

THE IMPACT OF THE COVID-19 PANDEMIC ON INPATIENT PSYCHIATRIC TREATMENT PROCESSES IN CHILDREN AND ADOLESCENTS

Çocuk ve Ergenlerde Yatarak Psikiyatrik Tedavi Süreçlerine COVID-19 Pandemisinin Etkisi

Şeyma HARMANCI¹ , Selma TURAL HESAPÇIOĞLU¹ , Dilan AYDIN AYVA¹ , Esra KAYGISIZ¹ ,
Seda KAFALI¹ , Mehmet Fatih CEYLAN¹ 

Afiliasyon / Affiliation:

¹Ankara Yıldırım Beyazıt University, Faculty of Medicine, Department of Child and Adolescent Psychiatry

Sorumlu Yazar /

Correspondence:

Şeyma HARMANCI
Ankara Yıldırım Beyazıt University, Faculty of Medicine, Department of Child and Adolescent Psychiatry
Ankara /Türkiye.
E-mail: seyma.harmanci@hotmail.com

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ABSTRACT

Objective: This study aims to examine the impact of the COVID-19 pandemic on inpatient treatment processes in child and adolescent psychiatry by comparing three distinct periods: pre-pandemic, during the pandemic, and post-pandemic.

Methods: Clinical data of a total of 768 patients who were hospitalized in the child and adolescent psychiatry inpatient unit of a university hospital between April 1, 2018, and January 31, 2024, were retrospectively reviewed. Sociodemographic variables (age, sex) and clinical variables (diagnosis, length of stay, number of admissions, history of suicide attempts, presence of comorbid diagnoses) were compared across three time periods. **Results:** During the pandemic period, a statistically significant increase was observed in the hospitalization rates of patients diagnosed with neurodevelopmental disorders, particularly attention-deficit/hyperactivity disorder ($p < 0.05$). Although hospitalization rates for patients diagnosed with depressive disorder, post-traumatic stress disorder, bipolar disorder, obsessive-compulsive disorder, substance use disorder, and anxiety disorders increased during the pandemic period, these increases were not statistically significant. The mean age of patients increased during the pandemic period, and the rate of comorbid diagnoses was markedly higher compared to previous periods. Additionally, the length of hospital stay was significantly shorter during the pandemic and post-pandemic periods ($p < 0.05$). **Conclusion:** The COVID-19 pandemic adversely affected the mental health of children and adolescents, particularly increasing the need for inpatient treatment among individuals with neurodevelopmental disorders. The findings highlight the necessity of maintaining the sustainability of child and adolescent mental health services world wide even under extraordinary circumstances such as a pandemic. Therefore, strengthening child mental health services and developing supportive policies targeted at vulnerable groups are crucial for preparedness in future similar crises.

Keywords: Attention Deficit Hyperactivity Disorder, Child and Adolescent Psychiatry, Inpatient Care, Mental Health Services, Neurodevelopmental Disorders, Pandemic

ÖZET

Amaç: Bu çalışma, COVID-19 pandemisinin çocuk ve ergen psikiyatrisi yatarak tedavi süreçlerine etkisini değerlendirmeyi amaçlamaktadır. Pandemi öncesi, pandemi dönemi ve pandemi sonrası olmak üzere üç farklı zaman diliminde servis başvuruları karşılaştırılarak, pandemi sürecinin psikiyatrik yatışlar üzerindeki etkisi analiz edilmiştir.

Yöntem: 1 Nisan 2018 – 31 Ocak 2024 tarihleri arasında bir üniversite hastanesinin çocuk ve ergen psikiyatrisi servisinde yatarak tedavi gören toplam 768 hastanın klinik verileri geriye dönük olarak incelenmiştir. Sosyodemografik (yaş, cinsiyet) ve klinik değişkenler (tanı, yatış süresi, yatış sayısı, intihar girişimi öyküsü, eş tanı varlığı) üç dönem arasında karşılaştırılmıştır. **Bulgular:** Pandemi döneminde özellikle dikkat eksikliği ve hiperaktivite bozukluğu başta olmak üzere nörogelişimsel bozukluk tanımlı hastaların yatış oranında istatistiksel olarak anlamlı bir artış gözlenmiştir ($p < 0.05$). Depresif bozukluk, travma sonrası stres bozukluğu, bipolar bozukluk, obsesif kompulsif bozukluk, madde kullanım bozukluğu ve anksiyete bozuklukları tanımlı hastaların yatış oranlarında pandemi döneminde artış gözlenmiştir; ancak bu artışlar istatistiksel olarak anlamlı bulunmamıştır. Pandemi döneminde hastaların yaş ortalaması artarken, eş tanı oranı da önceki dönemlere kıyasla belirgin şekilde yükselmiştir. Ayrıca, pandemi ve sonrası dönemde yatış süresi anlamlı olarak kısalmıştır ($p < 0.05$). **Sonuç:** COVID-19 pandemisi, çocuk ve ergenlerin ruh sağlığını olumsuz yönde etkilemiş, özellikle nörogelişimsel bozukluğu olan bireylerde yatarak tedavi ihtiyacını artırmıştır. Bulgular, pandemi gibi olağan dışı koşullarda dahi çocuk ve ergen ruh sağlığı hizmetlerinin sürdürülebilirliğinin korunmasının gerekliliğine işaret etmektedir. Bu nedenle, gelecekteki benzer kriz durumlarına hazırlık amacıyla çocuk ruh sağlığı hizmetlerinin güçlendirilmesi ve kırılgan gruplara yönelik destekleyici politikaların geliştirilmesi önem arz etmektedir.

Anahtar Kelimeler: Dikkat Eksikliği ve Hiperaktivite Bozukluğu, Çocuk ve Ergen Psikiyatrisi, Yataklı Servis, Ruh Sağlığı Hizmetleri, Nörogelişimsel Bozukluklar, Pandemi

INTRODUCTION

The COVID-19 pandemic has had significant effects on child and adolescent mental health (Msherghi et al., 2021; Reece & Sams, 2022). Preventive measures such as lockdowns, social distancing, and online education have led to unprecedented levels of stress, social isolation, and disruptions in family relationships worldwide (Msherghi et al., 2021). Although the infection rate of COVID-19 has been observed to be lower among children and adolescents, the pandemic and quarantine have had a greater impact on their emotional and social development (Singh et al., 2020), and it has been suggested that these effects may persist in the long term (Shen et al., 2020). Age, grade level, education level, gender, geographic regions, and electronic device usage have been associated with increased prevalence of mental health symptoms. The prevalence of these symptoms rose as the pandemic progressed, although signs of recovery and stabilization were also observed (Deng et al., 2023). A systematic review conducted by Orban and colleagues demonstrated that, during the pandemic, children and adolescents predominantly experienced increased mental health problems, particularly internalizing symptoms such as anxiety and depression (Orban et al., 2023). Accordingly, an increase in the prevalence of substance use disorders was also reported (Jones et al., 2021). A significant rise in suicidal ideation, suicidal behaviors, and self-harming behaviors was mainly observed among female adolescents (Dubé et al., 2021; Madigan et al., 2023). School closures contributed to feelings of anxiety and loneliness among adolescents and led to stress, sadness, and frustration among children (Chaabane et al., 2021). During this period of school closures, the three most commonly reported symptoms were anxiety (24.9%), depressive symptoms (19.7%), and stress (15.2%) (Tang et al., 2021). An increase in video game, internet, and screen use was observed, alongside a notable decrease in peer support. Among individuals with preexisting psychiatric disorders, symptom severity increased after the quarantine period, while perceived social support and consistent daily routines were identified as protective factors against symptom worsening (Shoshani & Kor, 2022). During the pandemic, an increase in behavioral problems and a decline in

sleep quality were observed among children with neurodevelopmental disorders (NDD). At the same time, disruptions in access to healthcare services, the breakdown of daily routines, and social isolation had adverse effects on families, leading to increased levels of depression, anxiety, and burnout among parents (Masi et al., 2021; Montirosso et al., 2021; Neece et al., 2020). Due to remote learning, lack of support, and insufficient resources, educational inequalities were reported to have worsened, particularly among disadvantaged and disabled groups (Chaabane et al., 2021). School routines are essential for children and adolescents with intellectual disabilities, as they help structure coping skills and behavior. Therefore, children with special educational needs were also considered to be at high risk during the pandemic (Lee, 2020). Among children with autism spectrum disorder (ASD), increased levels of anxiety, behavioral problems, and sleep disturbances were frequently reported (Perez Liz et al., 2024). Children with attention-deficit/hyperactivity disorder (ADHD) were observed to have difficulties with time management and behavioral regulation at home (Stein, 2022). In children with ADHD, participation in online classes was found to be lower, weight gain was more prominent, and the level of digital social interaction was higher (Abursu et al., 2025). Restrictions on going outside, closure of sports and play areas, and limited opportunities for physical activity indirectly contributed to an increase in hyperactivity symptoms and related difficulties (Wolf & Schmitz, 2024). A study conducted in Canada on children and adolescents showed that psychiatric inpatient admission rates increased during the COVID-19 pandemic compared to the pre-pandemic period. It was also emphasized that further longitudinal research is needed to examine whether the increase in the use of mental health services has persisted over time (Park et al., 2024). During the COVID-19 pandemic, many inpatient child and adolescent psychiatry units in our country were unable to operate due to staff being assigned to COVID-related services or the physical allocation of clinics for COVID-19 patients. However, our university hospital clinic in our city has been the only one to continue uninterrupted inpatient care in the field of child and adolescent psychiatry. To our knowledge, although there are numerous

studies based on outpatient and emergency service admissions comparing pre-pandemic and pandemic periods in the existing literature, no comprehensive study evaluating the pre-pandemic, pandemic, and post-pandemic periods in child and adolescent psychiatric inpatient units has been identified. This study aims to assess the impact of the pandemic process on psychiatric hospitalization among children and adolescents. It is expected to contribute to the literature by providing data that can guide service planning for extraordinary circumstances.

METHOD

Participants

The first COVID-19 case in Türkiye was reported on

March 11, 2020. The first curfew restrictions were implemented on April 10, 2020 (Tural Hesapcioglu et al., 2024). Therefore, cases hospitalized in March 2020 were excluded to maintain homogeneity. The date March 2, 2022, when the mask mandate in public spaces was lifted, was accepted as the end of the pandemic period (Anadolu, 2022). In this study, the pandemic period was defined as 23 months. To ensure homogeneity, the pre-pandemic and post-pandemic periods were also evaluated as 23-month intervals. To ensure homogeneity between periods, the pre-pandemic and post-pandemic intervals were determined based on the 23 months analyzed during the pandemic. Figure 1 presents the classification of patients into groups according to their hospitalization dates.

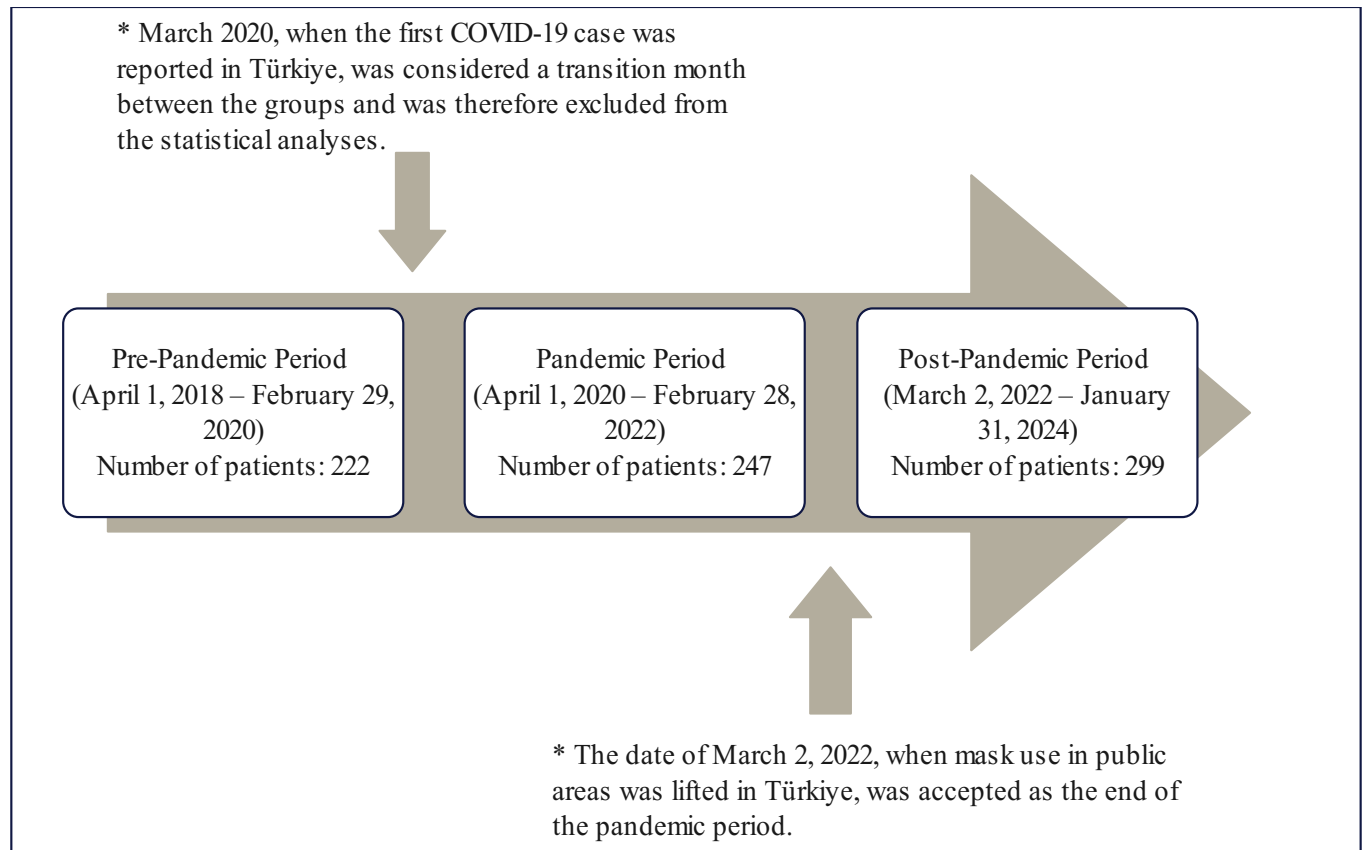


Figure 1. Flowchart showing the distribution of patients according to time periods

Data Collection Tools

Schedule for Affective Disorders and Schizophrenia for School-Age Children – Present and Lifetime Version – Turkish Adaptation (K-SADS-PL-DSM-5)

It is a semi-structured interview form developed by Kaufman and colleagues to assess past and current psychopathologies in children and adolescents (Kaufman et al., 1997). Following the development of DSM-5, the instrument was revised accordingly. The Turkish validity and reliability study of the

K-SADS-PL-DSM-5 was conducted by Gökler et al. It was further revised by Ünal and colleagues in 2019 (Ünal et al. 2019).

Sociodemographic and Clinical Data Form

Sociodemographic data (age, gender) and medical information (diagnosis, length of hospitalization, number of previous admissions, history of suicide attempts) were collected using a standardized form prepared by the researchers.

Procedure

This study was approved by the Health Science Ethics Committee of a university hospital with decision number 06-761 on 01 July 2024. The data used in this study were obtained through a retrospective review of the medical records of patients who received inpatient psychiatric treatment between April 1, 2018, and January 31, 2024. Participants were divided into three groups: pre-pandemic, pandemic, and post-pandemic. Diagnostic information used in the study was based on evaluations conducted during the hospitalization process, and the K-SADS was utilized in the diagnostic assessment. In addition, a sociodemographic and clinical data form—including variables such as each patient's age, gender, diagnosis, length of hospitalization, number of prior admissions, and history of suicide attempts—was prepared by the researchers and completed using information obtained from patient records. The

sociodemographic and clinical characteristics of the three groups were compared.

Statistical analysis

The quantitative data of the groups were summarized as mean $\pm$ standard deviation if the data were parametric. Median and interquartile range (IQR) were used to summarize the non-parametric quantitative data. Categorical data were summarized as numbers and percentages. The parametric data of the groups were compared with one-way ANOVA. Tukey-HSD test was used for post-hoc multiple comparisons. The non-parametric quantitative data of the groups were compared with the Kruskal-Wallis Test. The Dunn test was used for multiple comparisons. Categorical data were compared with the Chi-Square Test. The significance value was set at 0.05. The analyses are conducted with SPSS 22.0.

RESULTS

In this study, the sociodemographic and clinical characteristics of children and adolescents who received inpatient treatment during three distinct periods—pre-pandemic (Group 1, $n=222$), pandemic (Group 2, $n=247$), and post-pandemic (Group 3, $n=299$)—were compared. The sociodemographic and clinical characteristics of the three groups are presented in Table 1.

Table 1. Sociodemographic and clinical characteristics of inpatients before the pandemic (Group 1), during the pandemic (Group 2), and after the pandemic (Group 3)

	Group 1 ($n=222$)	Group 2 ($n=247$)	Group 3 ($n=299$)	U or χ^2	p
Age (M, (IQR))	15 (2) ^a	16 (3) ^b	15 (2) ^{ab}	7.759	0.021
Sex (Female, %)	129 (58.1%)	159 (64.1%)	188 (63.1%)	2.046*	0.359
Being under 12 years-age	16 (7.2%)	17 (6.9%)	16 (5.4%)	0.858*	0.651
Number of diagnoses (M, (IQR))	2 (2) ^a	3 (1) ^b	2 (1) ^a	53.778	<0.001
Duration of inpatient treatment (M, (IQR))	26,5 (20,5) ^a	22 (12) ^b	22 (10) ^b	22.946	<0.001
Times of inpatient treatment (M, (IQR))	1 (0) ^{ab}	1 (0) ^a	1 (0) ^b	7.100	0.029
Suicide attempt (n, %)	149 (67.1%)	146 (58.9%)	177 (59.6%)	4.138*	0.126

*: Chi Square test

Similar upper letters show non-difference between groups; different upper letters indicate statistically significant differences.

The median age of individuals admitted during the pandemic period was found to be higher ($p=0.021$). No significant difference was observed between the groups in terms of gender distribution ($p=0.359$). A higher rate of comorbid diagnoses was reported among patients hospitalized during

the pandemic period ($p<0.001$). The median length of hospitalization was longer in patients admitted during the pre-pandemic period compared to the other periods ($p<0.001$). Additionally, a significant difference was observed between the groups in terms of the number of hospital admissions ($p=0.029$).

The rate of suicide attempts was 67.1% (n = 149) in the pre-pandemic period, 58.9% (n = 146) during the pandemic, and 59.6% (n = 177) in the post-pandemic period. Although the differences in suicide attempt rates among the groups were not statistically significant (p = 0.126), a proportional decrease was

observed during and after the pandemic. Table 2 presents a comparative overview of the distribution of psychiatric diagnoses among patients hospitalized in the pre-pandemic (Group 1), pandemic (Group 2), and post-pandemic (Group 3) periods.

Table 2. Psychiatric diagnoses of inpatients before the pandemic (Group 1), during the pandemic (Group 2), and after the pandemic (Group 3)

	Group 1 (n=222)	Group 2 (n=247)	Group 3 (n=299)	U or χ^2	p
Depressive Disorder	105 (47.3%)	128 (51.6%)	130 (43.9%)	3.205 *	0.201
ADHD	69 (31.1%) ^a	135(54.4%) ^b	116 (39.2%) ^a	27.594	<0.001
Intellectual Disability	55 (24.8%) ^a	43 (17.3%) ^b	48 (16.2%) ^b	6.728	0.035
Anxiety Disorders	39 (17.6%)	43 (17.3%)	63 (21.3%)	1.746	0.418
PTSD	24 (10.8%)	29 (11.7%)	26 (8.8%)	1.319	0.517
Schizophrenia	24 (10.8%)	31 (12.5%)	29 (9.8%)	1.017	0.601
Bipolar Disorder	49 (22.1%)	56 (22.6%)	45 (15.2%)	5.895	0.052
OCD	12 (5.4%)	23 (9.3%)	18 (6.1%)	3.248	0.197
Conduct Disorder	41 (18.5%)	53 (21.4%)	72 (24.3%)	2.582	0.275
Eating Disorder	6 (2.7%)	14 (5.6%)	9 (3%)	3.539	0.170
Substance Use Disorders	8 (3.6%)	18 (7.3%)	22 (7.4%)	3.758	0.153
Tic Disorders	1 (0.5%)	1 (0.4%)	4 (1.3%)	1.601	0.455
Autism Spectrum Disorders	20 (9.0%) ^{ab}	32 (12.9%) ^a	20 (6.7%) ^b	6.100	0.047

*: Chi Square test

Similar upper letters show non-difference between groups; different upper letters indicate statistically significant differences.

When evaluated in terms of clinical diagnoses, the proportion of patients diagnosed with ADHD was significantly higher during the pandemic period (54.4%) compared to the other two periods (31.1% and 39.2%, respectively) (p < 0.001). The proportion of patients with intellectual disability was higher in the pre-pandemic period (24.8%) than in the pandemic (17.3%) and post-pandemic (16.2%) periods (p = 0.035). In our study, the proportion of hospitalized patients diagnosed with autism spectrum disorder (ASD) was found to be higher during the pandemic period (12.9%) compared to the post-pandemic period (6.7%) (p = 0.047). The rate of depressive disorder diagnoses was 47.3% in the pre-pandemic period, 51.6% during the pandemic, and 43.9% in the post-pandemic period (p = 0.201). Anxiety disorder diagnoses were identified at rates of 17.6%, 17.3%, and 21.3%, respectively (p = 0.418). The prevalence of post-traumatic stress disorder (PTSD) diagnoses was 10.8% before the pandemic, 11.7% during the pandemic, and 8.8% after the pandemic (p = 0.517). The diagnosis rate of bipolar disorder remained similar before and during

the pandemic (22.1% and 22.6%, respectively) but declined to 15.2% in the post-pandemic period (p = 0.052). Obsessive-compulsive disorder (OCD) diagnoses were more frequently observed during the pandemic compared to the periods before and after (5.4% → 9.3% → 6.1%; p = 0.197). Similarly, an increase in substance use disorder diagnoses was noted during the pandemic compared to the pre-pandemic period (3.6% → 7.3%), and this rate remained stable in the post-pandemic period (7.4%) (p = 0.153). Eating disorder diagnoses also showed a proportional increase during the pandemic (2.7% → 5.6% → 3%; p = 0.170).

DISCUSSION

This study examined the impact of the COVID-19 pandemic on child and adolescent psychiatric hospitalizations across three distinct periods: pre-pandemic, during the pandemic, and post-pandemic. The findings indicate that the pandemic led to changes not only in the number of admissions but also in the reasons for hospitalization, length of stay,

and clinical profiles. These results are noteworthy as they highlight the extent to which child and adolescent mental health services are vulnerable to global crises such as pandemics. The first finding of our study was that the proportion of patients diagnosed with ADHD during the pandemic period (54.4%) was significantly higher than in the other two groups (31.1% and 39.2%, respectively). A previous study also reported a significantly increased rate of ADHD diagnoses among patients in child and adolescent psychiatry inpatient units during the pandemic compared to the pre-pandemic period (Ekinci, 2024). The pandemic has been shown to have adverse effects on adolescents with ADHD, contributing to increased screen time, reduced physical activity, and a rise in unhealthy lifestyle habits such as sleep disturbances (Abursu et al., 2025; Rogers & MacLean, 2023; Stein, 2022). Moreover, disruption of daily routines and the lack of interpersonal and social interaction have been reported to exacerbate ADHD symptoms (Köse et al., 2021). The presence of ADHD may complicate the management of the primary condition, necessitating hospitalization and may increase the risk of requiring inpatient care during the pandemic. On the other hand, changes in application and referral patterns may also have contributed to the observed increase; during the pandemic, the approaches of families and educational institutions to accessing mental health services shifted, leading to earlier directions for hospitalization. In addition, disruptions in access to pharmacological treatments and prescription processes under pandemic conditions may have hindered symptom management in children and adolescents with ADHD, thereby resulting in a greater need for hospitalization. Therefore, the increase in ADHD diagnoses during the pandemic is considered to have been shaped by the convergence of multiple factors. Our second finding was that the proportion of patients with intellectual disability who were hospitalized was higher in the pre-pandemic period (24.8%) but decreased during the pandemic (17.3%) and post-pandemic periods (16.2%) ($p = 0.035$). In a study conducted by Ekinci et al. (2024) in a child and adolescent psychiatry inpatient unit, the rate of hospitalized patients diagnosed with intellectual disability was reported as 2.5% before the pandemic

and 3.7% during the pandemic. Similarly, another study indicated that the proportion of patients presenting to a child psychiatry outpatient clinic with a diagnosis of intellectual disability decreased from 10.4% in the pre-pandemic period to 6.8% during the pandemic (Yaylaci & Güller, 2022). The proportional decrease observed in our study may be explained by several factors. First, the increase in diagnoses of depressive and anxiety disorders during the pandemic may have made clinical indications more prominent, thereby reducing the relative proportion of patients with intellectual disability. In addition, the interruption of educational and rehabilitation services, along with difficulties in accessing healthcare institutions during the pandemic, may have further limited clinical applications for this patient group. Thirdly, our study found that the proportion of hospitalized patients diagnosed with Autism Spectrum Disorder (ASD) was higher during the pandemic (12.9%) compared to the post-pandemic period (6.7%) ($p = 0.047$). In a study by Yaylaci and colleagues, the rate of outpatient visits by patients with an ASD diagnosis increased from 3% before the pandemic to 5.1% during the pandemic (Yaylaci & Güller, 2022). Similarly, another study on inpatient populations reported an increase in hospitalization rates due to ASD from 4.3% pre-pandemic to 6.4% during the pandemic (Ekinci et al., 2024). It is known that the inability to provide educational and structured supports during the pandemic contributed to increased behavioral problems in children with ASD (Ekinci et al., 2024). The limitations in social interaction opportunities, disruptions in daily routines, and difficulties in accessing support services during the pandemic may have exacerbated symptom severity in individuals with ASD and made clinical presentations more prominent. Fourthly, our study observed proportional increases in specific psychiatric diagnoses among hospitalized patients during the pandemic period; however, these increases did not reach statistical significance. One such disorder is depressive disorder. In a study conducted by Zhou and colleagues involving 8,079 Chinese adolescents aged 12 to 18, depressive symptoms were reported in 43% of participants, anxiety symptoms in 37%, and the co-occurrence of both symptom clusters in 31% during the pandemic (Guessoum et al., 2020).

Another study reported depressive symptoms in 19.2% of children during the pandemic, with rates increasing to 40% among children with chronic illnesses and up to 50% among those with psychiatric diagnoses (Eroğlu & Yakşi, 2021). The increase in depressive disorder diagnoses during the pandemic may be attributed to stress factors such as social isolation, uncertainty, and interruptions in education and daily routines experienced by children and adolescents. Prolonged home confinement, distancing from peers and increased worries about the future may have exacerbated depressive symptoms, thereby contributing to the rise in diagnosis rates. Although not statistically significant, post-traumatic stress disorder (PTSD) showed a proportionally higher rate during the pandemic period. Countries such as France and Brazil reported marked increases in domestic violence incidents during the outbreak, with children and adolescents being at greater risk of abuse and neglect in homes where such violence occurs (Campbell, 2020). Furthermore, during the pandemic, women and girls have been reported to face increased exposure to gender-based violence, including sexual violence (UNFPA, 2020; (Guessoum et al., 2020). This proportional increase can be associated with heightened familial stress factors and traumatic experiences throughout the pandemic. Isolation and quarantine measures adversely affected family dynamics within the home, creating conditions conducive to increased domestic violence cases. Such adverse life experiences may result in severe psychological trauma in adolescents, who are in a developmentally sensitive period. In our study, hospitalization rates for bipolar disorder were similar during the pre-pandemic and pandemic periods (22.1% and 22.6%, respectively) but markedly decreased to 15.2% in the post-pandemic period ($p = 0.052$). A study conducted during the COVID-19 pandemic reported significant increases in manic symptoms coinciding with the strictest lockdown measures implemented in the Netherlands in April and May. It has been noted that the COVID-19 pandemic particularly contributed to increases in (hypo) manic symptoms and anxiety levels (Koenders et al., 2021). During the pandemic, uncertainty, isolation, and the perceived health threat adversely affected mood regulation, especially in

children and adolescents with underdeveloped coping skills. This situation highlights the necessity of uninterrupted mental health services, maintaining daily routines, and strengthening social support mechanisms as priorities during crisis periods. Our findings indicate that hospitalization rates for obsessive-compulsive disorder (OCD) were higher during the pandemic period compared to the pre-pandemic and post-pandemic periods (5.4% → 9.3% → 6.1%; $p = 0.197$). A study reported that outpatient visits to child psychiatry clinics with an OCD diagnosis increased from 1.1% before the pandemic to 6.8% during the pandemic ($p < 0.001$) (Yaylaci & Güller, 2022). Another study conducted in a child and adolescent inpatient unit found a significant rise in hospitalizations due to OCD during the pandemic (1.8 → 2.9; $p < 0.018$) (Ekinçi et al., 2024). Clinicians observed that a substantial portion of children and adolescents diagnosed with OCD during this period had exhibited subclinical symptoms prior to the pandemic, which escalated to clinical levels during the pandemic. Additionally, compulsions other than cleaning, such as checking, aggression, or religious obsessions, were reported to be less affected during the pandemic (Ekinçi et al., 2024). Handwashing emerged as one of the most effective preventive measures against infection during the pandemic and was heavily emphasized in the media. This emphasis contributed to an increase in symptom severity among OCD patients, particularly those with obsessions related to contamination and cleaning (Tanir et al., 2020). Consequently, OCD is frequently highlighted as one of the psychiatric diagnoses with the highest risk of exacerbation under pandemic conditions. The increase in OCD diagnoses can be explained not only by elevated individual anxiety levels but also by environmental factors such as the normalization of hygiene behaviors at a societal level overlapping with pathological compulsions, constantly changing health advisories, media-driven misinformation, and domestic stress. Another disorder that showed a higher rate during the pandemic period, although not reaching statistical significance, was eating disorders (2.7% → 5.6% → 3%; $p = 0.170$). In a study by Roumeliotis et al. (2024) involving children, adolescents, and young adults aged 6 to 20 in Canada; an increase in hospitalization rates due to

eating disorders was reported during the pandemic period (3.9% → 6.9%, $p < 0.01$). The increase may be attributed to factors such as increased social media use during the pandemic, the association of beauty ideals with thinness on social media platforms, reduced physical activity, and disruptions in eating behaviors during extended periods spent at home. In our study, an increase was observed in the rates of substance use disorder during and after the pandemic (3.6% → 7.3% → 7.4%), as well as in the proportion of patients diagnosed with anxiety disorder after the pandemic (17.6% → 17.3% → 21.3%). In contrast, Roumeliotis et al. (2024) reported a decrease in hospitalizations due to substance use disorder during the pandemic, while hospitalization rates for anxiety disorder increased among females (12.1% → 13.6%) (Roumeliotis et al., 2024). This discrepancy may be explained by differences in the demographic characteristics of the samples, regional disparities in access to health services, and varying societal impacts of the pandemic across countries. Furthermore, the diversity of health policies implemented during the pandemic, the extent of interruptions in mental health services, and changes in diagnostic and monitoring protocols may also have contributed to these differences. Notably, the data in our study were collected during the later stages of the pandemic, which may have made the delayed effects of substance use and anxiety disorders more apparent. The increase in substance use among youth may reflect maladaptive coping strategies emerging in response to the pandemic. The fifth finding of our study was a significant increase in the mean age of children and adolescents hospitalized during the pandemic period ($p = 0.021$). According to data from the Centers for Disease Control and Prevention (CDC), emergency department visits related to mental health among adolescents aged 12 to 17 increased by 31% during the COVID-19 pandemic compared to 2019 (CDC, 2020). This suggests that pandemic-related stress may have differential effects depending on age, with adolescents potentially facing a higher risk of psychological impact. The sixth finding of our study was a significant increase in the number of diagnoses and readmission rates among hospitalized patients during the pandemic period, accompanied by a statistically significant

decrease in length of stay. During the pandemic, children and adolescents were exposed to a high volume of often unfiltered information, primarily via digital platforms such as social media. These contents can be more direct, contextually lacking, and emotionally arousing compared to traditional media. Adolescents, whose brain development is not yet complete, lack the critical and analytical skills adults have to evaluate such information (Guessoum et al., 2020; Murty et al., 2016). Moreover, real-time access to pandemic-related information increased uncertainty and fear, contributing to psychological burden in children and adolescents (Loades et al., 2020). The literature reports that during crises such as pandemics, individuals at psychiatric risk have a higher likelihood of developing new psychiatric disorders. At the same time, those with pre-existing diagnoses may experience symptom exacerbations. This risk becomes more pronounced, especially when access to mental health services is limited (Moreno et al., 2020). These findings indicate an increase in comorbidity and more complex clinical presentations among children and adolescents. The closure of child and adolescent psychiatric inpatient units nationwide during the pandemic and the resulting increased demand on our clinic may have contributed to higher patient turnover. Modifications in treatment protocols likely led to a tendency to shorten hospital stays. The prolonged course of the pandemic may have caused repeated exacerbations of psychiatric symptoms, influencing the frequency of readmissions. The seventh finding of our study was that the rate of suicide attempts decreased from 67.1% before the pandemic to 58.9% during the pandemic and 59.6% after the pandemic. Quarantine measures and school closures also made it more difficult for adults such as teachers, school counselors, or healthcare professionals to recognize mental health problems in children and adolescents (Guessoum et al., 2020). Although the absolute numbers remained high, the observed proportional decrease may suggest that pandemic-related restrictions and difficulties in accessing healthcare affected hospital admissions. Conversely, a study reporting an increase in emergency department visits for suicide attempts among children found that the number of adolescents presenting for suicide attempts rose by 52%, from 21 in the pre-pandemic

period to 32 in the corresponding period of the following year (Benderlioğlu et al., 2024). This discrepancy could be explained by the fact that the referenced study included outpatient visits, not all of which resulted in hospitalizations. Moreover, the proportional decrease observed in our study may be associated not with an actual reduction in the absolute number of suicide attempts, but rather with the impact of pandemic conditions and difficulties in accessing healthcare services on admission data. Therefore, it should be taken into account that the findings reflect not the true course of suicidal behavior during the pandemic, but rather the part that was manifested within the healthcare system. **Strengths:** This study is significant in that it comparatively examined the effects of the COVID-19 pandemic in an inpatient child and adolescent psychiatry unit across three distinct periods: pre-pandemic, pandemic, and post-pandemic. To our knowledge, few studies have evaluated inpatient patterns longitudinally across multiple pandemic phases, which represents a gap in the current literature. The large sample size ($n = 768$) enhances the reliability of the findings. Additionally, the separate evaluation of different psychiatric diagnostic groups provides a more comprehensive understanding of how the pandemic affected diverse clinical presentations, addressing the need for multidimensional analyses in previous research. **Limitations:** This study was conducted in a single center and included data from only one university hospital; therefore, generalizability to other regions or institutions may be limited. Moreover, the study focused solely on inpatients, and outpatient admissions were not evaluated, which partially limits the ability to capture the full spectrum of pandemic-related effects. Finally, the long-term psychosocial outcomes of the pandemic could not be assessed within the scope of this study. While the study fills an important gap regarding inpatient trends and diagnostic variability, further multi-

center and longitudinal research is needed to fully understand the broader impact of the pandemic on child and adolescent mental health. The pandemic has had multifaceted impacts on the mental health of children and adolescents, with more pronounced effects observed in developmentally vulnerable groups. Environmental stressors during the pandemic, such as disruptions in routine care and support services, interruptions in education and rehabilitation programs, social isolation, increased family stress, and difficulties accessing healthcare, have significantly affected children and adolescents, particularly those with neurodevelopmental disorders. In our study, statistically significant changes were observed in the rates of psychiatric hospitalizations among children and adolescents with neurodevelopmental disorders when comparing the pre-pandemic, pandemic, and post-pandemic periods. Our findings indicate an increased demand for child psychiatry services during the pandemic and highlight the necessity of implementing effective measures to meet this need. Consequently, even in isolation-requiring situations like a pandemic, ensuring the continuity of mental health services with attention to the well-being of this vulnerable population is of critical importance.

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