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ADHD and Coexisting Disorders

More than two-thirds of individuals with ADHD have at least one other coexisting condition. The symptoms of ADHD—constant motion and fidgetiness, interrupting and blurting out, difficulty sitting still and need for constant reminders, etc.—may overshadow these other disorders. But just as untreated ADHD can present challenges in everyday life, other disorders can also cause unnecessary suffering in individuals with ADHD and their families if left untreated. Any disorder can coexist with ADHD, but certain disorders tend to occur more commonly with ADHD. ADHD may coexist with one or more disorders.

Disruptive behavior disorders

About 40 percent of individuals with ADHD have oppositional defiant disorder (ODD). ODD involves a pattern of arguing; losing one's temper; refusing to follow rules; blaming others; deliberately annoying others; and being angry, resentful, spiteful and vindictive.

Among individuals with ADHD, conduct disorder (CD) may also be present, occurring in 27 percent of children, 45–50 percent of adolescents and 20–25 percent of adults with ADHD. Children with conduct disorder may be aggressive to people or animals, destroy property, lie or steal things from others, run away, skip school or break curfews. Adults with CD often exhibit behaviors that get them into trouble with the law.

Mood disorders

In adults, approximately 38 percent of ADHD patients have a co-occurring mood disorder. Mood disorders are characterized by extreme changes in mood. Children with mood disorders may seem to be in a bad mood often. They may cry daily or be frequently irritable with others for no apparent reason. Mood disorders include depression, mania and bipolar disorder.



Approximately 14 percent of children with ADHD also have depression, whereas only 1 percent of children without ADHD have depression. In adults with ADHD, approximately 47 percent also have depression. Typically, ADHD occurs first and depression occurs later. Both environmental and genetic factors may contribute.

Up to 20 percent of individuals with ADHD may show symptoms of bipolar disorder, a severe condition involving periods of mania, abnormally elevated mood and energy, contrasted by episodes of clinical depression. If left untreated, bipolar disorder can damage relationships and lead to job loss, school problems and even suicide.

Anxiety

Up to 30 percent of children and up to 53 percent of adults with ADHD may also have an anxiety disorder. Patients with anxiety disorders often worry excessively about a number of things (school, work, etc.) and may feel edgy, stressed out, tired and tense and have trouble getting restful sleep.

Tics and Tourette Syndrome

Less than 10 percent of those with ADHD have tics or Tourette Syndrome, but 60 to 80 percent of those with Tourette Syndrome have ADHD. Tics involve sudden, rapid, recurrent, involuntary movements or vocalizations. Tourette Syndrome is a much rarer, but more severe tic disorder, where patients may make noises, such as barking a word or sound, and movements, such as repetitive flinching or eye blinking, on an almost daily basis for years.

Learning disorders

Up to 50 percent of children with ADHD have a coexisting learning disorder, whereas 5 percent of children without ADHD have learning disorders. Learning disorders can cause problems with how individuals acquire or use new information such as reading or calculating. The most common learning disorders are dyslexia and dyscalculia. In addition, 12 percent of children with ADHD have speech problems, compared with 3 percent without ADHD.

Sleep disorders

One-quarter to one-half of parents of children with ADHD report that their children suffer from a sleep problem, especially difficulties with falling asleep and staying asleep. Sleep problems can be a symptom of ADHD, may be made worse by ADHD or may make the symptoms of ADHD worse.

Substance abuse

Research suggests that youth with ADHD are at increased risk for very early cigarette use, followed by alcohol and then drug abuse.



Cigarette smoking is more common in adolescents with ADHD, and adults with ADHD have elevated rates of smoking and report particular difficulty in quitting. Youth with ADHD are twice as likely to become addicted to nicotine as individuals without ADHD.

However, research has shown that individuals with ADHD who are treated with stimulants are not more prone to cocaine and stimulant abuse than others. Indeed, adolescents who are prescribed stimulant medication for their ADHD are less likely to subsequently use illegal drugs than are kids with ADHD who are not prescribed medication.

Diagnosis

As part of the diagnostic process for ADHD, the clinician or mental health professional must also determine whether there are any other conditions affecting the individual that could be responsible for presenting symptoms. Often, the symptoms of ADHD may overlap with other disorders.

The challenge for the health care professional is to figure out whether a symptom belongs to ADHD, to a different disorder or to both disorders at the same time. For some patients, the overlap of symptoms among the various disorders makes multiple diagnoses necessary. Interviews and questionnaires are often used to obtain information about symptoms from the patient, the family and teachers—in the case of children—to screen for these other disorders.



Treatment of co-occurring conditions

Decisions about what disorder to treat first depends on the impairment that those symptoms are producing in the individual's life. Clinicians work with the patient and family members, especially with children, to establish an individually tailored comprehensive treatment plan. These plans are ongoing and should be reviewed at least annually to make sure that the treatment options are working and adjust them if necessary.

In many cases when an individual has both ADHD and a co-occurring condition, the health care professional may elect to treat the ADHD first because primary treatment of ADHD may reduce stress, improve attentional resources and may enhance the individual's ability to deal with the symptoms of the other condition. Treatment options for ADHD include behavior therapy, medication, skills training, counseling, and school supports and accommodations. These interventions can be tailored to the patient's and family needs and help the patient control symptoms, cope with the disorder, improve overall psychological well-being and manage social relationships.

References

Adler, L. A., Spencer, T. J., Stein, M. A., & Newcorn, J. H. (2008). Best practices in adult ADHD: Epidemiology, impairments, and differential diagnosis. *CNS Spectrums*, 13, 1–19.

Kooij JJ, Huss M, Asherson P, et al. (2012 July). Distinguishing comorbidity and successful management of adult ADHD. *Journal of Attention Disorders*. 16(5 Suppl):3S-19S. doi: 10.1177/1087054711435361. Epub 2012 Apr 12. Review.

Larson K, et al. (2011 March). Patterns of comorbidity, functioning, and service use for US children with ADHD, 2007. *Pediatrics* 127(3):462-70.

MTA Cooperative Group. (1999). A 14-month randomized clinical trial of treatment strategies for attention deficit hyperactivity disorder. *Archives of General Psychiatry*, 56, 12.

Pliszka, Steven R. (2015). Comorbid psychiatric disorders in children with ADHD. In Russell A. Barkley (Ed). *Attention-deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment* (4th ed.), (pp. 140–168). New York, NY, US: Guilford Press, xiii, 898 pp.

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