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ARAŞTIRMA MAKALESİ / ORIGINAL ARTICLE

FORENSIC MEDICINE

The impact of COVID-19 pandemic on forensic psychiatric cases in a university hospital in Turkey

COVID-19 pandemisinin Türkiye'de bir üniversite hastanesi psikiyatri kliniğine başvuran adli psikiyatrik vakalar üzerine etkisi

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ABSTRACT

Introduction: The coronavirus (COVID-19) pandemic has caused various negative effects on human life in terms of health, economics, and social aspects. Just as the pandemic has had an impact on many areas of life and medicine, it may also have had an impact on forensic psychiatry, which is the intersection of law and psychiatry. In this study, we aimed to investigate the impact of the COVID-19 pandemic on adult forensic psychiatric cases and contribute to the literature.

Method: This study is a retrospective, single-center study conducted at xx University Hospital. The files of 978 forensic psychiatric cases admitted within four years were scanned from the hospital data recording system. In the study, all cases applied for forensic psychiatric evaluation between 11.03.2020-03.03.2022 (pandemic period) and 03.03.2018-11.03.2020 (pre-pandemic period) were included. These two groups, including cases from the pandemic and pre-pandemic periods, were compared in terms of sociodemographic, criminal and forensic psychiatric characteristics.

Results: A total of 978 cases were included in our study, 451 in the pre-pandemic period and 527 in the COVID-19 pandemic period. An increase in the number of forensic psychiatric cases has been detected during the pandemic. It has been determined that there is a significant increase in forensic psychiatric cases sent especially due to Article 432 of the Turkish Civil Code (TCC 432) and Article 32 of the Turkish Penal Code (TPC 32). While 115 (25.5%) of the pre-pandemic period applications were TPC 32 and 69 (15.3%) were TPC 432, 209 (39.7%) of the pandemic period applications were TPC 32 and 158 (30%) were TCC 432 ($p < 0,001$).

Conclusion: Little information is available on how a pandemic may affect forensic psychiatric referrals. The most important result of our study is the detection of an increase in cases referred under TMK 432 and TCK 32. The most important feature of our study is that it is one of the limited number of studies in the literature investigating the effect of the pandemic process on forensic psychiatric cases and is also the first study in our country. In conclusion, this study provides an important basis for understanding the impact of the pandemic on forensic psychiatry and developing appropriate intervention strategies.

Keywords: *Forensic psychiatry, Forensic medicine, COVID-19, Pandemic, Turkish Penal Code, Turkish Civil Code*

ÖZET

Giriş: Coronavirus (COVID-19) pandemisi sağlık, ekonomik ve sosyal açıdan insan yaşamında çeşitli olumsuz etkilere yol açmıştır. Pandeminin hayatın ve tıbbın birçok alanda etkisi olduğu gibi hukuk ile psikiyatrinin kesişim alanı olan adli psikiyatri üzerinde de etkisi olmuş olabilir. Bu çalışmada, COVID-19 pandemisinin erişkin adli psikiyatrik vakalar üzerindeki etkisini araştırıp literatüre katkı sağlamayı amaçladık.

Yöntem: Bu çalışma xx Üniversite Hastanesinde yapılan retrospektif, tek merkezli bir çalışmadır. Dört yıllık süre içinde başvuran 978 adli psikiyatrik vakanın dosyaları üç aylık süre içinde hastane veri kayıt sisteminden taranmıştır. Çalışmada 11.03.2020-03.03.2022 (pandemi dönemi) ve 03.03.2018-11.03.2020 (pandemi öncesi dönem) arasında adli psikiyatrik değerlendirme için başvuran tüm vakalar çalışmaya dahil edilmiştir. Pandemi ve pandemi öncesi dönemdeki vakaları içeren bu iki grup sosyodemografik, kriminal, adli psikiyatrik özellikleri açısından karşılaştırılmıştır.

Bulgular: Çalışmamıza pandemi öncesi dönemde 451, COVID-19 pandemisi döneminde ise 527 olmak üzere toplam 978 vaka dahil edilmiştir. Pandemi sırasında kurumumuza başvuran adli psikiyatrik vakaların sayısında artış saptanmıştır. Özellikle Türk Medeni Kanunu'nun 432. maddesi (TMK 432) ve Türk Ceza Kanunu'nun 32. maddesi (TCK 32) nedeniyle gönderilen adli psikiyatrik vakalarda ciddi artış olduğu saptanmıştır. Pandemi öncesi dönem başvurularının 115'i (%25,5) TCK 32 ve 69'u (%15,3) TMK 432 iken pandemi dönemi başvuranların 209'u (%39,7) TCK 32 ve 158'i (%30) TMK 432'dir ($p < 0,001$).

Sonuç: Bir pandeminin adli psikiyatrik başvuruları nasıl etkileyebileceğine ilişkin çok az bilgi mevcuttur. Çalışmamızın en önemli sonucu TMK 432 ve TCK 32 kapsamında gönderilen vakalarda artış saptanmasıdır. Çalışmamızın en önemli özelliği pandemi sürecinin adli psikiyatrik vakalar üzerindeki etkisini araştıran literatürdeki sınırlı sayıda çalışmadan biri ayrıca ülkemizdeki ilk çalışma olmasıdır. Sonuç olarak, bu çalışma, pandeminin adli psikiyatri üzerindeki etkisini anlamak ve uygun müdahale stratejileri geliştirmek için önemli bir temel sağlamaktadır.

Anahtar Kelimeler: *Adli psikiyatri, Adli tıp, COVID-19, Pandemi, Türk Ceza Kanunu, Türk Medeni Kanunu*

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INTRODUCTION

Forensic psychiatry (FP) is a field that brings together concepts, knowledge and experience between law and psychiatry. This specialty explores and applies the intersection of these two disciplines by examining how the law defines psychiatric issues and what types of services they require (1). It is one of the subjects where forensic reports are required to be prepared by psychiatrists and forensic medicine specialists in Turkey. Forensic psychiatrists provide behavioural assessments, psychiatric evaluations, and counseling to aid in the understanding of legal issues faced by individuals with psychiatric conditions, with the ultimate goal of serving justice (2). The main goal of forensic psychiatry is to determine the impact of a person's mental state on their legal problems. This means making evaluations in legal hearings or court processes, ensuring the fair application of the law and contributing to the justice system. Forensic psychiatrists provide psychiatric evaluations and reports by collaborating with courts, prosecutors, attorneys, and other legal professionals (3).

Turkish Penal Code (TPC) 32/1 states that a person who cannot perceive the legal meaning and consequences of the act he has committed, or whose ability to direct his behavior in relation to this act has significantly decreased, cannot be punished due to mental illness. TPC 32/2 states that certain reductions will be made in the punishment of a person whose ability to direct his behavior has decreased in relation to the act he committed (2). TCC 57 a security measure is ordered for protection and treatment for a person who is mentally ill at the time of committing the act (2). Turkish Civil Code (TCC) 432 is regulated as "Any adult person who poses a danger to society due to mental illness, mental weakness, alcohol or drug addiction, seriously dangerous infectious disease or vagrancy, can be placed or detained in an institution suitable for treatment, education or rehabilitation, if personal protection cannot be provided otherwise (2). TCC 408 may request the restriction of any adult who proves that he cannot properly manage his affairs due to old age, disability, inexperience or serious illness (2).

Coronavirus Disease 2019 (COVID-19) has had a significant impact on mental health worldwide. In addition to the physical risks, it poses to individuals with severe mental disorders, the COVID-19 pandemic has also had a significant impact on the mental health of patients. The isolation and stress brought on by the pandemic leave them more affected than the general population, leading to the risk of relapses and exacerbations (4). The isolation and curfew restrictions implemented during the pandemic period made it more difficult for patients to continue their regular hospital visits, prescribe maintenance treatments, and administer depot antipsychotic treatments compared to their normal lives. Additionally, since coronaviruses may be associated with psychotic symptoms through immune mechanisms, COVID-19 infection itself may exacerbate symptoms in patients with schizophrenia (5). In addition to health problems, the pandemic also causes individuals to experience the loss of their loved ones, restrictions in daily life, and financial difficulties. In addition, this situation has led to an increase in criminal cases such as suicide, domestic violence and sexual abuse in the world (6).

Such negative consequences that occurred during the pandemic period may have caused some changes in forensic psychiatry, which is the common intersection of the law and the healthcare system. There are a limited number of studies in the literature examining forensic psychiatry cases during the pandemic period and investigating the impact of the pandemic on forensic psychiatry cases. This study aims to compare forensic psychiatric cases admitted to our psychiatry department before and during the COVID-19 epidemic. In this study, we aimed to investigate the impact of the COVID-19 pandemic on adult forensic psychiatric cases and contribute to the literature.

SAMPLE AND PROCEDURE

This research study was a retrospective observational study and all admissions to the Forensic Psychiatry Clinic of Recep Tayyip Erdoğan University Training and Research Hospital were made retrospectively through the hospital registry system. The files of 978 forensic psychiatric cases referred to us by the court within four years were scanned from the hospital

data recording system. The pandemic period began on March 11, 2020, with the first COVID-19 case in our country, and ended on March 3, 2022, with the removal of quarantine laws, mask use, and the HES code obligation (Hayat Eve Sığar). The pre-pandemic period was defined as two years before the pandemic. All cases referred for forensic psychiatric evaluation during the pandemic period and the pre-pandemic period we determined were included in the study. Although it is very unlikely, it was determined that those with missing data in their records would be excluded from the study. Patients were grouped as pre-pandemic period cases and pandemic period cases. Age, gender, marital status, educational status, diagnoses of patients as a result of forensic psychiatric examination, the purpose for which they were referred for forensic psychiatric examination, the crimes they committed, and the decisions made as a result of the psychiatric evaluation of these people were compared statistically between the groups.

The SPSS (Statistical Package for the Social Sciences Inc.) 26.0 for Windows was used in statistical analyses. Descriptive statistics and continuous variables such as age are presented as mean ± standard deviation, frequency distribution, and percentage. Categorical variables were given as frequency and percentage. The chi-square test was used to analyze categorical data. The suitability of the variables to the normal distribution was examined using visual (histogram and probability graphs) and analytical methods (Kolmogorov-Smirnov test and Shapiro-Wilk test). For variables that do not comply with the normal distribution, the Mann-Whitney U Test was used between two independent groups. The statistical significance level was accepted as $p<0.05$ for all values.

Ethics committee approval for the study was obtained by the Recep Tayyip Erdoğan University Non-invasive Clinical Research Ethics Committee, with the decision numbered 2022/73 dated March 24, 2022, and institutional permission was also obtained for the study. All practices performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 2000 Helsinki Declaration and its later amendments or comparable ethical standards.

RESULTS

Sociodemographic characteristics

during the 4-year period determined for the study, the records of 978 forensic psychiatric cases were accessed and included in the study. Of the 978 forensic psychiatric cases included in the study, 451 (46.1%) were admitted in the pre-pandemic period and 527 (53.9%) were admitted during the pandemic period. Only 69 (15.3%) of the cases admitted in the pre-pandemic period were women, and 86 (16.3%) of the cases admitted during the pandemic period were women. There was no significant difference in terms of gender between the pre-pandemic period and the pandemic period cases ($p > 0.05$). 382 (84.7%) of the cases admitted in the pre-pandemic period were men, and 441 (83.7%) of the cases admitted during the pandemic period were men. There was no significant difference in terms of gender between the pre-pandemic period and the pandemic period cases ($p > 0.05$) (Table 1). While the mean age of applications in the pre-pandemic period was 40.55 ± 13.29, the mean age of applications in the pandemic period was 38.85 ± 13.72. There was no statistically significant difference between the two groups in terms of age ($p > 0.05$). In the pre-pandemic period, 249 (55.2%) of those who applied were single, 156 (34.6%) were married, and 46 (10.2%) were widowed or divorced. Of those who applied during the pandemic period, 309 (58.6%) were single, 168 (31.9%) were married, and 50 (9.5%) were widowed or divorced. There was no statistically significant difference between the groups in terms of marital status ($p > 0.05$). Of those who applied in the pre-pandemic period, 6 (1.3%) were illiterate, 123 (27.3%) were primary school graduates, 202 (44.8%) were secondary school graduates, and 107 (23.7%) were high school graduates and 13 (2.9%) were university graduates. Of those who applied during the pandemic period, 17 (3.2%) were illiterate, 172 (31.6%) were primary school graduates, 219 (41.6%) were secondary school graduates, 95 (18%) were high school graduates and 24 (4.6%) were university graduates. There was a statistically significant difference between the groups in terms of educational status ($p < 0.01$) (Table 1).

Clinical Features

Of those who applied in the pre-pandemic period, 2 (0.4%) had depressive disorder, 8 (1.8%) had anxiety

Table 1. Sociodemographic characteristics of forensic cases before and during the pandemic

Sociodemographic characteristics	Before pandemic (n=451)	During pandemic (n=527)	Total (n=978)	p
Age, mean (±SD)	40.55 (±13.2)	38.85 (±13.7)	39.63 (±13.5)	0.84
Gender, n (%)				
Woman	69 (15.3)	86 (16.3)	155 (15.8)	0.66
Male	382 (84.7)	441 (83.7)	823 (84.2)	
Marital status, n (%)				
Single	249 (55.2)	309 (58.6)	558 (57.1)	0.55
Married	156 (34.6)	168 (31.9)	324 (33.1)	
Widowed-divorced	46 (10.2)	50 (9.5)	96 (9.8)	
Educational status, n (%)				
Illiterate	6 (1.3)	17 (3.2)	23 (2.4)	<0.016*
Primary school graduate	123 (27.3)	172 (32.6)	295 (30.2)	
Secondary school graduate	202 (44.8)	219 (41.6)	421 (43)	
High school graduate	107 (23.7)	95 (18)	202 (20.7)	
University graduate	13 (2.9)	24 (4.6)	37 (3.8)	

**Chi-square statistical analysis; p<0.05*

Table 2. Psychiatric diagnosis of forensic cases before and during the pandemic

Psychiatric diagnosis	Before pandemic n (%)	During pandemic n (%)	Total n (%)	p
Without a psychiatric diagnosis	20 (4.4)	34 (6.5)	54 (5.5)	<0.01*
Depressive disorder	2 (0.4)	8 (1.5)	10 (1)	
Anxiety disorder	8 (1.8)	9 (1.7)	17 (1.7)	
Psychotic disorder	185 (41)	153 (29)	338 (34.6)	
Bipolar disorder	132 (29.3)	117 (22.2)	249 (25.5)	
Substance use disorder	43 (9.5)	98 (18.6)	141 (14.4)	
Adjustment disorder	5 (1.1)	6 (1.1)	11 (1.1)	
Antisocial personality disorder	28 (6.2)	41 (7.8)	69 (7.1)	
Intellectual disability	23 (5.1)	50 (9.5)	73 (7.5)	
Dementia	5 (1.1)	8 (1.5)	13 (1.3)	
Other	1 (0.2)	2 (0.4)	3 (0.3)	

**Chi-square statistical analysis; p<0.05*

disorder, 185 (41%) had psychotic disorder, and 132 (29.3%) had bipolar disorder. 43 (9.5%) had substance use disorder, 5 (1.1%) had adjustment disorder, 28 (6.2%) had antisocial personality disorder, 23 (5.1%) had intellectual disability, 5 (1.1%) of them were diagnosed with dementia and 20 of them (4.4%) did not have any psychiatric diagnosis. Of those who applied during the pandemic period, 8 (1.5%) had depressive disorder, 9 (1.7%) had anxiety disorder, 153 (29%) had psychotic disorder, 117 (22.2%) had bipolar disorder, 98 (18.6%) had substance use disorder, 6 (1.1%) had adjustment disorder, 41 (7.8%) had antisocial personality disorder, 50 (9.5%) had intellectual disability, 8 (1.5%) of them were diagnosed with dementia and 34 of them (6.5%) did not have any psychiatric diagnosis. There was a statistically significant difference between the groups in terms of psychiatric diagnosis status ($p < 0.01$) (Table 2).

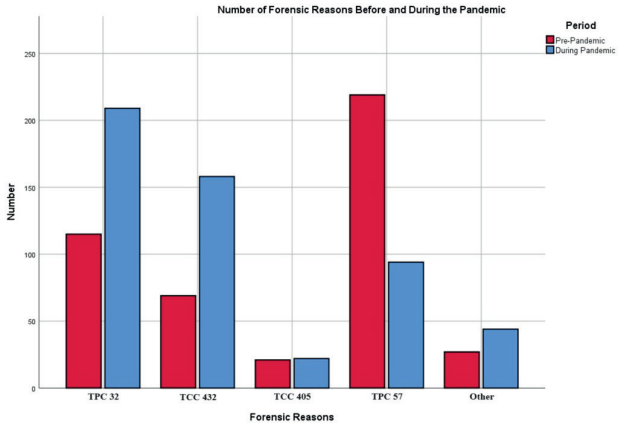

Figure 1. Number of forensic reasons applications before and during the pandemic

Reasons for forensic psychiatric evaluation and crime types

Considering the reasons for sending, 115 (25.5%) of the pre-pandemic period applications were TPC 32, 69 (15.3%) were TCC 432, 21 (4.7%) were guardianship, 219 (48.6%) were social healing. Of the applications during the pandemic period, 209 (39.7%) were TPC 32, 158 (30%) were TCC 432, 22 (4.2%) were guardianship, 94 (17.8%) were social healing. There was a statistically significant difference between the groups according to the reasons for sending them ($p < 0.001$) (Table 3). According to the crime distribution of forensic psychiatric cases evaluated in terms of criminal responsibility, 34 (29.3%) of the pre-pandemic applications were for assault-injury, 5 (4.3%) for theft, 6 (5.2%) for substance use, 1 (1%) murder, 3 (2.6%) attempted murder, 31 (26.7%) threats-insults, 12 (10.4%) sexual abuse, 6 (5,2%) were damage to property, 5 (4.3%) were looting-fraud, 14 (12.2%) were other crimes. Crime distribution of applications during the pandemic period: 50 (24.3%) assault-injury, 16 (7.8%) theft, 15 (7.3%) substance use, 3 (1.4%) murder, 11 (5.3%) attempted murder, 51 (24.8%) threats-insults, 8 (3.9%) sexual abuse, 11 (5.3%) damage to property, 2 (1%) were looting-fraud and 38 (18.4%) were other crimes. An increase in the rate of assault-injury, theft and substance use was detected during the pandemic period. There was a statistically significant difference between the groups according to crime distribution ($p = 0.03$) (Table 4). Of the applications referred due to TPC 32, 71 (21.9%) were diagnosed with psychotic disorder, 59 (18.2%) were diagnosed with bipolar disorder, 58 (17.9%) were diagnosed with antisocial personality disorder, and 36 (17.9%) were diagnosed with substance use disorder and 34 (10.5%) were diagnosed with intellectual disability. In the pre-pandemic period, 28 (24.3%) of the cases admitted due to TPC 32 were diagnosed with psychotic disorder, 24 (20.9%) were diagnosed with bipolar disorder, 24 (20.9%) were diagnosed with antisocial personality disorder, and 9 (7.8%) were diagnosed with substance use disorder. Of the cases admitted due to TPC 32 during the pandemic period, 43 (20.6%) had psychotic disorder, 35 (16.7%) had bipolar disorder, 27 (12.9%) had substance use disorder, and

Table 3. Reasons for forensic psychiatric evaluation of forensic cases before and during the pandemic

Reasons for forensic psychiatric evaluation	Before pandemic n (%)	During pandemic n (%)	Total n (%)	p
TPC 32	115 (25.5)	209 (39.7)	324 (33.1)	<0.001*
TCC 432	69 (15.3)	158 (30)	227 (23.2)	
Guardianship	21 (4.7)	22 (4.2)	43 (4.4)	
Social healing	219 (48.6)	94 (17.8)	313 (32)	
Whether the person is mentally ill	9 (2)	10 (1.9)	19 (1.9)	
Other	34 (7.8)	18 (3)	52 (5.4)	

**Chi-square statistical analysis; p<0.05*

Table 4. Crime types of forensic cases before and during the pandemic

Crime types	Before pandemic n (%)	During pandemic n (%)	Total n (%)	p
Assault-injury	34 (29.3)	50 (24.3)	84 (26.1)	0.03*
Theft	5 (4.3)	16 (7.8)	21 (6.5)	
Drug offenses	6 (5.2)	15 (7.3)	21 (6.5)	
Murder	1 (0.9)	3 (1.4)	4 (1.2)	
Attempted murder	3 (2.6)	11 (5.3)	14 (4.3)	
Threat-insult	31 (26.7)	51 (24.8)	82 (25.5)	
Sexual abuse	12 (10.3)	8 (3.9)	20 (6.2)	
Damage to property	6 (5.2)	11 (5.3)	17 (5.3)	
Looting-fraud	5 (4.3)	2 (1)	7 (2.2)	
Other	14 (12.1)	38 (18.4)	52 (16.1)	

**Chi-square statistical analysis; p<0.05*

Table 5. Psychiatric Diagnosis of TPC 32 and TCC 432 in before and during the pandemic

Psychiatric diagnosis	Before pandemic n (%)		During pandemic n (%)		p
	TPC 32	TCC 432	TPC 32	TCC 432	
Psychotic disorder	28 (24.3)	19 (27.5)	43 (20.6)	38 (24.1)	<0,001*
Bipolar disorder	24 (20.9)	23 (33.3)	35 (16.7)	37 (23.4)	
Substance use disorder	9 (7.8)	27 (39.1)	27 (12.9)	66 (41.8)	
Antisocial personality disorder	24 (20.9)	0 (0)	34 (16.3)	1 (0.6)	
Intellectual disability	6 (5.2)	0 (0)	28 (13.4)	4 (2.4)	

**Chi-square statistical analysis; p<0.05*

Table 6. Criminal responsibility status according to psychiatric diagnoses before and during the pandemic

Psychiatric diagnosis	Before pandemic n (%)			During pandemic n (%)			p
	TPC 32/1	TPC 32/2	Full criminal responsibility	TPC 32/1	TPC 32/2	Full criminal responsibility	
Psychotic disorder	11 (55)	2 (33.3)	15 (16.9)	21 (45.7)	14 (36.8)	8 (6.3)	<0.001*
Bipolar disorder	6 (30)	1 (16.7)	17 (19.1)	10 (21.7)	10 (26.3)	15 (11.9)	
Substance use disorder	0 (0)	0 (0)	9 (10.1)	0 (0)	3 (7.9)	24 (19)	
Antisocial personality disorder	0 (0)	0 (0)	24 (27)	0 (0)	0 (0)	34 (27)	

**Chi-square statistical analysis; p<0.05*

34 (16.3%) had antisocial personality disorder. There was a statistically significant difference between the groups ($p < 0.001$) (Table 5). In the pre-pandemic period, it was determined that 19 (27.5%) of the cases admitted due to TCC 432 were diagnosed with psychotic disorder, 23 (33.3%) were diagnosed with bipolar disorder, and 27 (39.1%) were diagnosed with substance use disorder. There was a statistically significant difference between the groups ($p<0.001$). It was determined that 38 (24.1%) of the cases admitted due to TCC 432 during the pandemic period were diagnosed with psychotic disorder, 37 (23.4%) were diagnosed with bipolar disorder, and 66 (41.8%) were diagnosed with substance use disorder. There was a statistically significant difference between the groups ($p < 0.001$) (Table 5).

In the pre-pandemic period, 11 (55%) of the forensic cases evaluated within the scope of TPC 32/1 were diagnosed with psychotic disorder and 6 (30%) with bipolar disorder. Of the forensic cases evaluated within the scope of TPC 32/2, 2 (33.3%) were diagnosed with psychotic disorder and 1 (16.7%) with bipolar disorder ($p < 0.001$) (Table 6). Of the forensic cases evaluated within the scope of TPC 32/1 during the pandemic, 21 (45.7%) were diagnosed with psychotic disorder and 10 (21.7%) were diagnosed with bipolar disorder. Of the forensic cases evaluated within the scope of TPC 32/2, 14 (36.8%) were diagnosed with psychotic disorder, 10 (26.3%) with bipolar disorder, and 3 (7.9%) with substance use disorder. There was a statistically significant difference between the groups ($p < 0.001$) (Table 6).

DISCUSSION

Our study represents one of the limited number of studies evaluating the impact of the pandemic on forensic psychiatric cases. It also stands out as the first study examining adult psychiatric cases during the pandemic period in our country. The average age and gender distribution of the cases included in the study during the four-year period are similar to other studies in the literature (7-10). It was determined that the education level of most of the cases was at the primary and secondary school levels. In forensic case studies, low education levels are typical (10).

Individuals with higher levels of education generally have access to more social support and resources. Education can help people make better-informed decisions and comply more with social norms. As in our study, in another study where forensic psychiatric cases are evaluated, young age, male gender, being single and low education level were the majority (11).

In our study, it was determined that the majority of forensic psychiatry cases were diagnosed with psychotic disorders, bipolar disorder and substance use disorders. Polat and Hocaoglu stated that the two most common diagnoses in their study were schizophrenia and mood disorders (7). In the study of Bolu et al., antisocial personality disorder was the most frequently diagnosed diagnosis (12). Yumru et al. stated that the most common diagnosis was substance-related conditions (13). In our study, it was determined that the majority of the reasons for referral of forensic psychiatric cases were criminal responsibility, compulsory treatment and evaluation of social healing. In Kocakaya and Ozturan's study, it was determined that most of them were sent to assess criminal responsibility (10). In a retrospective study of forensic cases admitted to a university hospital psychiatry outpatient clinic, it was reported that 56.8% of the cases were related to criminal law (14). Bolu et al. reported that 22.3% of the cases in their study were evaluated within the scope of article 32 of the TPC (12). Polat and Hocaoğlu reported that the most common reason for judicial application was TPC 57/1 (32.8%), followed by Article 432 of the TCC (20.41%) (7). The majority of the crimes in the cases sent due to criminal responsibility were assault-injury and threat-insult crimes. Polat and Hocaoğlu stated that the most common crime they detected was physical violence (7). Senturk et al., in their study, brought the experiences of child and adolescent mental health judicial committees during the COVID-19 pandemic to the literature (15). The number of studies in the field of adult forensic psychiatry is insufficient. Studies that have investigated the pandemic process with forensic cases in our country have found that there was a decrease in forensic case applications during the pandemic period (16). In the study conducted by Dogan and Ozturk, it was determined that there was a decrease in forensic cases applying to the emergency room during the pandemic period (17). It was determined that during the pandemic period, the rate of forensic cases in a pediatric emergency department in Turkey increased approximately 3-fold compared to the pre-pandemic period (18). In a study investigating suicidal tendencies before and during the pandemic, no significant difference was found (19).

In our study, an increase was detected in the cases sent under TPC 32 and TCC 432. We can attribute these increases to the disruption in the treatment of individuals with severe mental illnesses during the pandemic period and the relapses of their illnesses. It is stated that loneliness, anxiety, hopelessness, suicidal tendencies and domestic violence have increased worldwide due to the restrictions and social isolation imposed to prevent the spread of the disease (6). It has been stated that while some crimes (e.g., theft) decreased in many countries after the epidemic, others (e.g., digital crimes) increased. In particular, the increase in domestic violence worldwide has become one of the most important social problems. Police records also support the increase in domestic violence. Because people have been confined to their homes for a long time. The fear of contacting the virus, death or losing loved ones has made many people much more anxious (20). The suddenly taken restrictive measures caused individuals to be affected, especially psychologically, and to feel under pressure, and it was thought that the pressure and stress felt could be an important factor in individuals turning to violence. Due to the pandemic period, uncertainty, economic difficulties and emotional distress, an increase in the tendency to commit crimes may be observed in the general population and some psychiatric patients (21).

The COVID-19 pandemic also has effects on the number of crimes and the way they are committed. During the COVID-19 pandemic, calls made to the police departments of Los Angeles State to report crimes were recorded, and it was determined that there was a significant increase in reports of crimes such as domestic violence during this period (22). It has been suggested that with the increase in internet usage, there may be an increase in cyber fraud (23, 24). Some studies show that the COVID-19 pandemic has caused a decrease in crime rates. In a

study published in 2021, police records in 27 cities after the start of quarantines were examined and it was stated that there was an overall 37% decrease in crime levels in all cities (25). Apart from crime rates, the types of crimes committed are also affected by the pandemic process. Research shows that there is a decrease in the number of home thefts due to the increase in time spent by potential crime victims at home (25). It is stated that as the opportunities for home theft decrease, crime types such as auto theft and theft of open spaces may increase (26). Similarly, drug crimes have also been among the types of crimes affected by the pandemic process. Previous studies have reported that addictive substances are often associated with stress, psychological distress, and social isolation. It has been shown that an increase in the level of stress and anxiety will increase the motivation to use substances as a way of coping, especially in social disasters and pandemic situations (27). In her research conducted in 2020, Ayas states that drug crimes in England increased in March, April and May of 2020, that this increase may be due to people's fear and depressive mood due to the pandemic, and that crimes related to drug use decreased with the removal of pandemic restrictions (28). It has been suggested that increased COVID-19-related anxiety and fear may influence substance use escalation and initiation (29, 30). Smith et al. reported that increased stress and depressive symptoms were associated with an increase in the number of substances used during the COVID-19 pandemic (31). Similar to the literature, we found a rise in substance use disorder diagnoses during the pandemic period in our study. We also found an increase in the crime rates of assault-injury, theft and substance use crime during the pandemic period. Accordingly, the increase in theft crime rates in particular may be related to the increase in substance use rates.

In our study, an increase was detected in forensic psychiatric cases referred to us within the scope of compulsory treatment during the pandemic period. In addition to the physical risks, it poses to individuals with severe mental illness, the COVID-19 pandemic has also had a significant impact on the mental health of patients. The isolation and stress brought on by the pandemic leave them more affected than the general population, leading to the risk of relapses and exacerbations (32). During the pandemic, there were difficulties in accessing other medical services and psychiatric treatment as the healthcare system had to focus on patients with COVID-19 and control of the disease. There have been problems such as postponement or cancellation of appointments, difficulties in supplying medicines and the inability to access online treatment opportunities to replace face-to-face therapy. The isolation and curfew restrictions implemented during the pandemic period made it more difficult for patients to continue their regular hospital visits, prescribe maintenance treatments, and administer depot antipsychotic treatments compared to their normal lives (5).

Despite the meaningful and important findings of our study, it has several limitations. Our study has some limitations, such as being retrospective, obtaining information from medical records, not including psychiatric structured interviews, and being a single-center study. Additionally, there may be other factors that we cannot control that may affect the number of forensic cases admitted to our hospital during the pandemic period.

CONCLUSION

The most important feature of our study is that it is the first and only study in our country investigating the impact of the pandemic process on adult forensic psychiatric cases. In conclusion, this study provides an important basis for understanding the impact of the pandemic on forensic psychiatry and developing appropriate intervention strategies. In order to reduce the negative effects of the COVID-19 pandemic on these psychiatric patients, it is important to facilitate patients' access to treatment and support services, develop distance treatment options, organize support programs focusing on mental health, and strengthen social support networks. Furthermore, it is crucial to emphasise the importance of public awareness and mental health awareness in the context of psychiatric patients during the pandemic period. It is imperative that experts in this field, community leaders and health policymakers collaborate to reinforce the practice of forensic psychiatry in the post-pandemic

period. This is particularly crucial given the potential for future crises, such as pandemics, which may require the expertise of forensic psychiatrists.

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