

OVERVIEW OF ADHD

Attention-deficit/hyperactivity disorder (ADHD) is a chronic condition that affects millions of children and often continues into adulthood. ADHD includes a combination of persistent problems, such as difficulty sustaining attention, hyperactivity and impulsive behavior.

Children with ADHD may also struggle with low self-esteem, troubled relationships and poor performance in school. Symptoms sometimes lessen with age. However, some people never completely outgrow their ADHD symptoms. But they can learn strategies to be successful.

While, treatment won't cure ADHD, it can help a great deal with symptoms. Treatment typically involves medications and behavioral interventions. Early diagnosis and treatment can make a big difference in outcome.

SYMPTOMS OF ADHD

The primary features of ADHD include inattention and hyperactive-impulsive behavior. ADHD symptoms start before age 12, and in some children, they're noticeable as early as 3 years of age. ADHD symptoms can be mild, moderate or severe, and they may continue into adulthood.

There are three subtypes of ADHD:

- **Predominantly inattentive.** Many symptoms fall under inattention.
 - Fail to pay close attention to details or make careless mistakes in schoolwork
 - Have trouble staying focused in tasks or play
 - Appear not to listen, even when spoken to directly
 - Have difficulty following through on instructions and fail to finish schoolwork or chores
 - Have trouble organizing tasks and activities
 - Avoid or dislike tasks that require focused mental effort, such as homework
 - Lose items needed for tasks or activities, for example, toys, school assignments, pencils
 - Be easily distracted

- Forget to do some daily activities, such as forgetting to do chores
- **Predominantly hyperactive/impulsive.** Many symptoms are hyperactive and impulsive. A child who shows a pattern of hyperactive and impulsive symptoms may often:
 - Fidget with or tap his or her hands or feet, or squirm in the seat
 - Have difficulty staying seated in the classroom or in other situations
 - Be on the go, in constant motion
 - Run around or climb in situations when it's not appropriate
 - Have trouble playing or doing an activity quietly
 - Talk too much
 - Blur out answers, interrupting the questioner
 - Have difficulty waiting for his or her turn
 - Interrupt or intrude on others' conversations, games or activities
- **Combined.** This is a mix of inattentive symptoms and hyperactive/impulsive symptoms.

DIAGNOSING ADHD IN YOUNG CHILDREN

- Although signs of ADHD can sometimes appear in preschoolers or even younger children, diagnosing the disorder in very young children is difficult. That's because developmental problems such as language delays can be mistaken for ADHD.
- So, children preschool age or younger suspected of having ADHD are more likely to need evaluation by a specialist, such as a psychologist or psychiatrist, speech pathologist, or developmental pediatrician.

TREATMENT OF ADHD

- Standard treatments for ADHD in children include medications, behavior therapy, counseling and education services. These treatments can relieve many of the symptoms of ADHD, but they don't cure it. It may take some time to determine what works best for your child.

There's no specific test for ADHD, but making a diagnosis will likely include:

- **Medical exam**, to help rule out other possible causes of symptoms
- **Information gathering**, such as any current medical issues, personal and family medical history, and school records
- **Interviews or questionnaires** for family members, your child's teachers or other people who know your child well, such as caregivers, babysitters and coaches
- **ADHD criteria from the Diagnostic and Statistical Manual of Mental Disorders DSM-5**, published by the American Psychiatric Association
- **ADHD rating scales** to help collect and evaluate information about your child
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STIMULATE MEDICATION

Currently, stimulant drugs (psychostimulants) are the most prescribed medications for ADHD. Stimulants appear to boost and balance levels of brain chemicals called neurotransmitters. These medications help improve the signs and symptoms of inattention and hyperactivity — sometimes effectively in a short period of time.

Examples include:

- **Amphetamines.** These include dextroamphetamine (Dexedrine), dextroamphetamine-amphetamine (Adderall XR, Mydayis) and lisdexamfetamine (Vyvanse).
- **Methylphenidates.** These include methylphenidate (Concerta, Ritalin, others) and dexmethylphenidate (Focalin).

The right dose varies from child to child, so it may take some time to find the correct dose. And the dose may need to be adjusted if significant side effects occur or as your child matures. Ask your doctor about possible side effects of stimulants.

Stimulant medications and certain health risks

Some research indicates that using ADHD stimulant medications with certain heart problems may be a concern, and the risk of certain psychiatric symptoms may be increased when using stimulant medications.

- **Heart problems.** Stimulant medication may cause an increased blood pressure or heart rate, but the increased risk of serious adverse effects or sudden death is still unproved. However, the

doctor should evaluate your child for any heart condition or family history of heart disease before prescribing a stimulant medication and monitor your child during stimulant use.

- **Psychiatric problems.** Stimulant medications may rarely increase the risk for agitation or psychotic or manic symptoms with stimulant medications use. Contact the doctor immediately if your child has sudden new or worsening behavior or sees or hears things that aren't real while taking stimulant medication.

Other medications

Other medications that may be effective in treating ADHD include:

- Atomoxetine (Strattera)
- Antidepressants such as bupropion (Wellbutrin SR, Wellbutrin XL, others)
- Guanfacine (Intuniv)
- Clonidine (Catapres, Kapvay)

Atomoxetine and antidepressants work slower than stimulants do and may take several weeks before they take full effect. These may be good options if your child can't take stimulants because of health problems or if stimulants cause severe side effects.

Suicide risk

Although it remains unproved, concerns have been raised that there may be a slightly increased risk of suicidal thinking in children and teenagers taking nonstimulant ADHD medication or antidepressants. Contact your child's doctor if you notice any signs of suicidal thinking or other signs of depression.

Giving medications safely

It's very important to make sure your child takes the right amount of the prescribed medication. Parents may be concerned about stimulants and the risk of abuse and addiction. Stimulant medications are considered safe when your child takes the medication as prescribed by the doctor. Your child should see the doctor regularly to determine if the medication needs to be adjusted.

On the other hand, there's concern that other people might misuse or abuse stimulant medication prescribed for children and teenagers with ADHD. To keep your child's medications safe and to make sure your child is getting the right dose at the right time:

- **Give medications carefully.** Children and teens shouldn't oversee their own ADHD medication without proper supervision.

- **At home, keep medication locked in a childproof container.** And store medication away from the reach of children. An overdose of stimulant drugs is serious and potentially fatal.
- **Don't send supplies of medication to school with your child.** Deliver any medication yourself to the school nurse or health office