

ATTENTION DEFICIT HYPERACTIVITY DISORDER IS NOT JUST A CHILDHOOD DISORDER



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Attention Deficit Hyperactivity Disorder (ADHD) is a serious psychiatric disorder affecting children and adults of both sexes. The symptoms of the disorder are overactivity, impulsiveness, inattentiveness, and distractibility. Some or all of these symptoms may be present in an affected individual. The disorder is thought to have a genetic component. ADHD in adults is often treated with medications of various types with varying degrees of success.

Key words: Attention deficit hyperactivity disorder, adults, genetics, treatment

Attention Deficit Hyperactivity Disorder (ADHD) is a common psychiatric disorder affecting approximately 5% of school-age children.^{1,2} Individuals of both sexes may be affected. ADHD is far more prevalent in males than in females, however, with sex ratio estimates varying from 4:1 to 9:1.³ The symptoms of the disorder include *overactivity, impulsiveness, distractibility, and inattentiveness*. While it used to be thought that ADHD affects only children, evidence now suggests that this is not the case.^{4,5} While many children do outgrow the disorder in adolescence, many affected individuals continue to experience significant symptoms of ADHD as adults. The numbers vary widely between studies, but it has been estimated that 30% - 70% of children with ADHD continue to be affected as adults.⁴⁻⁶

The symptoms of ADHD may prove very disruptive and disturbing, both to the affected individual and to those in contact with him or her. In addition, ADHD in adults is strongly associated with substance abuse⁷

and antisocial personality disorder.⁸ Adults with ADHD tend to have lower occupational and academic success than adults in the general population.⁹

DIAGNOSIS

The *Diagnostic and Statistical Manual of Mental Disorders (4th edition) (DSM-IV)* of the American Psychiatric Association,³ provides the criteria which must be met for a diagnosis of ADHD (Table 1).

DSM-IV lists 9 inattentive symptoms, and 9 hyperactive-impulsive symptoms associated with ADHD. A child or adult with the disorder may exhibit inattentive symptoms, hyperactive-impulsive symptoms, or both. There are *three categories of ADHD* listed in DSM-IV: 1) *ADHD, primarily inattentive*

Table 1. Criteria which must be met for a diagnosis of ADHD

- 1) The symptoms cannot be better explained by another diagnosis.
- 2) The symptoms cannot occur only during the course of pervasive developmental disorder, schizophrenia, or other psychotic disorder.
- 3) Clinically significant symptoms must have been present in the individual from childhood.
- 4) Some symptoms must have been present before the age of 7.
- 5) The symptoms must be present in more than one setting.
- 6) There must be a clear indication that the symptoms are troublesome, affecting social relationships, academic performance, or job performance.
- 7) The symptoms must have lasted at least 6 months.

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type; 2) *ADHD, primarily hyperactive-impulsive type*; 3) *ADHD, combined type*. To be diagnosed with either the inattentive or hyperactive-impulsive subtypes, the patient must exhibit 6 symptoms of that subtype. To be diagnosed with the combined subtype, evidence of 6 inattentive symptoms and 6 hyperactive-impulsive symptoms must be present. In assessing a child for the disorder, diagnosis is based on current behaviour, following DSM-IV guidelines. It is common practice for a clinician to ask for information from the child's parents and teachers in addition to observing and talking to the child.

In assessing an adult for the disorder, it is not enough to determine that the individual meets the DSM-IV criteria currently. It must be established that the disorder dates from childhood. For this reason, a thorough account of childhood behaviour must be obtained. A diagnosis of ADHD is not made if the symptoms began in adulthood.

The clinician conducting an assessment for ADHD in an adult is often forced to rely upon the patient's account of his or her own behaviour. Informed observers, such as parents, spouses, or employers, are often not available. School records may be unavailable or uninformative. The diagnosis of ADHD in adults is controversial for this reason. It has been suggested that information received from an individual being assessed for ADHD is undependable.¹⁰ Recent research suggests, however, that the individual being assessed can provide as valid a report on his or her own symptoms of ADHD as can a knowledgeable informant.¹¹

To further complicate diagnosis, the DSM-IV criteria were designed for the assessment of children. Although DSM-IV specifies the number of symptoms required for a diagnosis of ADHD in childhood and in adulthood, it is by no means certain if this threshold is appropriate for adults.¹² There is some indication that fewer symptoms are necessary to reach clinical significance in an adult. Other psychiatric disorders, physical disorders, drug effects, and life situations can cause symptoms of ADHD both in children and adults. These conditions can also co-occur

with ADHD. In an assessment for the disorder, a thorough investigation is required to rule out other possibilities. No diagnostic tests for ADHD have been developed to date. A diagnosis of ADHD is based upon a clinical interview of the patient, and if possible, information obtained from knowledgeable informants.

ETIOLOGY

The etiology of ADHD is unknown. It is well accepted, however, that ADHD runs in families.^{13,14} Family-genetic studies,^{13,14} twin studies¹⁵ and adoption studies¹⁶ suggest that ADHD can be transmitted genetically from parent to offspring. In addition, studies show that first and second degree relatives of ADHD probands are more likely to have ADHD themselves than are the relatives of normal controls.^{14,17} The disorder is more likely to be seen in male relatives of ADHD probands than in the female relatives.¹⁴ Genetic transmission, however, does not seem to account for all cases of ADHD.^{8,17}

ADULT SYMPTOMS

There are countless ways ADHD may manifest itself in adults.³ Inattention may be manifested by difficulties completing necessary paperwork at home and at the workplace. An adult with the disorder may have difficulty focusing on detail. Tasks requiring sustained mental effort are often avoided completely. Affected individuals sometimes have trouble following a conversation or following instructions. Extraneous stimuli may be highly distracting.

Individuals with ADHD may be impulsive. This sometimes shows up as a tendency to interrupt during conversations, or to intrude on others. Adults with ADHD may not consider consequences and may take part in risky or even dangerous pastimes.

Like children with ADHD, adults with the disorder may have difficulty sitting still. They often report feeling restless, and often fidget when forced to stay in one place. Quiet or sedentary activities are often avoided.

The symptoms of ADHD may cause any number of difficulties. An individual with

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ADHD may have trouble keeping a job. Projects at home, such as completing income tax returns, may go unfinished. Troubles with the law and marital difficulties are not uncommon. Adults with ADHD have been shown to have an increased risk of car accidents, and an increased tendency to be charged with parking offences and moving violations.¹⁸

The severity of symptoms associated with ADHD and the level of dysfunction vary across situations and across time. In novel situations or highly stimulating or interesting situations, symptoms may be minimal or absent. In situations or settings which require high levels of attention or sustained attention, symptoms often worsen.

TREATMENT

Drug Therapy

An in-depth discussion of drug therapy for ADHD is beyond the scope of this paper. Adults with ADHD have, however, been treated with a variety of drugs, the most common being the stimulant medications methylphenidate and dextroamphetamine. As with children, results vary from individual to individual.¹⁹ Drug therapy does not help all affected individuals. In addition, consideration must be given to possible side-effects and abuse.

Psychosocial Interventions in Adults

There has been no research on the efficacy of psychosocial interventions in the treatment of ADHD in adults.

CONCLUSIONS

Research indicates that ADHD in adults is a real phenomenon. Affected individuals may be seriously handicapped by their symptoms. The diagnosis, however, can be difficult. A careful evaluation is needed to determine if symptoms are indeed the result of ADHD.

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“When we were young, we were told to act like adults.
Now that we are old, we are treated like infants.”