

ADHD Symptoms, Diagnosis and Management

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What are the Symptoms of ADHD?

ADHD is not like a broken arm, or strep throat. Unlike these two disorders, ADHD does not have clear physical signs that can be seen in an x-ray or a lab test. ADHD can only be identified by looking for certain characteristic behaviors, and these behaviors vary from person to person. Scientists have not yet identified a single cause behind all the different patterns of behavior--and they may never find just one. Rather, someday scientists may find that ADHD is actually an umbrella term for several slightly different disorders.

At present, ADHD is a diagnosis applied to children and adults who consistently display certain characteristic behaviors over a period of time. The most common behaviors fall into three categories: *inattention, hyperactivity, and impulsivity*.

Inattention. People who are inattentive have a hard time keeping their mind on any one thing and may get bored with a task after only a few minutes. They may give effortless, automatic attention to activities and things they enjoy. But focusing deliberate, conscious attention to organizing and completing a task or learning something new is difficult.

Hyperactivity. People who are hyperactive always seem to be in motion. They can't sit still. They may dash around or talk incessantly. Sitting still through a lesson can be an impossible task. Hyperactive children squirm in their seat or roam around the room. Or they might wiggle their feet, touch everything, or noisily tap their pencil. Hyperactive teens and adults may feel intensely restless. They may be fidgety or they may try to do several things at once, bouncing around from one activity to the next.

Impulsivity. People who are overly impulsive seem unable to curb their immediate reactions or think before they act. As a result, they may blurt out inappropriate comments. Or, they may run into the street without looking. Their impulsivity may make it hard for them to wait for things they want or to take their turn in games. They may grab a toy from another child or hit when they're upset.

Assessing ADHD

Not everyone who is overly hyperactive, inattentive, or impulsive has an attention disorder. Since most people sometimes blurt out things they didn't mean to say, bounce from one task to another, or become disorganized and forgetful, how can specialists tell if the problem is ADHD?

To assess whether a person has ADHD, specialists consider several critical questions: Are these behaviors excessive, long-term, and pervasive? That is, do they occur more often than in other people

the same age? Are they a continuous problem, not just a response to a temporary situation? Do the behaviors occur in several settings or only in one specific place like the playground or the office? The person's pattern of behavior is compared against a set of criteria and characteristics of the disorder. These criteria appear in a diagnostic reference book called the DSM (short for the *Diagnostic and Statistical Manual of Mental Disorders*).

According to the diagnostic manual, there are three patterns of behavior that indicate ADHD. People with ADHD may show several signs of being consistently inattentive. They may have a pattern of being hyperactive and impulsive. Or they may show all three types of behavior.

According to the DSM, signs of **inattention** include:

- becoming easily distracted by irrelevant sights and sounds
- failing to pay attention to details and making careless mistakes
- rarely following instructions carefully and completely
- losing or forgetting things like toys, or pencils, books, and tools needed for a task

Some signs of **hyperactivity** and **impulsivity** are:

- feeling restless, often fidgeting with hands or feet, or squirming
- running, climbing, or leaving a seat, in situations where sitting or quiet behavior is expected
- blurting out answers before hearing the whole question
- having difficulty waiting in line or for a turn

Because everyone shows some of these behaviors at times, the DSM contains very specific guidelines for determining when they indicate ADHD. The behaviors must appear early in life, before age 7, and continue for at least 6 months. In children, they must be more frequent or severe than in others the same age. Above all, the behaviors must create a real handicap in at least two areas of a person's life, such as school, home, work, or social settings. So someone whose work or friendships are not impaired by these behaviors would not be diagnosed with ADHD. Nor would a child who seems overly active at school but functions well elsewhere.

Can other conditions cause these symptoms?

The fact is, many things can produce these behaviors. Anything from chronic fear to mild seizures can make a child seem overactive, quarrelsome, impulsive, or inattentive. For example, a formerly cooperative child who becomes overactive and easily distracted after a parent's death is dealing with an emotional problem, not ADHD. A chronic middle ear infection can also make a child seem distracted and uncooperative. So can living with family members who are physically abusive or addicted to drugs or alcohol. Can you imagine a child trying to focus on a math lesson when his or her safety and well-being are in danger each day? Such children are showing the effects of other problems, not ADHD.

In other children, ADHD-like behaviors may be their response to a defeating classroom situation. Perhaps the child has a learning disability and is not developmentally ready to learn to read and write at the time these are taught. Or maybe the work is too hard or too easy, leaving the child frustrated or bored.

Some children's attention and class participation improve when the class structure and lessons are adjusted a bit to meet their emotional needs, instructional level, or learning style. Although such children need a little help to get on track at school, they probably don't have ADHD.

It's also important to realize that during certain stages of development, the majority of children that age tend to be inattentive, hyperactive, or impulsive--but do not have ADHD. Preschoolers have lots of energy and run everywhere they go, but this doesn't mean they are hyperactive. And many teenagers go through a phase when they are messy, disorganized, and reject authority. It doesn't mean they will have a lifelong problem controlling their impulses.

ADHD is a serious diagnosis that may require long-term treatment with counseling and medication. So it's important that a person first be assessed for any other causes for these behaviors.

What Can Look Like ADHD?

- Underachievement at school due to a learning disability
- Attention lapses caused by petit mal seizures
- A middle ear infection that causes an intermittent hearing problem
- Disruptive or unresponsive behavior due to anxiety or depression

Can other disorders accompany ADHD?

One of the difficulties in diagnosing ADHD is that it is often accompanied by other problems. For example, many children with ADHD also have a specific learning disability (LD), which means they have trouble mastering language or certain academic skills, typically reading and math. ADHD is not in itself a specific learning disability. But because it can interfere with concentration and attention, ADHD can make it doubly hard for a child with LD to do well in school.

A very small proportion of people with ADHD have a rare disorder called Tourette's syndrome. People with Tourette's have tics and other movements like eye blinks or facial twitches that they cannot control. Others may grimace, shrug, sniff, or bark out words.

More serious, nearly half of all children with ADHD--mostly boys--tend to have another condition, called oppositional defiant disorder. These children may overreact or lash out when they feel bad about themselves. They may be stubborn, have outbursts of temper, or act belligerent or defiant. Sometimes this progresses to more serious conduct disorders. Children with this combination of problems are at risk of getting in trouble at school, and even with the police. They may take unsafe risks and break laws--they may steal, set fires, destroy property, and drive recklessly. It's important that children with these conditions receive help before the behaviors lead to more serious problems.

At some point, many children with ADHD--mostly younger children and boys--experience other emotional disorders. About one-fourth feel anxious. They feel tremendous worry, tension, or uneasiness, even when there's nothing to fear. Because the feelings are scarier, stronger, and more frequent than normal fears, they can affect the child's thinking and behavior. Others experience depression. Depression goes beyond ordinary sadness--people may feel so "down" that they feel hopeless and unable to deal with everyday tasks. Depression can disrupt sleep, appetite, and the ability to think.

Because emotional disorders and attention disorders so often go hand in hand, every child who has ADHD should be checked for accompanying anxiety and depression. Anxiety and depression can be treated, and helping children handle such strong, painful feelings will help them cope with and overcome the effects of ADHD.

Of course, not all children with ADHD have an additional disorder. Nor do all people with learning disabilities, Tourette's syndrome, oppositional defiant disorder, conduct disorder, anxiety, or depression have ADHD. But when they do occur together, the combination of problems can seriously complicate a person's life. For this reason, it's important to watch for other disorders in children who have ADHD.

What causes ADHD?

Understandably, one of the first questions parents ask when they learn their child has an attention disorder is "Why? What went wrong?"

Health professionals stress that since no one knows what causes ADHD, it doesn't help parents to look backward to search for possible reasons. There are too many possibilities to pin down the cause with certainty. It is far more important for the family to move forward in finding ways to get the right help.

Scientists, however, do need to study causes in an effort to identify better ways to treat, and perhaps some day, prevent ADHD. They are finding more and more evidence that ADHD does not stem from home environment, but from biological causes. When you think about it, there is no clear relationship between home life and ADHD. Not all children from unstable or dysfunctional homes have ADHD. And not all children with ADHD come from dysfunctional families. Knowing this can remove a huge burden of guilt from parents who might blame themselves for their child's behavior.

Over the last decades, scientists have come up with possible theories about what causes ADHD. Some of these theories have led to dead ends, some to exciting new avenues of investigation.

One disappointing theory was that all attention disorders and learning disabilities were caused by minor head injuries or undetectable damage to the brain, perhaps from early infection or complications at birth. Based on this theory, for many years both disorders were called "minimal brain damage" or "minimal brain dysfunction." Although certain types of head injury can explain some cases of attention disorder, the theory was rejected because it could explain only a very small number of cases. Not everyone with ADHD or LD has a history of head trauma or birth complications.

ADHD Is Not Usually Caused by:

- too much TV
- food allergies
- excess sugar
- poor home life
- poor schools

Research shows that a mother's use of cigarettes, alcohol, or other drugs during pregnancy may have damaging effects on the unborn child. These substances may be dangerous to the fetus's developing brain. It appears that alcohol and the nicotine in cigarettes may distort developing nerve cells. For example, heavy alcohol use during pregnancy has been linked to fetal alcohol syndrome (FAS), a condition that can lead to low birth weight, intellectual impairment, and certain physical defects. Many children born with FAS show much the same hyperactivity, inattention, and impulsivity as children with ADHD.

Drugs such as cocaine--including the smokable form known as crack--seem to affect the normal development of brain receptors. These brain cell parts help to transmit incoming signals from our skin, eyes, and ears, and help control our responses to the environment. Current research suggests that drug abuse may harm these receptors. Some scientists believe that such damage may lead to ADHD.

Toxins in the environment may also disrupt brain development or brain processes, which may lead to ADHD. Lead is one such possible toxin. It is found in dust, soil, and flaking paint in areas where leaded gasoline and paint were once used. It is also present in some water pipes. Some animal studies suggest that children exposed to lead may develop symptoms associated with ADHD, but only a few cases have actually been found.

Other research shows that attention disorders tend to run in families, so there are likely to be genetic influences. Children who have ADHD usually have at least one close relative who also has ADHD. And at least one-third of all fathers who had ADHD in their youth bear children who have ADHD. Even more convincing: the majority of identical twins share the trait. At the National Institutes of Health, researchers are also on the trail of a gene that may be involved in transmitting ADHD in a small number of families with a genetic thyroid disorder.

Treatment Options

For decades, medications have been used to treat the symptoms of ADHD. Three of these medications are methylphenidate (Ritalin), dextroamphetamine (Dexedrine or Dextrostat), and pemoline (Cylert). However, most prescription psychiatric drugs also carry far-reaching negative side effects and risks (see below).

Unfortunately, people think medication is all that's needed. For lasting improvement, numerous clinicians believe that the most significant, long-lasting gains appear when medication is combined with behavioral therapy, emotional counseling, dietary control and practical support.

The Medication Debate

Ritalin and the other stimulants have sparked a great deal of controversy. The potential side effects should be carefully weighed against the benefits before prescribing the drugs. While on these medications, some children may lose weight, have less appetite, and temporarily grow more slowly. Others may have problems falling asleep. Some doctors believe that stimulants may also make the symptoms of Tourette's syndrome worse. Some doctors say if they carefully watch the child's height, weight, and overall development, the benefits of medication far outweigh the potential side effects. Side effects that do occur can often be handled by reducing the dosage. However, that is not necessarily true, and you should educate yourself on all aspects of the debate before making a decision.

A far safer approach is often found with natural (herbal or homeopathic) remedies, which should be considered as a first step ahead of prescription psychiatric drugs. When combined with strong dietary control, counseling as necessary and a healthy lifestyle, natural remedies have been shown to be effective in helping to alleviate the symptoms of ADHD.

Another debate is whether Ritalin and other stimulant drugs are prescribed unnecessarily for too many children. Remember that many things, including anxiety, depression, allergies, seizures, or problems with the home or school environment can make children seem overactive, impulsive, or inattentive. Critics argue that many children who do not have a true attention disorder are medicated as a way to control their disruptive behaviors.

Treatments To Help People With ADHD and Their Families Learn To Cope

Life can be hard for children with ADHD. They're the ones who are so often in trouble at school, can't finish a game, and lose friends. They may spend agonizing hours each night struggling to keep their mind on their homework, and then forget to bring it to school.

It's not easy coping with these frustrations day after day. Some children release their frustration by acting contrary, starting fights, or destroying property. Some turn the frustration into body ailments, like the child who gets a stomachache each day before school. Others hold their needs and fears inside, so that no one sees how badly they feel.

It's also difficult having a sister, brother, or classmate who gets angry, grabs your toys, and loses your things. Children who live with or share a classroom with a child who has ADHD get frustrated, too. They may feel neglected as their parents or teachers try to cope with the hyperactive child. They may resent their brother or sister never finishing chores, or being pushed around by a classmate. They want to love their sibling and get along with their classmate, but sometimes it's so hard!

It's especially hard being the parent of a child who is full of uncontrolled activity, leaves messes, throws tantrums, and doesn't listen or follow instructions. Parents often feel powerless and at a loss. The usual methods of discipline, like reasoning and scolding, don't work with this child, because the child doesn't really choose to act in these ways. It's just that their self-control comes and goes. Out of sheer frustration, parents sometimes find themselves spanking, ridiculing, or screaming at the child, even though they know it's not appropriate. Their response leaves everyone more upset than before. Then they blame themselves for not being better parents. Once children are diagnosed and receiving treatment, some of the emotional upset within the family may fade.

Medication can help to control some of the behavior problems that may have led to family turmoil. But more often, there are other aspects of the problem that medication can't touch. Even though ADHD primarily affects a person's behavior, having the disorder has broad emotional repercussions. For some children, being scolded is the only attention they ever get. They have few experiences that build their sense of worth and competence. If they're hyperactive, they're often told they're bad and punished for being disruptive. If they are too disorganized and unfocused to complete tasks, others may call them lazy. If they impulsively grab toys, butt in, or shove classmates, they may lose friends. And if they have a related conduct disorder, they may get in trouble at school or with the law. Facing the daily frustrations that can come with having ADHD can make people fear that they are strange, abnormal, or stupid.

Often, the cycle of frustration, blame, and anger has gone on so long that it will take some time to undo. Both parents and their children may need special help to develop techniques for managing the patterns of behavior. In such cases, mental health professionals can counsel the child and the family, helping them to develop new skills, attitudes, and ways of relating to each other. In individual counseling, the therapist helps children or adults with ADHD learn to feel better about themselves. They learn to recognize that having a disability does not reflect who they are as a person. The therapist can also help people with ADHD identify and build on their strengths, cope with daily problems, and control their attention and aggression. In group counseling, people learn that they are not alone in their frustration and that others want to help. Sometimes only the individual with ADHD needs counseling support. But in many cases, because the problem affects the family as well as the person with ADHD, the entire family may need help. The therapist assists the family in finding better ways to handle the disruptive behaviors and promote change. If the child is young, most of the therapist's work is with the parents, teaching them techniques for coping with and improving their child's behavior.

Several intervention approaches are available and different therapists tend to prefer one approach or another. Knowing something about the various types of interventions makes it easier for families to choose a therapist that is right for their needs.

Psychotherapy works to help people with ADHD to like and accept themselves despite their disorder. In psychotherapy, patients talk with the therapist about upsetting thoughts and feelings, explore self-defeating patterns of behavior, and learn alternative ways to handle their emotions. As they talk, the therapist tries to help them understand how they can change. However, people dealing with ADHD usually want to gain control of their symptomatic behaviors more directly. If so, more direct kinds of intervention are needed.

Cognitive-behavioral therapy helps people work on immediate issues. Rather than helping people understand their feelings and actions, it supports them directly in changing their behavior. The support might be practical assistance, like helping Henry learn to think through tasks and organize his work. Or the support might be to encourage new behaviors by giving praise or rewards each time the person acts in the desired way. A cognitive-behavioral therapist might use such techniques to help a belligerent child learn to control his fighting, or an impulsive teenager to think before she speaks.

Social skills training can also help children learn new behaviors. In social skills training, the therapist discusses and models appropriate behaviors like waiting for a turn, sharing toys, asking for help, or responding to teasing, then gives children a chance to practice. For example, a child might learn to "read" other people's facial expression and tone of voice, in order to respond more appropriately. Social skills training helps ADHD children learn to join in group activities, make appropriate comments, and ask for help. A child might learn to see how his behavior affects others and develop new ways to respond when angry or pushed.

Support groups connect people who have common concerns. Many adults with ADHD and parents of children with ADHD find it useful to join a local or national support group. Many groups deal with issues of children's disorders, and even ADHD specifically. The national associations listed at the back of this booklet can explain how to contact a local chapter. Members of support groups share frustrations and successes, referrals to qualified specialists, and information about what works, as well as their hopes for themselves and their children. There is strength in numbers--and sharing experiences with others who have similar problems helps people know that they aren't alone.

Parenting skills training, offered by therapists or in special classes, gives parents tools and techniques for managing their child's behavior. One such technique is the use of "time out" when the child becomes too unruly or out of control. During time outs, the child is removed from the agitating situation and sits alone quietly for a short time to calm down. Parents may also be taught to give the child "quality time" each day, in which they share a pleasurable or relaxed activity. During this time together, the parent looks for opportunities to notice and point out what the child does well, and praise his or her strengths and abilities.

An effective way to modify a child's behavior is through a system of *rewards and penalties*. The parents (or teacher) identify a few desirable behaviors that they want to encourage in the child--such as asking for a toy instead of grabbing it, or completing a simple task. The child is told exactly what is expected in order to earn the reward. The child receives the reward when he performs the desired behavior and a mild penalty when he doesn't. A reward can be small, perhaps a token that can be exchanged for special privileges, but it should be something the child wants and is eager to earn. The penalty might be removal of a token or a brief "time out." The goal, over time, is to help children learn to control their own behavior and to choose the more desired behavior. The technique works well with all children, although children with ADHD may need more frequent rewards.

In addition, parents may learn to structure situations in ways that will allow their child to succeed. This may include allowing only one or two playmates at a time, so that their child doesn't get over stimulated. Or if their child has trouble completing tasks, they may learn to help the child divide a large task into small steps, then praise the child as each step is completed.

Parents may also learn to use stress management methods, such as meditation, relaxation techniques, and exercise to increase their own tolerance for frustration, so that they can respond more calmly to their child's behavior.

Controversial Treatments

Understandably, parents who are eager to help their children want to explore every possible option. Many newly touted treatments sound reasonable. Many even come with glowing reports. A few are pure quackery. Some are even developed by reputable doctors or specialists--but when tested scientifically, cannot be proven to help.

Here are a few types of treatment that have not been scientifically shown to be effective in treating the majority of children or adults with ADHD:

- biofeedback
- allergy treatments
- medicines to correct problems in the inner ear
- megavitamins
- chiropractic adjustment and bone re-alignment
- treatment for yeast infection
- eye training
- special colored glasses

A few success stories can't substitute for scientific evidence. Until sound, scientific testing shows a treatment to be effective, families risk spending time, money, and hope on fads and false promises.

The Natural Approach

Rather than prescribing strong and sometimes addictive psychiatric drugs, (Ritalin, Concerta, Adderall) naturopathic approaches to the treatment of ADHD and ADD **take a more holistic look** at the individual and take into account diet, lifestyle, personality type, surroundings and emotional factors.

Natural remedies are used to **gently and effectively** treat the symptoms, while at the same time helping the person to heal and to reach a state of **balance and health**.

The natural approach is less harmful and more thorough and has a **greater chance of curing** the problem altogether, instead of keeping the individual on psychiatric drugs for many years.

This is very important, especially in the case of children, because of the frequent **side effects of prescription drugs** and the risk of addiction.