) of the forensic patients were illiterate, 33 (8.1%) were literate,

126 (30.8%) were elementary school graduates, 82 (20%) were middle school graduates, 68 (16.6%) were high school graduates, and 28 (6.8%) had an associate's/undergraduate degree. In terms of residential address, it was determined that 79 (19.3%), 140 (34.2%) and 190 (46.5%) patients were living in a village, town and a city, respectively. On the other hand, in terms of economic status, it was determined that 205 (50.1%), 172 (42.1%) and 32 (7.8%) of the forensic patients defined their economic status as low, medium and high, respectively.

Furthermore, of the forensic patients that were admitted, it was determined that 8 (2%) were students, 24 (5.9%) were civil servants, 70 (17.1%) were laborer, 92 (22.5%) were specialty occupation workers, 209 (51.1%) were unemployed and 6 (1.5%) were retired (Table 1).

In terms of clinical characteristics, it was determined that 74 (18.1%) forensic patients had an additional organic disease (diabetes, hypertension, cardiovascular disease, asthma, benign prostatic hyperplasia, musculoskeletal diseases, epilepsy), 200 (48.9%) patients have been on some sort of psychiatric medication, and 395 (96.6%) patients had a psychiatric disease. From among those with a psychiatric

disease, it was determined that 120 (30.4%) forensic patients had a psychiatric disorder for less than 5 years, 77 (19.5%) patients had a psychiatric disorder for a period between 5 and 10 years, and 198 (50.1%) patients had a psychiatric disorder for more than 10 years. Additionally, it was determined that 336 (82.2%) the forensic patients included in this study had previously received psychiatric treatment. Furthermore, it was determined that 83 (20.3%) of the forensic patients had a history of self-mutilation, 61 (14.9%) patients had a history of suicide attempts, 242 (59.2%) patients had a smoking history, and 94 (23%) patients had a history of alcohol/substance abuse (Table 2).

Of the forensic patients with a psychiatric disorder, it was determined that 80 (20.3%) patients had mental retardation, 74 (18.7%) patients had bipolar disorder, 70 (17.7%) patients had schizophrenia, 71 (18%) patients had NOS-psychosis, 23 (5.8%) patients had NOS-emotional disorder, 17 (4.3%) patients had substance-induced mood disorder, 14 (3.5%) patients had delusional disorder, 6 (1.5%) patients had substance-induced psychosis, 24 (6.1%) patients had other types of psychiatric disorders and 16 (4.1%) patients had multiple psychiatric disorders (Figure 1).

Table 1. The sociodemographic characteristics of the patients

		Number	%
Age, Average ± SD(min-max)		36.4±11.7 (18-83)	
Marital Status	Single	243	59.4
	Married	142	34.7
	Widow / Divorced	24	5.9
Educational Status	Illiterate	72	17.6
	Literate	33	8.1
	Primary School	126	30.8
	Secondary School	82	20.0
	High school	68	16.6
Settlement	University	28	6.8
	Village	79	19.3
	Subprovince	140	34.2
Economic Condition	City	190	46.5
	Low	205	50.1
	Medium	172	42.1
	High	32	7.8
Occupation	Student	8	2.0
	Officer	24	5.9
	Employee	70	17.1
	Special Profession	92	22.5
	Unemployed	209	51.1
	Retired	6	1.5

SD:Standart Deviation

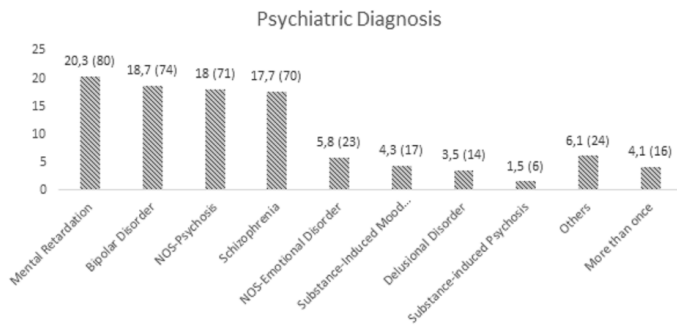


Figure 1. Psychiatric diagnoses of the participants

Of the 409 forensic patients, it was determined that 217 (53.1%) patients have been admitted to the Elazig Fethi Sekin City Hospital HSFPS to be kept under observation, whereas that the remaining 192 (46.9%) patients have been admitted to the Elazig Fethi Sekin City Hospital HSFPS to be placed under protection and treatment (Figure 2).

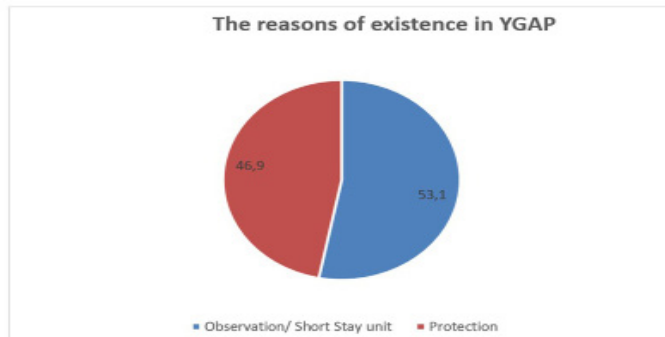


Figure 2. Participants' reasons of existence in HSFPS

In terms of the crimes committed by the forensic patients analyzed within the scope of this study, it was determined that 113 (27.6%), 28 (6.8%), 23 (5.6%), 18 (4.4%), 17 (4.2%), 108 (26.4%) and 102 (24.9%) patients were convicted of the offenses of simple injury, sex crime, threat, murder, insult, others types of crimes and multiple crimes respectively (Figure 3).

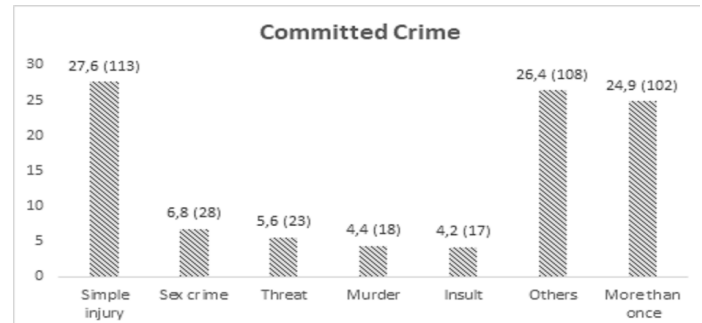


Figure 3. Reasons for forensic patients to be in HSFPS

Lastly, it was determined that 345 (84.4%), 54 (13.2%) and 10 (2.4%) of the forensic patients included in this study received treatment at the Elazig Fethi Sekin City Hospital HSFPS, once, twice, and thrice or more, respectively. 201 (49.1%) of the forensic patients were determined to have received inpatient treatment not just at Elazig Fethi Sekin City Hospital HSFPS but also at other institutions. Of these patients, 44 (21.9%) and 157 (78.1%) patients were determined to have received treatment at institutions other than Elazig Fethi Sekin City Hospital HSFPS, once and more than once, respectively (Table 3).

Table 2. The addictions and diseases of patients included in the study

		Sayı	%
Additional organic disease	Yes	74	18.1
	No	335	81.9
Psychiatric drug use	Yes	200	48.9
	No	209	51.1
Psychiatric disease status	Yes	395	96.6
	No	14	3.4
Period of disease	Less than 5 years	120	30.4
	5-10 years	77	19.5
	More than 10 years	198	50.1
Previous Psychiatric Treatment Status	Yes	336	82.2
	No	73	17.8
Self-mutilation	Yes	83	20.3
	No	326	79.7
Suicide Attempt	Yes	61	14.9
	No	348	85.1
Smoking	Yes	242	59.2
	No	167	40.8
Alcohol / Drug Use	Yes	94	23.0
	No	315	77.0

Table 3. The HSFP characteristics of patients included in the study

	Number	%	
The reason of existence in HSFP	Observation / Short Stay Unit	217	53.1
	Prevention Therapy	192	46.9
	Simple injury	113	27.6
	Sex crime	28	6.8
	Threat	23	5.6
Committed Crimes	Murder	18	4.4
	Insult	17	4.2
	Others	108	26.4
	More than one	102	24.9
	Once	345	84.4
Number of treatment in HSFP	Twice	54	13.2
	Three times and more	10	2.4
The state of inpatient psychiatric treatment except for HSFP	Yes	201	49.1
	No	208	50.9
	Once	44	21.9
The number of inpatient psychiatric treatment except for HSFP	More than once	157	78.1

HSFP. High Security Forensic Psychiatry

DISCUSSION

In this study, sociodemographic, clinical and criminal characteristics of the forensic patients who were treated in the Elazig Fethi Sekin City Hospital High-Security Forensic Psychiatry Service between 01.03.2020 and 01.03.2021 were analyzed. Consequentially, it was found that 59.4% and 5.9% of the forensic patients included in this study were single and widowed/divorced, respectively. This finding is compatible with the findings of the relevant studies available in the literature in that they also reported high rates of single patients in their study groups (10, 11). Another study with a large sample reported that 83.6% of convicted psychiatric patients without criminal responsibility were single (12). In addition, it was determined that 76.6% of the patients of the forensic patients included in this study had an elementary school degree or less, which is a finding supporting the view that there is a low and certain level of relationship between violent behavior and education level (13). As an example, in a study conducted on homicidal criminal cases, it was found that the subjects had a low level of education (56.2% and 57.2%), and the authors emphasized the relationship between education level and violence (14).

In terms of residential addresses, it was determined that the rate (46.5%) of forensic patients who were living in a city was lower than the rate of patients living in other types of residential areas (15). There are widespread opinions that geographical factors and residential can have an impact on criminal behavior (16). This data in our study has been interpreted as that the rate of forensic patients who have

difficulty in accessing treatment may be high, and as a result, they may have been involved in crime due to overlooked disease recurrences. In terms of employment status, it was determined that more than half (51.1%) of the forensic patients included in this study were unemployed. Turkcan et al. reported that 50% of all cases evaluated by forensic psychiatry were not employed in any job (17). In another follow-up study, 61 non-criminal cases were followed for 5 years and it was found that 86% of them did not work at all during this period (18). It is known that psychiatric disorders, including but not limited to the inability to cope with the stresses of the job, poor social skills and decreased cognitive abilities, may render individuals with a psychiatric disorder unsuccessful in business life (19, 20). It has been reported that unemployment increases the probability of being involved in a crime in individuals with a psychiatric disorder (21). 205 (50.1%) of the forensic patients included in this study defined their economic status as low, which is a finding similar to the respective findings of the relevant studies available in the literature (22). It has been reported that low economic status, as unemployment, increases the probability of being involved in a crime in individuals with a psychiatric disorder (23). Factors such as sex, unemployment and divorce have been shown to be related to violence. It has been reported that divorce and unemployment can increase the risk of crime even without having any mental illness, yet unemployment and divorce are more common in individuals with mental illness (24).

Additionally, it was found that the diagnosis of 20.3% of

the forensic patients included in this study was mental retardation. It has been reported that individuals with a diagnosis of mental retardation are more likely to be both a victim of a crime (25) and the perpetrator of a crime (26). It has been also reported that individuals diagnosed with mood disorders and psychotic disorders are more likely to be involved in crime (27, 28). The analysis of the types of psychiatric disorders of the forensic patients included in this study revealed that 40.7% of the patients had schizophrenia and other psychotic disorders. This finding is compatible with the respective findings of the relevant studies available in the literature (29, 30). On the other hand, the finding that 18.7% of the forensic patients included in this study had bipolar disorder was different from the respective finding reported in İnan et al.'s study (31). Furthermore, it was determined that the number of forensic patients with a chronic psychiatric disorder, that is, a psychiatric disorder sustained for long periods, were more than the number of other patients, that is, the patients with an acute psychiatric disorder. This is an important finding since it is known that predisposition to committing crime increases as the psychiatric disorder becomes chronic (32). In addition, it was determined that 51.5% of the patients have not been using psychiatric medication. This is also an important finding, since it was demonstrated in the literature that patients with psychiatric disorders are more prone to violence if they do not receive adequate treatment (33, 34). A study examined homicidal crime before and after treatment in patients with psychosis and showed that the risk of crime was 15.5 times higher before treatment than after treatment (35). This finding emphasizes the importance of regular use of psychiatric medication and close follow-up in respect of the forensic patients in Turkey.

59.2% and 23% of the forensic patients included in this study had a history of smoking and alcohol/substance use, respectively. It is known that the rate of smokers among forensic patients is very high (36). The risk of committing a crime or resorting to violence increases fourfold in patients with a serious psychiatric illness and co-diagnosis of substance use disorder. Studies have shown that the increase in violent crimes committed by individuals with mental disorder can be explained by a history of alcohol and/or substance use (37).

The analysis of the forensic patients included in this study in terms of the offenses they were convicted of revealed that they were mostly convicted of offense of actual bodily harm (27.6%). This finding supports the respective finding of the study conducted in the Psychiatric Hospital Forensic Psychiatry Service of Bakırköy Psychiatric Hospital in Istanbul (31). It is known that forensic patients can exhibit both self-mutilative and suicidal behaviors (38). In parallel with the said finding reported in the literature, it was found that 20.3% and 14.9% of the forensic patients included in this study had a history of self-mutilation and suicide attempt, respectively. Additionally, it was determined that 25.6% of the forensic patients treated at Elazığ Fethi Sekin City Hospital HSFPS were treated in more than one forensic

psychiatry service, which was interpreted as a finding indicating that forensic patients may be prone to repeat their crimes (39). This finding indicates the importance of providing treatment to forensic patients at an HSFPS in that they can be prevented from harming both themselves and their environments.

The mean age of the forensic patients included in this study was calculated as 36.4 ± 11.7 years as compared to 32 and 41.7 years, which were reported as the mean ages of the patient groups investigated in the studies of Coid et al. (2007) and Özbay (2010), respectively (39, 40).

It is noteworthy that the forensic patients who repeat their crimes were mostly patients with substance use disorder and low educational levels. Nevertheless, the retrospective structure of this study emerges as a limitation, thus the results of this study, such as the result mentioned above, should be supported by prospective follow-up studies using structured scales.

CONCLUSION

Our study presents the sociodemographic data of the cases in the high-security forensic psychiatry service of a city hospital over a one-year period. The relationship between crime and mental illness depends on multiple factors. The reasons that push individuals to commit crimes include individual, psychological and sociological characteristics, which is why it is important to consider sociodemographic concepts in this group. In addition, these data are guiding and informative about possible risk factors of crime.

HSFSPs are needed in order to closely monitor and supervise the control and follow-up of the cases in the forensic psychiatry service. As a result of the cooperation between the judicial system and health systems, HSFSPs enable coordinated work for forensic cases and are important for reintegrating these cases into society. We think that crime rates will decrease with well-functioning HSFPS systems.

It was concluded based on the results of this study that high-security forensic psychiatry services (HSFSPs) are crucial institutions in terms of community mental health, as they play an important role in preventing forensic patients from harming themselves and their environments, and that the number and capacity of these HSFPSs should be increased throughout the country.

Financial disclosures: All authors report no financial interests or potential conflicts of interest.

Conflict of Interest: The authors declare that they have no competing interest.

Ethical approval: Uthe related ethics committee approval was obtained from the Firat University Non-Interventional Ethics Committee with the approval number E-97132852-050.01.04-40884 dated 03.05.2021

REFERENCES

1. Yanık M. Turkish Mental Health System and Evaluations, Mental Health Action Plan Proposal. Reviews, Cases and Hypotheses in Psychiatry. 2007;24-6.
2. Engstrom EJ. History of forensic psychiatry. *Curr Opin Psychiatry*. 2009;22:576-81.
3. Savrun BM. Türkiye'de adli psikiyatri uygulamaları. *Türkiye Klinikleri Journal of Psychiatry Special Topics*. 2011;4:60-6.
4. Rutherford M, Duggan S. Forensic mental health services: facts and figures on current provision. *The British Journal of Forensic Practice*. 2008.
5. Bergenheim A. Sexual assault, irresistible impulses, and forensic psychiatry in Sweden. *Int J Law Psychiatry*. 2014;37:99-108.
6. Öncü F, Ger C. Zorunlu Tedavi. İçinde: Sercan M, editör. *Adli Psikiyatri Uygulama Klavuzu*, 1. Baskı. Ankara: Türkiye Psikiyatri Derneği Yayınları; 2007. p.51-69.
7. Polat H, Karakaş SA. Adli Psikiyatri Hemşireliği. *Ebelik ve Sağlık Bilimleri Dergisi*. 2020;3:225-32.
8. Bolu A, Toygar M, Pan E ve ark. Bir eğitim hastanesi psikiyatri kliniğinde adli olguların değerlendirilmesi; beş yıllık inceleme. *Gulhane Med J*. 2014; 6:1-4.
9. Polat S, Hocaoğlu Ç. Bir eğitim ve araştırma hastanesi psikiyatri polikliniğine yönlendirilen adli olguların değerlendirilmesi. *Ortadoğu Tıp Derg*. 2020;12:290-4.
10. Türkcan S, İncesu C, Canbek Ö ve ark. 1831 adli olgunun tanı dağılımı ve tanı-suç bağlantısının değerlendirilmesi. *Düşünen Adam Psikiyatri ve Nörolojik Bilimler Dergisi*. 2000;13:132-7.
11. Swanson JW, Swartz MS, Essock SM, et al. The social-environmental context of violent behavior in persons treated for severe mental illness. *Am J Psychiatry*. 2002;92:1523-31.
12. Crocker AG, Nicholls TL, Seto MC, et al. The National Trajectory Project of individuals found not criminally responsible on account of mental disorder in Canada. Part 2: the people behind the label. *Can J Psychiatry*. 2015; 60:106-16.
13. Kessler RC, Foster CL, Saunders WB, Stang PE. Social consequences of psychiatric disorders, I: Educational attainment. *Am J Psychiatry*. 1995;52:1026-32.
14. Kovacevic D, Žarković-Palijan T, Radeljak S, et al. Forensic aspects in domestic homicide. *Coll Antropol*. 2010;34:29-37.
15. Camcioğlu TH, Öncü F, Şüküroğlu S, et al. Bipolar I bozukluğu olan erkek olguların suç işlemede sosyodemografik ve sosyoekonomik etmenlerin etkisi. *Türk Psikiyatri Dergisi*. 2012;25: 163-70.
16. Durmaz, Şükrü. Bilişim Suçlarının Sosyolojik Analizi. Gazi Üniversitesi Sosyal Bilimler Enstitüsü Kamu Yönetim Ana Bilim Dalı Yayınlanmamış Yüksek Lisans Tezi, Ankara. 2005: 25-26.
17. Türkcan S, İncesu C, Canbek Ö, Can Y, Sercan M, Uygur N. 1831 adli olgunun tanı dağılımı ve tanı-suç bağlantısının değerlendirilmesi. *Düşünen Adam Psikiyatri ve Nörolojik Bilimler Dergisi*. 2000;13:132-7.
18. Nicholson RA, Norwood S, Enyart C. Research report characteristics and outcomes of insanity acquittees in Oklahoma. *Behavioral Sciences & the Law*. 1991;9:487-500.
19. Liberman RP, Jacobs HE, Blackwell GA. Overcoming psychiatric disability through skills training, in *Psychiatric Disability: Clinical, Legal, and Administrative Dimensions*. Edited by Meyerson AT, Fine TF. Washington DC, American Psychiatric Press, 1987.
20. Baron RC, Salzer MS. Career patterns of persons with serious mental illness: generating a new vision of lifetime careers for those in recovery. *Psychiatric Rehabilitation Skills*. 2000; 4:136-56.
21. Draine J, Salzer MS, Culhane DP, Hadley TR. Role of social disadvantage in crime, joblessness, and homelessness among persons with serious mental illness. *Psychiatric Services*. 2002;53:565-73.
22. Hudson CG. Socioeconomic status and mental illness: tests of the social causation and selection hypotheses. *Am J Orthopsychiatry*. 2005;75:3-18.
23. Lurigio AJ. People with serious mental illness in the criminal justice system: Causes, consequences, and correctives. *Prison J*. 2011;91:66-86.
24. Elbogen EB, Johnson SC. The intricate link between violence and mental disorder: results from the national epidemiologic survey on alcohol and related conditions. *Arch Gen Psychiatry*. 2009;66:152-61.
25. Nixon M, Thomas SD, Daffern M, Ogloff JR. Estimating the risk of crime and victimisation in people with intellectual disability: a data-linkage study. *Soc Psychiatry Psychiatr Epidemiol*. 2017;52:617-26.
26. Fogden BC, Thomas SD, Daffern M, Ogloff JR. Crime and victimisation in people with intellectual disability: a case linkage study. *BMC Psychiatry*. 2016;16:1-9.
27. Dolenc B, Dernovšek MZ, Sprah L, et al. Relationship between affective temperaments and aggression in euthymic patients with bipolar mood disorder and major depressive disorder. *J Affect Disord*. 2015;174:13-8.
28. Nijman H, Cima M, Merckelbach H. Nature and antecedents of psychotic patients' crimes. *J Forensic Psychiatry*. 2003;14:542-53.
29. Swinson N, Flynn S, While D, et al. Trends in rates of mental illness in homicide perpetrators. *Br J Psychiatry*. 2011;198:485-9.
30. McGrath M, Oyebode F. Characteristics of perpetrators of homicide in independent inquiries. *Med Sci Law*. 2005;45:233-43.
31. İnan S, Yıldızhan E, Öncü F. İnsana Yönelik Ciddi Suç İşleyen Adli Psikiyatri Olgularının Hastalık Öyküleri, Sosyodemografik ve Suç Özellikleri. *Türk Psikiyatri Derg*. 2018;29:258-68.
32. Ghiasi N, Azhar Y, Singh J. Psychiatric illness and criminality. *StatPearls*. 2020 [Internet].
33. Volavka J, Citrome L. Pathways to aggression in schizophrenia affect results of treatment. *Schizophr Bull*. 2011;37:921-9.
34. Walsh E, Buchanan A, Fahy T. Violence and schizophrenia:

- examining the evidence. *Br J Psychiatry*. 2002;180:490-5.
35. Nielszen O, Large M. Rates of homicide during the first episode of psychosis and after treatment: a systematic review and meta-analysis. *Schizophr Bull*. 2010;36:702-12.
 36. Dickens G, Stubbs J, Popham R, Haw C. Smoking in a forensic psychiatric service: a survey of inpatients' views. *J Psychiatr Ment Health Nurs*. 2005;12:672-8.
 37. Kelly TM, Daley DC, Douaihy AB. Treatment of substance abusing patients with comorbid psychiatric disorders. *Addict Behav*. 2012;37:11-24.
 38. Cuellar J, Curry TR. The prevalence and comorbidity between delinquency, drug abuse, suicide attempts, physical and sexual abuse, and self-mutilation among delinquent Hispanic females. *Hisp J Behav Sci*. 2007;29:68-82.
 39. Coid J, Hickey N, Yang M. Comparison of outcomes following aftercare from forensic and general adult psychiatric services. *Br J Psychiatry*. 2007;190:509-14.
 40. Özbay Y. Factors affecting compliance with compulsory outpatient treatment after compulsory clinical treatment in cases whose criminal responsibility has been lifted. Ph.D. thesis, Bakirkoy Prof. Dr. Mazhar Osman Mental Health and Neurological Diseases Training and Research Hospital İstanbul, 2010.