

ADHD from Childhood to Adulthood



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ABSTRACT: Attention deficit hyperactivity disorder (ADHD) is the most common neurodevelopmental disorder in childhood, characterized by inattention, impulsivity, and hyperactivity. Recognizing and diagnosing ADHD in children is mostly during the school period. ADHD negatively affects children's skills necessary for academic success and social adaptation in the school environment. ADHD symptoms are at the forefront of the situations in which the child, not only the parents but also the teachers, directs the family to seek treatment or help.

ADHD appears to affect 5-10% of children and 4.4% of adults worldwide. ADHD is a genetically inherited disease that emerges with the effect of genetic factors. For this reason, problems may arise in family functions when there is more than one person with ADHD at home. In this study, DSM-5 diagnostic criteria, models developed for the diagnosis of adult ADHD and what families can do when living with ADHD are shared.

KEYWORDS: Attention Deficit Hyperactivity Disorder, Family, Adult, Diagnostic Criteria.

INTRODUCTION

ADHD is a neurodevelopmental disorder that can present with attention problems, impulsivity and hyperactivity, and which is estimated to be present in 3-7% of school-age children and causes significant impairments in academic, social and family functioning (Miller and Thompson, 2013). Other social and psychiatric problems can be added to this picture throughout life (Sürücü, 2011). ADHD is a disorder caused by more than one factor, the exact cause of which is unknown (Sadek, 2013; Öztürk ve Uluşahin, 2018). Studies show that environmental factors before and after birth play a role in the formation of ADHD (Taylor & Rogers, 2005). Maternal malnutrition during pregnancy, diseases, traumas (March & Barkly, 2006; Banaschewski et al., 2015), smoking, alcohol and substance use, maternal age, high blood pressure and stress, neurotoxins such as lead (March & Barkly, 2006; Şenol et al., 2005; Semerci and Turgay 2008; Banaschewski et al. 2015; Franke et al., 2018; Öztürk and Uluşahin, 2018) and fetal alcohol syndrome (Sadek, 2013) are among the risk factors. Postpartum environmental factors include injury, severe deprivation, the mother's abusive and hostile treatment of the baby, exposure to serious neglect, abuse, the presence of psychopathology in the parent, and the child's exposure to heavy metals such as lead or some chemicals in food (Banaschewski T. et al. 2015).; Faraone et al., 2015; Franke et al., 2018).

It is emphasized that ADHD is a genetically transmitted disease (Sprich et al., 2000). It has been determined that the disorder is common in first-degree relatives of children with ADHD, and it has been suggested as genetic evidence that monozygotic twins (80%) have more comorbidity than fraternal twins, or that siblings of hyperactive children have a double risk compared to the general population (Ercan, 2009). Farone (1997) states that more than half of all parents with ADHD may have a child with ADHD, and that approximately one-fourth of the children presenting with ADHD have ADHD, one of their parents, and most of these families have more than one sibling.

There is a difference between the rates of ADHD in girls and boys, and it is 2-5 times more common in boys. In clinical samples, the male/female ratio can go up to 10:1 (Öztürk & Uluşahin, 2018). Adults are more tolerant of girls' hyperactivity than boys in preschool; this results in less diagnosis of the disease in girls. Since inattention and cognitive problems are prominent in girls, and the problems of impulsiveness and aggressive behavior are less, it was thought that the number of applications for treatment may be lower (Polanczyk & Rohde, 2007).

About 80% of children with ADHD have learning disorders, anxiety, oppositional tic, obsessive compulsive disorders, sleep disorders, enuresis and encopresis (Ercan et al., 2016; Franke et al., 2018; Coşkun et al., 2020). Problems accompanying ADHD differ according to gender. Expressive behavior problems and aggressive attitudes are more common in boys (Öztürk & Uluşahin, 2018). The presence of accompanying problems causes difficulties in diagnosing ADHD (Semerci & Turgay, 2007).

The symptoms of ADHD may differ according to the developmental stages. In addition to difficulties in being able to sit for a certain period of time, maintaining attention, controlling impulsive behaviors, following directions, using time effectively, obeying the rules in games or activities, completing the task and productivity, as well as forgetting what needs to be done, planning and

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organizational problems, social relations problems with peers can be seen (March & Barkley, 2003). In adults with ADHD, on the other hand, hyperactive-impulsive symptoms such as the feeling of restlessness are internalized and inadequate emotional self-regulation and executive dysfunctions become more evident (Faraone et al., 2015). In adulthood, where executive functions play an important role, individuals with ADHD may have difficulties in making choices and working efficiently, managing the home and budget, coping with work, maintaining parenting and marriage while maintaining their relationships (Brown, 2009). Tension in the family, poor problem-solving skills when problems arise, poor self-perception, chaotic family life and divorces (Adler and Cohen 2004), poor social functioning and difficulties with others (Clarke et al. 2005), substance abuse (Wilens 2004) are among the problems that can be seen in adulthood. While a child with ADHD climbs the walls, the adult equivalent of this symptom has the feeling of "inner restlessness", which is a state of extreme boredom from sitting in one place for a long time or waiting for something. Similarly, if the short attention span of a child who goes to school is that he/she can listen to the lesson for a very short time compared to the grade level, this situation is equivalent for an adult to drift away from the subject and dream more quickly than other adults in a meeting (Ercan, 2009).

As psychiatric disorders accompanying ADHD in adults can complicate the clinical presentation and it is not easy to obtain early records and remember the patient's childhood symptoms (Murphy & Adler, 2004), there is no childhood diagnosis and treatment history or childhood when the history of ADHD is ignored, the diagnosis of ADHD may be overlooked (Şengül et al., 2004). Kooji et al. (2010) in their study covering 18 European countries determined that adult ADHD is underdiagnosed and treated in European countries, which causes high costs, and stated that expertise in the diagnostic evaluation and treatment of ADHD for adults should be increased in psychiatry. Starck et al. (2016) stated in their study that the situation is worrisome for families with children with ADHD, that in addition to parent-child interaction, parental ADHD symptoms may affect the parent's education style, and this may also have negative effects on the child's education and therapy outcome. Starck et al. (2016) emphasized the importance of screening parents for ADHD symptoms in order to organize processes and treatment design according to symptoms if they or their children are receiving treatment.

Adler et al. (2017) emphasized the importance of executive dysfunction and emotional control disorder in many patients with adult ADHD, and emphasized that clinicians should consider these additional symptoms in their evaluation and treatment plans of adult ADHD patients.

The family environment is the first environment where children's love, affection, close attention and care needs are met. The family is one of the most important factors affecting the individual in the formation and development of personality, as the first environment in which the individual receives education and lives. The relationship of the child with the parent for the kinetic, cognitive, affective, social and moral development of the child forms the basis of the attitudes and behaviors adopted by the attitudes towards other individuals, objects and the whole life (Toplu-Demirtaş E., 2019). In other words, healthy family functions help the child's needs to be met in a balanced way and thus help him to mature. It is emphasized that unhealthy family functions are a risk factor for psychiatric disorders and psychological stress. Severe incompatibility within the family, low socio-economic level, and the presence of psychiatric problems in the parents are risk factors both for family functions and for the child's mental health (Biederman et al. 1995).

DSM-5 ADHD Diagnostic Criteria

A. A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, as characterized by (1) and/or (2):

1. Inattention: Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

Note: The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

- a. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).
- b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).
- c. Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
- d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).
- e. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
- f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).
- g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).

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- h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).
- i. Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).
2. Hyperactivity and impulsivity: Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:
- Note:* The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or a failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.
- a. Often fidgets with or taps hands or feet or squirms in seat.
- b. Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
- c. Often runs about or climbs in situations where it is inappropriate. (*Note:* In adolescents or adults, may be limited to feeling restless.)
- d. Often unable to play or engage in leisure activities quietly.
- e. Is often “on the go,” acting as if “driven by a motor” (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).
- f. Often talks excessively.
- g. Often blurts out an answer before a question has been completed (e.g., completes people’s sentences; cannot wait for turn in conversation).
- h. Often has difficulty waiting his or her turn (e.g., while waiting in line).
- i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people’s things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).
- B. Several inattentive or hyperactive-impulsive symptoms were present prior to age 12 years.
- C. Several inattentive or hyperactive-impulsive symptoms are present in two or more settings (e.g., at home, school, or work; with friends or relatives; in other activities).
- D. There is clear evidence that the symptoms interfere with, or reduce the quality of, social, academic, or occupational functioning.
- E. The symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better explained by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, personality disorder, substance intoxication or withdrawal).

Specify whether:

314.01 (F90.2) Combined presentation: If both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past 6 months.

314.00 (F90.0) Predominantly inattentive presentation: If Criterion A1 (inattention) is met but Criterion A2 (hyperactivity-impulsivity) is not met for the past 6 months.

314.01 (F90.1) Predominantly hyperactive/impulsive presentation: If Criterion A2 (hyperactivityimpulsivity) is met but Criterion A1 (inattention) is not met over the past 6 months.

Specify if:

In partial remission: When full criteria were previously met, fewer than the full criteria have been met for the past 6 months, and the symptoms still result in impairment in social, academic, or occupational functioning.

Specify current severity:

Mild: Few, if any, symptoms in excess of those required to make the diagnosis are present, and symptoms result in only minor functional impairments.

Moderate: Symptoms or functional impairment between “mild” and “severe” are present.

Severe: Many symptoms in excess of those required to make the diagnosis, or several symptoms that are particularly severe, are present, or the symptoms result in marked impairment in social or occupational functioning

Models Developed for the Diagnosis of ADHD in Adults

Different models have been developed for the diagnosis of ADHD in adults. These are, respectively, adult ADHD according to Copeland (1991) criteria, adult ADHD according to UTAH (1995) criteria, and adult ADHD according to Brown (1996) criteria (Copeland, 1991; Utah,1995; Rucklidge & Tannock, 2002).

Adult ADHD according to Copeland (1991) criteria:

- a) Lack of attention and temptation,
- b) Impulsivity
- c) Activity level problems,
- d) Incompatibility,
- e) Failure to show the expected success,

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- f) Organization and reading problems,
- g) Emotional difficulties,
- h) Difficulties in social relationships.

Two of the following items with motor hyperactivity and inattention in adulthood according to the Utah criteria:

1. Impulsivity,
2. Mood lability,
3. Outbursts of anger,
4. Organizational problems,
5. Stress intolerance and emotional overreactivity and
6. ADHD-related features (marriage problems, low professional and academic achievement, alcohol or substance abuse) (Wender et al., 1995).

According to Brown (1996) criteria, it is a measurement tool that can evaluate adult ADHD and executive function deficits associated with these ADHD symptoms. Adult ADHD criteria according to the Brown criteria (Rucklidge & Tannock, 2002):

- a) Activation
- b) Attention
- c) Effort
- d) Affect
- e) Working memory and recall.

In addition to the clinical evaluations of parents and children, tests supporting this evaluation are used. The MOXO d-CPT is a standardized computer-administered test designed to diagnose ADHD-related symptoms. The children's version of MOXO takes 15.2 minutes to be administered to children aged 6-12, and the MOXO Young and Adult version takes 18 minutes to be administered to children aged 13-65. The approach to the diagnosis and treatment of ADHD is based on developmental, cognitive and behavioral axes. MOXO d-CPT provides comprehensive and measurable results for all three axes (MOXO d-CPT Test Turkish User and Reporting Manual, 2020).

Families with ADHD Children

ADHD is a condition that forces the parent, conflicts, consumes and causes problems in the family. Although families constantly warn their children and give various threats and punishments, they cannot reach a conclusion. The first condition of being a parent of a child with ADHD is to comply with the basic principles of raising a child. For this, parents need to be able to set boundaries and help them to see their mistakes as an opportunity for empathy, effective communication, meeting their need for love, recognizing and accepting the child with all their characteristics (Sürücü, 2011).

Psychosocial interventions should be made for the families of children with ADHD. Priority goals for this are (Sanderes, 2012):

- 1- Developing the parent-child relationship.
- 2- To reduce or manage the child's problematic behaviors at home.
- 3- To increase the consistent discipline approaches of the parents.
- 4- To reduce the rigid, rude and negative attitudes of parents.
- 5- To ensure that parents receive psychological support when necessary.
- 6- To increase the parents' sense of competence and confidence.
- 7- To raise awareness of parents about the behaviors seen in their children.
- 8- To increase the communication skills of parents.

RESULTS

Parents of children with ADHD can also go to a psychiatrist to determine whether they have ADHD or not, and if there are problems in family interaction and communication, they can be referred to family therapy. It is thought that more positive results in family life can be achieved by receiving various supports (family therapies, medication) for the solution of problems that may arise due to having more than one ADHD at home. It is thought that it will be beneficial for the parents to support the child with ADHD in making their own decisions and learning from their mistakes, while taking an active part in the lives of the children by displaying a conciliatory attitude. It is thought that it is important for parents to monitor their children from a young age and not to attribute the child's excessive activity and behavior problems to being at a young age. It is thought that it will be easier for the parents to fulfill their family roles in children with ADHD who are diagnosed with early diagnosis with medication and psychologist support.

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