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Clinical Profile of Children and Adolescents Referred for Psychiatric Admission Following Emergency Psychiatric Evaluation

Acil Psikiyatrik Değerlendirme Sonrası Psikiyatri Yatışına Yönlendirilen Çocuk ve Ergenlerin Klinik Profili

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Abstract

Introduction: This study aims to examine the psychiatric profiles and hospitalization-related characteristics of children and adolescents referred for inpatient psychiatric treatment following emergency psychiatric evaluation in Türkiye.

Methods: A retrospective chart review was conducted on 57 adolescents (36 females, 21 males) who were evaluated in the pediatric emergency department and referred for psychiatric hospitalization between October 2022 and September 2024. Socio-demographic variables, psychiatric diagnoses, suicide attempt history, psychotropic medication use, and hospitalization outcomes were analyzed.

Results: No significant gender differences were found in age, family structure, or school attendance. However, suicide attempts were significantly more common in females (80.6%) than males (42.9%) (p=0.004). Poisoning was the most frequent method among females (75.9%), whereas males more often used hanging or jumping. Depressive disorder was the most common diagnosis in females (69.4%), while bipolar disorder (23.8%) and psychotic disorder (14.3%) were more prevalent in males. Comorbidity was more frequent in females (44.4%) compared to males (19.0%), (p=0.053). At the time of presentation, 91.7% of females and 95.2% of males were already using psychotropic medication. Overall, 50.9% of the cases were admitted to inpatient care. Treatment refusal was higher among males (42.9%) than females (25%).

Conclusion: Our study underscores significant gender-based differences in psychiatric presentations, suicide attempt characteristics, and hospitalization outcomes. These findings highlight the urgent need, in pediatric emergency settings, to improve access to inpatient psychiatric care and to strengthen early intervention strategies for acute psychiatric conditions, with a specific emphasis on suicide-related presentations.

Keywords: Child and adolescent psychiatry, emergency admissions, suicide attempts

Öz

Giriş: Bu çalışma, Türkiye'de acil psikiyatrik değerlendirme sonrasında psikiyatri yatışına yönlendirilen çocuk ve ergenlerin psikiyatrik profillerini ve yatışla ilişkili özelliklerini incelemeyi amaçlamaktadır.

Yöntemler: Ekim 2022 ile Eylül 2024 tarihleri arasında çocuk acil serviste değerlendirilen ve psikiyatri yatışına yönlendirilen 57 ergenin (36 kız, 21 erkek) dosyaları geriye dönük olarak incelenmiştir. Sosyo-demografik veriler, psikiyatrik tanılar, özkıyım girişimi öyküsü, psikotrop ilaç kullanımı ve yatış sonuçları değerlendirilmiştir.

Bulgular: Yaş, aile yapısı ve okul devam durumu açısından cinsiyetler arasında anlamlı fark bulunmamıştır. Ancak özkıyım girişimi kızlarda (%80,6) erkeklere (%42,9) göre anlamlı düzeyde daha yaygındı (p=0,004). Kızlarda en sık yöntem zehirlenme (%75,9) iken, erkeklerde ası veya yüksekten atlama gibi yöntemler gözlenmiştir. Kızlarda en yaygın tanı depresif bozukluk (%69,4), erkeklerde ise bipolar bozukluk (%23,8) ve psikotik bozukluk (%14,3) idi. Komorbidite kızlarda (%44,4) erkeklere (%19,0) göre daha yüksekti (p=0,053). Başvuru sırasında kızların %91,7'si, erkeklerin %95,2'si psikotrop ilaç kullanmaktaydı. Olguların %50,9'u yatırılarak tedavi altına alınırken, tedavi reddi erkeklerde (%42,9) kızlara (%25) göre daha sık görüldü.

Sonuç: Çalışmamız, psikiyatri başvuru özellikleri ve yatışla ilgili sonuçlarda cinsiyete dayalı belirgin farkları ortaya koymaktadır. Bu bulgular, çocuk acil servislerinde özellikle özkıyımla ilişkili durumlar başta olmak üzere, akut psikiyatrik bozukluklara yönelik erken müdahale stratejilerinin güçlendirilmesi ve psikiyatri yatış hizmetlerine erişimin artırılması gerekliliğini ortaya koymaktadır.

Anahtar Kelimeler: Çocuk ve ergen ruh sağlığı ve hastalıkları, acil başvuru, özkıyım girişimleri

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Introduction

In recent years, a striking increase has been observed in psychiatric-related emergency visits among children and adolescents worldwide.[1] Recent large-scale studies from the United States (US) and Europe confirm a sharp rise in emergency presentations due to mental health concerns among youth, particularly related to suicide risk and mood.[2] This trend indicates a growing prevalence of mental health problems in the younger population and highlights that emergency departments are increasingly encountering such cases. Suicidal behaviors, depressive and anxiety symptoms, behavioral problems, acute psychotic episodes, and adverse effects of psychotropic medications are among the most common reasons for child and adolescent psychiatric presentations to emergency services.[1,3]

Pediatric emergency departments are of critical importance for the prompt and effective management of psychiatric disorders in children and adolescents.[4] In psychiatric emergency presentations, interventions typically involve a comprehensive psychiatric evaluation of the pediatric patient, crisis intervention when indicated, and appropriate triage or referral. In cases involving suicidal behavior, an initial assessment is performed to ensure medical stabilization.[5] Following stabilization, the patient's safety and overall well-being are evaluated, and a formal psychiatric assessment is conducted. A thorough physical examination is essential to exclude potential organic etiologies underlying the psychiatric presentation. Based on the findings of the psychiatric evaluation, clinical decisions may include discharge, short-term observation, admission to an inpatient psychiatric unit, or referral for child psychiatry outpatient clinic follow-up.[6] A study conducted in Türkiye demonstrated that only one-quarter of patients presenting to the emergency department with psychiatric complaints met the criteria for acute psychiatric conditions requiring inpatient admission, while more than half were discharged with pharmacological management.[7] This pattern is consistent with international findings, where many pediatric psychiatric emergencies are managed without inpatient admission due to triage protocols and limited psychiatric bed availability.[8]

While the majority of psychiatric disorders in childhood and adolescence are managed through outpatient follow-up, certain conditions necessitate partial hospitalization or inpatient care. Factors such as risk of self-harm or harm to others, acute psychotic symptoms, substance intoxication, and inadequate family support are among the primary considerations for inpatient admission in children and adolescents.[3,9] In a study conducted in Türkiye examining the indications for hospitalization among 245 patients aged 6 to 18 years, the most common reasons for admission were major depressive disorder (23.3%), bipolar disorder (20%), and disruptive behavior disorder (14.7%).[10,11] Recent data from a pediatric psychiatric emergency unit in Türkiye identified emotional dysregulation, suicidal ideation, and disruptive behaviours as the most frequent reasons for emergency referrals among youth.[12] Similarly, international studies highlight mood and psychotic disorders as the leading diagnoses in pediatric psychiatric hospitalizations.[10,11,13] Additionally, among all psychiatric admissions in the US, the most frequently reported diagnoses included depression (35.9%), substance use disorders (34.0%), and attention-deficit/hyperactivity disorder [(ADHD): 19.4%].[10,13]

Due to the limited number of inpatient child and adolescent mental health clinics in our country, patients may experience prolonged stays in the emergency setting, which can delay timely intervention. The emergency department of the hospital where our study was conducted receives both individual psychiatric admissions and referrals from nearby hospitals. Most patients are referred to outpatient care, while those with severe conditions are hospitalized. This study aims to examine the clinical and referral characteristics of pediatric patients admitted through emergency services, thereby offering evidence-based insights into acute care pathways in child and adolescent psychiatry. By focusing on this specific patient population, the study addresses a critical gap in the literature and contributes to a better understanding of the clinical needs and referral dynamics in acute child and adolescent mental health care.

Materials and Methods

This study included patients who presented with psychiatric complaints to the pediatric emergency department of Marmara University Pendik Training and Research Hospital between October 1, 2022, and September 30, 2024. These patients were referred for psychiatric consultation, and subsequently evaluated by a child and adolescent psychiatrist, resulting in a decision for psychiatric inpatient admission. Marmara University Pendik Training and Research Hospital was a fully equipped tertiary care center located on the Anatolian side of İstanbul. The hospital provides 24/7 child and adolescent psychiatry services, including emergency psychiatric care. The pediatric emergency department receives approximately 150,000-160,000 patient visits annually; during the study period, a total of 302,532 patients were admitted to this unit. All patients admitted to the pediatric emergency department are initially assessed by a pediatrician. Patients requiring psychiatric evaluation are referred to our clinic. Psychiatric evaluations are performed in a designated private interview room within the emergency department to ensure confidentiality and appropriate clinical conditions. Patients are monitored in the high-acuity area of the emergency

department under the supervision of both pediatric and child psychiatry teams, accompanied by their caregivers, while awaiting admission to the appropriate inpatient service. The average length of stay in the emergency department for these patients ranges from 2 to 3 days, although in some cases, this period may be extended depending on bed availability.

Between October 1, 2022; and September 30, 2024, a total of 1,355 patients will be referred to our clinic for emergency psychiatric evaluation. Among these, 62 patients (4.58%) were deemed in need of inpatient psychiatric admission to the child and adolescent psychiatry unit. Inclusion criteria included being between 0 and 18 years of age and having received a formal referral for inpatient care. Patients were excluded if critical clinical or socio-demographic data-such as psychiatric diagnoses, medication history, or basic demographic information-were missing from the hospital information system. As a result, 5 patients were excluded due to incomplete diagnostic records, yielding a final study sample of 57 adolescents (36 females, 21 males).

Data were obtained from the patients' files recorded in the hospital's electronic medical records system, and all data were anonymized. The socio-demographic characteristics of the patients, psychiatric diagnoses, use of psychotropic medication, history of suicide attempts, and outcomes of the inpatient admission process were examined. Psychiatric diagnoses were determined through clinical interviews based on Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria, conducted as part of the emergency psychiatric evaluation, along with history obtained from the family.[14] No structured diagnostic tools were used in the evaluation. This limitation has been described in detail in the limitations section.

Psychotropic medication use among patients was categorized into selective serotonin reuptake inhibitors (SSRIs), antipsychotics, ADHD medications (including methylphenidate and atomoxetine), mood stabilizers, benzodiazepines, and acute injectable treatments administered in the emergency department. Injectable antipsychotic medications were administered according to the urgency of symptom control and the patient's clinical profile. Within the scope of this study, the injectable treatments used in our clinical practice were classified based on their duration of action. Haloperidol lactate was categorized as a short-acting injection (SAI). Zuclopenthixol acetate was classified as an intermediate-acting injection (IAI). Zuclopenthixol decanoate and risperidone microsphere extended-release were identified as long-acting injections (LAIs).

The children's global assessment scale (CGAS) was used to assess the functional status of the children and adolescents.[15] CGAS was used to evaluate the overall functional level of the children.[15] In this study, the CGAS was used to assess the individual's overall psychosocial functioning[15]. The validity and reliability of the Turkish version of the scale were established by Gökler et al.[16] The CGAS is a clinician-rated instrument that provides a single score ranging from 1 to 100, based on the assessment of various aspects of a child's psychological functioning. According to the scoring criteria, children who receive a score of 80 or below are referred for psychiatric follow-up; those scoring 60 or below are referred for psychiatric treatment and monitoring; and those scoring 40 or below are considered for inpatient psychiatric care.

Ethical approval for this study was obtained from the Marmara University Faculty of Medicine Clinical Research Ethics Committee (approval no: 09.2025.25-0025, date: 18.04.2025). All participants were informed about the study and written consent was obtained.

Statistical Analysis

Descriptive statistics including frequency, percentage, mean, and standard deviation were used to summarize the data. The distribution of the data was tested using the Kolmogorov-Smirnov test. The Independent Samples t-test was used to analyze parametric continuous variables, while the Mann-Whitney U test was applied for non-parametric data. The chi-square test or Fisher's exact test was used to compare categorical variables. A p-value of <0.05 was considered statistically significant. All analyses were conducted using SPSS version 23.0.

Results

Our study included 36 female adolescents (mean age: 15.20±1.68 years) and 21 male adolescents (mean age: 15.81±1.13 years) who were referred for psychiatric inpatient clinic admission. Among the female participants, 50% (n=18) were attending formal education, compared to 33.3% (n=7) of the males (χ^2=1.496, p=0.221). Both parents were living together in 50% (n=18) of the female group and 52.4% (n=11) of the male group (χ^2=1.872, p=0.392). A family history of psychiatric disorders was reported in 41.7% (n=15) of females and 57.1% (n=12) of males (χ^2=1.274, p=0.259).

The onset of initial psychiatric symptoms occurred 18.48±2.55 months in females and 19.92±4.51 months in males prior. The duration of psychiatric follow-up was 14.19±3.10 months for female patients and 7.37±3.56 months for male patients. Data regarding psychiatric diagnosis and CGAS scores are presented in Table 1. Comorbidity was identified in 20 patients (n=20, 35.1%) within the sample. Of these, 15 patients (n=15, 26.3%) had two psychiatric diagnoses, while 5 patients (n=5, 8.8%) had three co-occurring psychiatric diagnoses. Among patients diagnosed with depressive disorder (n=13; 22.8%),

comorbid psychiatric disorders included conduct disorder (n=6; 10.5%), anxiety disorders (n=5; 8.8%), and ADHD (n=4, 7.0%). In the subgroup with ADHD (n=7, 12.3%), comorbid diagnoses were conduct disorder (n=4, 7.0%), bipolar disorder (n=1, 1.8%), and depressive disorder (n=4, 7.0%). Among those diagnosed with conduct disorder (n=12, 21.1%), comorbid conditions included depressive disorder (n=6, 10.5%), ADHD (n=4, 7.0%), bipolar disorder (n=2, 3.5%), and anxiety disorder (n=1, 1.8%).

The rate of suicide attempts was significantly higher at 80.6% (n=29) among females compared to 42.9% (n=9) among males (p=0.004). Among those who had attempted suicide, 48.3% (n=14) of the female patients and 66.7% (n=6) of the male patients reported it as their first attempt, while the remaining cases had a history of multiple attempts (p=0.763). Data on methods of suicide attempts by gender are presented in Table 2. Among the 19 patients referred for inpatient psychiatric hospitalization without a history of suicide attempt (n=19, 33.3%), the primary reasons for referral were as follows: depressive disorder with suicidal ideation (n=5, 8.8%), conduct disorder with prominent aggression and risk of harm to others (n=5, 8.8%), manic episode (n=4, 7.0%), acute psychotic episode (n=3, 5.3%), and severe obsessive-compulsive disorder (n=2, 3.5%).

In our study, 91.7% of the female patients and 95.2% of the male patients were already on psychotropic medication at the time of emergency department admission. The most commonly used medication classes were atypical antipsychotics and SSRIs. Data on psychotropic medication use are provided in Table 3. None of the patients was receiving injectable treatments at the time of admission; however, the types of antipsychotic medications administered via injection in the emergency department are also listed in Table 3. Among the total sample of 57 patients, 27 (n=27, 47.4%) received at least one form of intramuscular injection during their emergency psychiatric evaluation. Of these, 4 patients (n=4, 7.0%) received all three types of injectable agents: short-, intermediate- and long-acting. In 11 cases (n=11, 19.3%), two types of injectables were used. Additionally, 12 patients (n=12, 21.1%) were treated exclusively with short-acting injectables. SAIs were administered to 20 patients (35.1%). These included patients diagnosed with bipolar disorder (n=6, 10.5%), major depressive disorder (n=5, 8.8%), conduct disorder (n=3, 5.3%), psychotic disorder (n=3, 5.3%), ADHD (n=2, 3.5%), and anxiety disorder (n=1, 1.8%). IAIs were administered to 15 patients (26.3%). These were used in patients with bipolar disorder (n=4, 7.0%), major depressive disorder (n=4, 7.0%), conduct disorder (n=2, 3.5%), psychotic disorder (n=2, 3.5%), ADHD (n=2, 3.5%), and anxiety disorder (n=1, 1.8%). LAIs were used in 6 patients (10.5%), including those with bipolar disorder

Table 1. Psychiatric diagnosis and CGAS scores of the participants

	Female n=36 (%)	Male n=21 (%)	p-value
Depressive disorder	25 (69.4%)	7 (33.3%)	**0.008***
Conduct disorder	14 (38.9%)	6 (28.6%)	0.568*
Anxiety disorder	12 (33.3%)	2 (9.5%)	**0.044***
ADHD	7 (19.4%)	3 (14.3%)	0.624*
Bipolar disorder	4 (11.1%)	5 (23.8%)	0.205*
Psychotic disorder	3 (8.3%)	3 (14.3%)	0.480*
Conversion disorder	2 (5.6%)	3 (14.3%)	0.346*
OCD	1 (2.8%)	1 (4.8%)	0.695*
Comorbidity	16 (44.4%)	4 (19.0%)	**0.053***
	Mean ± SS	**Mean ± SS**	
CGAS score	30.91±1.66	32.85±12.84	0.531**

p<05 was considered statistically significant. Statistical significance is indicated in bold
*: Chi-square test, **: Student's t-test, CGAS: Children's global assessment scale, ADHD: Attention deficit hyperactivity disorder, OCD: Obsessive-compulsive disorder, SS: Statistical significance

Table 2. Methods of suicide attempts

	Female n=36 (%)	Male n=21 (%)	p-value
Suicide attempts	29 (80.6%)	9 (42.9%)	**0.004***
	Female n=29 (%)	**Male n=9 (%)**	
Poisoning	22 (75.9%)	2 (22.2%)	**0.004***
Cutting	3 (10.3%)	2 (22.2%)	0.357*
Hanging	0 (0%)	2 (22.2%)	**0.009***
Jump from high place	3 (10.3%)	2 (22.2%)	0.357*
Other	1 (3.4%)	1 (11.1%)	0.368*

p<05 was considered statistically significant. Statistical significance is indicated in bold
*: Chi-square test

Table 3. Types of psychotropic medications

	Female n=36 (%)	Male n=21 (%)	p-value
Use of at least one medication	33 (91.7%)	20 (95.2%)	0.611*
SSRIs	21 (58.3%)	10 (47.6%)	0.433*
Atypical antipsychotics	30 (83.3%)	19 (90.5%)	0.454*
Methylphenidate	5 (13.9%)	1 (4.8%)	0.279*
Mood stabilizer	8 (22.2%)	3 (14.3%)	0.464*
Benzodiazepine	3 (8.3%)	3 (14.3%)	0.480*
SAIs	12 (33.3%)	8 (38.1%)	0.716*
IAIs	7 (19.4%)	8 (38.1%)	0.123*
LAIs	3 (8.3%)	3 (14.3%)	0.480*

p<05 was considered statistically significant.
Short-acting injection: Haloperidol, Intermediate-acting injection: Zuclopenthixol acetate, Long-acting injection: Zuclopenthixol decanoate
*: Chi-square test, SSRIs: Selective serotonin reuptake inhibitors, SAIs: Short-acting injectable antipsychotics, IAIs: Intermediate-acting injectable antipsychotics, LAIs: Long-acting injectable antipsychotics

(n=3, 5.3%), psychotic disorder (n=2, 3.5%), and conduct disorder (n=1, 1.8%).

Of the patients referred for psychiatric hospitalization, 50.9% (n=29) were successfully admitted to the inpatient clinic unit. The mean waiting time in the emergency department for these patients was 39.07±39.02 (mean ± SD) hours. The outcomes following referral for inpatient clinic admission are presented in Table 4.

Discussion

The present study investigated the psychiatric characteristics and hospitalization referrals of children and adolescents presenting to a pediatric emergency department over a two-year period. Consistent with global trends, our findings reflect a rising demand for emergency psychiatric care and inpatient services in youth populations. Compared to previous national and international research, our study provides updated data on clinical presentations and admission outcomes contributing to the understanding of service needs in acute child psychiatry.

The demographic characteristics of children and adolescents referred for psychiatric hospitalization were examined to explore potential gender-based differences. No statistically significant differences were found between female and male patients in terms of age or family structure. A high prevalence of psychiatric disorders in the families of both female and male patients was noted. While half of the girls were enrolled in formal education, the majority of boys were not attending school. Nonetheless, the relatively small sample size may have limited the ability to detect subtle demographic variations between groups. Previous studies have identified several key risk factors associated with adolescent psychiatric emergencies and suicide attempts, including adverse life events, parental separation, parental psychiatric disorders, low socio-economic status, limited access to education, and poor academic performance.[17]

In our study, the most common diagnoses among female and male adolescents were depressive disorder and conduct disorder, respectively. A high rate of comorbidity was observed in both groups. Bipolar and psychotic disorders were found to be more prevalent in male patients. Acute psychiatric conditions such as severe aggression, explosive anger outbursts, psychosis, or severe anxiety disorders, serious suicide attempts, and toxic-metabolic conditions including neuroleptic malignant syndrome and serotonin syndrome are among the leading causes of emergency psychiatric intervention.[18] Following initial stabilization in the emergency department, some patients are referred for outpatient follow-up, while others are admitted to inpatient units. In our sample, depressive disorder emerged as the most frequent diagnosis, which may be associated with the high rate of suicide attempts. Bipolar and psychotic disorders were less frequently cited as reasons for hospitalization, as these cases were often stabilized with pharmacological treatment and followed up on an outpatient basis. Two previous studies conducted in Türkiye similarly reported that the most common reasons for inpatient child psychiatry admissions were mood disorders, particularly depressive disorders, as well as disruptive behavior disorders and psychotic disorders.[10,19] In our study, depressive disorder was the leading diagnosis among those referred for psychiatric admission, which is consistent with the existing literature. Similarly, a recent study from Türkiye also identified depression as the most common diagnoses in pediatric psychiatric emergency admissions.[12] However, notable variability in diagnostic distribution may occur depending on the characteristics of the psychiatric units. Such variability may stem from differences in the populations served, the clinical approaches employed, and the application of diagnostic criteria.[19]

Suicide attempt rates were significantly higher among female adolescents. Approximately 80% of the female patients referred for psychiatric hospitalization had a history of suicide attempt, whereas the rate was notably lower among male patients. When examining the methods of attempt, poisoning was significantly more frequent among females, while hanging was more common among males. These findings are consistent with previous studies indicating that, during adolescence, females are more likely to engage in suicide attempts, whereas males tend to choose more lethal methods and are more often to be involved in fatal outcomes.[20] Similar to our findings, a recent study from a pediatric emergency unit in Türkiye reported that 80% of patients presenting with suicide attempts were female, with drug overdose being the most common method, highlighting the gendered nature of suicidal behavior and supporting the need for differentiated risk assessment and follow-up strategies.[21] While depressive disorders are a strong predictor of suicidal ideation, accompanying symptoms such as anxiety, irritability, and impaired emotional regulation have also been identified as significant contributors to suicide attempts.[22] In our study, the high prevalence of depressive disorder and

Table 4. Outcomes of psychiatric hospitalization referrals

	Female n=36 (%)	Male n=21 (%)	p-value
Child psychiatry inpatient admission	17 (47.2%)	8 (38.1%)	0.726*
Psychiatry inpatient admission	3 (8.3%)	1 (4.8%)	
Refusal of treatment	9 (25%)	9 (42.9%)	
Referral canceled and continued with outpatient follow-up	7 (19.5%)	3 (14.3%)	

p<05 was considered statistically significant.
*: Chi-square test

comorbid psychiatric disorders may account for the elevated rate of suicide attempts observed in this population. The notably higher standard deviation observed in CGAS scores among male patients may be attributed to greater diagnostic heterogeneity within this group. While a large proportion of female patients, exhibited similar clinical profiles characterized by suicide attempts-resulting in more uniformly impaired functioning-male patients demonstrated a broader range of psychiatric diagnoses and symptom presentations, leading to a wider distribution of functional impairment levels.

Psychotropic medication use was common in both genders, with SSRIs, and atypical antipsychotics frequently prescribed. These medications play a critical role in managing depressive symptoms and other psychopathological conditions.[23] The persistence of severe symptoms at emergency admission suggests limited treatment response and the need for more intensive care. Injectable treatments were also frequently used to ensure rapid symptom control, particularly during extended emergency stays due to limited inpatient bed availability. Global trends reflect these observations as recent reviews report a significant increase in psychotropic prescriptions-including antidepressants, stimulants, and atypical antipsychotics-among children and adolescents between 2013 and 2023. Moreover, long-acting injectable antipsychotics are increasingly utilized in youth populations, particularly for early-onset psychotic disorders.[24,25] These findings underscore the importance of timely pharmacological intervention and the integration of individualized treatment strategies.[26]

The inpatient admission rate to the child psychiatry unit was found to be 47.2% for females and 38.1% for males, with no statistically significant difference between the two groups. However, the rate of treatment refusal was notably higher among male patients (42.9%) compared to female patients (25%). Rates of admission cancellation and outpatient follow-up were similar across both genders. These findings suggest that gender is not a determining factor in referral decisions for inpatient child psychiatry care. The higher treatment refusal rates among male patients may be related to lower help-seeking behavior and concerns about stigma commonly observed in males.[27] A study conducted in Türkiye emphasized that adolescent males may demonstrate lower motivation for help-seeking and treatment adherence compared to females, which may reflect broader socio-cultural influences on psychiatric service utilization.[28] Furthermore, during the study period, it was noted that while there were two inpatient units available for the admission of female patients in İstanbul, only one unit was available for males. This discrepancy likely led to longer waiting times for male patients, which may have contributed to the increased rate of treatment refusal observed in this group. In addition, social and familial factors may have influenced the decision to accept or refuse inpatient care. Variables such as parental attitudes toward psychiatric hospitalization, cultural perceptions of mental illness, and perceived necessity or urgency of treatment can play a crucial role in treatment compliance. Longer waiting times in the emergency department may have exacerbated caregiver fatigue and emotional distress, particularly among families of male patients, and thereby increased resistance to hospitalization.[29] Prior studies have shown that systemic delays in psychiatric care can negatively impact both patient and caregiver cooperation, ultimately contributing to treatment refusal.[8]

Study Limitations

This study provides important insights into the psychiatric profiles of children and adolescents referred for inpatient psychiatric care after presenting to a pediatric emergency unit in Türkiye. Although our hospital lacks a dedicated child and adolescent psychiatry inpatient unit, psychiatric consultations are nonetheless provided 24/7-a practice rarely implemented in other institutions nationwide. Therefore, the data presented here reflect a realistic profile of psychiatric inpatient referral needs in this age group. However, several limitations should be acknowledged. First, the retrospective nature of the study, which relied on clinical records, may have introduced bias due to variability in documentation quality and the absence of standardized data collection protocols. Second, the limited sample size (n=57) may have substantially reduced the statistical power, particularly for subgroup comparisons, thereby limiting the generalizability of the results. Additionally, psychiatric diagnoses were made using unstructured clinical interviews rather than standardized diagnostic tools like structured ones. While all evaluations were conducted by experienced clinicians using DSM-5 criteria, the lack of structured tools may have reduced inter-rater reliability, diagnostic objectivity, and contributed to the underreporting of comorbid conditions. Importantly, given the emergency department setting, the use of structured diagnostic interviews was not feasible under the existing clinical constraints. Moreover, although relevant risk factors such as low socio-economic status, parental separation, and school attendance, were routinely explored during psychiatric evaluations, these variables were not assessed through standardized and systematic methods, which limits the ability to draw firm conclusions regarding their role. In addition, the unequal distribution of inpatient facilities during the study period-with two inpatient units available for girls but only one for boys in İstanbul-may have contributed to disparities in admission and treatment refusal rates. Finally, although this is a single-center study, it was conducted in İstanbul-a city marked

by significant socio-cultural diversity and high population density, drawing patients from many regions of Türkiye. This context may partially enhance the representativeness of the findings.

Conclusion

This study comprehensively examined the inpatient referral process of children and adolescents following emergency psychiatric evaluations, with a particular focus on gender-based clinical differences and key factors influencing admission decisions. Higher rates of depressive and anxiety disorders, psychiatric comorbidity, and suicide attempts were observed among female adolescents; however, outcomes related to psychopharmacological interventions and referral patterns did not differ significantly by gender. These findings underscore the critical importance of early identification, adequate inpatient capacity, and systematic improvements in emergency psychiatric care for youth. Clinically, the results highlight the need to tailor admission procedures to account for gender-specific risk profiles and to address systemic barriers, including treatment refusal. Improving environmental conditions in emergency settings and expediting referral pathways based on clinical urgency may enhance outcomes. Notably, the high proportion of suicidal behavior observed points to an urgent need for specialized inpatient services for at-risk youth, particularly in urban and socio-economically diverse regions. Ultimately, the results advocate for policy reforms aimed at expanding and strengthening child and adolescent psychiatric services to ensure timely and equitable mental health care.

Ethics

Ethics Committee Approval: Ethical approval for this study was obtained from the Marmara University Faculty of Medicine Clinical Research Ethics Committee (approval no: 09.2025.25-0025, date: 18.04.2025).

Informed Consent: All participants were informed about the study and written consent was obtained.

Footnotes

Authorship Contributions

Surgical and Medical Practices: Ç.D.T., G.Y.A., Concept: Ç.D.T., G.Y.A., Design: Ç.D.T., G.Y.A., Data Collection or Processing: Ç.D.T., K.N., Analysis or Interpretation: Ç.D.T., G.Y.A., Literature Search: Ç.D.T., K.N., G.Y.A., Writing: Ç.D.T., G.Y.A.

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References

1. Adak İ. An overview of emergency services in child and adolescent psychiatry. In: Sabuncuoğlu O, (editor). Emergencies in child and adolescent psychiatry. 1st ed. Ankara: Türkiye Klinikleri; 2021:1-6.
2. Cutler GJ, Rodean J, Zima BT, Doupnik SK, Zagel AL, et al. Trends in pediatric emergency department visits for mental health conditions and disposition by presence of a psychiatric unit. Acad Pediatr. 2019;19:948-55.
3. Ezquerra B, Peñuelas-Calvo I, Marti-Estevez I, Taracena-Cuerda M, Baca-García E, et al. Emergency psychiatric care for children and adolescents: factors associated with multiple visits and hospital admissions. Eur Child Adolesc Psychiatry. 2025;34:1883-93.
4. Janssens A, Hayen S, Walraven V, Leys M, Deboutte D. Emergency psychiatric care for children and adolescents: a literature review. Pediatr Emerg Care. 2013;29:1041-50.
5. Baren JM, Mace SE, Hendry PL, Dietrich AM, Goldman RD, et al. Children's mental health emergencies–part 2: emergency department evaluation and treatment of children with mental health disorders. Pediatr Emerg Care. 2008;24:485-98.
6. Edelsohn GA, Braitman LE, Rabinovich H, Sheves P, Melendez A. Predictors of urgency in a pediatric psychiatric emergency service. J Am Acad Child Adolesc Psychiatry. 2003;42:1197-202.
7. Bilginer Ç, Karadeniz S, Aydoğdu S, Bulut Şahin D. Child mental health services in emergency department of a university hospital. Turk J Child Adolesc Ment Health. 2021;28:12-9.
8. Mapelli E, Black T, Doan Q. Trends in pediatric emergency department utilization for mental health-related visits. J Pediatr. 2015;167:905-10.
9. Hamm MP, Osmond M, Curran J, Scott S, Ali S, et al. A systematic review of crisis interventions used in the emergency department: recommendations for pediatric care and research. Pediatr Emerg Care. 2010;26:952-62.
10. Tural Hesapçıoğlu S, Hacıosmanoğlu CD, Okuyucu M, Ceylan MF. Primary diagnosis of the inpatients in child and adolescent psychiatry clinic and their comorbid psychiatric diagnosis. Turkish Medical Journal. 2024;9:1-7.
11. Lalayants M, Kim M, Prince JD. Psychiatric hospitalization among adolescents. J Behav Health Serv Res. 2018;45:292-9.
12. Kayan Ocakoğlu B, Alkaş Karaca GE, Erata MC, Ocakoğlu FT, Yerlikaya Oral E, et al. Assessment of children and adolescents' admissions to pediatric psychiatric emergency department. Psychiatry. 2025;88:41-54.
13. Bardach NS, Coker TR, Zima BT, Murphy JM, Knapp P, et al. Common and costly hospitalizations for pediatric mental health disorders. Pediatrics. 2014;133:602-9.
14. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. 5th ed. Washington, DC:American Psychiatric Association; 2013.
15. Shaffer D, Gould MS, Brasic J, Ambrosini P, Fisher P, et al. A children's global assessment scale (CGAS). Arch Gen Psychiatry. 1983;40:1228-31.
16. Gökler B, Ünal F, Pehlivantürk B, Çengel Kültür E, Akdemir D, et al. Reliability and validity of schedule for affective disorders and schizophrenia for school age children-present and lifetime version-Turkish version. Turk J Child Adolesc Ment Health. 2004;11:109-16.
17. Siu AMH. Self-harm and suicide among children and adolescents in Hong Kong: a review of prevalence, risk factors, and prevention strategies. J Adolesc Health. 2019;64(6 Suppl):S59-S64.

18. Dougherty DM, Mathias CW, Marsh-Richard DM, Prevette KN, Dawes MA, et al. Impulsivity and clinical symptoms among adolescents with non-suicidal self-injury with or without attempted suicide. Psychiatry Res. 2009;169:22-7.
19. Özbaran B, Köse S, Yılmaz E, Aydın AN, Aydın C. Evaluation of the contribution of inpatient services and experienceson improvement in child and adolescent psychiatry practice. Alpha Psychiatry. 2016;17:120-6.
20. Cash SJ, Bridge JA. Epidemiology of youth suicide and suicidal behavior. Curr Opin Pediatr. 2009;21:613-9.
21. Çoban ÖG, Gül ME, Önder A. Evaluation of children and adolescents admitted to emergency service with suicide attempt. J Pediatr Emerg Intensive Care Med. 2022;9:153-7.
22. Brent DA. Master clinician review: saving holden caulfield: suicide prevention in children and adolescents. J Am Acad Child Adolesc Psychiatry. 2019;58:25-35.
23. Patel V, Flisher AJ, Hetrick S, McGorry P. Mental health of young people: a global public-health challenge. Lancet. 2007;369:1302-13.
24. Altuwaijri Y. Trends and prevalence of psychotropic medication use in children and adolescents in the period between 2013 and 2023: a systematic review. Cureus. 2024;16:e55452.
25. Scharko AM, Sieracki R, Mireski SJ. Long-acting injectable antipsychotic medication use in youth: a systematic review of the literature along with medwatch safety data and prescriber attitudes. J Child Adolesc Psychopharmacol. 2025;35:69-79.
26. Karadağ M, Türk N, Gökçen C, Topal Z. Sociodemographic and diagnostic characteristics of inpatients in a university hospital child and adolescent psychiatry clinic. Turk J Child Adolesc Ment Health. 2021;28:7-11.
27. Latalova K, Kamaradova D, Prasko J. Perspectives on perceived stigma and self-stigma in adult male patients with depression. Neuropsychiatr Dis Treat. 2014;10:1399-405.
28. Dikeç G, Kardelen C, Pilz González L, Mohammadzadeh M, Bilaç Ö, et al. Perceptions and experiences of adolescents with mental disorders and their parents about psychotropic medications in Turkey: a qualitative study. Int J Environ Res Public Health. 2022;19:9589.
29. Logan DE, King CA. Parental facilitation of adolescent mental health service utilization: a conceptual and empirical review. Clin Psychol Sci Pract. 2001;8:319-33.