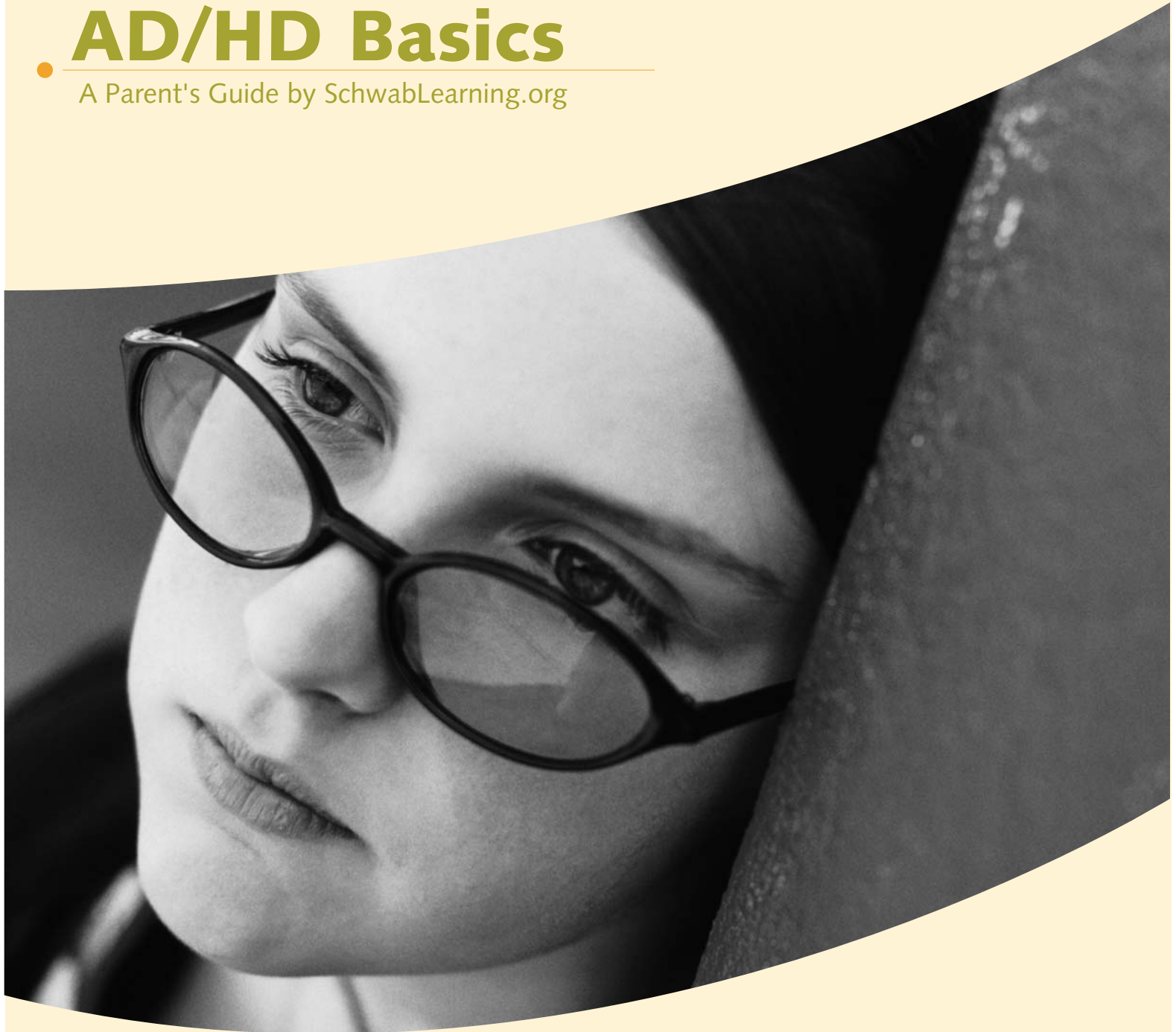


AD/HD Basics

A Parent's Guide by SchwabLearning.org



AD/HD Basics: **A Parent's Guide by Schwablearning.org**

If your child has been diagnosed with Attention-Deficit/Hyperactivity Disorder (AD/HD), our *E-ssential Guide to AD/HD Basics* will put you on the fast track to information! This guide covers the fundamental facts about AD/HD and includes articles and expert interviews written especially for SchwabLearning.org, along with suggested resources. You might share this guide with family members and your child's teacher to increase their awareness and understanding of AD/HD.

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A Parent's Guide to AD/HD Basics

AD/HD — An Overview

Sometimes your child doesn't pay attention or follow directions, and you wonder if she has AD/HD. How is it diagnosed? What can you do to help her?

What is AD/HD?

Attention-Deficit/Hyperactivity Disorder (AD/HD) is a neurobehavioral disorder that affects an estimated 4-12 percent of the school age population. The *Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV)*, published by the American Psychiatric Association, describes three subtypes of AD/HD:

- **Inattentive** — can't seem to get focused or stay focused on a task or activity
- **Hyperactive-impulsive** — very active and often acts without thinking
- **Combined** — inattentive, impulsive, and too active

How is AD/HD Diagnosed?

Currently, there are no medical tests, such as blood tests or electrical imaging (such as MRI), that diagnose AD/HD. However, research in this area is being conducted with the hope that making the diagnosis can be more precise in the near future.

At this time, behavior criteria from *DSM-IV* are used to make the determination of AD/HD. Some of these behaviors are seen more often at certain periods of child development, and behaviors may vary for boys and girls. Individual clinicians may interpret the criteria differently, so it's important that you choose a qualified professional to make the diagnosis.

Because of inconsistencies in diagnosis by medical professionals, the American Academy of Pediatrics (AAP) came out with its guidelines in May 2000. They recommend a comprehensive assessment that relies on direct information from parents (or caregivers) and the classroom teacher (or other school professional) using developmental history, rating scales, observations, and available test results.

Information from all of the sources is reviewed carefully. The clinician has to make a judgment about whether the symptoms of AD/HD impair academic achievement, classroom performance, family and social relationships, independent functioning, self-esteem, leisure activities, and/or self-care. So it usually takes two or more visits to the clinician before a diagnosis can be made.

Behaviors generally are observed before age 7. Symptoms need to be present in at least two places, e.g., at school, home, community, childcare setting, and for at least 6 months. They should occur more often and be more severe than for other kids of the same age or developmental level.

A few of the symptoms of AD/HD are:

- Doesn't pay close attention to details
- Doesn't seem to listen when spoken to directly
- Is easily distracted

“Imagine how hard it might be for a first grader to sit and concentrate on instruction in a fourth grade classroom, and you'll get an idea of how hard it is for many kids with AD/HD to function in groups their own age.”



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- Has difficulty organizing and finishing tasks
- Fidgets with hands and feet; has difficulty remaining seated
- Runs about or climbs excessively when inappropriate (seems “motor-driven”)
- Talks continually
- Interrupts conversations and intrudes upon other kids' games
- Avoids tasks that require sustained mental effort (e.g., schoolwork, homework, games)
- Does things that are dangerous without thinking about possible outcomes

“If your child with AD/HD doesn't qualify for special education, she may be eligible for accommodations ... in the general education classroom under Section 504 of the Rehabilitation Act.”

What Does This Mean for Your Child?

Kids with AD/HD may be delayed as much as 30 percent of their actual age in their ability to pay attention and remember. This means that a 9-year-old may act more like a 6-year-old in his ability to focus and use self-control. Imagine how hard it might be for a first grader to sit and concentrate on instruction in a fourth grade classroom, and you'll get an idea of how hard it is for many kids with AD/HD to function in groups their own age. It doesn't mean his intelligence is any less; it's just the ability to control impulses that's affected.

What Services are Available?

A medical diagnosis of AD/HD doesn't automatically qualify your child for special education. Your child must be assessed and found eligible by the public school's multidisciplinary team in order to qualify for services. If she's experiencing academic problems along with AD/HD, you or the teacher may request an evaluation to see if she qualifies for special education services.

Kids with AD/HD may be eligible under “specific learning disability” since attention problems may be the cause of significant academic difficulties. Or they may qualify as “emotionally disturbed” if their social or emotional behaviors negatively affect their ability to learn. Or they can be considered “other health impaired” if they have limited strength, vitality, or alertness (including increased attention to environmental stimuli which results in limited concentration in the educational setting) and the AD/HD adversely affects their educational performance.

If your child with AD/HD doesn't qualify for special education, she may be eligible for accommodations, such as preferential seating in the general education classroom under Section 504 of the Rehabilitation Act. This law prohibits discrimination on the basis of a disability. She qualifies if the public school's multidisciplinary 504 team agrees that, in comparison to the average child with no disability, she has an impairment that “substantially limits one or more major life activities.”

If your child doesn't qualify for these services, then her needs may be addressed in the general education classroom.

How Is It Treated?

Depending on your child's needs, more than one of the following may be appropriate and/or necessary to help your child succeed:

- Medication
- Behavior management strategies at home and at school

AD/HD — An Overview

- Classroom accommodations
- Family and child counseling

How Can Parents Help?

- Anticipate problems and help her make a plan.
- Establish clear rules, limits, and expectations.
- Reduce the amount of talking and reminding; use charts and lists as reminders instead.
- Consistently use positive reinforcement and logical consequences.
- Collaborate with her teacher about necessary modifications and/or accommodations.
- Look for opportunities to support and celebrate her strengths, especially in the non-academic areas.
- Become knowledgeable about AD/HD by reading, attending conferences, participating in support groups or online communities.
- Depending on your child's age, discuss the specifics of his/her AD/HD, using books and websites for kids.
- Be sure that childcare providers and leaders of groups and programs outside of school are aware of the management strategies that you and the school have found to be effective.

How Can Teachers Help?

- Provide individual accommodations as appropriate.
- Follow a consistent behavior management plan.
- Reinforce appropriate behavior.
- Find opportunities to use her strengths and talents at school.
- Work collaboratively and communicate regularly with parents.

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About the Author

Jan Baumel, M.S., Licensed Educational Psychologist, spent 35 years in education as a teacher, school psychologist, and special education administrator before joining Schwab Learning. Today she is a consultant to local school districts and university field supervisor for student teachers.

A Parent's Guide to AD/HD Basics

Dr. Sam Goldstein Explains the Best Way to Diagnose for AD/HD

SchwabLearning.org asks:

We have heard that the evaluation for AD/HD during childhood can be completed in as short a time as one hour. Yet some professionals take hours administering a variety of tests before a diagnosis is made. How can a parent be a wise consumer when seeking evaluation if they suspect their child may struggle with AD/HD?

Dr. Sam Goldstein Answers:

First, it is important for parents to understand that when kids struggle emotionally, behaviorally, or developmentally it is likely they may experience difficulty in a number of important life activities. The process of assessment is not just to count symptoms and proclaim diagnoses but to understand a child's strengths, as well as weaknesses, in ways that assist in providing support and help.

To be wise consumers, parents must first understand the important role normally maturing self-control plays in child development. Self-control is critically important to learn, behave, manage emotions, develop friendships, and function effectively in community activities. Thus, it's not surprising that the co-occurrence of learning, behavioral, and emotional problems is the rule rather than the exception for children receiving diagnoses of AD/HD.

The diagnostic process must carefully explore many of these co-occurring problems, not only to provide appropriate diagnoses and assistance but also to identify early signs or risk factors that may speak to an emerging problem. This process allows parents, educators, and professionals to provide help and assistance before children fail.

For example, preschoolers with delayed development of self-control are often disinterested in sedentary, pre-academic activities. Their lack of practice leads to limited proficiency. This often makes them appear as if they may have a learning disability. Yet some children with AD/HD also demonstrate weaknesses in key skills necessary for early academic achievement. **A thorough assessment allows a professional to not only examine the issue of AD/HD but also the possibility of weaknesses in skills necessary for early academic learning.** Further, it is well recognized that among children with early language and learning problems, parent and teacher reports of hyperactive, impulsive, and inattentive behavior are often elevated, not necessarily the result of a biological risk but of the child's day in and day out frustration. Only a thorough assessment can tease out and provide an understanding of these risks and their relationships.

In the clinical diagnostic process there are eighteen symptoms of AD/HD. **These symptoms can be assessed through direct observation and history taking but can also very efficiently be assessed by asking parents and teachers to complete well-researched, normative questionnaires.** In fact, this quickly allows a professional to obtain parent and teacher input specifically concerning the presentation

“Keep in mind that inattention, off-task behavior, and non-compliance are the most common complaints parents make about children.”

Dr. Sam Goldstein Explains the Best Way to Evaluate for AD/HD

and severity of AD/HD symptoms. However, parents should be cautioned that when this type of questionnaire is the only means of assessment, the result might be an over-identification of kids with AD/HD.

Time-saving questionnaires and brief histories provide a very efficient means of identifying the 20% of children in the general population who may struggle. To truly understand the reasons for these struggles, a good evaluator must take a much more detailed and careful history, as well as explore the possibility that symptoms could be the result of other conditions. Keep in mind that inattention, off task behavior, and non-compliance are the most common complaints parents make about children. In particular, inattentiveness is a characteristic description of children with depression, anxiety, oppositional behavior, and even learning disabilities. For many of these children, their inattentiveness is not the result of a biologically based problem with developing self-control.

“Although school personnel usually are not in the position to make a diagnosis of AD/HD, the input they can provide to the physician and community psychologist is invaluable.”

At the other extreme, it is not necessary to administer a ten-hour neuropsychological test battery to a child referred for symptoms of AD/HD when a brief history and general questionnaires reveal no indications of delayed academic achievement, severe emotional problems, or family adversity. **When parents suspect their child may experience problems as a result of AD/HD, a good place to begin is by obtaining a book or video about the subject and becoming educated about common signs, symptoms, and behaviors, as well as co-occurring problems.** If parents are then concerned their child may experience symptoms of AD/HD to an impairing degree, I suggest they speak with their pediatrician or family practitioner. Most physicians working with children today also work closely with child psychologists and can refer the child for an initial consultation. I also suggest parents request a consultation with their child's school psychologist. Although school personnel usually are not in the position to make a diagnosis of AD/HD, the input they can provide to the physician and community psychologist is invaluable in the diagnostic process.

Finally, keep in mind that when children leave school they are not asked their weakest subject and most annoying behavior and then assigned that job for life. In fact, it is just the opposite. We accomplish our goals in life through our strengths and assets. **For me, an evaluation considering AD/HD in a child must also place equal focus on defining and understanding that child's strengths and abilities.**

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About the Author

Sam Goldstein, Ph.D. is a clinical neuropsychologist and member of the faculty of the University of Utah. He has authored over 100 scholarly publications, including eighteen texts, book chapters, peer reviewed research and informational articles for parents and professionals He can be reached through his website at: <http://www.samgoldstein.com>.



A Parent's Guide to AD/HD Basics

Management Strategies — Attention-Deficit/Hyperactivity Disorder

Supporting your child with Attention-Deficit/Hyperactivity Disorder (AD/HD) at home can be very tiring. But to help your child succeed, you'll need to coach him daily. You'll find it's easier if you have a practical and meaningful plan geared to his level of development and AD/HD symptoms.

General Parenting Tips

- When developing a plan to help your child, you'll need to adjust the rules and consequences to your child's level of development. Many kids who have AD/HD behave as if they're much younger than their true age.
- Explain to your child that you care about him and you'll do your best to understand what he's going through.
- Show him how proud you are of his accomplishments with praise and affection. Catch him being good.
- Set up a few clear rules and be consistent. Don't argue over small things. Say "no" less often, but mean it when you say it.
- When giving your child directions or instructions, check for his understanding. Keep directions short.
- Some kids with AD/HD have a hard time putting their thoughts in order. Ask, "Who? What? Where? When? Why?" to help him think about and explain what's important.
- Establish open lines of communication from a young age. Don't be afraid to talk to him about his strengths and needs and how AD/HD affects him. He should be "brought into the loop" so he can understand what AD/HD is and is not. Often kids misunderstand what's wrong with them when adults don't give them the facts.

Academic Support at Home

- Set up a regular routine for homework. Try to schedule homework for the same time and place each day. If you involve your child in setting the schedule, he may be more cooperative in completing homework.
- When he's working on homework, schedule regular breaks for activity every 10 or 15 minutes. Let him walk around, get a drink of water, or have a snack. Use a timer to monitor breaks and time spent working on homework. Often kids with AD/HD have difficulty managing time. They need to learn how to plan ahead and pace themselves.
- Offer rewards for doing homework. Coordinate the program with his teacher. The goal is to lessen your direct supervision and gradually have him take responsibility for completing his work. His chances of success may be better if you propose a reward or consequence and follow through on it.
- Give non-judgmental, constructive feedback. You might say, "I'm glad you started working on that paper. I'm looking forward to reviewing the first few paragraphs tomorrow," rather than, "You haven't done a thing all week."

Management Strategies — Attention-Deficit/Hyperactivity Disorder

- Organizing your child's homework might be the most difficult task to deal with. An assignment book or sheet that the teacher can sign may prevent confusion about assignments. If he forgets his materials or the assignment book at school or home, then consequences should be logical. For instance, have him return to school to get what he needs.

Behavioral Support at Home

- Tell your child what you want him to do rather than what you don't want. For instance, say, "Please finish your math homework," rather than, "Stop bothering your sister."
- Prepare your child for change in routine. Many kids don't take surprises or change very well. If you expect a change, review the rules, agree on a possible incentive or reward for good behavior, and clearly state the consequences for misbehaving.
- Reinforce even small, positive changes in your child's behavior. As you help him realize the progress he is making, his motivation and self-confidence will increase.
- If you need to cool off from a difficult moment with your child, find a friend or neighbor to watch him, even for 15 minutes. To take care of your child, you have to take care of yourself, too.

Home-School Connection

- Regular communication between home and school may be necessary for the first several months of school. A communication plan should be initiated with the teacher during the first month of school. Depending upon your child's age, daily, weekly, or monthly plans can be developed to monitor your child's behavior and schoolwork.
- Often kids with AD/HD benefit from classroom accommodations to complete work. Talk to the teacher to see if your child needs more time, a quiet place to work, or shorter assignments to be successful.
- When designing a behavior plan with the teacher, it's often helpful to establish consequences and rewards together and agree on how to enforce them. Similar language should be used with your child at home and school for consistency.
- Schedule regular meetings with teachers and school support staff to monitor progress of your child's behavior or action plan. Depending on his age, he should be present during the discussion of the school-based plan. By 5th or 6th grade, he can probably be involved in describing problems affecting his learning, and setting his goals.
- If your child is on medication, ask the teacher to provide feedback to you about its effectiveness. Consult with your child's doctor regularly, at least twice a year. Share medical reports with school personnel.

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About the Author

Brian Inglesby, M.A., L.E.P., is a school psychologist who enjoys the challenges of working with students who possess a broad spectrum of learning issues. Of special interest to Brian is the opportunity to provide teachers, parents, and students with the ability to better understand and manage a student's unique learning profile.



A Parent's Guide to AD/HD Basics

What Parents Need to Know about AD/HD and Medication: Advice from an M.D.

SchwabLearning.org Asks:

If a child has been diagnosed with Attention-Deficit/Hyperactivity Disorder (AD/HD) and parents are considering giving him medication for the symptoms, what advice, as a pediatrician and child psychiatrist, would you give them?

Dr. Joshi Answers:

I find that, along with a thoughtful and thorough evaluation, most parents want information. They want to learn about medication and its effects. But in order to get that information, they need to feel comfortable with their child's medical practitioner.

To prepare for each appointment, parents should write down their questions ahead of time and leave space under each one to fill in the answers when they meet with the doctor. I suggest parents ask themselves:

- Is it easy to ask the doctor questions and get answers I understand?
- Does the doctor spend adequate time spent on addressing my concerns, or do I feel rushed?
- Were all of my questions answered?
- How often will I have to bring my child to an office appointment?
- If concerns arise, how can I reach the practitioner between office visits?

“Medicine will make it easier for them to succeed because it allows them to make good choices and be in control of their behavior and attention, rather than being controlled by their behavior.”

Considering Medication

While behavioral interventions can be very helpful, medication management is almost always recommended for kids who are diagnosed with AD/HD. Eighty years of clinical experience have taught us that, by far, the safest and most effective medicines for the treatment of AD/HD are from the class called psychostimulants which includes two major types: methylphenidates (MPH) and amphetamines (AMPH).

MPH preparations include medicines such as Ritalin®, Methylin®, Focalin®, Metadate®, and Concerta®. There is no evidence that one preparation is any better than another, and most prescriptions are based on the preference of the practitioner. There are, however, some differences to be aware of. Concerta® and Metadate-CD® have the advantage of being once-daily preparations and may last 10-12 hours. The other MPH preparations require dosing two or three times a day because they are effective for shorter periods (3-4 hours).

AMPH preparations include Dexedrine®, Adderall®, and Adderall-XR®. The latter is designed to last around 10 hours and can be given in one dose in the morning.



What Parents Need to Know about AD/HD and Medication: Advice from an M.D.

Other medicines with scientific evidence to support effectiveness include antidepressants, such as Wellbutrin® (bupropion), Effexor® (venlafaxine), and Tofranil® (imipramine), and antihypertensives, such as Catapres® (clonidine), or Tenex® (guanfacine).

Strattera® (atomoxetine) is a relatively new non-stimulant agent approved by the U.S. Food and Drug Administration (FDA) for treating AD/HD in adults, teens, and children 6 and older. Although Strattera® and psychostimulants (Concerta®, Metadate®, Ritalin®, Adderall®, and others) are comparable in some efficacy (effectiveness) studies, stimulants are still considered first-line treatment for AD/HD. However, Strattera® may be especially helpful to patients who cannot tolerate stimulants due to specific side effects (such as tics), and for those who had an unsatisfactory response to stimulants. Strattera® might also be considered first-line by families who don't want their child/teen treated with stimulant medicines.

There currently is very little evidence for the use of herbal preparations, such as St. John's Wort, Evening Primrose Oil, or Fish Oil for the treatment of AD/HD. Ongoing scientific studies are evaluating the effectiveness of other natural remedies, such as highly unsaturated fatty acid supplementation, but no conclusions have been reached.

Most practitioners will discuss all options with you, but learn everything you can about medications to treat AD/HD and generate your own questions for the doctor.

Watching for Side Effects

Medication side effects are usually transient and minimal. Your child's practitioner will go over specific side effects, depending on what medication is prescribed. In general, stimulants are known to cause headache, stomachache, small increases in blood pressure and pulse, appetite suppression, and sleep difficulties. Less common effects include irritability, mood changes, unmasking of tics, and slowing of the speed of growth in height.

The most common side effects in pediatric populations taking Strattera® have been upset stomach, decreased appetite, dizziness, and drowsiness. Strattera® may slightly increase blood pressure and pulse, and its effects on growth are thus far unknown. Your provider will follow these parameters at each visit. A patient's metabolism of Strattera® may be affected by other medications, so be sure to inform your provider about all the medicines your child is taking.

It's important to communicate with your child's physician if you notice any of these side effects. Most are responsive to simple interventions, such as giving the dose with food, lowering the dose, changing its timing, or switching to another medicine.

Managing Medication at Home

Again, your practitioner will go over the specifics, depending on the medicine used. I encourage all patients to take all medicines 7 days a week, at least for the first month. This allows parents to observe any changes during the weekends. If the team decides the medication is not necessary on the weekends, so be it. This rule only applies to the psychostimulants, however. All other psychotropic medications need to be taken each and every day unless your child's doctor tells you otherwise; stopping them suddenly may be dangerous.

Be alert to your child's reaction when the stimulant medication has worn off. With the shorter acting preparations, there may be some irritability. Some children even experience "rebound hyperactivity," which may call for a dose adjustment by the provider. Most kids will tolerate the wear-off period fine. With the longer-acting preparations, wear-off problems are less severe and less common.

What Parents Need to Know about AD/HD and Medication: Advice from an M.D.

In the case of Strattera®, its duration of effect may be as little as 6 hours or as long as 24 hours. As it may cause drowsiness, it is sometimes given as a single nighttime dose (in contrast to stimulants, which are almost never given at night due to the potential for insomnia).

If your child forgets to take his medication, your response will depend on the specific medicine used. As a general rule, it is not dangerous to miss a dose of stimulants. If needed, shorter acting preparations may be given later in the day if a dose is missed. However, I avoid giving psychostimulants after 3:30 p.m. for most kids, as they may interfere with sleep. All other medicines routinely used for AD/HD should be taken every day, as prescribed, without the use of catch-up doses. Exceptions do exist, and contingency plans ("missed-dose plans") should be discussed with your doctor.

Managing Medication at School

Just as it's usually not a good idea to keep family secrets, keeping a school in the dark about your child's AD/HD is generally not helpful either. While it may be difficult to get appropriate accommodations in place at certain schools, most schools do want to support their students. Your child's doctor, school psychologist, or counselor may have some practical suggestions to use in the classroom to help your child succeed.

Work with your child's teacher to create a special "signal" (gentle squeeze on the shoulder, opportunity to do a special errand) when it's time to go to the office or nurse's station for mid-day medication. Once-daily preparations make these kinds of arrangements unnecessary, but for those kids who respond better to shorter-acting agents, it's crucial for maintaining confidentiality.

Talking to Your Child About Medication

How you talk to your child about medication depends, in large part, on your child's developmental stage. Younger children (5-7 years) need reassurance they're not "bad" kids. They need to know their parents understand that they're trying really hard to behave, pay attention in class, or stay in their seat. The medicine will make it easier for them to succeed because it allows them to make good choices and be **in control** of their behavior and attention, rather than being **controlled by** their behavior.

Older school-aged and pre-teen children (8-12 years) also need constant reminders about, and attention to, things they **can** do well, rather than having their parents dwell on their difficulties. Medical analogies can be helpful, such as, "You know how getting your glasses helped you (or your friend or your cousin) a lot in your (his or her) schoolwork? That's kinda how this medicine is supposed to help, too."

Teens need to know it's not "all about the pill." When their grades turn around, **they** did it — the medication simply allowed them to focus long enough to actually get the work done. The teen still had to take the test or finish the paper. Meds can't take tests! Emphasize that you, he, the doctor, and his teachers are all on the same team, trying to help him succeed.

Be sure to pick your words carefully when praising behavior or setting limits. "Wow, you're having a great day today. You must have taken your meds!" is a somewhat backhanded compliment. Better would be simply to say, "Wow, you're trying really hard today. Nice job of paying attention (or cleaning your room, or sticking with a hard assignment, or staying in your seat)!"

Without overdoing it, publicly praise as much as possible to bolster self-esteem and focus on your child's strengths. Be generous with the small, but significant non-verbal cues of life — a pat on the back here, a high-five there. You're spending a lot of time, effort, and spirit seeking treatment for the problem; just don't forget to nurture what's good about your child!!

What Parents Need to Know about AD/HD and Medication: Advice from an M.D.

Looking Toward the Future

In general, most children and teens do not outgrow their AD/HD, so medications may be helpful over the entire lifespan. However, depending on the specific type of AD/HD — inattentive, hyperactive/impulsive, or combined — interventions may change over time. Teens are capable of developing cognitive strategies that were not possible for them as children. Adults may develop still more strategies that lead to successful management of their AD/HD and which may lessen or eliminate the need for medication.

Medication Warnings

Warnings about possible side-effects of prescription medications are updated frequently. Make sure no recent warnings have been issued on your child's medication. Ask your pharmacist for an update each time you refill the prescription.

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About the Author

Shashank V. Joshi, M.D., FAAP, is a child psychiatrist and pediatrician at Stanford University School of Medicine. He is Director of the AD/HD Clinic, and of School-based Mental Health Services in the Division of Child & Adolescent Psychiatry and Department of Pediatrics.

A Parent's Guide to AD/HD Basics

Inattentive AD/HD: Overlooked and Undertreated?

When Ethan brought home his first fourth grade report card, he knew his parents would not be pleased. In addition to grades that ranged between B and D, the teacher had commented, just as his third grade teacher had, "If Ethan would just focus on his work and try harder, he could do so much better!"

Lack of concentration and apparent lack of effort are hallmarks of the Inattentive subtype of AD/HD. The Predominantly Inattentive type (IN) of AD/HD — without hyperactivity or impulsivity — has been known as a disorder since 1994. Unlike children with the more commonly recognized "Combined" (CB — inattentive, hyperactive and impulsive) form of the disorder, children with IN are not behaviorally disruptive and typically are not difficult for parents or teachers to manage. **Children with IN may appear to be underactive, sluggish or daydreamers, but their problems with attention are just as severe as those with CB-type AD/HD.** Instead of working on their math problems, they might be gazing into space. When the teacher calls on them, they may have no idea of what is being discussed. Since they don't absorb new information well or produce the same caliber of work as their classmates, children with IN may be mislabeled as "slow learners" or "learning disabled" — often on the basis of group-administered tests where they had difficulty concentrating. **They often just quietly underachieve with no one fully aware of their true potential.**

In addition to their academic difficulties, children with IN often have very significant social problems. Their classmates see them as "tuned-out," or not "with it," and they are more likely to be ignored and friendless.

One recent study suggests that the social problems of children with the IN and CB subtypes of AD/HD may have different causes and different results. (Maedgen & Carlson, 2000). Children with the CB type tend to annoy others with their provocative, intrusive and sometimes aggressive behavior. As a result, these children are more likely to be socially rejected. When asked directly, however, these children with CB are able to state clearly and accurately how they should and should not behave with other children. In the heat of the moment, however, they are unable to exercise the behavioral self-control to follow through. **Children with IN, however, were more likely to lack the knowledge of social skills.** This may include knowing *how* to handle such everyday social interactions such as joining a group of children already at play, resolving a dispute or initiating a friendship. In part, these difficulties may be due to a failure to pay attention to the social nuances — the nonverbal cues or "body language" — which are an important part of social communication.

A Prevalent and Impairing Condition

Survey studies suggest that the IN form of AD/HD may be at least as common in schools as the better-known CB type. In these large-scale studies, hundreds of teachers were each asked to rate all the children in their classes on a checklist of behaviors reflecting the three core symptoms of AD/HD: inattention, hyperactivity and impulsivity.

The survey data also showed an interesting distribution between the sexes. Whereas the CB type is about four times more common among boys than girls, the IN type is more **evenly distributed between**

Inattentive AD/HD: Overlooked and Undertreated?

the sexes with a boy:girl ratio closer to 2:1. In fact, if a girl has AD/HD, she is more likely to have the IN type. (Wolraich, Hannah, Pinnock, Baumgaertel, & Brown, 1996).

In the survey studies, teachers were also asked to rate how “impaired” students were in the three most important areas of functioning in school: academic, social and behavioral. The percentages of children rated by teachers as being “impaired” are shown below for the three currently recognized subtypes of AD/HD: IN, CB, and Predominantly Hyperactive-Impulsive (HI).

Percent of children rated by teachers as being “impaired”			
	IN	CB	HI
Academic	76%	82%	23%
Social	59%	82%	53%
Behavioral	58%	90%	80%

These findings showed that a high percentage of children with IN were suffering academic difficulties — in fact, the percentage almost equaled that for the CB type. Sizeable percentages also had behavioral and social difficulties.

Despite the serious difficulties that children with IN experience, relatively few are identified or referred for treatment. Children with IN also account for up to 25 percent of all children with AD/HD who are seen at mental health centers. One likely reason is that since they are quieter and far less disruptive than children with CB, they are less likely to create headaches for teachers or parents, and therefore more likely to be overlooked.

Another important finding emerging from the survey studies was that the IN type of AD/HD may have a later age of onset than the other types. Although all subtypes must have an onset by age seven in order to meet current DSM-IV criteria for AD/HD, these more recent studies suggest that many cases of IN type may not actually become apparent until age nine, and that impairment may not be significant until age 11. (Applegate et al., 1997).

Assessment

Like all good psychological assessments of children, the assessment for AD/HD begins with parental interviews concerning the details of the child’s current difficulties, including time of onset, frequency, duration and severity. Behavioral questionnaires, completed by parents and teachers, are also very helpful in determining the nature of the child’s difficulties and their seriousness when compared to the behavior of other children of the same age and gender in the general population. During this interview, the parents will also be asked about the child’s physical, mental and emotional development from birth to the present. A good assessment will also inquire about the development of the **family** in order to identify any stressors or other problems that may affect the child’s functioning.

The child is interviewed individually in order to get the “child’s-eye” view of the challenges, satisfactions and stressors in his or her life at school, home and with peers. It also provides an opportunity to informally observe and assess the child’s attention, language, self-control, self-confidence and relational skills.

When there are concerns about a child’s general learning ability or specific “information-processing” skills (as is often the case in all types of AD/HD), a set of tests may be administered to more precisely examine the child’s intellectual functioning, as well as his or her current level of educational achievement in major subject areas. Neuropsychological tests — which assess brain-based functions in the areas of memory, language, attention and motor skill — may also help to identify underlying

Inattentive AD/HD: Overlooked and Undertreated?

causes of the child's difficulties. Because inattention is the primary symptom of IN and the tell-tale signs of impulsivity and hyperactivity are absent, a good clinician will take particular care to rule out other "silent" problems, such as anxiety and depression, which can also impair concentration and effort, before diagnosing IN.

Treatment

Studies involving treatment plans that are specifically effective for children with the IN type of AD/HD are limited. Research is underway at the Mount Sinai AD/HD Center, supported by grants from the National Institutes of Health (NIH), to investigate the effectiveness of stimulant medications in children with IN. Other research in this program is investigating the unique difficulties children with IN have with orienting and focusing, immediate and short-term memory and in "executive" functions, such as self-stopping, organization and planning. The most recently funded study will examine the use of functional Magnetic Resonance Imaging in identifying unique patterns of brain activation in children with IN. It is hoped that a better understanding of these differences will lead to the development of educational and psychological treatment approaches that address the specific needs of children with IN.

References

Applegate, B., et al. (1997). Validity of the age-of-onset criterion for ADHD: A report from the DSM-IV field trials.

Journal of the American Academy of Child and Adolescent Psychiatry, 36, 1211–1221.

Gaub, M., & Carlson, C. L. (1997). Gender differences in ADHD: A meta-analysis and critical review. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 1035–1045.

Maedgen, J. W., & Carlson, C. L. (2000). Social functioning and emotional regulation in the attention deficit hyperactivity disorder subtypes. *Journal of Clinical Child Psychology*, 29, 30–42.

Wolraich, M. L., et al. (1996). Comparison of diagnostic criteria for attention deficit hyperactivity disorder in a county-wide sample.

Journal of the American Academy of Child and Adolescent Psychiatry, 35, 319–324.

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A Parent's Guide to AD/HD Basics

The Facts about AD/HD — Quiz

Attention Deficit/Hyperactivity Disorder (AD/HD) is a complex condition which is often misunderstood. How well can you separate the facts and the fiction about AD/HD? Take our quiz and find out!

- 1) To be diagnosed with AD/HD, a child must routinely display behavior that is inattentive, hyperactive, and impulsive.
 True
 False
- 2) Which of the following therapy or combination of therapies has proven most helpful for most kids with AD/HD?
 a) Medication alone
 b) Psychotherapy and medication
 c) Behavior management, medication, and accommodations
 d) Biofeedback and nutritional therapy
- 3) About what percentage of children who have AD/HD also have a learning disability (LD)?
 a) 50%
 b) 25%
 c) 10%
- 4) When a child is diagnosed with AD/HD, he may or may not be eligible for special education services in the public school system.
 True
 False
- 5) Most research shows that children who take stimulant medication for AD/HD are at greater risk for later substance abuse.
 True
 False

Answers on next page.



The Facts about AD/HD Quiz — Answers

- 1) To be diagnosed with AD/HD, a child must routinely display behavior that is inattentive, hyperactive, and impulsive.

Correct answer:

...> **False**

Not every child with AD/HD displays all three types of behavior. Today's accepted guidelines state there are three subtypes of AD/HD: inattentive, hyperactive-impulsive, and combined (inattentive, impulsive, and hyperactive).

- 2) Which of the following therapy or combination of therapies has proven most helpful for most kids with AD/HD?

Correct answer:

...> **c) Behavior management, medication, and accommodations**

In a recent national long-term study, children with AD/HD were split into groups and given various types of treatment. The most successful group by far was that which received behavior therapy, medication, and accommodations.

- 3) About what percentage of children who have AD/HD also have a learning disability (LD)?

Correct answer:

...> **a) 50%**

In 2002, the Centers for Disease Control and Prevention (CDC) reported that about one-half of children diagnosed with AD/HD have also been identified as having a learning disability.

- 4) When a child is diagnosed with AD/HD, he may or may not be eligible for special education services in the public school system.

Correct answer:

...> **True**

Having AD/HD doesn't automatically qualify a student for special education services. But if the school determines his AD/HD is causing significant academic difficulty (whether or not he also has a learning disability), he may qualify.

- 5) Most research shows that children who take stimulant medication for AD/HD are at greater risk for later substance abuse.

Correct answer:

...> **False**

Several recent studies of children with AD/HD showed that those taking stimulant medication are only about half as likely to develop substance abuse problems in adolescence or adulthood as compared to kids with AD/HD who don't take medication.



A Parent's Guide to AD/HD Basics

Resources

AD/HD — An Overview

Books

The ADD/ADHD Checklist: An Easy Reference for Parents and Teachers

<http://www.amazon.com/exec/obidos/ASIN/013762395X/schwabfoundation/>

By Sandra Rief

Answers to Distraction

<http://www.amazon.com/exec/obidos/ASIN/055337821X/schwabfoundation/>

By Edward M. Hallowell

Websites

American Academy of Pediatrics:

AD/HD Guidelines

<http://www.aap.org/policy/ac0002.html>

American Academy of Pediatrics Parent Pages:

AD/HD and Your School-Aged Child

<http://pediatrics.aappublications.org/cgi/data/108/4/1033/DC1/1>

American Psychiatric Association:

Fact Sheet on AD/HD (pdf)

<http://www.nichcy.org/pubs/factshe/fs19txt.htm>

Brain POP:

AD/HD Movie

http://www.brainpop.com/health/nervous/adhd/index.weml?&tried_cookie=true

National Information Center for Children and Youth with Disabilities:

Briefing Paper on Attention-Deficit/Hyperactivity Disorder

<http://www.nichcy.org/pubs/factshe/fs14txt.htm>

National Information Center for Children and Youth with Disabilities:

Fact Sheet on AD/HD

<http://www.nichcy.org/pubs/factshe/fs19txt.htm>

National Institute of Mental Health:

Attention Deficit Hyperactivity Disorder

<http://www.nimh.nih.gov/publicat/adhd.cfm>

Dr. Sam Goldstein Explains the Best Way to Evaluate for AD/HD

Books

Attention Deficit Disorder and Learning Disabilities: Realities, Myths, and Controversial Treatments

<http://www.amazon.com/exec/obidos/ASIN/0385469314/schwabfoundation/>

By Barbara D. Ingersoll, Ph.D. and Sam Goldstein, Ph.D.



Resources

Dr. Sam Goldstein Explains the Best Way to Evaluate for AD/HD (*continued*)

Hyperactivity: Why Won't My Child Pay Attention?

<http://www.amazon.com/exec/obidos/ASIN/0471533076/schwabfoundation/>

By Sam Goldstein, Ph.D. and Michael Goldstein M.D.

Overcoming Underachieving: An Action Guide to Helping Your Child Succeed in School

<http://www.amazon.com/exec/obidos/ASIN/0471170321/schwabfoundation/>

By Sam Goldstein, Ph.D. and Nancy Mather, Ph.D. (editors)

When You Worry about the Child You Love: Emotional and Learning Problems in Children

<http://www.amazon.com/exec/obidos/ASIN/0684832682/schwabfoundation/>

By Edward M. Hallowell, M.D.

Websites

Dr. Goldstein's Website

<http://www.samgoldstein.com/>

Management Strategies — Attention-Deficit/Hyperactivity Disorder

Books

1-2-3 Magic: Effective Discipline for Children 2-12

<http://www.amazon.com/exec/obidos/ASIN/0963386190/schwabfoundation/>

By Thomas Phelan, Ph.D.

All About Attention Deficit Disorder

<http://www.amazon.com/exec/obidos/ASIN/1889140112/schwabfoundation/>

By Thomas Phelan, Ph.D.

The Best of 'Brakes': An Activity Book for Kids With ADD

<http://www.amazon.com/exec/obidos/ASIN/1557986614/schwabfoundation/>

By Patricia O. Quinn, M.D. (Editor) and Judith M. Stern, M.A. (Editor)

Driven to Distraction

<http://www.amazon.com/exec/obidos/ASIN/0684801280/schwabfoundation/>

By Edward Hallowell and John Ratey

Putting On the Brakes: Young People's Guide to Understanding ADHD

<http://www.amazon.com/exec/obidos/ASIN/0945354320/schwabfoundation/>

By Patricia O. Quinn, M.D. and Judith M. Stern, M.A.

Taking Charge of ADHD Revised Edition: The Complete, Authoritative Guide for Parents

<http://www.amazon.com/exec/obidos/tg/detail/-/1572305606/schwabfoundation/>

By Russell A. Barkley

Websites

American Academy of Pediatrics:

AD/HD Guidelines

<http://www.aap.org/policy/ac0002.html>

American Academy of Pediatrics Parent Pages:

AD/HD and Your School-Aged Child

<http://www.aap.org/policy/ac0002.html>

Resources

Management Strategies — Attention-Deficit/Hyperactivity Disorder (*continued*)

American Psychiatric Association:

Fact Sheet on AD/HD (pdf)

http://www.psych.org/public_info/adhdfactsheet42401.pdf

Attention Deficit Disorder Association Website

<http://www.add.org/>

Children and Adults with Attention Deficit Disorder (CHADD) Website

<http://www.chadd.org/>

Video

1-2-3 Magic: Effective Discipline for Children 2-12

<http://www.amazon.com/exec/obidos/ASIN/6301924967/schwabfoundation/>

By Thomas Phelan

What Parents Need to Know about AD/HD and Medication: Advice from an M.D.

Books

ADHD: Achieving Success in School and in Life

<http://www.amazon.com/exec/obidos/ASIN/0205292291/schwabfoundation/>

By Barbara P. Guyer (editor)

Straight Talk about Psychiatric Medications for Kids

<http://www.amazon.com/exec/obidos/ASIN/1572302046/schwabfoundation/>

By Timothy Wilens

Websites

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD):

Medical Management of Children and Adults with AD/HD

<http://www.chadd.org/fs/fs3.htm>

WhatMeds.com: The Medications

<http://whatmeds.com/meds.html>



Visit Schwab Learning's Online Resources



SchwabLearning.org is a a parent's guide to helping kids with learning difficulties.

We'll help you understand how to:

- **Identify** your child's problem by working with teachers, doctors, and other professionals.
- **Manage** your child's challenges at school and home by collaborating with teachers to obtain educational and behavioral support, and by using effective parenting strategies.
- **Connect** with other parents who know what you are going through. You'll find support and inspiration in their personal stories and on our Parent-to-Parent message boards.
- Locate **resources** including Schwab Learning publications, plus additional books and websites.

SchwabLearning.org—free and reliable information at your fingertips, 24 hours a day, seven days a week.



Sparktop.org™ is a one-of-a-kind website created expressly for kids ages 8-12 with learning difficulties including learning disabilities (LD) and Attention-Deficit/Hyperactivity Disorder (AD/HD). Through games, activities, and creativity tools, kids at SparkTop.org can:

- Find information about how their brain works, and get tips on how to succeed in school and life.
- Showcase their creativity and be recognized for their strengths.
- Safely connect with other kids who know what they are going through.

SparkTop.org is free, carries no advertising, and is fully compliant with the Children's Online Privacy Protection Act (COPPA).

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