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ORIGINAL ARTICLE

Consultation patterns and diagnostic revisions during inpatient stay in child and adolescent psychiatry: A retrospective analysis

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Abstract

The aim of this study was to describe the frequency, distribution, and reasons for consultations during inpatient treatment in child and adolescent psychiatry, and to evaluate diagnostic changes between admission and discharge. This retrospective, single-center study

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included 252 children and adolescents hospitalized in the child and adolescent psychiatry inpatient unit of Ankara Etlik City Hospital between November 1, 2024 and November 1, 2025. Demographic characteristics, admission and discharge DSM-5-TR diagnoses, consulted departments, reasons for consultation, and number of consultations were extracted from the hospital electronic record system. Data were analyzed using descriptive statistics and McNemar's test. The mean age was 15.54 ± 1.82 years. Three-quarters of patients (75.0%) required at least one consultation during hospitalization, and 41.7% required three or more. Social services was the most frequently consulted department (44.8%), and legal or protective concerns were the most common reason for consultation (34.5%). Clinically meaningful diagnostic changes were observed between admission and discharge: neurodevelopmental disorders and anxiety and obsessive-compulsive disorders more than doubled, while psychotic spectrum diagnoses showed a marked decline. Within-patient analysis revealed that 58 patients (24.3%) showed a change in diagnostic category between admission and discharge. In the child and adolescent psychiatry inpatient unit, multidisciplinary involvement appears to be a common feature, the service interfaces closely with protective welfare systems, and the inpatient stay provides a meaningful opportunity for diagnostic clarification. These findings suggest that capacity planning should jointly address the treatment, diagnostic clarification, and medical-social coordination functions of the inpatient unit.

Introduction

Child and adolescent psychiatry inpatient units provide treatment for complex clinical presentations including mood disorders, psychotic disorders, severe behavioral disturbances, and eating disorders. A review of the literature reveals that psychiatric consultation processes, referral reasons, and outcomes for patients hospitalized in pediatric wards have been documented in considerable detail [1,2]. These studies emphasize the importance of recognizing the mental health needs of children hospitalized in pediatric services and of providing multidisciplinary care.

In contrast, the scope, frequency, and determinants of consultations requested from other medical departments and services for patients hospitalized in child and adolescent psychiatry inpatient units, based on their physical health needs, have not been adequately addressed in the literature [3]. Yet, psychiatric inpatient units serve a heterogeneous patient population with a high risk of somatic comorbidity, including children and adolescents with neurodevelopmental disorders, acute psychotic presentations, and mood disorders. These patients face substantial risks both from physical complications arising from the nature of the disorder itself (for example, malnutrition and electrolyte imbalance in eating disorders) and from the potential adverse effects of psychopharmacological treatments (such as metabolic syndrome, cardiac rhythm disturbances, and QTc prolongation) [2,4]. In addition to these medical needs, hospitalized children and adolescents frequently present with psychosocial adversity and risk behaviors, including maltreatment, family dysfunction, self-harm, substance use, and involvement with child protection or judicial systems, which generate consultation needs beyond medical care [5,6]. The limited available studies report that consultations from neurology, pediatrics, endocrinology, and cardiology are most frequently requested in psychiatric inpatient units; the main reasons for consultation typically include differential diagnosis of seizure-like phenomena, monitoring of medication side effects, and management of comorbid medical conditions [7].

Beyond medical consultations, social services and legal or child-protection processes also constitute an integral part of care in child and adolescent psychiatry inpatient units; neglect, abuse, requests for

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protective custody, and judicial procedures are common clinical realities in this patient population [5,8]. Furthermore, the inpatient stay represents an opportunity not only for treatment but also for reassessment of admission diagnoses through detailed clinical observation and additional diagnostic evaluation. Diagnostic revisions between admission and discharge are well documented, particularly in inpatient settings where prolonged observation and collateral information are available [9,10]. Based on this literature, a substantial burden of medical consultations, prominent social service and child-protection involvement, and a measurable degree of diagnostic revision may be anticipated in this population. However, studies that systematically map both the medical and psychosocial consultation needs, the consultation outcomes, and the diagnostic changes occurring during hospitalization in child and adolescent psychiatry inpatient settings remain limited.

This retrospective study aims to characterize, over a one-year period, the following aspects of children and adolescents hospitalized in a child and adolescent psychiatry inpatient unit: the patterns of medical and social service consultations, the most frequently consulted departments and services and the reasons for consultation, the outcomes of these consultations, and the changes between admission and discharge diagnoses. The findings of the study are expected to contribute to filling the gap in the literature regarding the somatic and psychosocial dimensions of holistic care provided in inpatient psychiatry settings, to support the development of multidisciplinary treatment algorithms, and to optimize clinical service planning.

Materials and Methods

Study design, setting, and ethical approval

This single-center, retrospective study was conducted at the inpatient ward of the Department of Child and Adolescent Psychiatry, and was approved by the Ankara Etlik City Hospital Scientific Research Evaluation and Ethics Committee (Approval no: AEŞH-BADEK1-2026-167, Date: March 25, 2026). The study was conducted in accordance with the Declaration of Helsinki. Given the retrospective design and use of fully anonymized records, the requirement for individual informed consent was waived. All patient data were de-identified prior to analysis and stored in encrypted files accessible only to the research team.

The unit is a 20-bed tertiary inpatient facility located within a large public hospital, which serves as a referral center for complex cases in child and adolescent psychiatry. The unit is staffed by child and adolescent psychiatrists, residents, clinical psychologists, social workers, and nursing personnel, and provides treatment for children and adolescents up to 18 years of age. Exceptionally, patients slightly older than 18 years who were already under ongoing outpatient follow-up in our department could be admitted. Indications for admission include acute psychiatric decompensation, diagnostic clarification requiring extended observation, treatment initiation or modification under supervision, and cases involving legal or child-protection concerns. As a tertiary center, the unit does not transfer patients to other facilities. Patients whose primary problem is psychiatric are managed in the unit with consultation support from the relevant departments, whereas patients whose acute medical condition takes precedence are primarily admitted to the relevant medical department with consultation-liaison psychiatry follow-up.

Study population

All children and adolescents (age range, 8.0-18.7 years) who were hospitalized in the child and adolescent psychiatry inpatient unit during the one-year period between November 1, 2024, and November 1, 2025, were included in the study. As the study was designed as a comprehensive single-center medical record review, no a priori sample size calculation was performed. All consecutive patients meeting the inclusion criteria were enrolled. Inclusion criteria were hospitalization for at least

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24 hours during the study period and availability of adequate sociodemographic and clinical data (discharge summaries, consultation notes, and medication records). Patients with observational admissions shorter than 24 hours or with largely incomplete medical records precluding meaningful data extraction were excluded. Missing values in individual variables (for example, admission or discharge diagnosis) were not grounds for exclusion. During the study period, 269 hospitalization episodes were screened. Eight patients were excluded due to observational admissions shorter than 24 hours and 5 due to largely incomplete medical records. For 4 patients with repeated admissions, only the first admission was included. A total of 252 patients constituted the final study sample.

Data collection and variables

All data were retrospectively obtained from the hospital's electronic medical records system, including discharge summaries, nursing observation notes, consultation requests and response notes, and laboratory or diagnostic test results. Data extraction was performed by two investigators using a standardized extraction form. Consultation variables were coded using a predefined categorical framework established prior to data extraction. All records were coded by one investigator and verified by a second investigator against the original records. Discrepancies were resolved through discussion with a third senior investigator, with reference to the original source documents.

The following variables were recorded for each case. Sociodemographic data comprised age and sex. Clinical variables included length of hospitalization, family history of psychiatric illness, family history of medical illness, and psychiatric diagnoses at admission and at discharge, recorded according to DSM-5-TR criteria. Psychopharmacological data covered medication classes used at admission (defined as medications in use immediately before hospitalization) and at discharge, including antipsychotics, antidepressants, mood stabilizers, anxiolytics, stimulants, non-stimulant ADHD medications, and other psychotropic agents, as well as the presence of polypharmacy. Consultation data included, for each consultation requested during hospitalization, the consulted department or service, the reason for consultation, and the consultation outcome.

Operational definitions and categorization

Diagnostic categories: Psychiatric diagnoses at admission and at discharge were recorded according to DSM-5-TR criteria and were classified into eight diagnostic groups for presentation: Depressive disorders, Bipolar disorder (including manic and depressive episodes), Psychotic spectrum disorders (including schizophrenia spectrum and prodromal psychosis), Conduct disorders, Neurodevelopmental disorders (including autism spectrum disorder and intellectual disability), Anxiety and obsessive-compulsive disorders (including anxiety disorders and obsessive-compulsive and related disorders), Feeding and eating disorders, and Other diagnoses. The admission diagnosis was the provisional diagnosis recorded in the electronic medical record at the time of hospitalization by the admitting child and adolescent psychiatrist or resident (the on-call physician for admissions outside working hours), on the basis of the information available in the acute setting. The discharge diagnosis was recorded by the treating child and adolescent psychiatrist at the end of hospitalization, after the full period of inpatient observation, collateral information gathering, and any additional evaluations.

Psychopharmacological polypharmacy: Polypharmacy was defined as the concurrent use of psychotropic medications from two or more different pharmacological classes at either admission or discharge.

Consultation variables: Consultations requested during hospitalization were classified along three dimensions: the consulted department or service, the reason for consultation (including legal or child-protection concerns, diagnostic clarification, acute medical conditions, medical comorbidity, treatment optimization, and nutrition- or eating-related problems), and the consultation outcome (including request

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for further investigation, social or protective report or referral, initiation of new treatment, no pathology identified, follow-up recommendation, treatment modification recommendation, or no response received). Repeated consultations with the same department for the same patient were counted once, based on the first consultation. Because a single patient could receive consultations from multiple departments or services and could have multiple recorded reasons or outcomes, these variables were analyzed as multiple-response items.

Statistical analyses

All statistical analyses were performed using IBM SPSS Statistics software (version 27, IBM Corp., Armonk, NY, USA). The normality of continuous variables was assessed with the Shapiro-Wilk test and visual inspection of histograms. Continuous variables were presented as both mean ± standard deviation and median (25th–75th percentile); categorical variables were expressed as frequency and percentage (n, %). Consultation variables (department or service consulted, reason, and outcome) were analyzed as multiple-response items, as more than one response could be recorded per patient. Percentages for these variables were calculated based on the total number of patients. All analyses were performed on patients with available data for the relevant variable. Admission and discharge diagnoses were available for 243 and 240 patients, respectively, and both were available for 239 patients. Within-patient changes in diagnostic category between admission and discharge were evaluated using McNemar's test, applied separately for each diagnostic category. In an exploratory analysis, the association between diagnostic category change and having received a consultation for diagnostic clarification was examined using the chi-square or Fisher's exact test, as appropriate.

Results

Sample characteristics

A total of 252 patients were included in the study. The mean age was 15.54 ± 1.82 years, and 109 patients (43.3%) were male. Regarding family history, 120 patients (47.6%) had a documented family history of psychiatric illness and 73 (29.0%) had a family history of medical illness; no family history was reported in 85 patients (33.7%). The main descriptive characteristics of the sample are presented in Table 1.

Table 1. Demographic and clinical characteristics of the sample (N=252).

Variable	n (%) or mean ± SD (median; 25th-75th)
Age	15.54 ± 1.82 (16.0; 14.4-16.9)
Sex (Male)	109 (43.3)
Family history of psychiatric illness	120 (47.6)
Family history of medical illness	73 (29.0)
No family history	85 (33.7)
Length of hospitalization (day)	20.52 ± 12.79 (20.0; 10.0-28.3)
Psychopharmacological treatment at admission	209 (82.9)
Polypharmacy at admission	139 (55.2)
Psychopharmacological treatment at discharge	236 (93.7)
Polypharmacy at discharge	186 (73.8)

Note: Family history categories are not mutually exclusive. A patient could have both a psychiatric and a medical family history. "No family history" indicates the absence of both. Polypharmacy was defined as the concurrent use of two or more psychotropic medications from different classes. SD, standard deviation.

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Admission and discharge diagnoses

The diagnostic categories at admission and discharge are presented in Table 2. At admission, the most frequently recorded diagnostic category was depressive disorders (n = 104, 41.3%), followed by psychotic spectrum disorders (n = 41, 16.3%), conduct disorders (n = 37, 14.7%), and bipolar disorder (n = 21, 8.3%). At discharge, depressive disorders remained the most frequent diagnostic category (n = 100, 39.7%). Other commonly recorded categories at discharge included psychotic spectrum disorders (n = 26, 10.3%), conduct disorders (n = 25, 9.9%), neurodevelopmental disorders (n = 23, 9.1%), and anxiety and obsessive-compulsive disorders (n = 23, 9.1%). From admission to discharge, the prevalence of neurodevelopmental disorders increased from 4.4% to 9.1%, and that of anxiety and obsessive-compulsive disorders increased from 4.0% to 9.1%, while psychotic spectrum disorders decreased from 16.3% to 10.3%.

Within-patient analysis showed that 58 patients (24.3%) changed diagnostic category between admission and discharge (Table 2). McNemar's test revealed significant decreases in psychotic spectrum (p<0.001) and conduct disorders (p=0.029), and significant increases in neurodevelopmental (p=0.003) and anxiety and obsessive-compulsive disorders (p=0.001). The most common transition was from conduct disorders to neurodevelopmental disorders (n = 10). In an exploratory analysis, diagnostic category change was not associated with having received a consultation for diagnostic clarification (23.6% vs. 24.6%; p=1.00).

Table 2. Diagnoses recorded at admission and discharge, and within-patient diagnostic category changes.

Diagnostic category	Admission diagnosis, n (%)	Discharge diagnosis, n (%)	Lost category (b)	Gained category (c)	*p*
Depressive disorders	104 (41.3)	100 (39.7)	10	7	0.628
Psychotic spectrum disorders	41 (16.3)	26 (10.3)	16	1	<0.001
Conduct disorders	37 (14.7)	25 (9.9)	16	5	0.029
Bipolar disorder	21 (8.3)	18 (7.1)	7	4	0.546
Other diagnoses	12 (4.8)	20 (7.9)	5	13	0.099
Neurodevelopmental disorders	11 (4.4)	23 (9.1)	1	13	0.003
Anxiety and OC disorders	10 (4.0)	23 (9.1)	1	15	0.001
Feeding and eating disorders	7 (2.8)	5 (2.0)	2	0	0.480

Note: McNemar's test. Diagnoses were determined based on DSM-5-TR criteria. Admission and discharge frequencies are based on all patients with an available diagnosis at each time point (243 at admission and 240 at discharge, of 252 total; percentages are based on N = 252). Values of b, c, and p are based on the 239 patients with diagnoses available at both time points; row totals may therefore differ slightly from the admission and discharge columns. Each patient was assigned a single primary diagnostic category. b = number of patients in the category at admission who were not in the category at discharge; c = number of patients not in the category at admission who were in the category at discharge. A total of 58 patients (24.3%) showed a change in diagnostic category between admission and discharge. OC, obsessive-compulsive.

Psychopharmacological treatments at admission and discharge

At admission, an active psychopharmacological treatment record was present in 209 patients (82.9%). The most frequently used medication class was antipsychotics (n = 190, 75.4%), followed by antidepressants (n = 124, 49.2%). Polypharmacy, defined as the concurrent use of medications from two or more pharmacological classes, was present in 139 patients (55.2%) at admission. At discharge, a psychopharmacological treatment record was documented in 236 patients (93.7%). Antipsychotics remained the most frequently prescribed medication class at discharge (n = 209, 82.9%), followed by antidepressants (n = 155, 61.5%). Polypharmacy at discharge was identified in 186 patients (73.8%). The distribution of psychopharmacological treatments at admission and discharge is presented in Table 3.

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Table 3. Pharmacological treatments at admission and discharge.

Medication class / Variable	At admission, n (%)	At discharge, n (%)
Any psychotropic medication recorded	209 (82.9)	236 (93.7)
Antipsychotics	190 (75.4)	209 (82.9)
Antidepressants	124 (49.2)	155 (61.5)
Anxiolytics	25 (9.9)	27 (10.7)
Mood stabilizers	20 (7.9)	33 (13.1)
Stimulants	17 (6.7)	32 (12.7)
Non-stimulant ADHD medications	6 (2.4)	28 (11.1)
Other psychotropic agents	18 (7.1)	28 (11.1)
Polypharmacy	139 (55.2)	186 (73.8)

Note: A patient may be receiving more than one medication class; therefore, the sum of percentages for medication classes may exceed 100%. Polypharmacy was defined as the concurrent use of two or more psychotropic medications. ADHD, attention-deficit/hyperactivity disorder.

Consultation characteristics

Consultation characteristics are summarized in Table 4. A total of 189 patients (75.0%) underwent at least one consultation during their hospitalization. The mean number of consultations was 3.29 ± 4.22 (median: 2.00; range: 0-31). Three or more consultations were recorded in 105 patients (41.7%), and 125 patients (49.6%) were consulted with more than one department.

Table 4. Consultation characteristics.

Variable	n (%) or mean ± SD (median; range)
Total number of consultations	3.29 ± 4.22 (2.00; 0-31)
Patients with at least one consultation	189 (75.0)
Patients with ≥3 consultations	105 (41.7)
Patients consulted with multiple departments	125 (49.6)
Most frequently consulted departments	
Social services	113 (44.8)
General pediatrics	47 (18.7)
Pediatric neurology	44 (17.5)
Pediatric endocrinology	34 (13.5)
Pediatric cardiology	28 (11.1)
Pediatric gastroenterology	14 (5.6)
Physical therapy and rehabilitation / Orthopedics	13 (5.2)
Reasons for consultation	
Legal or child-protection concerns	87 (34.5)
Diagnostic clarification	72 (28.6)
Acute medical conditions	65 (25.8)
Medical comorbidity	50 (19.8)
Treatment optimization	14 (5.6)
Nutrition- or eating-related problems	14 (5.6)
Consultation outcomes	
Request for further investigation	83 (32.9)
Social/protective report or referral	63 (25.0)

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Variable	n (%) or mean ± SD (median; range)
Initiation of new treatment	57 (22.6)
No pathology identified	27 (10.7)
Follow-up recommendation	24 (9.5)
Treatment modification recommendation	2 (0.8)
No response received	9 (3.6)

Note: Percentages are based on the total cohort (N = 252), not only on consulted patients. A patient may have been consulted with more than one department and for more than one reason; therefore, the sum of percentages for individual departments, reasons, and outcomes may exceed 100%. Repeated consultations with the same department were counted once per patient. SD, standard deviation.

The most frequently consulted department was Social Services (n = 113, 44.8%), followed by General Pediatrics (n = 47, 18.7%), Pediatric Neurology (n = 44, 17.5%), Pediatric Endocrinology (n = 34, 13.5%), and Pediatric Cardiology (n = 28, 11.1%). The most common reason for consultation was legal or child-protection concerns (n = 87, 34.5%), followed by diagnostic clarification (n = 72, 28.6%), acute medical conditions (n = 65, 25.8%), and medical comorbidity (n = 50, 19.8%).

Regarding consultation outcomes, the most frequent category was a request for further investigation (n = 83, 32.9%), followed by social/protective reports or referrals (n = 63, 25.0%), initiation of new treatment (n = 57, 22.6%), no pathology identified (n = 27, 10.7%), and follow-up recommendations (n = 24, 9.5%). Consulted departments, reasons for consultation, and consultation outcomes were evaluated as multiple-response variables; therefore, the sum of the percentages may exceed 100%.

Discussion

In this retrospective single-center study, we aimed to characterize the consultation needs of 252 children and adolescents hospitalized in a child and adolescent psychiatry inpatient unit over a one-year period, with particular attention to which medical and social services were most frequently involved in their care and how often these consultations led to actionable clinical changes. Three findings stand out. First, three-quarters of the patients (75.0%) required at least one consultation during their hospitalization, and nearly half (41.7%) required three or more, indicating that multidisciplinary involvement is the rule rather than the exception in this population. Second, social services emerged as the single most frequently consulted department (44.8%), and legal or child-protection concerns were the leading reason for consultation (34.5%), highlighting that inpatient psychiatric care for children and adolescents extends substantially beyond clinical treatment to encompass protective and welfare-related responsibilities. Third, we observed clinically meaningful shifts between admission and discharge diagnoses, most notably more than two-fold increases in neurodevelopmental disorders and in anxiety and obsessive-compulsive disorders, alongside a decline in psychotic spectrum diagnoses, suggesting that the inpatient stay served not only as a treatment intervention but also as an opportunity for diagnostic refinement. Together, these findings underscore the multifaceted role of the child and adolescent psychiatry inpatient setting, which functions simultaneously as a treatment unit, a diagnostic clarification platform, and a hub for medical and social coordination.

The consultation burden observed in our cohort suggests that multidisciplinary involvement is a common feature, rather than an exceptional event, of child and adolescent psychiatric inpatient care. In a contemporary mixed-age Australian tertiary hospital, 31% of psychiatric inpatients were reported to require at least one medical consultation, a figure substantially lower than the proportion we observed despite their broader age range [7]. Within a comparable Turkish context, a mean of 1.15 requested consultations per child and adolescent inpatient has been described, with primary care, neurology, and dietetics dominating the referral pattern [3]. Our markedly higher consultation density likely reflects the institutional profile of our setting, a 20-bed tertiary unit within a large city hospital in Ankara that

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receives nationwide referrals and concentrates clinically complex presentations, together with the developmental complexity of hospitalized children and adolescents, in whom medical, psychosocial, and family-related needs frequently converge during a single admission. This interpretation aligns with systematic review findings positioning pediatric mental health liaison services as central to bridging acute and community care [2]. It also aligns with work linking complex neurodevelopmental and somatic comorbidities to extended admissions and underscoring the need for integrated multidisciplinary planning [1]. Children with psychiatric diagnoses additionally exceed peers in cross-sector healthcare use, reinforcing that early-life psychopathology systematically expands service demand [4]. Additional factors may also have contributed to this pattern. The relatively long length of stay may have increased the opportunity for consultation requests. In addition, the threshold for requesting social service evaluations as part of routine safeguarding practice may be low in our unit. Finally, the availability of pediatric subspecialties within the same hospital campus may have facilitated referrals. These findings suggest that adequately resourced consultation-liaison structures may be an important component of care planning in this setting.

The prominence of social services and child-protection concerns in our consultation profile situates child and adolescent inpatient psychiatry at the intersection of clinical care, social welfare, and legal protection systems. In our setting, these consultations largely concern processes operating under protective welfare mechanisms, namely family court applications for care, health, and counselling measures, and allocations of social or material support. This pattern aligns with international evidence: a whole-of-population study from South Australia reported that 44.9% of mental health-related adolescent hospitalizations involved individuals with prior child protection contact [6], closely paralleling the proportion at which legal or protective concerns drove consultations in our cohort. Linked welfare and electronic health record data have similarly shown that adolescents in protective custody display distinct healthcare utilization patterns [11], and a systematic review and meta-analysis identified social adversity and prior welfare involvement among the consistent determinants of service contact in child and adolescent psychiatric care [5]. Clinical assessment of maltreated children is itself recognized as more time-intensive and reliant on direct engagement with protective services and legal authorities, an interface most often navigated through formal consultations [12]. A smaller subset of patients in our unit is admitted involuntarily under prosecutorial orders, which points to the distinct domain of involuntary child and adolescent psychiatric admission [8,13]. These findings collectively position the inpatient unit as a node within a broader child-welfare infrastructure, which may require embedded social-work capacity, defined legal pathways, and procedures aligned with child-protection responsibilities.

The diagnostic changes observed between admission and discharge suggest that hospitalization functions not only as a treatment intervention but also as an opportunity for diagnostic clarification. A large-scale study conducted across three clinical settings in more than 10,000 adult patients demonstrated that diagnostic stability was highest in the inpatient setting compared with emergency and outpatient settings, an effect attributed to prolonged observation, the ability to obtain collateral information, and extended assessment time [9]. The same dynamic has been described in adolescent inpatients, in whom internalizing disorders are identified more consistently during admission than externalizing presentations, a pattern that aligns with the marked increase in anxiety and obsessive-compulsive disorders observed in our cohort [10]. Diagnostic transitions into and out of the psychotic spectrum have also been shown to be common in adolescent populations; a national follow-up study reported that more than half of adolescents admitted with a bipolar diagnosis later transitioned to alternative diagnoses over time [14]. This pattern is directly consistent with the recommendation that, in first-episode psychosis, diagnoses other than schizophrenia and bipolar disorder should be considered provisional [15]. In an exploratory analysis, diagnostic category change was not associated with having received a consultation for diagnostic clarification. This analysis was limited by the small size of the

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subgroup; moreover, such consultations, particularly neurology referrals, are often requested to exclude an organic cause rather than to revise the psychiatric diagnosis. Within this literature, the decline in psychotic spectrum diagnoses in our cohort likely reflects the relocation of adolescents with atypical or transient psychotic features into more appropriate categories under continuous observation, while the more than two-fold increases in neurodevelopmental and in anxiety and obsessive-compulsive disorders may reflect underlying psychopathology not captured during pre-admission evaluations. Taken together, these findings suggest that an adequate inpatient stay should be regarded not as a standalone care parameter but as a clinical asset that contributes to diagnostic accuracy.

Psychotropic medication use and polypharmacy increased from admission to discharge in our study, consistent with reports from other tertiary child and adolescent psychiatry inpatient settings in Türkiye [16]. The most marked change was the more than fourfold increase in non-stimulant ADHD medications, together with a near doubling of stimulant use. This pattern may partly reflect the diagnostic transitions observed in our cohort, particularly the shift from conduct disorders to neurodevelopmental disorders. Externalizing symptoms are known to delay the recognition of underlying neurodevelopmental disorders [17,18]. In this context, the inpatient stay appears to have enabled the recognition of underlying neurodevelopmental psychopathology and the initiation of disorder-specific pharmacotherapy.

The findings of this study should be considered in light of several limitations. First, the single-center, retrospective, and descriptive design precludes causal inference and constrains generalizability; although our center is a large tertiary unit that receives nationwide referrals, findings may differ in centers with other bed capacities, service configurations, and referral patterns. Second, all diagnoses were established through clinical assessment using DSM-5-TR criteria, without the use of structured diagnostic interview instruments; while this approach reflects real-world clinical practice, it represents a measurement reliability limitation for categorical changes between admission and discharge diagnoses. Third, because the admission diagnosis was a provisional diagnosis made in an acute setting, part of the observed change may reflect the transition from a provisional to a definitive diagnosis rather than diagnostic revision in the strict sense. In addition, because no post-discharge follow-up data were available, the temporal stability of the diagnostic revisions we observed remains uncertain, and the extent to which the decline in psychotic spectrum diagnoses represents durable diagnostic clarification or is subject to further transitions during follow-up cannot be determined from this dataset. Despite these limitations, the relatively large sample covering a consecutive one-year cohort and the detailed consultation documentation support the descriptive validity of the study.

Conclusion

This retrospective single-center analysis identifies three interconnected patterns shaping the function of the child and adolescent psychiatric inpatient unit. First, multidisciplinary involvement in this population appears to be a common feature rather than an exceptional requirement, suggesting that well-resourced consultation-liaison capacity is an important element of service planning. Second, inpatient care extends beyond clinical treatment to interface closely with the child protection system, which may require embedded social-work capacity, defined legal pathways, and procedures aligned with child-protection responsibilities. Third, hospitalization serves not only as a treatment intervention but also as a meaningful opportunity for diagnostic clarification, suggesting that an adequate inpatient stay should be regarded not as a standalone care parameter but as a clinical asset that contributes to diagnostic accuracy. Taken together, these findings suggest that capacity planning may need to jointly address treatment, diagnostic clarification, and medical-social coordination functions. Future multicenter and prospective studies could test the consistency of these patterns across different referral contexts and clarify the long-term impact of discharge diagnoses and consultation-based interventions on clinical trajectories.

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Conflict of interest

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

Data availability statement

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

References

1. Bond L, Palavarapu R, Gordon A, Oketah N, Moore K, Barrett E, et al. Prolonged length of hospital stay and delayed discharges among patients referred to child psychiatry liaison services: A 5-year retrospective analysis. J Pediatr. 2025;286:114700. doi: 10.1016/j.jpeds.2025.114700.
2. Avery M, Kirk S, Pryjmachuk S. A mixed methods systematic review of the impact of paediatric mental health liaison services on children and young people's mental and physical health, stakeholder experience, and service-level outcomes. Eur Child Adolesc Psychiatry. 2025;34(12):3749-67. doi: 10.1007/s00787-025-02815-5.
3. Dikeç G, Baysan Arabacı L, Uzunoğlu G. An analysis of the consultations requested in the child and adolescent clinic of a regional psychiatric hospital [in Turkish]. ACU Sağlık Bil Derg. 2020;11(3):418-22. doi: 10.31067/0.2019.193.
4. Agnafors S, Kjellström AN, Björk MP, Rusner M, Torgerson J. Health care utilization in children and adolescents with psychiatric disorders. Acta Psychiatr Scand. 2023;148(4):327-37. doi: 10.1111/acps.13590.
5. Walker S, Barnett P, Srinivasan R, Abrol E, Johnson S. Clinical and social factors associated with involuntary psychiatric hospitalisation in children and adolescents: A systematic review, meta-analysis, and narrative synthesis. Lancet Child Adolesc Health. 2021;5(7):501-12. doi: 10.1016/S2352-4642(21)00089-4.
6. Judd J, Pilkington RM, Malvaso C, Procter AM, Montgomerie A, Anderson JJ, et al. Mental health-related hospitalisations of adolescents and their contact with child protection services to age 11 years, South Australia: A whole-of-population descriptive study. Med J Aust. 2024;221(10):540-5. doi: 10.5694/mja2.52489.
7. Holland C, Hudson-Jessop P. Quantifying consultations to medical specialties during psychiatric inpatient admissions in a Queensland tertiary hospital. Australas Psychiatry. 2023;31(1):65-8. doi: 10.1177/10398562221131160.
8. Kandsperger S, Ecker A, Schleicher D, Wirth M, Brunner R, Jarvers I. Emergency-related inpatient admissions in child and adolescent psychiatry: Comparison of clinical characteristics of involuntary and voluntary admissions from a survey in Bavaria, Germany. Eur Child Adolesc Psychiatry. 2024;33(1):303-13. doi: 10.1007/s00787-023-02154-3.
9. Baca-Garcia E, Perez-Rodriguez MM, Basurte-Villamor I, Fernandez del Moral AL, Jimenez-Arriero MA, Gonzalez de Rivera JL, et al. Diagnostic stability of psychiatric disorders in clinical practice. Br J Psychiatry. 2007;190:210-6. doi: 10.1192/bjp.bp.106.024026.
10. Blázquez A, Ortiz AE, Castro-Fornieles J, Morer A, Baeza I, Martínez E, et al. Five-year diagnostic stability among adolescents in an inpatient psychiatric unit. Compr Psychiatry. 2019;89:33-9. doi: 10.1016/j.comppsych.2018.11.011.
11. Beal SJ, Mara CA, Nause K, Ammerman RT, Seltzer R, Jonson-Reid M, et al. Effects of child protective custody status and health risk behaviors on health care use among adolescents. Acad Pediatr. 2022;22(3):387-95. doi: 10.1016/j.acap.2021.05.016.

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12. Zeanah CH, Humphreys KL. Child abuse and neglect. J Am Acad Child Adolesc Psychiatry. 2018;57(9):637-44. doi: 10.1016/j.jaac.2018.06.007.

13. Stylianidou CA, Douzenis A, Giannopoulou I. Involuntary psychiatric hospitalisation of children and adolescents: A retrospective analysis of Athens public prosecutor's office for minors records. Eur Child Adolesc Psychiatry. 2026;35(1):303-8. doi: 10.1007/s00787-025-02821-7.

14. Repo A, Kaltiala R, Holttinen T. Hospital-treated bipolar disorder in adolescence in Finland 1980-2010: Rehospitalizations, diagnostic stability, and mortality. Bipolar Disord. 2024;26(8):793-800. doi: 10.1111/bdi.13486.

15. Peralta D, Janda L, García de Jalón E, Moreno-Izco L, Sánchez-Torres AM, Cuesta MJ, et al. Long-term diagnostic stability, predictors of diagnostic change, and time until diagnostic change of first-episode psychosis: A 21-year follow-up study. Psychol Med. 2024;54(7):1329-38. doi: 10.1017/S0033291723003173.

16. Büber A, Gavcar EG, Başay Ö, Ünlü G, Kabukçu Başay B, Şenol H. Prevalence and factors affecting the use of antipsychotics and antipsychotic polypharmacy in a child and adolescent psychiatry inpatient service. J Child Adolesc Psychopharmacol. 2023;33(2):69-75. doi: 10.1089/cap.2022.0065.

17. Kentrou V, de Veld DM, Mataw KJ, Begeer S. Delayed autism spectrum disorder recognition in children and adolescents previously diagnosed with attention-deficit/hyperactivity disorder. Autism. 2019;23(4):1065-72. doi: 10.1177/1362361318785171.

18. Mandy W, Midouhas E, Hosozawa M, Cable N, Sacker A, Flouri E. Mental health and social difficulties of late-diagnosed autistic children, across childhood and adolescence. J Child Psychol Psychiatry. 2022;63(11):1405-14. doi: 10.1111/jcpp.13587.

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