

## **Attention-Deficit Hyperactivity Disorder**

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## **Attention-Deficit Hyperactivity Disorder: History and Background Information**

Attention-deficit hyperactivity disorder is a diagnosis for individuals who have difficulty with attention, impulse control, and are overactive (Barkley, 2014). ADHD is one of the most common reasons a student might be referred to a mental health provider. It is also a well-documented disorder, with over 10,000 clinical and scientific publications covering ADHD since Melchior Adam Weikard's first documented case in Germany in 1775 (Barkley, 2014, p. 35). An even earlier indication of the existence (though not documentation) of ADHD was William Shakespeare's description of King Henry VIII as inattentive and hyperactive, lacking impulse control (Barkley, 2014). In 1798 Alexander Crichton (Scotland) described symptoms akin to ADHD, which he categorized in two ways: distractibility or a lack of motivation/energy around tasks (Barkley, 2014, p. 2). George Still's study in 1902 (England) provided the most details and had a large sample – 43 children – who he described as being overactive and having difficulties with attention and behavior (Barkley, 2014, p. 3). Around the same time, in 1908 Alfred Tredgold (also England) described children he found to have low intelligence and abnormally limited attentiveness, impulse control, and willpower. Both Tredgold and Still suggested that changes to the environment or possibly medication could affect change in these individuals but considered the disease to be a life-long condition (Barkley, 2014). And in Spain, Rodriguez-Lafora (1917) labeled certain individuals “unstable” and his description of them aligns with symptoms of ADHD (Barkley, 2014).

Early conceptions of ADHD focused on inattention, impulse control, overactivity, and behavior control. The idea at the time was that these could be caused by brain injuries or defects or by environment. Later, ADHD became associated with brain damage, particularly in the frontal lobes. Then the focus was on brain disfunction, and that switched to a focus on hyperactivity. Now ADHD is recognized as a neurodevelopmental disability (Barkley, 2014, p. 25).

**Causes of ADHD:** No specific factor is known to cause ADHD, but there are many factors that may come into play, including genetics, biology (neural imaging shows that frontal lobes may be

different in children with ADHD), and environmental toxins (Howard and Landau, 2010). Although parenting style and environment doesn't cause ADHD, it can impact the child's development and the extent to which the disorder will impair their functionality (Howard and Landau, 2010).

### **Symptoms of ADHD**

The three core symptoms of ADHD are inattention, hyperactivity, and impulsivity (NASP, 2010). Symptoms will vary by child and may vary depending on the type of ADHD (more on this in Diagnostic criteria, below). A child may seem like they are daydreaming, lethargic, or struggling with cognition, but do not seem hyperactive (*predominantly inattentive ADHD*); or they may have significant problems with hyperactivity but lack the attention-related symptoms (*predominantly hyperactive/impulsive ADHD*); or they may exhibit all symptoms (*combined type ADHD*) (Howard and Landau, 2010). Broader signs that a child has ADHD may be academic difficulties, conduct problems (fighting, lying, destructiveness, may be said to be "ignoring" the teacher), and problems with peer relationships (Howard and Landau, 2010).

### **Diagnostic criteria for ADHD**

The criteria for diagnosing ADHD under DSM-5 guidelines requires that symptoms be present for more than six months in more than two settings (DSM-5). The symptoms also need to have a negative impact on academic, social emotional, or occupational functioning. Children under 17 need to demonstrate more than six of the symptoms, and for adults over 17, five. Additionally, the symptoms need to have been present prior to the age of 12, and it must be established that the symptoms are not resulting from a different disorder. The DSM-5 categorizes by Inattentive Type or Hyperactive/Impulsive Type, resulting in three diagnoses: *Combined Presentation*, *Predominantly Inattentive Presentation*, *Predominantly Hyperactive-Impulsive Presentation*. Some examples of symptoms in the Inattention category include: misses details, makes careless mistake, difficulty sustaining attention, doesn't follow instructions, difficulty organizing, or losing things. Some examples of

symptoms in the Hyperactivity and impulsivity section would be fidgeting, leaves seat, runs or climbs in inappropriate settings, talks excessively, seems like they are “driven by a motor” (DSM-5).

There isn’t one single test, questionnaire, or assessment strategy used to diagnose ADHD. Assessments should come in multiple forms, and information as well. A good evaluation should include ratings of the student’s behavior, observations in multiple settings, especially schools but also homes, and interviews of teachers and parents (Howard and Landau, 2010). The student’s academic performance is examined as well, looking at multiple facets: accuracy, productivity, learning style, and how changes in teaching style affect the student (Howard and Landau, 2010). When all these factors have been examined, a medical professional then checks these findings against diagnostic criteria of the American Psychiatric Association and rules out any other disorders (Howard and Landau, 2010).

The functional behavioral assessment (FBA) is a useful tool – the student is closely observed to uncover why a behavior happens (Howard and Landau, 2010). Additionally, Howard and Landau (2010) advocated for a formal psychoeducational assessment to determine if there are any other underlying conditions that may be adding to the difficulties in school, because there may be comorbidities.

### **Facts/Data about ADHD**

According to a 2016 parent survey published by the CDC (2021), we know the following:

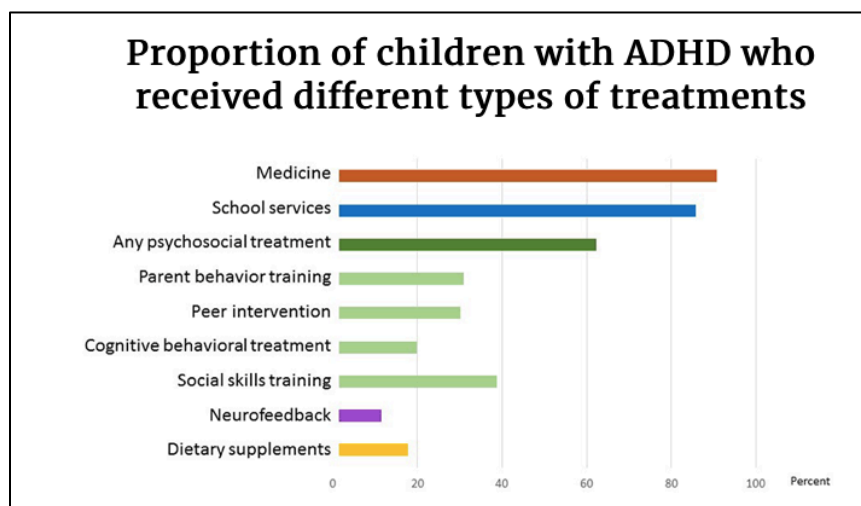
- About 6.1 million (9.4%) children have been diagnosed with ADHD. The smallest portion of that number is in children ages 2-5 years, at 388,000. 2.4 million children ages 6-11 years have been diagnosed with ADHD, and about 3.3 million children ages 12-17.
- Boys are twice as likely to be diagnosed as girls (12.9% compared to 5.6%).
- According to this same survey, 64% of children with ADHD had at least one other disorder. 52% had a behavior disorder, and 33% had anxiety. 17% had depression, and 14% had autism spectrum disorder (CDC, 2021).

- A child with a close relative with ADHD is 5 times more likely to have ADHD than a child without (Howard and Landau, 2010).
- Up to 1/3 of children with ADHD will repeat a grade in elementary school (Howard and Landau, 2010).

## Treatment methods for ADHD

### *Medication*

According to the CDC, 62% of children with ADHD take medication as a form of treatment (ages 2-5, 18%; ages 6-11, 69%; ages 12-17, 62%) (CDC, 2021). Although it seems counterintuitive, stimulants have proven effective in calming children with ADHD, amphetamine (the ingredient in Adderall and others) and methylphenidate (the ingredient in Ritalin and others) (CHADD, 2021). Stimulants increase dopamine production, which can help improve ADHD symptoms, and children may be better able to pay attention, may have better impulse control, and may feel less frustrated and more likely to be able to follow instruction (CHADD, 2020). Side effects can include loss of appetite, issues with sleeping, headaches, and abdominal pain (CHADD, 2020). Doctors work closely with parents to try out different dosages and types of medication to come up with a plan that works best for the child, as benefits and side effects vary by individual (CHADD, 2020).



CDC, 2021

There are also non-stimulant drugs used for children who don't do well with stimulants (CHADD, 2021). These drugs do not work as well, and have some unpleasant side effects, like

nausea, dizziness, dry mouth, fatigue, or sleep issues, but they be an alternative if the stimulants aren't working well, or if the family chooses not to use stimulants for another reason (CHADD, 2020).

### ***Behavioral Treatment***

According to the CDC, 47% of children with ADHD receive behavioral treatment (ages 2-5, 60%; ages 6-11, 51%; ages 12-17, 42%) (CDC, 2021). Behavioral therapies, not individual or psychoanalytic therapies, are evidence-based, empirically supported treatments for ADHD. Some programs that are commonly used are PCIT (Parent Child Interactive Therapy), for children 2-7 years; Triple P (Positive Parenting Program), for children ages 0-8; and Incredible Years Program, for children ages 0-12) (UC Davis, 2022). There are other therapies that may be effective but do not yet have enough research, such as mindfulness, CBT (cognitive behavior therapy) for adolescents (used currently in adults), and physical activity (UC Davis, 2022).

### ***No treatment***

About 23% of children with ADHD do not receive either behavioral therapy or medicinal treatment (CDC, 2021).

## **ADHD Support Groups and Resources for Individuals and Families**

### ***Support Groups:***

I reached out to the local elementary, middle school, and high school counselors, and a school psychologist, and was referred to NIMH and CDC (listed below) for information and resources, but the consensus was that Columbia County and surrounding areas has a dearth of support groups or services for families of children with ADHD or adults with ADHD. An online search of the Capital District area didn't yield fruitful results, except for SUNY Albany (listed below) links to CHADD groups (nearest group in Nassau and Suffolk County). However, ADDA offers virtual support groups for a multitude of adult categories, including support groups for working adults, partners, LGBTQ-plus community members, multicultural groups, and parent/family support groups (though not children-specific groups).

**Information Center:**

**ADDitude Magazine** <https://www.additudemag.com/category/adhd-add/>

- Resource-rich website (and/or print magazine) with sections providing information about ADHD, symptoms and tests treatment, parenting, adult ADHD, webinars and resources, ADHD in school, newsletters and blogs, and a section for professional research, educators, and clinicians.

**ADDA (Attention Deficit Disorder Association)** <https://add.org>

- Offers virtual support group for a wide array of adults and a parent/family support group.
- Like the other sites provides information, links to resources, research, workshops, webinars.

**CHADD (Children and Adults with Attention-Deficit/Hyperactivity Disorder)** <https://chadd.org>

- Provides information about ADHD to parents and families, educators, adults, and professionals. Offers links to supports such as scholarships, research, policy work, publications, and training. Offers an online community and links to support groups. Advocates for policy.

**CDC (Centers for Disease Control)** <https://www.cdc.gov/ncbddd/adhd/>

- Provides data and statistics, information about ADHD, treatments, symptoms and diagnosis information, links to studies and resources, fact sheets and videos, links to recent research, and more.

**NIMH (National Institute of Mental Health)** <https://www.nimh.nih.gov/search-nimh?q=adhd>

- Provides articles, research, and information about treatment and latest medical updates.

**SUNY Albany Psychological Services Center** <https://www.albany.edu/psc/>

- Provides assessment, testing, and evaluation and treatment through the Child and Family Therapy Clinic.

## **ADHD Special Education Services in school**

The diagnosis of ADHD alone does not qualify for special education services, unless the disability is categorized as OHI (other health impaired), emotional disturbance, or learning disabled (Howard and Landau, 2010). If a student does not meet those criteria, then Section 504 plans would allow for modifications and accommodations, but the student would be considered a general education student.

### ***Outline of likely services:***

If the student is diagnosed with ADHD, then as per the NASP Position Statement (2018) a student may receive the following services, varying by case:

- Instruction strategies in self-management
- Collaboration with parents to ensure behavior support is consistent across home and school
- Monitoring by CES team to ensure IEP requirements are being met
- Education of school staff about ADHD
- Access to special education services as appropriate
- Collaboration with community professionals and medical services as needed
- Individual and group support to promote self-worth and confidence
- Class-wide and individual behavior support systems
- Possible use of medication

Even if a student doesn't qualify for special education services, they may receive accommodations such as extended test time, quiet workspace, modified assignments, assignment chunking, home-school notes, computer technology, or tutoring (Howard and Landau, 2010).

## **The school counselor's role with a student with ADHD**

### ***Advocate for inclusion***

If the student with ADHD has comorbidities that designate them a special education student, the school counselor can work with the school to ensure that inclusion standards are high-quality.



Among the criteria for determining the quality of the program are whether the classroom and the activities include students with and without disabilities, that the students with disabilities be held to high standards, that the general education teacher deliberately plans lessons that include both students with and without disabilities, that the students have access to accommodations if needed, and that evidence-based services and supports are provided. The school counselor can be an advocate and collaborator in ensuring that inclusive classrooms meet these standards.

***S.C.R.I.P.T. (Supporter, Counselor, Resource provider, Investigator, Planner, Trainer/Teacher)***

Trolley (2014) used an acronym to summarize how a counselor might best advocate for inclusive practices and equitable access for students with disabilities: S.C.R.I.P.T.

***Supporter:*** The counselor supports the student with ADHD, the student's siblings and parents, and the teachers.

***Counselor/Consultant/Collaborator:*** A student with ADHD would benefit from short-term individual counseling and group counseling geared toward social emotional skills and self-management skills, to support them in the academic, social, and career domains. Counseling may or may not be included on the IEP. The counselor can be consultant to the teachers, special education team (if applicable), and can collaborate with the administration, parents, and members of the team to ensure communication.

***Resource provider:*** The counselor can collect resources that might include service providers in the community and/or access to printed or online research about ADHD. These resources are for parents, students, teachers, and school administration.

***Investigator:*** The counselor may use more informal assessments like observations, surveys, or interviews to collect more information about the student with ADHD.

***Planner:*** The school counselor helps in the early stages of the development of the IEP or can intervene with academic, social emotional, or transition planning to bridge the IEP, which ends in

secondary school, and the 504, which follows the student to adulthood. As a planner, the counselor would support the student as they set personal and future goals.

***Trainer/teacher:*** The counselor provides resources and information about ADHD to teachers, staff, administration, other students, and families.

### ***Evidence-based interventions***

If the student is not eligible for special education but needs accommodations, the counselor can assist as well. Students with ADHD are likely to need tutoring, are more likely to repeat grades or drop out of school and are more at risk for developing additional emotional problems like depression and anxiety (Branscome, et. al, 2014). A school counselor can provide evidence-based interventions such as small group counseling, mindfulness training, check-in/check-out, and cognitive problem solving (Branscome, et. al, 2014).

### ***Modifications to lessons/counseling sessions***

When conducting classroom lessons, individual or group counseling sessions, the counselor can make sure to use some of the following strategies to accommodate a student with ADHD (Brain Balance, 2022):

#### ***Distractions***

- Seat near the counselor, away from windows or doors
- Follow seated instruction with active instruction
- Use visuals! Use visuals and displays – and make sure they are easily seen by student
- Divide big tasks into smaller tasks (“we are going to make a collage!” becomes a series of clearly defined steps)

#### ***Interrupting/conversation skills***

- Use a timer if students are taking turns in a group
- Frequent reminders of the rules for interrupting/raising your hand before speaking

- Use a reward system or token system to acknowledge good behavior

***Impulsivity***

- Display clear, simple rules in clear sight
- Make a written agenda of the lesson/session
- Use specific praise and acknowledge good behavior

***Fidgeting***

- Incorporate movement into lessons
- Give student a fidget (stress ball or another object)

***Following directions***

- Make instructions clear and brief (again – use planning time to break down big tasks into smaller, clearly defined tasks)
- Give frequent reminders of the steps in the sequence

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