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# Complaints, diagnosis, follow-up, and treatment of patients applying to 0-6 years old child psychiatry and developmental pediatrics outpatient clinic

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#### Abstract

**Aim:** By studying children aged 0-6 with outpatient and health board admissions, we aimed to contribute valuable insights to the literature on early childhood support, focusing on admission complaints, diagnosis distribution, treatments, and patient follow-ups.

**Materials and Methods:** Between 01.08.2022 and 01.02.2023 patients aged 0-6 from Diyarbakır Gazi Yaşargil Hospital's Pediatric and Adolescent Mental Health and Developmental Pediatrics clinic, including those seeking health board evaluations, were studied. This prospective analysis examined patient demographics, complaints, diagnoses, health board interactions, treatments, and additional medical conditions. Patient follow-up numbers were scanned from the system for analysis before concluding the retrospective study.

**Results:** Of the 600 patients included in the study, 337 patients came to the health board outpatient clinic, 160 to the child psychiatry outpatient clinic, and 103 to the developmental pediatrics outpatient clinic. 220 (36.7%) were female and 380 (63.3%) were male. The most common presenting complaints of the patients were speech delay, hyperactivity, report renewal, and irritability. In our study, the presenting diagnoses were global developmental delay, isolated speech delay, autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), articulation disorder, behavioral problems, stuttering, and specific learning disorder (SLD) with decreasing frequency. It was observed that 77.5% of the patients had no follow-up and the highest rates of follow-up were ADHD (67.4%) and ASD (56.9%). It was observed that 87.5% of the patients with a health board application had no follow-up.

**Conclusion:** Determining the diagnosis, follow-up, and treatments of the patients may guide the areas in which child psychiatrists and developmental pediatricians should work more intensively in the future. Early diagnosis, screening initiatives, awareness campaigns, and training for parents, teachers, and health professionals, along with telehealth, multi-disciplinary strategies, and school collaborations, enhance health board applications and patient follow-up.

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# Introduction

Early childhood is one of the most critical phases in an individual's life, and the experiences in this period can shape their later life. This period, which usually lasts from birth to 6 years of age, lays the foundation for an individual's physical, mental, emotional, and social development. The brain develops rapidly during this period and the rapid development of the brain leads to important changes in mental areas such as language development and the acquisition of problem-solving skills. Monitoring developmental delays in early childhood is very important as it enables early diagnosis, intervention, and support. This period is characterized by high levels of brain plasticity, which means the brain's ability to adapt and reorganize itself. Early intervention takes advantage of this plasticity, allowing for more successful restructuring and development of neural pathways. Early identification of developmental delays allows for the creation of specialized educational strategies to meet the child's specific needs, contributing to the child's ability to participate in social activities and build relationships with peers. This promotes a sense of belonging and social inclusion, which is essential for healthy social development [1]. There are studies evaluating the reasons for the presentation of children in this age group. In studies evaluating the frequency of sociodemographic and men-

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tal diagnoses in children aged 0-18 years who presented to child and adolescent psychiatry outpatient clinics in our country, it was reported that 50% of the children in the 0-6 age group had mental illness [2]. Karabekiroğlu et al. reported that 15-45% of children aged 1-4 years had any psychiatric or developmental problem [3]. In another study conducted in Turkey, it was reported that 71.6% of patients aged 0-5 years had a clinical diagnosis, and speech delay (43.5%), irritability-frustration (25.6%) and hyperactivity (21.8%) were the most common reasons for presentation and the most common psychiatric diagnoses were stimulus deficiency (14.5%), adjustment disorder (13.2%), autism spectrum disorder (ASD) (8.8%), global developmental delay (GDD) (7.9%), and attention deficit hyperactivity disorder (ADHD) (5.7%) [4]. In a study conducted in our country examining the diagnoses of patients presenting to the developmental pediatrics outpatient clinic, it was observed that speech delay ranked first with 23.1%(n:444) [5]. One of the study areas of child psychiatry and developmental pediatrics is children with special needs. In addition to organizing the treatment of children with special needs, it is necessary to know the social and educational rights and practices granted to these children so that patients can be guided correctly. Mental deficiency and developmental delays are among the most common causes of psychiatric disorders in children and adolescents who apply to the health board for special needs report for children (SNRC), and autism spectrum disorders and specific learning disabilities are among the other most common causes of application [5]. In a study published by the Turkish Statistical Institute (TÜİK) in 2011, it was reported that 4.9% of the disabled people registered in the National Disability Database were in the 0-6 age group, 16.2% in the 7-14 age group and 1.2% in the 15-24 age group [6].

To date, studies have been conducted in different centers in our country to examine the sociodemographic characteristics, presenting complaints, and diagnoses of patients presenting to child and adolescent psychiatry and developmental pediatrics outpatient clinics [2,7,8]. With appropriate support provided in early childhood, it is possible to help children show their potential at the highest level and develop healthily. Therefore, we aimed to add information to the literature by planning a study including children aged 0-6 years with outpatient clinic and health board admissions together and examining the complaints at admission, distribution of diagnoses, treatments, and follow-up of health board patients.

# Materials and Methods

Patients aged 0-6 years who applied to the Child and Adolescent Mental Health and Diseases and Developmental Pediatrics outpatient clinic of Diyarbakır Gazi Yaşargil Training and Research Hospital between 01.08.2022 and 01.02.2022, including those who applied for a health board, were included in the study. The study was planned prospectively. Our study is a cross-sectional study. In this context, it was decided by the Department of Biostatistics to include all patients admitted within 6 months in the study. In our study, written informed consent was obtained from the patients and their parents after the study procedures were explained in detail. The gender, age, complaints, diagnoses, applications to the health board, number of follow-ups, treatments, additional psychiatric diseases, and additional medical diseases of the patients were analyzed. The follow-up numbers of the patients were scanned from the system before the prospective study was finalized. Psychiatric diagnoses were determined according to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). The patients diagnosed with isolated speech delay and global developmental delay (GDD) were administered the Ankara Developmental Screening Inventory (AGTE). Approval for the study was obtained from the Diyarbakır Gazi Yaşargil Training and Research Hospital Non-Interventional Clinical Research Ethics Committee dated 22.07.2022/143.

### Statistical analysis

Statistical analysis was performed with SPSS 22.0 (Statistical Package for the Social Sciences, SPSS Inc, Chicago, USA). The distribution of the characteristics related to the complaints and diagnoses in the children included in the study was determined by descriptive statistics using numbers, rates, percentages, and standard deviations. The chi-square test was used to evaluate whether there was a significant difference between the diagnoses received by boys and girls and whether there was a significant difference between the expected value was below, Fisher's Exact Test was used. Independent t-test was used to compare the ages of the male and female genders. p<0.05 was considered statistically significant.

# Results

Of the 600 patients included in the study, 337 patients came to the health board outpatient clinic, 160 to the child psychiatry outpatient clinic, and 103 to the developmental pediatrics outpatient clinic. 220 (36.7%) were girls and 380 (63.3%) were boys. The youngest patient was 1 month old and the oldest was 71 months old. Ages were normally distributed. There was no significant difference in age between boys and girls (p = 0.285). (CI 95%: Lower: -1.192; Upper: 4.050). The mean age of all patients was  $44.56 \pm 15.75$  months,  $43.65 \pm 16.13$  months for girls, and  $45.08 \pm 15.53$  months for boys. There were health committee applications in 337 (56.2%) and none in 263 (43.8%). Follow-ups were observed in 135 (22.5%). Regarding their treatment, 265 (44.2%) received psychosocial recommendations, 294 (49%) received special education and 41 (6.8%) received medical treatment (Risperidone n=36, Psychostimulant n=5). ADHD and behavioral problems were initiated most frequently. The first choice was risperidone. Among the additional medical diseases, 36 (6.0%) had genetic syndromes, 22 (3.7%) had epilepsy, 20(3.3%) had cerebral palsy and 5(0.8%) had hearing loss. Among the additional psychiatric disorders, 14 (2.3%) had articulation disorder, 9 (1.5%) had autism spectrum disorder, 5 (0.8%) had attention deficit hyperactivity disorder, and 3 (0.5%) had enuresis nocturne (Table 1).

The complaints of the patients in order of frequency; speech delay (39.2%), hyperactivity (8.2%), report renewal (7.3%), irritability-violence (6.7%), report removal (6.7%),

**Table 1.** Characteristics of patients aged 0-6 years admitted to the outpatient clinic.

**Table 3.** Psychiatric diagnoses of children aged 0-6 years by gender.

	N (%)
Gender	
Male	380 (63.3)
Girl	220 (36.7)
Health board application	
Yes	135 (22.5)
No	465 (77.5)
Patient Follow-up	
Yes	135 (22.5)
No	465 (77.5)
Treatment	
Psychosocial recommendations	265 (44.2)
Special education	294 (49.0)
Medical treatment	41 (6.8)
Additional medical illness	
Genetic syndrome	36 (6.0)
Epilepsy	22 (3.7)
Cerebral Palsy	20 (3.3)
Other	8 (1.4)
Hearing loss	5 (0.8)
None	509 (84.8)
Additional psychiatric illness	
Articulation disorder	14 (2.3)
ASD	9 (1.5)
GDD	6 (1.1)
ADHD	5 (0.8)
Enuresis nocturna	3 (0.5)
None	562 (93.2)
ASD: Autism Spectrum Disorders ADHD: Attention	

ASD: Autism Spectrum Disorders, ADHD: Attention

Deficit-Hyperactivity Disorder, GDD: General Developmental Delay.

 Table 2. Presenting complaints of patients aged 0-6 years.

	N (%)
Speech delay	235 (39.2%)
Hyperactivity	49 (8.2%)
Report renewal	44 (7.3%)
Report extraction	40 (6.7%)
Irritability	40 (6.7%)
Motor delay	32 (5.3%)
Articulation disorder	27 (4.5%)
Stuttering	25 (4.2%)
Avoiding eye contact	24 (4.0%)
Objection to the report	20 (3.3%)
Other	19 (3.2%)
Diaper report	15 (2.5%)
Enuresiz nocturna	10 (1.7%)
Fear	9 (1.5%)

motor delay (5.3%), articulation disorder (4.5%), stuttering (4.2%), not making eye contact-not looking at the

Diagnosia	Gender		n	
Diagnosis	Male Female		р	
Isolated speech delay	95	38	0.028 <sup>*b</sup>	
(n,%)	25%	17.3%		
General developmental delay	111	86	0.013 <sup>*b</sup>	
(n,%)	29.2%	39.1%		
Stuttering	24	2	0.002 <sup>*a</sup>	
(n,%)	6.3%	0.9%		
Enuresis nocturna	4	6	0.123 <sup>a</sup>	
(n,%)	1.1%	2.7%		
ASD	34	17	0.606 <sup>b</sup>	
(n,%)	8.9%	7.7%		
Behavioural problems	20	8	0.363 <sup>b</sup>	
(n,%)	5.3%	3.6%		
ADHD	42	4	0.001 <sup>*a</sup>	
(n,%)	11.1 %	1.8%		
SLD	2	4	0.125 <sup>a</sup>	
(n,%)	0.5%	1.8%		
Articulation disorder	16	13	0.977 <sup>b</sup>	
(n,%)	4.2%	5.9%		
Normal development	17	20	0.256 <sup>b</sup>	
(n,%)	4.5%	9.1%		
Masturbation	2	8	0.004 <sup>*a</sup>	
(n,%)	0.5%	3.6%		
Other	5	6	0.214 <sup>b</sup>	
(n,%)	1.3%	% 2.7		
Anxiety disorder	8	8	0.472 <sup>b</sup>	
(n,%)	2.1%	3.6%	0.4/2	

ASD: Autism spectrum disorder, SLD: Specific Learning Disorder ADHD: Attention Deficit Hyperactivity Disorder a: Fisher's exact test b: Chi-square test \* p<0.05.

**Table 4.** Outpatient clinic follow-ups of patients whoapplied to the health board.

Health board application	Patient Follow up		
	Yes (n,%)	No (n,%)	р
Yes (n,%)	42 (12.5)	295(87.5)	0.001
No (n,%)	93 (35.4)	170 (64.6)	

chi-square test p<0.05.

name (4%), objection to the report (3.3%), diaper report (2.5%) masturbation (1.8%), fear (1.5%). Other complaints (3.2%) were nail-biting, hair plucking, salary support, and inability to fall asleep and maintain sleep (Table 2).

The diagnoses received by the patients in descending order of frequency were: global developmental delay (32.8%), isolated speech delay (22.2%), ASD (8.5%), ADHD (7.7%), articulation disorder (4.8%), behavioral problems (4.7%), stuttering (4.3%), anxiety disorder (2.7%), other (1.8%)and specific learning disorder (SLD) (1.0%). 6.2% had no psychiatric diagnosis. 9.8% of those with a health board application did not receive any diagnosis. The distribution of diagnoses according to gender is given in Table 3.

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The rates of follow-up of the patients according to their diagnoses were ADHD 67.4%, ASD 56.9%, enuresisencopresis 50%, masturbation 40%, SLD 33.3%, isolated speech delay 27.8%, general developmental delay 10.7% and stuttering 3.8%. Articulation disorders and anxiety disorders were not followed up. The relationship between the health board patients and whether the patients had follow-up or not was found to be statistically significant (p=0.001). It is shown in Table 4.

# Discussion

In our study, 63.3% of the patients who applied to the child and adolescent mental health diseases outpatient clinic and the developmental pediatrics outpatient clinic, which is a new branch of child health diseases in our country, were male. It is observed in the literature that boys are generally more common in early childhood admissions. In studies conducted in four different child psychiatry clinics in our country, it was reported that cases between the ages of 0-18 years consisted of boys with rates ranging from 61.5%to 66.9% [5,9]. In the USA, 60.8% of 40639 children receiving mental health services were found to be male [10]. Seven et al. found a male sex ratio of 65% in a study conducted on cases aged 0-5 years, similar to our study. Aras et al. found a male rate of 72.5% in the age group 1-6 years in their study conducted in our country [11]. A better understanding of gender-specific neurodevelopmental differences will help in early diagnosis and intervention. The most common presenting complaints of the patients were speech delay, hyperactivity, report renewal, irritability-frustration, and report removal. In a study conducted in Trabzon province, the complaints at the age of 0-6 years were found to be speech disorder, misbehavior, disobedience, hyperactivity, destructive behaviors, sleep disturbance, and sibling jealousy, respectively [12]. In a study conducted in Kahramanmaraş, similar complaints were observed [4]. Although the type of application to the health board is specified in the regulation on SNRC as the pediatrician or the relevant specialist physician making the evaluation and referring to SNRC authorized physician, or if there is no follow-up physician, SNRC authorized physician directly evaluating and referring to the health board, as seen in our study, it was observed that 6.7% of the patients' first application complaint was to issue a report. In their study, Uygur et al. asked the participants about the common method of application to the health board in their hospitals and found that 73.1% of the patients applied directly to the health board by their legal guardian without any preliminary evaluation by a physician. When it was analyzed whether the patients who applied to the health board were followed up or not, it was seen that 87.5% of them were not followed up. It is possible to infer from this result that the patients did not apply for treatment and follow-up for their current diagnoses, but only to obtain and use the report. Özbaran and Köse, in their study sharing their six-year experience with the disability health board, stated that it was determined that some institutions encouraged the legal guardians of children to obtain reports to benefit from the financial allowances of the state and that the same people tried to appear as the guardians of many different children [13]. In this respect, direct application to the health board in violation of the regulation increases the workload on the health board and makes it open to abuse by the aforementioned individuals. It was observed that 9.8% of those who applied to the health board did not receive any diagnosis. In a study conducted in Bolu province, 3.6% of the cases applying for SNRC were reported as having "no special needs". When psychiatric diagnoses were examined, it was found that 16.9% did not have any psychiatric diagnosis [14]. In another study, it was shown that 27.7% of the applicants to the health committee had normal intelligence levels [15].

The presenting diagnoses in our study were global developmental delay, isolated speech delay, ASD, ADHD, articulation disorder, behavioral problems, stuttering, anxiety disorder, other and specific learning disorders (SLD). In a study conducted in a child psychiatry clinic in Turkey, stimulus deficiency, adjustment disorder, ASD, GDD, ADHD, stuttering, psychosocial deprivation, boundarysetting problems, articulation disorder, and separation anxiety were reported [7]. In a study examining the distribution of diagnoses in a developmental pediatrics outpatient clinic, speech delay was found to be the most common diagnosis with 23.1% (n: 444). The differences in our study may have been influenced by the methodological differences used, especially the sample size. When the difference in diagnoses between genders was examined, it was found to be statistically significant that the prevalence of GDD, isolated speech delay, stuttering, and ADHD was higher in boys and childhood masturbation (CM) was higher in girls. In previous studies, it has been found that GDD, isolated speech delay, and ADHD are more common in males [4,16-19]. In the childhood age group, developmental delay is observed in 12-16% [20]. In addition to many factors, male gender is among the factors that increase the risk for developmental delay [19]. Although there is no consensus on the cause of isolated speech and language problems, some risk factors have been reported. Gender is accepted as a risk factor and it is known that the risk is three times higher in male. These studies have attributed this finding to a later maturation of the central nervous system in boys compared to girls [21]. In contrast to our study, Uzun Cicek et al. found no difference between genders in speech delay [22]. Epidemiologic studies have reported that the prevalence of ADHD in preschool children is between 2-7% and higher in the male gender [23]. Although there is no clear epidemiologic data on the prevalence of CM, it has been reported that it starts to be observed in the first 2 months of life, the prevalence increases around the age of 4 years in preschool children and is more common in girls than boys [24]. In our study, 6.2% did not receive any psychiatric diagnosis. In previous studies, Aktepe et al. reported that 87.3% of the cases had at least one diagnosis and the remaining 12.7% had normal characteristics, and Aras et al. reported that 85.1% of the cases had at least one diagnosis and the remaining 14.9% had normal characteristics [8, 11]. When compared with these two studies, the lower proportion of cases evaluated as normal in our study may be related to the possibility that more severe cases were brought to our clinic compared to the complaints at the pediatric mental health outpatient clinics of the other two university hospitals, the fact that the patients were admitted from very different socioeconomic levels, and the inclusion of health board patients in the sample. In addition, considering the inter-regional variability in the view of psychiatric diseases in our country and the inter-regional differences in psychopathology in families, especially in mothers, there may be different sociocultural reasons for the high rate in our study.

It was observed that 77.5% of the patients in our study had no follow-up. Considering the importance of early diagnosis and follow-up in early childhood, this rate was found to be very high. When the rate of follow-up of the patients according to their diagnosis was analyzed, it was observed that ADHD (67.4%) and ASD (56.9%) were the most common diseases. When follow-up studies on ASD and ADHD were examined, it was observed that the followup rates were high [25]. When ADHD is considered, it has been reported that children whose symptoms are evident at an early age have more impairment in language and cognitive areas, more mental disorders, more pronounced psychosocial and academic impairment, and more resistant behavioral problems in school years [26]. It is important to recognize, address, and follow up ADHD in the preschool period to reduce the problems that the disorder will cause in the following years. On the other hand, the diagnosis of ASD also affects the family in many ways. The increased material and emotional needs of the child diagnosed with ASD and the responsibility to meet these needs can make life difficult for families. The high follow-up rates of these disorders can be explained by their high psychosocial destructive effects on the family and the fact that early diagnosis and follow-up have great effects on treatment. The follow-up of patients diagnosed with isolated speech delay and general developmental delay was found to be very low. The fact that the majority of the patients with these diagnoses were health board patients and the families applied only for the report may have been the reason for this. However, physician follow-up of patients diagnosed with developmental delay and isolated speech delay in children aged 0-6 years is of great importance for early diagnosis, individual planning, family education, and monitoring the progress of development. Methods such as early diagnosis and screening programs, awareness-raising campaigns and education programs among parents, teachers, and health professionals, telehealth and remote follow-up, multidisciplinary approach, and school and nursery collaboration can be used to increase physician follow-up of patients.

When the treatments of the patients were examined, 44.2% were offered psychosocial recommendations, 49% were offered special education, and 6.8% were offered medical treatment. In a study in which 153 patients were in the 0-6 age group, 26.1% were offered counseling, and 12.4% were offered special education [27]. In the presence of any psychopathology in the preschool period, family intervention is at the top of the treatment options. In a systemic review of family interventions, parent education was found to be very effective in terms of treatment in children with

conduct disorder between the ages of 3-8 years. When diagnosing mental symptoms, developmental processes, familial stressor factors, mental status of the caregiver, and underlying medical diseases should be excluded, and then the first option in the treatment algorithm of preschool children is informing the family and family education [28]. In one study, psychotropic drugs were initiated in 20.8% of patients, and in another study, the rate of psychotropic initiation in patients aged 0-6 years was found to be 24.2% [4,27]. The reason for our difference with the literature may be differences in the distribution of diagnoses and several cases.

In our study, 15.2% were found to have additional medical diseases. The most common comorbidities were genetic syndromes, epilepsy, and cerebral palsy. In a study in which health boards were examined, it was found that these patients had additional medical diagnoses with diagnoses such as epilepsy, cerebral palsy, and loss of motor function [15]. In another study, the rate of non-psychiatric comorbidities was 18% and the most common accompanying medical conditions were epilepsy, Down syndrome, cerebral palsy, and hypothyroidism [4]. In our study, the rate of comorbid psychiatric illness was found to be 6.8%. When the cases with more than one diagnosis were evaluated in Karabekiroğlu et al. study, it was found that more than one diagnosis was made in a total of 73 cases (13.6%)including 6 cases aged 0-6 years, 36 cases aged 7-11 years and 31 cases aged 12-18 years [29]. It has been reported that the presence of psychiatric comorbidities increases the severity of the disease, causes chronicization, and leads to more significant deterioration in psychosocial functionality and quality of life [29].

Although our study was planned prospectively, the fact that the sociodemographic data of children and families were not evaluated in detail, the data belonging to a single center, and the results of the methods used to make the diagnosis were not given in the study can be considered as limitations of the study. However, this study is the first study conducted in our country on the reasons and diagnoses of preschool children admitted to child and adolescent mental health and diseases and developmental pediatrics outpatient clinics by evaluating the patients together. To the best of our knowledge, there is no study in the literature investigating the follow-up of health board patients.

### Conclusion

In our study, in children aged 0-6 years, the number of applications to the child psychiatry health board outpatient clinic, and developmental pediatrics clinic was approximately 2 times higher in boys, and the most common complaints were speech delay, hyperactivity, report renewal, irritability-anxiousness, It was observed that the most common clinical diagnoses were GGG, isolated speech delay, stuttering and ADHD in boys and childhood masturbation (CHM) in girls, 77.5% of the patients had no follow-up, and ADHD (67.4%) and ASD (56.9%) were the diseases with the highest rate of follow-up according to the diagnosis. In addition, it was determined that 87.5% of the patients with a health board application had no follow-up. Similar studies conducted by clinics in different

geographical regions of our country will provide clarification of frequently encountered diagnoses and treatments. In addition, it may guide in which areas child psychiatrists and developmental pediatricians should work more intensively in the future. Regulation of health board applications and follow-ups will be in the best interest of both the patient and the physician. To increase the follow-up of patients, it would be beneficial to use methods such as early diagnosis and screening programs, awareness-raising campaigns and training programs among parents, teachers, and health professionals, telehealth and remote followup, multidisciplinary approach, and school and nursery cooperation.

#### Disclosure

Authors declared no financial support.

# $Conflict \ of \ interest$

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Ethical approval

Approval for the study was obtained from the Diyarbakır Gazi Yaşargil Training and Research Hospital Non-Interventional Clinical Research Ethics Committee dated 22.07.2022/143.After a full verbal explanation regarding the study, all children accepted to participate in the study, and written and verbal informed consent was provided by the parents.

# $Authors' \ contributions$

The study was planned by C. M. I. and S.G.B. the experiments were done by C.M.I and S.G.B. contributed to the collection, analysis, and interpretation of the data. S.G.B. drafted the article and revised it. C.M.I. gave final approval of the version to be published. All authors reviewed the manuscript.

#### References

- Vaskivska HO, Palamar SP, Kondratiuk SG, Zhelanova VV. Psychodidactic determinants of the development of children of preschool age. Wiadomosci Lek Wars Pol 1960. 2018;71(6):1207-14.
- Meriçli M, Yildiz T, Baykal S. Çocuk ve Ergen Psikiyatrisi Polikliniğine Başvuran Olgularda Sosyodemografik Özellikler, Semptom Ve Tanı Dağılımı.
- Karabekiroğlu K, Babadağı Z, Yüce M, Say GN, Karabekiroğlu A. Factors that Influence Admission in Early Childhood: A Study with 669 Cases within A Community and Clinical Sample. Turk J Child Adolesc Ment Health. 2016;23(1):5-16.
- 4. Çocuk ve Ergen Psikiyatrisi Polikliniğine Başvuran 0-5 Yaş Arası Çocukların Başvuru Şikayetleri ve Psikiyatrik Tanıları.
  - EBSCO [İnternet]. [a.yer 27 Kasım 2023]. Erişim adresi: https://research.ebsco.com/c/mwdjhe/viewer/pdf/ccxsd7egpj? auth-callid=8f69ab57-64fc-947d-8624-7b8b3eb279ad.
- Büyükavci MA. Gelişimsel Pediatri Polikliniğinin Bir Devlet Hastanesinde 2,5 Yıllık Deneyimi. Istanb Yeni Yuzyil Univ Yeni Yuzyil J Med Sci. 27 Ekim 2023;4.
- Özbaran B, Köse S. Çocuk Psikiyatrisi Pratiğinde Özürlü Sağlık Kurulu Raporları-6 Yıllık Ege Üniversitesi Deneyimi. Çocuk Ve Genç Ruh Sağlığı Derg. 2011;18(1):67-72.
   Türkiye İstatistik Kurumu (TÜİK). Özürlülerin sorun ve bek-
- Türkiye İstatistik Kurumu (TUİK). Ozürlülerin sorun ve beklentileri araştırması, 2010. Ankara: Türkiye İstatistik Kurumu Matbaası, 2011. [İnternet]. [a.yer 27 Kasım 2023]. Erişim adresi: https://data.tuik.gov.tr/Bulten/Index?p=Ozurlulerin-Sorun-ve-Beklentileri-Arastirmasi-2010-6370.

- Hatice Sevgen F, Altun H. Çocuk ve Ergen Psikiyatrisi Polikliniğine Başvuran 0-5 Yaş Arası Çocukların Başvuru Şikayetleri ve Psikiyatrik Tanıları. J Mood Disord. 01 Aralık 2017;7(4):205-11.
- AKTEPE E, DEMİRCİ K, ÇALIŞKAN A, SÖNMEZ Y. Çocuk ve ergen psikiyatrisi polikliniğine başvuran hastalarda belirti ve tanı dağılımları. Düşünen Adam-Psikiyatri Ve Nörolojik Bilim Derg [İnternet]. 2010 [a.yer 04 Aralık 2023];23(2). Erişim adresi: https://avesis.akdeniz.edu.tr/yayin/b4234e7c-176d-4d01-977c-2b5ded6cbe19/cocuk-ve-ergen-psikiyatrisipoliklinigine-basvuran-hastalarda-belirti-ve-tani-dagilimlari.
- Kilinçel Ş. Çocuk ve Ergen Psikiyatrisi Polikliniğine Başvuran Hastaların Tanı Dağılımı ve Tedavilerinin Değerlendirilmesi. Sak Med J [İnternet]. 27 Ekim 2020 [a.yer 27 Kasım 2023]; Erişim adresi: https://dergipark.org.tr/tr/doi/10.31832/smj.777420.
- Harpaz-Rotem I, Rosenheck RA. Changes in outpatient psychiatric diagnosis in privately insured children and adolescents from 1995 to 2000. Child Psychiatry Hum Dev. 2004;34(4):329-40.
- Aras Ş, Ünlü G, Taş FV. Çocuk ve Ergen Psikiyatrisi Polikliniğine Başvuran Hastalarda Belirtiler, Tanılar ve Tanıya Yönelik İncelemeler. Klin Psikiyatri Derg. 2007;10(1):28-37.
- T YF. Bir Çocuk-Ergen Ruh Sağlığı ve Hastalıkları Polikliniğine Başvuran Çocuk ve Ergenlerin Ruhsal Belirtileri ve Risk Faktörlerinin Değerlendirilmesi. Konuralp Med J. 01 Nisan 2011;3(1):1-8.
- 14. Özbaran B, Köse S. Çocuk Psikiyatrisi Pratiğinde Özürlü Sağlık Kurulu Raporları-6 Yıllık Ege Üniversitesi Deneyimi. Çocuk Ve Genç Ruh Sağlığı Derg. 2011;18(1):67-72.
- Kayhan M, Öztürk Y. Bir Üniversite Hastanesine Çocuklar İçin Özel Gereksinim Raporuna Başvuran Olguların Klinik ve Sosyodemografik Özellikleri. Osman Tıp Derg. 17 Mart 2020;42(2):240-8.
- Şahin N, Altun H, Kara B. Özürlü Çocuk Sağlık Kurulu Raporlarının Değerlendirilmesi. Kocatepe Tıp Derg. 01 Nisan 2014;15(1):48-53.
- Başay BK, Tezer D. Üç yaş öncesi konuşma gecikmesi nedeniyle çocuk psikiyatri polikliniklerine başvuran çocuklara ne oldu? 2 yıl sonrasına ait veriler. Pamukkale Med J. 14 Mayıs 2020;13(2):373-84.
- Coles EK, Slavec J, Bernstein M, Baroni E. Exploring the gender gap in referrals for children with ADHD and other disruptive behavior disorders. J Atten Disord. Subat 2012;16(2):101-8.
- Developmental screening in primary care: the effectiveness of current practice and recommendations for improvement - Digital Collections - National Library of Medicine [Internet]. [a.yer 30 Kasım 2023]. Erişim adresi: https://collections.nlm.nih.gov/catalog/nlm:nlmuid-101468878pdf.
- Rydz D, Srour M, Oskoui M, Marget N, Shiller M, Birnbaum R, vd. Screening for developmental delay in the setting of a community pediatric clinic: a prospective assessment of parent-report questionnaires. Pediatrics. Ekim 2006;118(4):e1178-1186.
- Boyle J. Speech and language delays in preschool children. BMJ. 25 Ağustos 2011;343:d5181.
- Uzun Çiçek A, Akdag E, Celebi Erdivanli O. Sociodemographic Characteristics Associated With Speech and Language Delay and Disorders. J Nerv Ment Dis. Subat 2020;208(2):143.
- Prevalence estimations of attention-deficit/hyperactivity disorder: differential diagnoses and comorbidities in a Colombian sample - PubMed [İnternet]. [a.yer 30 Kasım 2023]. Erişim adresi: https://pubmed.ncbi.nlm.nih.gov/12691001/.
- Unal F. Predisposing factors in childhood masturbation in Turkey. Eur J Pediatr. Mayıs 2000;159(5):338-42.
- Zachor DA, Ben-Itzchak E. From Toddlerhood to Adolescence, Trajectories and Predictors of Outcome: Long-Term Follow-Up Study in Autism Spectrum Disorder. Autism Res. 2020;13(7):1130-43.
- Willoughby MT, Curran PJ, Costello EJ, Angold A. Implications of early versus late onset of attention-deficit/hyperactivity disorder symptoms. J Am Acad Child Adolesc Psychiatry. Aralık 2000;39(12):1512-9.
- Karaman D, KARA K, Durukan İ. Çocuk ve Ergen Psikiyatrisi Polikliniğine Başvuran HastalaraTedavi Uygulamaları. Anatol J Clin Investig. 01 Ekim 2012;6(4):225-30.
- Gleason MM, Egger H, Emslie G, Greenhill L, Kowatch R, Lieberman A, vd. Psychopharmacological Treatment for Very Young Children: Contexts and Guidelines. J Am Acad Child Adolesc Psychiatry. 01 Ocak 2008;46:1532-72.

29. Durukan İ, Karaman D, Kara K, Türker T, Tufan AE, Yalçın Ö, vd. Çocuk ve ergen psikiyatrisi polikliniğine başvuran hastalarda tanı dağılımı / Diagnoses of patients referring to a child and adolescent psychiatry outpatient clinic. Dusunen Adam J Psychiatry Neurol Sci. 15 Haziran 2011;113-20.