Comparison of patients presenting to the emergency department with psychiatric complaints before and after the covid-19 pandemic.

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ABSTRACT

Objectives: This study aims to investigate whether there was a difference in the psychiatric complaints of patients presenting to the emergency department before and after the COVID-19 pandemic.

Methods: All patients aged 18 years and over who presented to the adult emergency department of the University of Health Sciences Bursa Yüksek İhtisas Training and Research Hospital between 11.03.2019 and 11.03.2021 with psychiatric complaints, for whom psychiatry consultation was requested, and whose complete study data were available were retrospectively included in the study.

Results: There were 1508 patients in the study. Of the patients, 50.9% (n=768) were in the pre-pandemic group, 54.0% (n=815) were single, and 77.4% (n=1167) were unemployed. As a result of the statistical analysis, a significant correlation was found between diagnosed psychiatric diseases, depression, anxiety disorder, post-traumatic stress disorder, alcohol-substance withdrawal, panic disorder, delirium, and other psychiatric diseases with the pre-pandemic and post-pandemic periods respectively [(p=0.001), (p<0.05), (p<0.001), (p<0.05), (p<0.05), (p<0.05), (p<0.05), (p<0.05)]. In addition, a significant correlation was found between hallucinations, agitation, aggression, panic attacks, catatonic symptoms, delusions, depressive complaints, and the onset of these symptoms and findings with the pre-pandemic and post-pandemic periods [(p=0.001), (p<0.001), (p<0.001), (p<0.05), (p<0.001), (p<0.05), (p<0.05), (p<0.05)]. Accordingly, in the post-pandemic group, the presentation rate of patients with a diagnosis of psychiatric illness, generalized anxiety disorder, panic disorder, and delirium, taking psychiatric medication, having agitation, panic, delusions and depressive complaints, who are single and unemployed was significantly higher than in the pre-pandemic period.

Conclusion: It has been understood that the COVID-19 disease, causing a worldwide pandemic, serious mortality, and morbidity, increased psychiatric complaints compared to the pre-pandemic period.

Keywords: Psychiatric complaints, COVID-19, anxiety, emergency department

COVID-19 was first detected in December 2019 in Wuhan, China, and then spread rapidly worldwide. On 11 March 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. The virus has caused a major health crisis around the world due to its rapid spread and high mortality rate. Currently, many research and studies on COVID-19 are ongoing [1]. The COVID-19 pandemic has had significant psychological effects on people, which has led to emotional reactions such as anxiety, stress and fear in many people due to the high contagiousness, lethality, and uncontrolled nature of the disease [2].

During the pandemic, the sense of uncertainty in the community, concerns about the future of the health system and society, job losses, economic uncertainties, social isolation and quarantine have harmed people's mental health.

The COVID-19 pandemic has also posed an increased risk to people with mental health problems. These people have struggled to receive their current treatments during the pandemic, and their support systems and resources have decreased, which has led to an increase and worsening of symptoms in people with psychological problems [3].

However, people have developed ways to cope with their emotional reactions such as anxiety, stress, and fear. These include stress-reducing behaviors such as regular exercise, meditation, good sleep patterns, healthy nutrition, and social connections. In addition, psychological support services have also been an important resource to protect people's mental health during the pandemic [4].

Some people may also experience health problems after the pandemic. In particular, due to the measures taken during the pandemic, many people may not have been able to go for regular health checks and receive treatment, which may have negatively affected the health of people with chronic diseases or those who require treatment.

This study aims to investigate whether there was a difference in the psychiatric complaints of patients presenting to the emergency department before and after the COVID-19 pandemic.

METHODS

This single-center retrospective study was conducted with the protocol numbered 2011-KAEK-2021/02-11 approved by the Clinical Research Ethics Committee of the University of Health Sciences Bursa Yüksek İhtisas Training and Research Hospital.

All patients aged 18 years and over who presented to the Adult Emergency Department of University of Health Sciences Bursa Yüksek İhtisas Training and Research Hospital between 11.03.2019 and 11.03.2021 with psychiatric complaints, for whom psychiatry consultation was requested, and for whom complete study data were available were retrospectively included in the study. Patients under 18 years of age, who did not have psychiatric complaints, and whose complete study data could not be accessed were excluded from the study.

A standardized data entry form was created. The data of the patients were obtained from emergency patient files through the Hospital Information Management System. Using the hospital automation system and patient cards, patients' age, gender, marital status, employment status, presenting complaint, history of psychiatric illness, alcohol and/or substance use, comorbidities, medications, mode of onset of symptoms (acute-chronic), whether they were a diagnosed psychiatric patient, whether they had thoughts or attempts of self-mutilation, whether they were forensic cases, whether they had COVID-19 infection, whether they were open to communication, treatment compliance, whether neurological symptoms and signs accompany, general physical examination and neurological examination characteristics, pathological features in imaging (brain tomography, magnetic resonance imaging) tests requested to rule out organic pathologies, psychiatry consultation results and recommendations, treatment performed in the emergency department, diagnosis, consultations requested from other departments, and outcome status (discharge, hospitalization) were investigated. The study was recorded in the standard study data entry form.

Statistical Analysis

IBM SPSS Statistics for Windows, Version 21.0 (IBM Corp. Armonk, NY: USA. Released 2012) package program was used for statistical analyses. Descriptive statistics were expressed as mean ± standard deviation (minimum - maximum), median and range and/or interquartile range (IQR) for numerical variables, while categorical variables were expressed as number of cases and (%). Kolmogorov-Smirnov test was used for normality distribution of the data. Levene's test was used to determine whether the assumption of homogeneity of variances was met. The

significance of the difference between the groups in terms of continuous numerical variables for which parametric test statistical assumptions were met was examined by Student's t-test, while the significance of the difference in terms of continuous numerical variables for which parametric test statistical assumptions were not met was evaluated by Mann-Whitney U test. Chi-square and Fisher's exact test were used to analyze whether there was a relationship between categorical variables. $p < 0.05$ was considered statistically significant. The results were given at 95% confidence interval.

Table 1. Clinical and Demographic Information

Age (year) [*]		36 (28-46)
Gender [#]	Male	820 (54,4)
	Female	688 (45,6)
Groups by Pandemic [#]	Pre-Pandemic	768 (50,9)
	Post-Pandemic	740 (49,1)
PCR Test Result[#]	Negative	1451 (96,2)
	Positive	57 (3,8)
Marital Status[#]	Single	815 (54,0)
	Married	674 (44,7)
	Other	19 (1,3)
Employment Status[#]	Unemployed	1167 (77,4)
	Employed	301 (20,0)
	Other	40 (2,6)
Family History of Psychiatric Disease[#]		372 (24,7)
Diagnosis of Psychiatric Disease[#]		756 (50,1)
Psychiatric Diseases[#]	Psychosis	318 (21,1)
	Adjustment Disorder	305 (20,2)
	Bipolar Disorder	208 (13,8)
	Depression	205 (13,6)
	Anxiety Disorder	171 (11,3)
	Alcohol-Substance Addiction	130 (8,6)
	Schizophrenia	101 (6,7)
	Post Traumatic Stress Disorder	42 (2,8)
	Panic Attack	31 (2,1)
	Conversion	29 (1,9)
	Delirium	26 (1,7)
	Obsessive Compulsive Disorder	25 (1,7)
	Attention Deficit Hyperactivity Disorder	15 (1,0)
	Somatoform Disorder	14 (0,9)
	Other	58 (3,8)
Non-Psychiatric Co-morbidity[#]		365 (24,2)
	Hypertension	170 (11,3)
	Diabetes Mellitus	45 (3,0)
	Epilepsy	31 (2,1)
	Mental Retardation	29 (1,9)
Co-morbidity [#]	Coronary Artery Disease	22 (1,5)
	Asthma/COPD	19 (1,3)
	Dementia	13 (0,9)
	Cerebrovascular Disease	13 (0,9)
	Other	69 (4,6)
Alcohol Use[#]		295 (19,6)
Drug Use[#]		261 (17,3)
Total[#]		1508 (100)

[#] n (%), [*] Median, (IQR 25-75), COPD: Chronic Obstructive Pulmonary Disease

RESULTS

A total of 1508 patients were included in the study. The median age of the patients was 36 (IQR, 25-75: 28-46) years and 54.4% (n=820) of the patients were male. While 50.9% (n=768) of the patients were in the pre-pandemic group, 3.8% (n=57) had positive PCR test results. While 50.1% (n=756) of the patients had a diagnosed psychiatric illness, 24.7% (n=372) had a family history of psychiatric illness. The most common psychiatric disorders were psychosis (21.1%, n= 318) and adjustment disorder (20.2%, n=305) (Table 1).

The most common symptoms and signs in the presentation were delusions (31.5%, n= 475) and depressive symptoms (30.8%, n= 464), and 56.2% (n=848) of these symptoms/findings were sudden onset. In the psychiatric evaluation of the patients, 75.1% (n=1132) were open to communication and 50.9% (n=767) were compliant with treatment. Consultation from other departments was requested for 18.7% (n=282) of these patients (Table 2).

In the analysis performed to determine the relationship between the gender, marital and employment sta-

Table 2. Clinical and Demographic Information

Onset Status of Symptoms[#]	Acute	848 (56,2)
	Chronic	660 (43,8)
Admission Symptoms/Findings [#]	Delusion	475 (31,5)
	Depressive Symptoms (Complaints)	464 (30,8)
	Anxiety	439 (29,1)
	Hallucination	422 (28,0)
	Self-Harm	409 (27,1)
	Agitation	369 (24,5)
	Catatonic Symptoms	283 (18,8)
	Aggression	137 (9,1)
	Panic Attack	101 (6,7)
	Deprivation	72 (4,8)
Psychiatric Drug Use [#]		557 (36,9)
Psychiatric Drugs[#]	Antidepressant Agents	430 (28,5)
	Antipsychotic Agents	372 (24,7)
	Mood Regulatory Agents	103 (6,8)
	Anxiolytic Agents	53 (3,5)
Psychiatric Evaluation Findings [#]	Openness to Communication	1132 (75,1)
	Treatment Compliance	767 (50,9)
	Presence of Suicidal Thoughts	334 (22,1)
	Aggression Status	152 (10,1)
	Presence of Neurological Findings	152 (10,1)
Forensic Status [#]		337 (22,3)
Other Consultation Request[#]		282 (18,7)
	No	1226 (81,3)
	Internal Medicine	179 (11,9)
	Neurology	67 (4,4)
	Orthopedics and Traumatology	9 (0,6)
Other Consultation [#]	Infectious Diseases	7 (0,5)
	General Surgery	7 (0,5)
	Anesthesia and Reanimation	6 (0,4)
	Brain and Nerve Surgery	4 (0,3)
	Other	4 (0,3)
	Plastic and Reconstructive Surgery	2 (0,1)
Computed Tomography of the Brain[#]		153 (10,1)
Cranial Magnetic Resonance Imaging [#]		120 (8,1)
Total[#]		1508 (100)

n (%)

Table 3. Analysis of Variables by Groups

Variables			Groups		Total	Chi-square/ Fisher's exact test
			Pre-Pandemic	Post-Pandemic		
Gender	Female	n (%)	362 (52,6)	326 (47,4)	688 (100)	p>0,05*
	Male	n (%)	406 (49,5)	414 (50,5)	820 (100)	
Marital Status	Single	n (%)	379 (46,5)	436 (53,5)	815 (100)	**p=0,001&**
	Married	n (%)	379 (56,2)	295 (43,8)	674 (100)	
	Other	n (%)	10 (52,6)	9 (47,4)	19 (100)	
Employment Status	Unemployed	n (%)	540 (46,3)	627 (53,7)	1167 (100)	**p<0,001&**
	Employed	n (%)	199 (66,1)	102 (33,9)	301 (100)	
	Other	n (%)	29 (72,5)	11 (27,5)	40 (100)	
History of Psychiatric Illness	No	n (%)	381 (55,3)	308 (44,7)	689 (100)	**p<0,05***
	Yes	n (%)	387 (47,3)	432 (52,7)	819 (100)	
Family History of Psychiatric Illness	No	n (%)	582 (51,2)	554 (48,8)	1136 (100)	p>0,05*
	Yes	n (%)	186 (50,0)	186 (50,0)	372 (100)	
Total		n (%)	768 (50,9)	740 (49,1)	1508 (100)	

* Chi-square/ Fisher's exact test

tus of the patients, and the history of psychiatric illness in their background and family history with the period before and after the pandemic, a significant difference was found between pre pandemic and post pandemic period in terms of marital status, employment status, and having a history of psychiatric illness in their background respectively [(p=0.001), (p<0.001), (p<0.05)]. The rates of singles in the post-pandemic group and married and other groups in the pre-pandemic group were significantly higher. In the post-pandemic period, the rates of unemployed and having a history of psychiatric illness were significantly higher (Table 3).

In the Chi-square / Fisher's exact analysis to determine the relationship between the patients' diagnosed psychiatric illness status and current psychiatric illness diagnoses and the period before and after the pandemic, a statistically significant correlation was found between depression, anxiety disorder, post-traumatic stress disorder, alcohol-substance addiction, panic attacks, delirium, other psychiatric disorders (sleep disorder, eating disorders), and alcohol use with the pre- and post- pandemic period respectively [(p=0.001), (p<0.05), (p<0.001), (p<0.05), (p<0.05), (p<0.05), (p<0.05), (p<0.05)]. In the post-pandemic period, the rates of anxiety disorder, panic attacks, delirium and alcohol use were significantly higher in those with diagnosed psychiatric diseases. In the pre-pandemic group, the rates of depression, post-traumatic stress disorder, alcohol-substance abuse and other psychiatric diseases were significantly higher (Table 4).

In the analysis conducted to determine the relation-

ship between the admission symptoms and findings, baseline status in terms of the period before and after the pandemic, a significant correlation was found between hallucinations, agitation, aggression, panic attacks, catatonic symptoms, delusions, depressive complaints, and the onset of these symptoms and signs with the period before and after the pandemic [(p=0.001), (p<0.001), (p<0.001), (p<0.05), (p<0.001), (p<0.05), (p<0.05), (p<0.05)]. In the pre-pandemic group, the rates of acute admission symptoms and signs, hallucinations and aggression were found to be significantly higher, whereas the rates of agitation, panic attacks, catatonic symptoms, delusions and depressive complaints were significantly higher in the post-pandemic group (Table 5).

In the analysis conducted to determine the relationship between the patients' psychiatric drug use status and medications, psychiatric evaluation findings, forensic case status, request for consultation outside of psychiatry, and cranial CT and MRI requests with the period before and after the pandemic, a significant correlation was found between the use of psychiatric drugs, use of anxiolytics, hallucinations and aggression, and request for other consultation with the period before and after the pandemic [(p<0.05), (p=0.001),(p<0.05), (p<0.05), (p<0.05)]. The rates of hallucinations and aggression among psychiatric evaluation findings were significantly higher in the pre-pandemic group, whereas the rates of psychiatric drug use, anxiolytic use and request for other consultation were significantly higher in the post-pandemic

Table 4. Analysis of Psychiatric Disease Diagnoses by Groups

Variables			Groups		Total	Chi-square/
			Pre-Pandemic	Post-Pandemic		Fisher's exact test
Diagnosed Psychiatric Disease Status	No	n (%)	415 (55,2)	337 (44,8)	752 (100)	**p=0,001***
	Yes	n (%)	353 (46,7)	403 (53,3)	756 (100)	
Psychosis	No	n (%)	606 (50,9)	584 (49,1)	1190 (100)	p>0,05*
	Yes	n (%)	162 (50,9)	156 (49,1)	318 (100)	
Depression	No	n (%)	647 (49,7)	656 (50,3)	1303 (100)	**p<0,05***
	Yes	n (%)	121 (59,0)	84 (41,0)	205 (100)	
Bipolar Disorder	No	n (%)	654 (50,3)	646 (49,7)	1300 (100)	p>0,05*
	Yes	n (%)	114 (54,8)	94 (45,2)	208 (100)	
Obsessive Compulsive Disorder	No	n (%)	756 (51,0)	727 (49,0)	1483 (100)	p>0,05&
	Yes	n (%)	12 (48,0)	13 (52,0)	25 (100)	
Somatoform Disorder	No	n (%)	759 (50,8)	735 (49,2)	1494 (100)	p>0,05&
	Yes	n (%)	9 (64,3)	5 (35,7)	14 (100)	
Anxiety Disorder	No	n (%)	713 (53,3)	624 (46,7)	1337 (100)	**p<0,001***
	Yes	n (%)	55 (32,2)	116 (67,8)	171 (100)	
Post Traumatic Stress Disorder	No	n (%)	739 (50,4)	727 (49,6)	1466 (100)	**p<0,05&**
	Yes	n (%)	29 (69,0)	13 (31,0)	42 (100)	
Alcohol-Substance Addiction	No	n (%)	685 (49,7)	693 (50,3)	1378 (100)	**p<0,05***
	Yes	n (%)	83 (63,8)	47 (36,2)	130 (100)	
Attention Deficit Hyperactivity Disorder	No	n (%)	757 (50,7)	736 (49,3)	1493 (100)	p>0,05&
	Yes	n (%)	11 (73,3)	4 (26,7)	15 (100)	
Panic Disorder	No	n (%)	761 (51,5)	716 (48,5)	1477 (100)	**p<0,05&**
	Yes	n (%)	7 (22,6)	24 (77,4)	31 (100)	
Delirium	No	n (%)	760 (51,3)	722 (48,7)	1482 (100)	**p<0,05&**
	Yes	n (%)	8 (30,8)	18 (69,2)	26 (100)	
Conversion	No	n (%)	749 (50,6)	730 (49,4)	1479 (100)	p>0,05&
	Yes	n (%)	19 (65,5)	10 (34,5)	29 (100)	
Adjustment Disorder	No	n (%)	616 (51,2)	587 (48,8)	1203 (100)	p>0,05*
	Yes	n (%)	152 (49,8)	153 (50,2)	305 (100)	
Schizophrenia	No	n (%)	719 (51,1)	688 (48,9)	1407 (100)	p>0,05*
	Yes	n (%)	49 (48,5)	52 (51,5)	101 (100)	
Other	No	n (%)	729 (50,3)	721 (49,7)	1450 (100)	**p<0,05&**
	Yes	n (%)	39 (67,2)	19 (32,8)	58 (100)	
Alcohol Use	No	n (%)	596 (49,1)	617 (50,9)	1213 (100)	**p<0,05***
	Yes	n (%)	172 (58,3)	123 (41,7)	295 (100)	
Total		n (%)	768 (50,9)	740 (49,1)	1508 (100)	

* Chi-square/ Fisher's exact test

Table 5. Analysis of Symptoms by Groups

Variables			Groups		Total	Chi-square/ Fisher's exact Test
			Pre-Pandemic	Post-Pandemic		
Onset of Symptoms	Acute	n (%)	458 (54,0)	390 (46,0)	848 (100)	**p<0,05***
	Chronic	n (%)	310 (47,0)	350 (53,0)	660 (100)	
Hallucination	No	n (%)	524 (48,3)	562 (51,7)	1086 (100)	**p=0,001***
	Yes	n (%)	244 (57,8)	178 (42,2)	422 (100)	
Agitation	No	n (%)	614 (53,9)	525 (46,1)	1139 (100)	**p<0,001***
	Yes	n (%)	154 (41,7)	215 (58,3)	369 (100)	
Aggression	No	n (%)	673 (49,1)	698 (50,9)	1371 (100)	**p<0,001***
	Yes	n (%)	95 (69,3)	42 (30,7)	137 (100)	
Anxiety	No	n (%)	546 (51,1)	523 (48,9)	1069 (100)	p>0,05*
	Yes	n (%)	222 (50,6)	217 (49,4)	439 (100)	
Panic Attack	No	n (%)	730 (51,9)	677 (48,1)	1407 (100)	**p<0,05***
	Yes	n (%)	38 (37,6)	63 (62,4)	101 (100)	
Catatonic Symptoms	No	n (%)	673 (54,9)	552 (45,1)	1225 (100)	**p<0,001***
	Yes	n (%)	95 (33,6)	188 (66,4)	283 (100)	
Deprivation	No	n (%)	727 (50,6)	709 (49,4)	1436 (100)	p>0,05*
	Yes	n (%)	41 (56,9)	31 (43,1)	72 (100)	
Self-harm	No	n (%)	543 (49,4)	556 (50,6)	1099 (100)	p>0,05*
	Yes	n (%)	225 (55,0)	184 (45,0)	409 (100)	
Delusion	No	n (%)	551 (53,3)	482 (46,7)	1033 (100)	**p<0,05***
	Yes	n (%)	217 (45,7)	258 (54,3)	475 (100)	
Depressive Complaints	No	n (%)	556 (53,3)	488 (46,7)	1044 (100)	**p<0,05***
	Yes	n (%)	212 (45,7)	252 (54,3)	464 (100)	
Total		n (%)	768 (50,9)	740 (49,1)	1508 (100)	

* Chi-square/ Fisher's exact Test

group (Table 6).

No statistically significant difference was found in the Mann-Whitney U test performed to investigate whether there was a difference between the age and length of hospitalization of the patients with the period before and after the pandemic [(p>0.05), (p>0.05)].

DISCUSSION

Psychiatric emergency is a term used to refer to situations that occur in an individual's emotions, thoughts or behaviors, which may harm the individual's health or the people around him/her, requiring emergency assistance. In recent years, the number of psychiatric emergencies and applications to emergency services has been increasing. In studies conducted in our country, it was reported that such admissions represented a rate between 3% and 17% of total admissions [5, 6].

COVID-19 has not only affected the health of many people around the world, but has also had economic and social impacts. Therefore, many countries needed economic and social support to deal with the pandemic. The COVID-19 pandemic has had significant psychological effects on people (2), which has led to emotional reactions such as anxiety, stress and fear in many individuals due to the nature of the pandemic, its high contagiousness, lethality and uncontrolled nature. In a study conducted by Wang *et al.* in 2020, it was reported that people who do not work are more prone to psychiatric disorders due to the stress they experience [7].

The economic crisis and recession during the COVID-19 pandemic triggered the fears of individuals in the society. Social distancing, isolation, and travel restrictions have led to a decrease in labor force and many people have lost their jobs [8]. In the study conducted by Alexis *et al.* in 2020, the percentage of unemployed patient applications was found to be

Table 6. Analysis of Psychiatric Medication and Evaluation Findings by Groups

Variables			Groups		Total	Chi-square/ Fisher's exact Test
			Pre-Pandemic	Post-Pandemic		
Psychiatric Drug Use	No	n (%)	514 (54,0)	437 (46,0)	951 (100)	*p<0,05**
	Yes	n (%)	254 (45,6)	303 (54,4)	557 (100)	
Antidepressant	No	n (%)	554 (51,4)	524 (48,6)	1078 (100)	p>0,05*
	Yes	n (%)	214 (49,8)	216 (50,2)	430 (100)	
Antipsychotic	No	n (%)	589 (51,8)	547 (48,2)	1136 (100)	p>0,05*
	Yes	n (%)	179 (48,1)	193 (51,9)	372 (100)	
Anxiolytic	No	n (%)	753 (51,8)	702 (48,2)	1455 (100)	*p=0,001&*
	Yes	n (%)	15 (28,3)	38 (71,7)	53 (100)	
Emotion-State Regulator	No	n (%)	707 (50,3)	698 (49,7)	1405 (100)	p>0,05*
	Yes	n (%)	61 (59,2)	42 (40,8)	103 (100)	
Presence of Suicidal Thoughts	No	n (%)	595 (50,7)	579 (49,3)	1174 (100)	p>0,05*
	Yes	n (%)	173 (51,8)	161 (48,2)	334 (100)	
Hallucination	No	n (%)	539 (48,8)	566 (51,2)	1105 (100)	*p<0,05**
	Yes	n (%)	229 (56,8)	174 (43,2)	403 (100)	
Aggression Status	No	n (%)	673 (49,6)	683 (50,4)	1356 (100)	*p<0,05**
	Yes	n (%)	95 (62,5)	57 (37,5)	152 (100)	
Openness to Communication	No	n (%)	200 (53,2)	176 (46,8)	376 (100)	p>0,05*
	Yes	n (%)	568 (50,2)	564 (49,8)	1132 (100)	
Treatment Compliance	No	n (%)	378 (51,0)	363 (49,0)	741 (100)	p>0,05*
	Yes	n (%)	390 (50,8)	377 (49,2)	767 (100)	
Presence of Neurological Findings	No	n (%)	700 (51,6)	656 (48,4)	1356 (100)	p>0,05*
	Yes	n (%)	68 (44,7)	84 (55,3)	152 (100)	
Forensic Status	No	n (%)	581 (49,6)	590 (50,4)	1171 (100)	p>0,05*
	Yes	n (%)	187 (55,5)	150 (44,5)	337 (100)	
Other Consultation Request	No	n (%)	642 (52,2)	587 (47,8)	1229 (100)	*p<0,05**
	Yes	n (%)	126 (45,2)	153 (54,8)	279 (100)	
Computerized Brain Tomography	No	n (%)	695 (51,3)	660 (48,7)	1355 (100)	p>0,05*
	Yes	n (%)	73 (47,7)	80 (52,3)	153 (100)	
Cranial Magnetic Resonance Imaging	No	n (%)	703 (50,6)	685 (49,4)	1388 (100)	p>0,05*
	Yes	n (%)	65 (54,2)	55 (45,8)	120 (100)	
Total		n (%)	768 (50,9)	740 (49,1)	1508 (100)	

* Chi-square/ Fisher's exact Test

77.8% in the post-pandemic period [9]. In our study, the unemployment rate among patients was seen to increase from 46.3% to 53.7% in the post-pandemic period. We think that this situation is related to the increase in unemployment caused by the pandemic. In addition to the problems caused by the pandemic, economic concerns caused negative effects on the psychology of patients such as stress, sadness, anxiety, anxiety, and depressive symptoms.

Pandemics have the potential to have a psycho-social impact on the society as well as physical effects [10]. Studies comparing the marital status of people before and after the pandemic have been conducted. In a study on this subject, it was found that there was an increase in divorce rates after COVID-19 [11]. In the study conducted by Wang Y *et al*. in China, which investigated the psychological status during the COVID-19 pandemic and the factors affecting this, it was determined that the percentage of married individuals was lower than the pre-COVID-19 period, while the percentage of single individuals was higher in the period when the COVID-19 pandemic ended. In addition, it was found that there was a limited increase in the percentage of divorced individuals and

there was no statistically significant difference [12]. In our study, the number of single patients was higher than married patients in the post-pandemic period. We think that factors such as the problems caused by the quarantine process, anxiety about illness and death, exposure to more stressors, insufficient socialization, and increased conflicts due to increased time spent with family members increase this situation.

In the COVID-19 pandemic, it was observed that most of the patients admitted to the emergency department had a history of psychiatric illness. During the pandemic, an increase was observed in the prevalence of emergency department visits in patients with a history of psychiatric illness [9]. In a cross-sectional study, it was shown that people with diagnosed mental disorders were significantly more likely to experience anxiety, depression and stress disorders than people without mental disorders [13]. This may be explained by the change in the daily routine of the patients during the quarantine process, disruption of psychiatry follow-up-treatment, and the inability to regularly attend psychiatry outpatient clinic controls in this process [14]. In our study, it was found that patients with a history of psychiatric illness (53.3%) were more common than those without a psychiatric diagnosis in the applications made in the post-pandemic period.

Uncertainty about the future, information pollution about COVID-19, restrictive practices such as quarantine can cause fear, distress, irritability, panic, sadness, helplessness and loneliness. Such symptoms can lead to serious mental distress. In addition to its negative effects on physical health, COVID-19 can also cause serious mental health problems such as stress, insomnia, high anxiety and chronic depression [15]. In a cross-sectional study conducted by Islam *et al*. in 2020, it was shown that 79.6% of people in the community had panic symptoms and 37.6% had depressive symptoms during the pandemic [16]. In the study conducted by Alexis *et al*. it was found that generalized anxiety disorder was significantly increased in emergency department admission diagnoses [9]. In our study, in the post-COVID-19 period, the rate of patients with anxiety disorder, panic disorder, and depressive complaints was found to be higher in patients with psychiatric complaints in the emergency department, which is consistent with the literature.

The COVID-19 pandemic has contributed alcohol consumption due to stress and social isolation [17]. A study conducted in Australia showed that approximately one in five people increased their alcohol use during the COVID-19 pandemic [18]. In March 2020, a study conducted in the USA showed that alcohol sales increased by 54% compared to the same period of the previous year [19]. In our study, the number of patients admitted to the emergency department due to alcohol use decreased compared to the pre-pandemic period. We think that this situation was caused by the decrease in alcohol consumption due to the restriction of people's social environments during the quarantine period, and at the same time, unnecessary presentations to the emergency department due to alcohol use decreased during the pandemic. The restriction in alcohol sales during the lockdown period may also have been a reason.

The incidence of delirium in hospitalized elderly is estimated to be 23% (20). In the first studies conducted during the pandemic period, it was shown that delirium and mental status changes were observed between 20-30% in COVID-19 patients, and this rate was 60-70% in cases of severe disease [20]. During the COVID-19 period, delirium may have been observed in those with neuropsychiatric predisposition or in the elderly due to isolation. In our study, the rate of delirium was found to be significantly higher in the post-pandemic group. The data obtained in the study were consistent with the literature.

The most important limitation was the retrospective nature of the study and that the data searches were performed through patient files and the Hospital Information Management System. In addition, the fact that the study was single centered and some patients were excluded from the study due to missing data were other limitations.

The COVID-19 pandemic is a trauma with physical and psychological effects. These traumatic effects may vary according to the class, socioeconomic and cultural status, and individual characteristics. Knowing and anticipating the situations that cause the emergence of these symptoms and the emotions that are difficult to cope with will make it easier to overcome the mental difficulties and reduce mental damage.

In conclusion, according to the data in our study, in the post-pandemic group, the admission rate of patients with a diagnosis of psychiatric illness, generalized anxiety disorder, panic disorder and delirium, taking psychiatric medication, having agitation, panic, delusions and depressive complaints, being single, unemployed, and requiring consultation other than psychiatry was significantly higher than in the pre-pandemic period.

CONCLUSION

Conflict of Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Ethical Approval

The protocol of the study was approved by the Medical Ethics Committee of University of Health Sciences, Bursa Yuksek Ihtisas Training and Research Hospital, Bursa, Turkey. (Decision number: 2011 KAEK-25 2021/02-11, date: 17.02.2021).

Authors' Contribution

Study Conception: FBÇ, MOA, MY, HK, Yİ; Study Design: FBÇ, MOA, MY, HK, Yİ; Literature Review: FBÇ, MOA, MY, HK; Critical Review: FBÇ, MOA, MY, HK, Yİ; Data Collection and/or Processing: FBÇ, MOA, MY, Yİ; Analysis and/or Data Interpretation: FBÇ, MOA, MY, HK; Manuscript preparing: FBÇ, MOA, MY, HK, Yİ.

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