

Clinical and sociodemographic characteristics of children and adolescents under health measure

Sağlık tedbiri ile izlenen çocuk ve ergenlerin klinik ve sosyodemografik özellikleri

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Abstract

Purpose: The aim of this study was to retrospectively examine the reasons for the health measures applied to children and adolescents who applied to the Child and Adolescent Psychiatry Outpatient Clinic, whether additional measures were applied, sociodemographic characteristics, diagnoses and treatments.

Materials and methods: The files of 150 children and adolescents who applied to the outpatient clinic with a health measure decision between 01.01.2023 and 31.12.2024 were retrospectively reviewed.

Results: The most common diagnosis was depressive disorder (35%), and antipsychotics (44%) and antidepressants (35%) were the most commonly used treatments. Sexual abuse was significantly higher in females and being a child dragged into crime was significantly higher in males ($p=0.002$). Substance abuse was significantly higher in children who did not continue their education ($p=0.022$). The diagnosis of ADHD and conduct disorder was significantly higher in males and depressive disorder was significantly higher in females ($p<0.001$; $p=0.005$; $p<0.001$). Intellectual disability was found to be significantly higher in children dragged into crime ($p<0.001$). A significant correlation was found between the diagnosis of anxiety disorder and regular outpatient follow-up, and substance use disorder and not attending regular follow-up ($p=0.031$; $p=0.034$).

Conclusion: The study has allowed us to evaluate the sociodemographic and clinical characteristics of cases with health measures and better understand the importance and impact of mental health support and follow-up for children. More comprehensive and longitudinal studies in this field are important for strengthening the child protection system.

Keywords: Health measure, child protection law (CPL), child and adolescent psychiatry.

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Öz

Amaç: Bu çalışmanın amacı, Çocuk ve Ergen Psikiyatrisi Polikliniğine başvuran çocuk ve ergenlerde uygulanan sağlık tedbirlerinin nedenlerini, ek tedbir alınıp alınmadığını, olguların sosyodemografik özellikleri, tanıları ve tedavilerini retrospektif olarak incelemektir.

Gereç ve yöntem: 01.01.2023 ile 31.12.2024 tarihleri arasında sağlık tedbiri kararı ile polikliniğe başvuran 150 çocuk ve ergenin dosyaları retrospektif olarak incelenmiştir.

Bulgular: En yaygın tanı depresif bozukluktur (%35) ve en sık kullanılan tedavi antipsikotikler (%44) ve antidepressanlar (%35) olmuştur. Cinsel istismar, kadınlarda anlamlı derecede daha yüksek ve suça sürüklenen çocuk olma durumu erkeklerde anlamlı derecede daha yüksek bulunmuştur ($p=0,002$). Madde bağımlılığı, eğitime devam etmeyen çocuklarda anlamlı derecede daha yüksek saptanmıştır ($p=0,022$). Dikkat eksikliği ve hiperaktivite bozukluğu ve davranış bozukluğu tanıları erkeklerde anlamlı derecede daha yüksek ve depresif bozukluk tanısı kadınlarda anlamlı derecede daha yüksek bulunmuştur ($p<0,001$; $p=0,005$; $p<0,001$). Entelektüel yetersizlik suça sürüklenen çocuklarda anlamlı derecede daha yüksek bulunmuştur ($p<0,001$). Anksiyete bozukluğu tanısı ile düzenli poliklinik takibi arasında anlamlı bir ilişki bulunurken, madde kullanımı bozukluğu ile düzenli takibe gelmeme arasında anlamlı bir ilişki bulunmuştur ($p=0,031$; $p=0,034$).

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Sonuç: Çalışma, sağlık tedbiri bulunan olguların sosyodemografik ve klinik özelliklerini değerlendirmemize olanak sağlamış ve çocuklar için ruh sağlığı desteği ve takibinin önemini ve etkisini daha iyi anlamamıza yardımcı olmuştur. Bu alanda daha kapsamlı ve uzun dönemli çalışmalar, çocuk koruma sistemini güçlendirmek için önemlidir.

Anahtar kelimeler: Sağlık tedbiri, çocuk koruma kanunu (ÇKK), çocuk ve ergen psikiyatri.

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Introduction

Childhood is the purest and most vulnerable time when a person first begins to understand the world, when hope and the future take shape. Children deserve to grow up in a world where they are not only loved and trusted, but also where their rights are respected.

Childhood is a universal experience as well as a socio-cultural experience and a culture-specific concept. Children's rights are defined as a universal concept used to describe the legal and moral rights to education, health, housing, protection from physical, psychological or sexual abuse, etc. that all children around the world are born with. Child protection legislation in Türkiye is based on the Law on the Establishment, Duties and Procedures of Juvenile Courts, which was passed by the Turkish Grand National Assembly in 1979 [1].

The United Nations (UN) Convention on the Rights of the Child (CRC) was unanimously adopted by the UN General Assembly on November 20, 1989. The CRC states that "Every human being shall be considered a child until the age of eighteen years, unless he or she attains majority at an earlier age in accordance with the law applicable to the child". This article is taken as a basis in the regulations made for children in the countries that are parties to the Convention. Many problems concerning children are universal (e.g., exploitation of children, alcohol and substance abuse, children living in families in need of assistance, and children dragged into crime) [2, 3].

In order to protect children in need of protection and children dragged into crime in our country and to ensure and maintain their well-being, the Child Protection Law No. 5395 was enacted in 2005 by making amendments to the Turkish Penal Code and guaranteeing children's

rights. Children who are neglected or abused in terms of health, education, and care and whose physical and psychosocial development is at risk due to these reasons are defined as "children in need of protection" in our laws. Protective and supportive measures are defined to ensure that children in need of protection have a healthy psychosocial development, are not exposed to neglect and abuse, and do not turn to crime. These measures include counseling, education, care, health, and shelter. In the context of the CRC, health measures include the provision of necessary medical care to protect and treat the child's physical and mental health, as well as supervision and maintenance by the authorized unit. In order for children to benefit from medical and mental health services, the necessary physical and mental treatment and follow-up are arranged with the health measure issued by the court decision. The court-appointed supervisor follows this process and reports to the juvenile court every 3 months. When necessary, the health measure can be terminated upon the recommendation of the follow-up physician and the approval of the court. Cases followed up with a health measure decision have an important place in the practice of child and adolescent mental health outpatient clinics, but there is limited research on the evaluation of these cases [4-6].

When the studies conducted in the field are examined, it is seen that in the study conducted by Nasıroğlu [7], children who were followed up with health measures were diagnosed with a high rate of mental disorders; in the study conducted by Güller and Yaylacı [8], children followed up with health measures did not continue formal education at a high rate, family functionality was impaired, and mental disorders were seen more frequently; in the study conducted by Akdağ [9], approximately half of the children followed up with health

measures received psychiatric diagnoses and the most common mental disorder was post-traumatic stress disorder (PTSD); in the study conducted by Kardaş et al. [6], it was reported that adolescents with substance use among the cases followed up with health measures had different sociodemographic and clinical characteristics compared to those without substance use; and in the study conducted by Kul et al. [10], it was reported that 46.7% of the cases under health measures did not continue to follow up regularly.

The purpose of this study was to examine the reasons for health care interventions, whether additional interventions (care, counseling, education) were used, sociodemographic characteristics, diagnoses, and treatments of health care cases that presented to the Child and Adolescent Psychiatry Outpatient Clinic of the Pamukkale University Medical School Hospital, and to contribute to the limited number of studies in this area.

Materials and methods

Study design and participants

The study was approved by the Ethics Committee for Non-Interventional Clinical Research of the Faculty of Medicine of Pamukkale University (approved date: 12.11.2024, approved number: 19, E-60116787-020-610225).

Between January 1, 2023, and December 31, 2024, the reasons for issuing health measures, whether there were additional measures (care, counseling, education), sociodemographic characteristics, diagnosis, and treatment of 150 health measure cases that applied to the Child and Adolescent Psychiatry Outpatient Clinics of the Pamukkale University Faculty of Medicine Hospital were retrospectively reviewed.

Statistical analysis

Descriptive statistics were presented as mean, standard deviation, range, frequency, and percentage. The independent samples t-test was

used to compare continuous variables between two groups, and chi-square analyses were conducted to examine relationships between categorical variables. Statistical analyses were performed using IBM SPSS version 25.

Results

The mean age at first presentation of the children ($n=150$) in the study was 14.5 years ($SD=3.0$), with the lowest age at presentation being 2 years and the highest age at presentation being 17 years. When the gender distribution of the cases was analyzed, 61.3% were female ($n=92$) and 38.7% were male ($n=58$). When the children's participation in formal education was evaluated, it was found that 62.7% ($n=94$) of the children were continuing their education and 36.7% ($n=55$) were not continuing their education. In terms of receiving special education, it was observed that the majority of the children (88.0%, $n=132$) did not receive special education, and only 12.0% ($n=18$) received special education.

Regarding living arrangements, 43.3% ($n=65$) lived with a single parent, 26.7% ($n=40$) lived with their parents in a nuclear family, 21.3% ($n=32$) were in institutional care, 6.7% ($n=10$) lived with non-parental family elders, and 2.0% ($n=3$) lived with extended family. When the findings regarding the care history of the children were analyzed, it was determined that 39.3% ($n=59$) had been in institutional care before, while 60.7% ($n=91$) did not have any history of institutional care. Regarding the children's place of residence, the proportion of children living in institutions was higher among girls (29.3%, $n=27$), while the proportion of boys living in institutions was 8.6% ($n=5$) ($p=0.030$). It was observed that 47.8% ($n=44$) of the girls had been institutionalized in the past, while this rate was 25.9% ($n=15$) for the boys. The rate of boys with a history of institutionalization was significantly lower than that of girls ($p=0.007$). The relationship between institutionalization and history of institutionalization and gender was found to be significant. The sociodemographic data of the cases are shown in Table 1.

Table 1. Sociodemographic data of the cases

| | n (%) | Female | Male | Statistic |
|------------------------------------|-------------|--------------|--------------|-------------------|
| Age at First Application | | | | |
| Mean (SD) | 14.5 (3.0) | 14.8 (2.9) | 13.9 (3.1) | t(148)=1.93 |
| Range | 2.0 - 17.0 | 2.0 - 17.0 | 6.0 - 17.0 | p=0.056 |
| Gender | | | | |
| | | 92 (61.3%) | 58 (38.7%) | |
| Continuing Formal Education | | | | |
| No | 56 (37.3%) | 36.0 (39.1%) | 20.0 (34.5%) | $\chi^2(2)=0.88$ |
| Yes | 94 (62.7%) | 56.0 (60.9%) | 38.0 (65.5%) | p=0.645 |
| Receiving Special Education | | | | |
| No | 132 (88.0%) | 84.0 (91.3%) | 48.0 (82.8%) | $\chi^2(1)=2.46$ |
| Yes | 18 (12.0%) | 8.0 (8.7%) | 10.0 (17.2%) | p=0.117 |
| Both Parents Together | | | | |
| No | 104 (69.3%) | 66.0 (71.7%) | 38.0 (65.5%) | $\chi^2(1)=0.65$ |
| Yes | 46 (30.7%) | 26.0 (28.3%) | 20.0 (34.5%) | p=0.421 |
| Living Situation | | | | |
| Institution | 32 (21.3%) | 27.0 (29.3%) | 5.0 (8.6%) | |
| Nuclear Family | 40 (26.7%) | 24.0 (26.1%) | 16.0 (27.6%) | |
| Single Parent Supervision | 65 (43.3%) | 35.0 (38.0%) | 30.0 (51.7%) | $\chi^2(4)=10.69$ |
| No Parents, Family Elder Present | 10 (6.7%) | 4.0 (4.3%) | 6.0 (10.3%) | p=0.030* |
| Extended Family | 3 (2.0%) | 2.0 (2.2%) | 1.0 (1.7%) | |
| Institutional History | | | | |
| No | 91 (60.7%) | 48.0 (52.2%) | 43.0 (74.1%) | $\chi^2(1)=7.19$ |
| Yes | 59 (39.3%) | 44.0 (47.8%) | 15.0 (25.9%) | p=0.007* |

t: Independent samples t-test; χ^2 : Chi square test, degrees of freedom are given in parentheses; *: p<0.05 statistically significant

When the measures taken for 150 children participating in the study were analysed, it was observed that the most common reason for the measures was psychological complaints (41.3%, n=62). Apart from this, 25.3% (n=38) were taken under the scope of measures because they were victims of sexual assault, and 11.3% (n=17) were taken under the scope of measures because their parents were ill or did not provide adequate care. In addition, 7.3% (n=11) were taken under measure as children dragged into crime, 4.7% (n=7) due to substance abuse, 5.3% (n=8) due to irregular access to treatment, and 4.7% (n=7) as victims of domestic violence. Among the reasons for health measures, being a victim of sexual assault was found to be higher in girls (31.5%, n=29) compared to boys (15.5%, n=9). On the

other hand, the rate of taking measures as a child dragged into crime was significantly higher in boys (17.2%, n=10) compared to girls (1.1%, n=1) (p=0.002).

When other measures other than health measures were evaluated, it was found that 14.0% (n=21) of the children were provided with educational support. In terms of counseling measures, 53.3% (n=80) of the children benefited from psychosocial support or counseling services. While 8.7% (n=13) of the children received care measures, 16.7% (n=25) received shelter measures. When the rates of children's regular participation in the measures were analyzed, it was found that 54.0% (n=81) of the children regularly participated in the measures, while 46.0% (n=69) did not regularly participate in the measures.

There was a significant difference between genders in terms of educational measures ($p<0.001$). While 21.7% of girls ($n=20$) took educational measures, this rate was 1.7%

for boys ($n=1$). Finally, 22.8% ($n=21$) of girls ($p=0.011$) took shelter measures, while this rate was 6.9% ($n=4$) for boys. Data on the measures organized for the cases are shown in Table 2.

Table 2. Data on measures organized for cases

| | n (%) | Female | Male | Statistic |
|---|-------------|--------------|--------------|----------------------------------|
| Reason for Health Measure | | | | |
| Victim of sexual assault | 38 (25.3%) | 29.0 (31.5%) | 9.0 (15.5%) | |
| Juvenile delinquent | 11 (7.3%) | 1.0 (1.1%) | 10.0 (17.2%) | |
| Substance use | 7 (4.7%) | 5.0 (5.4%) | 2.0 (3.4%) | |
| Complaints (mental/physical illness) | 62 (41.3%) | 33.0 (35.9%) | 29.0 (50.0%) | $\chi^2(6)=21.27$ $p<0.002^*$ |
| Inability to receive treatment / Unable to receive treatment | 8 (5.3%) | 6.0 (6.5%) | 2.0 (3.4%) | |
| Domestic violence | 7 (4.7%) | 6.0 (6.5%) | 1.0 (1.7%) | |
| Parent ill or not providing care | 17 (11.3%) | 12.0 (13.0%) | 5.0 (8.6%) | |
| Education Measure | | | | |
| No | 129 (86.0%) | 72.0 (78.3%) | 57.0 (98.3%) | $\chi^2(1)=11.84$ |
| Yes | 21 (14.0%) | 20.0 (21.7%) | 1.0 (1.7%) | $p<0.001^*$ |
| Counseling Measure | | | | |
| No | 70 (46.7%) | 43.0 (46.7%) | 27.0 (46.6%) | $\chi^2(1)=0.00$ |
| Yes | 80 (53.3%) | 49.0 (53.3%) | 31.0 (53.4%) | $p=0.982$ |
| Care Measure | | | | |
| No | 137 (91.3%) | 81.0 (88.0%) | 56.0 (96.6%) | $\chi^2(1)=3.25$ |
| Yes | 13 (8.7%) | 11.0 (12.0%) | 2.0 (3.4%) | $p=0.071$ |
| Shelter Measure | | | | |
| No | 125 (83.3%) | 71.0 (77.2%) | 54.0 (93.1%) | $\chi^2(1)=6.50$ |
| Yes | 25 (16.7%) | 21.0 (22.8%) | 4.0 (6.9%) | $p=0.011^*$ |
| Regular Attendance to Measure | | | | |
| No | 69 (46.0%) | 39.0 (42.4%) | 30.0 (51.7%) | $\chi^2(1)=1.25$ |
| Yes | 81 (54.0%) | 53.0 (57.6%) | 28.0 (48.3%) | $p=0.264$ |

χ^2 : Chi square test, degrees of freedom are given in parentheses; *: $p<0.05$ statistically significant

The most common diagnosis was depressive disorder. 35% ($n=52$) of the children were diagnosed with depressive disorder. The rate of children diagnosed with conduct disorder was 24% ($n=36$), while the rate of children diagnosed with attention deficit and hyperactivity disorder (ADHD) was 23% ($n=34$). The proportion of children diagnosed with anxiety disorder was 8.0% ($n=12$), and less frequent diagnoses included Intellectual Disability (4.0%, $n=6$), obsessive-compulsive disorder (OCD) (0.7%,

$n=1$), autism spectrum disorder (ASD) (1.3%, $n=2$), specific learning disorder (4.0%, $n=6$), substance use disorders (4.7%, $n=7$), bipolar disorder (0.7%, $n=1$), and psychotic disorders (2.1%, $n=3$).

In general, 44% ($n=66$) of the children had a single psychiatric diagnosis, while 29% ($n=44$) had multiple diagnoses. On the other hand, 27% ($n=40$) had no diagnosis. The most common combination among children with multiple diagnoses was ADHD and conduct disorder

(30%, n=13). Other combinations included depressive disorder and conduct disorder (18%, n=8), depressive disorder and substance use disorder (6.8%, n=3), and depressive disorder and anxiety disorder (4.5%, n=2). The combination of ADHD, depressive disorder, and conduct disorder was observed in 4.5% (n=2). Less common combinations included ADHD and anxiety disorder (2.3%, n=1), ADHD and psychotic disorder (2.3%, n=1), conduct disorder and substance use disorder (2.3%, n=1), ADHD and depressive disorder (2.3%, n=1), ADHD and intellectual disability (2.3%, n=1), conduct disorder and intellectual disability (2.3%, n=1), and intellectual disability and ASD (2.3%, n=1).

The diagnosis of ADHD was significantly higher in boys ($p<0.001$). While 44.8% (n=26) of boys were diagnosed with ADHD, this rate was 8.7% (n=8) for girls. The diagnosis of depressive disorder was significantly more common in girls; 46.7% (n=43) of girls were diagnosed with depression, while this rate was 15.5% (n=9) in boys ($p<0.001$). The diagnosis of conduct disorder was significantly more common in boys ($p=0.005$). While 36.2% (n=21) of boys were diagnosed with conduct disorder, this rate was 16.3% (n=15) for girls. There was also a significant gender difference in diagnosis status ($p=0.013$). While 50.0% (n=46) of girls had a single diagnosis, this rate was 34.5% (n=20) for boys. Data on diagnoses are shown in Table 3.

Table 3. Diagnoses of health measure cases

| Diagnosis | n (%) | Female | Male | Statistic |
|-------------------------------|-----------|--------------|--------------|-------------------------------|
| ADHD | 34 (23%) | 8.0 (8.7%) | 26.0 (44.8%) | $\chi^2(1)=26.49$ $p<0.001^*$ |
| Depressive Disorder | 52 (35%) | 43.0 (46.7%) | 9.0 (15.5%) | $\chi^2(1)=15.31$ $p<0.001^*$ |
| Conduct Disorder | 36 (24%) | 15.0 (16.3%) | 21.0 (36.2%) | $\chi^2(1)=7.73$ $p=0.005^*$ |
| Anxiety Disorder | 12 (8.0%) | 6.0 (6.5%) | 6.0 (10.3%) | $\chi^2(1)=0.71$ $p=0.401$ |
| Intellectual disability | 6 (4.0%) | 3.0 (3.3%) | 3.0 (5.2%) | $\chi^2(1)=0.34$ $p=0.561$ |
| Obsessive-Compulsive Disorder | 1 (0.7%) | 1.0 (1.1%) | 0.0 (0.0%) | $\chi^2(1)=0.63$ $p=0.426$ |
| ASD | 2 (1.3%) | 1.0 (1.1%) | 1.0 (1.7%) | $\chi^2(1)=0.11$ $p=0.740$ |
| Specific Learning Disorder | 6 (4.0%) | 3.0 (3.3%) | 3.0 (5.2%) | $\chi^2(1)=0.34$ $p=0.561$ |
| Substance Use Disorder | 7 (4.7%) | 5.0 (5.4%) | 2.0 (3.4%) | $\chi^2(1)=0.32$ $p=0.574$ |
| Bipolar Disorder | 1 (0.7%) | 0.0 (0.0%) | 1.0 (1.7%) | $\chi^2(1)=1.60$ $p=0.206$ |
| Psychotic Disorder | 3 (2.1%) | 1.0 (1.1%) | 2.0 (3.4%) | $\chi^2(1)=3.22$ $p=0.073$ |
| Diagnosis Status | | | | |
| Single Diagnosis | 66 (44%) | 46.0 (50.0%) | 20.0 (34.5%) | |
| Multiple Diagnoses | 44 (29%) | 19.0 (20.7%) | 25.0 (43.1%) | $\chi^2(2)=8.70$ $p=0.013^*$ |
| No Diagnosis | 40 (27%) | 27.0 (29.3%) | 13.0 (22.4%) | |

ADHD: Attention Deficit Hyperactivity Disorder; ASD: Autism Spectrum Disorder, χ^2 : Chi square test, degrees of freedom are given in parentheses, *: $p<0.05$ statistically significant

While 12.3% (n=10) of the children who regularly attended the appointments organised for health measure reasons were diagnosed with anxiety disorder, this rate was 2.9% (n=2) among those who attended irregularly ($p=0.031$). There is an opposite pattern in substance use. While 8.7% (n=6) of the children who did not come to the centre regularly were diagnosed with substance use disorder, this rate was 1.2% (n=1) among those who came regularly ($p=0.034$).

The diagnosis of anxiety disorder was significantly higher in children whose parents were divorced ($p=0.005$). While only 3.8% (n=4) of children whose parents were married were diagnosed with anxiety, this rate was 17.4% (n=8) for children whose parents were divorced.

While 10.9% (n=6) of children who did not continue their formal education were diagnosed with a substance use disorder, this rate was 1.1% (n=1) of children who continued their education ($p=0.022$). ADHD, intellectual disability, ASD, and specific learning disorder diagnoses were significantly more common in children receiving special education ($p<0.001$).

The diagnosis of intellectual disability showed a significant relationship with the reason for taking health measures ($p=0.008$). While 27.3% (n=3) of the children who received measures as children and were dragged into crime were diagnosed with intellectual disability, this rate varied between 0-3.2% in other groups.

While 71.4% (n=5) of the children for whom health measures were taken due to substance use were diagnosed with substance use disorder ($p<0.001$), this rate ranged between 0-5.5% in the other groups. No significant relationship was observed between the reason for the measure and other diagnoses ($p>0.05$). The same analysis was repeated for girls only and boys only to see whether there was a difference in the relationships between the reason for the

measure and the diagnoses between genders. The same results were observed for both genders as for the whole sample.

The diagnosis of depressive disorder was observed at a higher rate in the cases with a shelter order ($p<0.001$). While 64% (n=16) of those with shelter measures had a diagnosis of depressive disorder, 36% (n=9) did not have a diagnosis of depressive disorder. No significant relationship was observed between other measures and diagnoses ($p>0.05$).

40% of the patients were not taking any medication, 28% were taking a single medication, and 32% were taking multiple medications. In terms of drug type, the most commonly used drugs were antipsychotics (44%) and antidepressants (35%). These were followed by ADHD medications (14%), while other medications (valproic acid, propranolol, and hydroxyzine) were used by only 2.7%. Antidepressant use was more common among females (43.5%) and less common among males (22.4%) ($p=0.009$). ADHD medication use was significantly more common among males (27.6% vs. 5.4%), and this difference was significant ($p<0.001$).

In terms of combination therapies, the most common combination was the use of antipsychotics and antidepressants (19%); 13% used only antipsychotics, and 11% used only antidepressants. ADHD medication alone was used in 4%, while the combination of antipsychotics and ADHD medication was used in 7.3%. Less common combinations included the combination of antipsychotic, ADHD medication, and antidepressant (2%); the combination of antidepressant and ADHD medication (0.7%); the combination of antidepressant and other medication (0.7%); and triple combinations of antipsychotic, antidepressant, and other medication (2%). The treatments received by the health measure cases are shown in Tables 4 and 5.

Table 4. Treatments received by health measure cases

| Medications | n (%) | Female | Male | Statistic |
|--------------------------|----------|--------------|--------------|-------------------------------|
| Antipsychotic | 66 (44%) | 36.0 (39.1%) | 30.0 (51.7%) | $\chi^2(1)=2.29$ $p=0.130$ |
| Antidepressant | 53 (35%) | 40.0 (43.5%) | 13.0 (22.4%) | $\chi^2(1)=6.91$ $p=0.009^*$ |
| ADHD Medication | 21 (14%) | 5.0 (5.4%) | 16.0 (27.6%) | $\chi^2(1)=14.50$ $p<0.001^*$ |
| Other Medications | 4 (2.7%) | 4.0 (4.3%) | 0.0 (0.0%) | $\chi^2(1)=2.59$ $p=0.107$ |
| Treatment Type | | | | |
| No Treatment | 60 (40%) | 41.0 (44.6%) | 19.0 (32.8%) | |
| Single Medication Use | 42 (28%) | 31.0 (33.7%) | 17.0 (29.3%) | $\chi^2(1)=4.78$ $p=0.091$ |
| Multiple Medications Use | 48 (32%) | 20.0 (21.7%) | 22.0 (37.9%) | |

ADHD: Attention Deficit Hyperactivity Disorder, χ^2 : Chi square test, degrees of freedom are given in parentheses
 *: $p<0.05$ statistically significant

Table 5. Combination of medications used

| Medications | n (%) |
|--|-----------|
| Antipsychotic, ADHD Medication | 11 (7.3%) |
| Antipsychotic, Antidepressant, Other Medications | 3 (2.0%) |
| Antipsychotic, ADHD Medication, Antidepressant | 3 (2.0%) |
| Antidepressant, Other Medications | 1 (0.7%) |
| ADHD Medication, Antidepressant | 1 (0.7%) |

ADHD: Attention Deficit Hyperactivity Disorder

Discussion

The mean age at presentation of the children in the study was 14.5 years (min-max: 2-17); 61.3% of the cases were female, 62.7% were attending formal education, and 26.7% lived in a nuclear family with their parents. It was found that 39.3% of the children had been in institutional care before, 24.0% were still in institutional care, the rate of living in an institution and having a history of institutionalization was statistically significantly higher in the female gender, and the diagnosis of depressive disorder was statistically significantly higher in cases with shelter measures. It was found that the most common diagnoses were depressive disorder, conduct disorder, and ADHD; ADHD and conduct disorder were most common

in children with more than one psychiatric diagnosis; depressive disorder diagnosis was statistically significantly higher in females, ADHD and conduct disorder diagnosis in males, antidepressant use in females, and ADHD medication in males. The most commonly used drugs are antipsychotics and antidepressants. The rate of being a victim of sexual abuse is significantly higher in females, and the rate of measures due to being dragged into crime is significantly higher in males. It was found that the frequency of substance use disorder was statistically significantly higher in children who did not attend formal education compared to those who attended formal education, the diagnosis of anxiety disorder was significantly higher in children whose parents were

separated, and the diagnosis of intellectual disability was statistically significantly more common in children who were dragged into crime. It was found that the diagnosis of anxiety disorder was significantly higher in children who regularly attended health measure outpatient clinic appointments, and the diagnosis of substance use disorder was significantly higher in children who did not regularly attend health measure outpatient clinic appointments.

In the study, the mean age of the cases was found to be 14.5 years, which is consistent with the results of the studies in the literature in which the psychosocial characteristics of the cases with health measures were analysed and the most common age range for the issuance of health measures was reported to be 14-18 years [11]. The female gender was 61.3% of the cases. When the literature was reviewed, it was found to be compatible with the studies of Güller and Yaylacı [8] and Akdağ [9]. On the other hand, in another study conducted by Nasıroğlu [7], the female-male ratio was found to be very slightly male dominant. In the same study, the most common reason for the issuance of health measures was conduct disorder, which may explain the predominance of the male gender [7]. Similar to other studies, the reason for the higher rate of female gender in this study can be explained by the fact that the health measures given due to sexual abuse are the second most common reason for health measures, and the victims of sexual abuse are statistically significantly female. Other studies have also shown that the victims of sexual abuse are mostly of the female gender [8, 9].

The study found that 37.3% of the children did not continue their formal education. When the literature was reviewed, it was reported that these rates were 37%, 28%, and 17% in different studies. There are many psychosocial problems associated with not continuing education during adolescence, and the mental development of young people is negatively affected [7, 8, 11]. In adolescence, many psychosocial problems can be seen with non-attendance to education, and the psychological development of young people is negatively affected [8]. Children who attend school have lower rates of delinquency and destructive behaviour [12]. The risk of neglect and abuse also increases when children do not attend school [13]. It was found that the prevalence of substance use disorder in

children who did not attend formal education was statistically significantly higher than those who attended formal education. Attending education is known to be protective against many psychopathologies, including substance use [6]. Studies have shown the bidirectional nature of the relationship between academic performance and substance use [14]. In this relationship, academic performance was shown to predict substance use more [15]. Another study showed that those who used cannabis in adolescence had a lower level of education in adulthood compared to those who never used cannabis [16]. It has also been found to be associated with lower levels of academic functioning, higher rates of school dropout, and lower rates of university enrollment [16-19]. In a study comparing substance use and non-substance use in cases of health measures, lower academic achievement and higher truancy rates were observed in adolescents who used substances [6]. Our results are compatible with these findings.

It was observed that 39.3% of the children had been in institutional care before, and 24.0% were still in institutional care. In the literature, 26.9% of the cases for whom health measures were issued had a history of institutionalization [9]. The fact that the rate of living in an institution and having a history of institutionalization was found to be statistically significantly higher in the female gender in the study may be related to the fact that sexual abuse cases were found to be significantly higher in the female gender and the rate of taking measures due to sexual abuse was high in the study.

In the study, 26.7% of cases were still married and living as a nuclear family. Some of the remaining cases lived with a single parent or in institutional care; some lived with family elders other than their parents, and a very small proportion lived with extended family. The literature reports rates of parental unity of 46.7% [8] and 59% [7]. Family disruption, parental separation, and living with a single parent are reported to increase the risk of neglect and abuse [20, 21]. Considering that approximately 70% of the cases in the study had a broken family integrity and constituted the majority of the cases of health measures, it is understood how important family support and parental care are as protective factors for children, as well as how important family and

spouse therapies and psychiatric support for parents are in protecting the mental health of children and adolescents, and how important family and spouse therapies and psychiatric support for parents are, and that these services should be widespread and accessible. It was found that diagnoses of anxiety disorders were significantly higher in children whose parents had been separated. The separation of parents is one of the most difficult events in a child's life. Divorce alone does not have a negative impact on family members. It is the changes caused by the divorce that are more difficult. Moving house, changing schools, limited time with the noncustodial parent, and parental conflict increase children's stress levels [22]. In a meta-analysis investigating the long-term effects of parental divorce on mental health, it was reported that when exposed to chronic stress, structural and functional changes occur with hypothalamo-pituitary-adrenal axis imbalance and cortisol increases, and as a result, anxiety symptoms may be observed [23-26].

The study found that the most common reason for health measures was psychological complaints (suicide attempt, self/harm, harm to self/environment, etc.). The second and third most common reasons are sexual abuse and parents being ill or not providing care. When the regular attendance rates of the children were analysed, it was found that 54.0% of the children regularly attended the health measure outpatient clinic appointments. This situation actually shows that approximately half of the cases for whom health measures were issued could not be followed up regularly. This irregular follow-up may be due to the neglect of the treatment of children with insufficient parental support and interest.

Females are significantly more likely to be victims of sexual abuse, and males are more likely to be involved in crime. The diagnosis of intellectual disability was found to be statistically significantly more common in children involved in crime. The literature also shows that sexual abuse of children and adolescents is more common among females [8, 9, 27]. Studies of children's criminal behaviour have reported that males are more likely to be involved in crime [28-31]. In a study examining the relationship between juvenile delinquency and sociodemographic characteristics and intelligence, it was found that children who were

dragged into crime were more frequently male, and intellectual functioning was more frequently limited [28]. It has been reported that gender-related biological and hormonal characteristics cause aggressive behaviours and behavioural problems to occur more frequently in males, and this increases the tendency to commit crime in males [28, 32].

In addition to health interventions, other interventions organised for the cases were also analysed. The rates of counselling (53.3%), shelter (16.7%), education (14.0%), and care (8.7%) are in line with the literature [8]. When the relationship between measures and diagnoses was analysed, it was observed that depressive disorder was significantly higher in cases with shelter measures. Depressive Disorder was found to be the most common mental health disorder in the present study and was found to be statistically significantly higher in females. Considering that females were found to be statistically significantly higher among those who stayed in institutional care and those who were in institutional care, it is seen that institutional care given depending on the shelter measure is related to depressive disorder in females.

In the study, no mental disorder was detected in 27% of the cases for whom health measures were issued. It was found that the most common diagnoses were depressive disorder, conduct disorder, and ADHD, and the most commonly used drugs were antipsychotics and antidepressants. In children with more than one psychiatric diagnosis, it was found that ADHD and conduct disorder were most common, depressive disorder diagnosis was significantly higher in the female gender, ADHD and conduct disorder diagnosis was significantly higher in the male gender, antidepressant use was significantly higher in the female gender, and ADHD medication was significantly higher in male gender. In another study conducted with health measure cases, it was reported that only 21.5% of the children had no mental disorder [8]. In the same study, it was found that ADHD, conduct disorder, and depressive disorder were seen with the same frequency, and posttraumatic stress disorder was the most common diagnosis. In the study conducted by Nasıroğlu [7], it was reported that 26.3% of the patients were diagnosed with ADHD and conduct disorder, and 15% of the patients had no mental disorder. It is known that exposure to neglect

and abuse increases the incidence of Conduct disorders, depressive disorders, and anxiety disorders [33]. In a study conducted in the USA, it was reported that conduct disorder and ADHD were the most common diagnoses in children included in the child protection system, followed by mood disorders and anxiety disorders [34]. The fact that the diagnosis of depressive disorder was significantly higher in the female gender, and the diagnosis of ADHD and conduct disorder was significantly higher in the male gender, is consistent with the distribution of these diagnoses specific to the genders [35-37]. In addition, when the reasons for issuing health measures were analysed according to gender, the frequency of depressive disorder may have increased with the significantly high level of sexual abuse in the female gender. Similarly, being dragged into crime is significantly higher in the male gender. It is reported that conduct disorder and ADHD are observed at a much higher rate in children dragged into crime [38].

In the study, it was observed that 46% of the cases did not attend health measure outpatient clinic appointments regularly. In another study conducted in this field in our country, similar to our study, it was found that 46.7% of the health measure cases did not attend regular follow-ups [10], and in another study, 43.0% of the children did not attend regular follow-ups [8]. These data show that there are problems related to the follow-up of patients who need to be treated. Although health measure cases can easily apply to specialised outpatient clinics for follow-up with a referral from a judicial authority, about half of the cases do not attend regular follow-up. Kul et al. [10] reported in their study that the most important reason for this issue may be that the cases do not believe in the necessity of the health measure decision, they react to the health measure decision, and/or they think that they do not see the benefit of the follow-ups made due to the health measure. On the other hand, it may be considered that most of the patients could not come to regular follow-ups because they did not have parents who had the responsibility to undertake the follow-up and treatment.

It was found that the diagnosis of anxiety disorder was significantly higher in children who regularly attended health measure outpatient clinic appointments, and the diagnosis of substance use disorder was significantly higher

in children who did not regularly attend health measure outpatient clinic appointments. In the literature, it is reported that patients with anxiety disorder regularly attend outpatient clinic follow-ups after starting treatment, and some of those who do not attend regularly experience very mild symptoms or have accompanying depressive disorder/symptoms [39]. Adolescence is a time of many biopsychosocial changes. Being diagnosed with a mental disorder during adolescence and adjusting to treatment can be challenging for adolescents because they may feel different, incomplete, and defective from their peers, which can reduce compliance with treatment [40]. It has been reported that substance use negatively affects adherence to treatment by decreasing drug efficacy and causing side effects to be felt more severely [41]. Adolescents may believe that even if they do not comply with the treatment in this period, they will not be negatively affected by this situation and may use alcohol and substances to self-medicate or may not continue institutionalization [14]. This may also lead to physical health problems. Therefore, it is important to examine comorbid substance abuse disorder in the evaluation of treatment compliance. It was also shown in the study of Kardaş et al. [6] that adolescents who were monitored within the scope of health measures and who used substances may be different from those who did not use substances in terms of some clinical characteristics.

In conclusion, the rights of children are not merely promises, but inherent necessities that every child is born with. This study has allowed us to evaluate the sociodemographic and clinical characteristics of cases with health measures and better understand the importance and impact of mental health support and follow-up for children. More comprehensive and longitudinal studies in this field are essential for strengthening the child protection system. Children's health is one of the priorities of every society. Health measures taken under the Child Protection Law are an important step for the healthy development of the child. However, the effectiveness of health measures can only be ensured through the support of implementers and the awareness of society, not just through legal regulations. To make health measures for child health more effective, cooperation between social service professionals and health

professionals must be strengthened. Beyond legal frameworks, developing a sense of social responsibility for children's healthy growth is of vital importance.

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