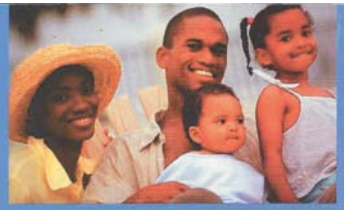
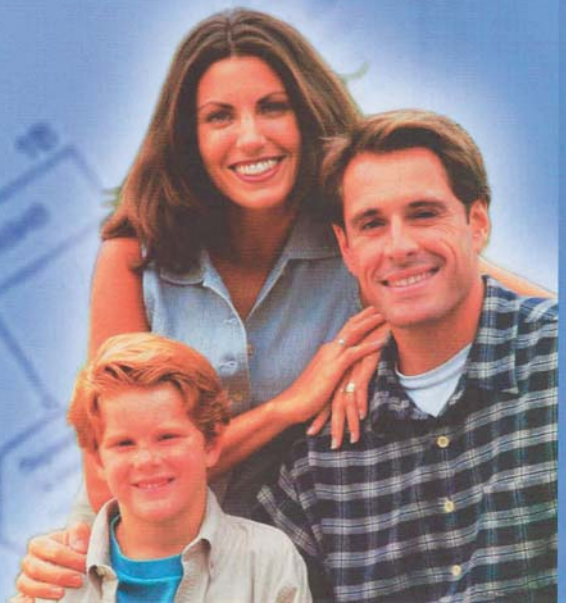


A ADHD AND THE FAMILY

Blueprint for Success



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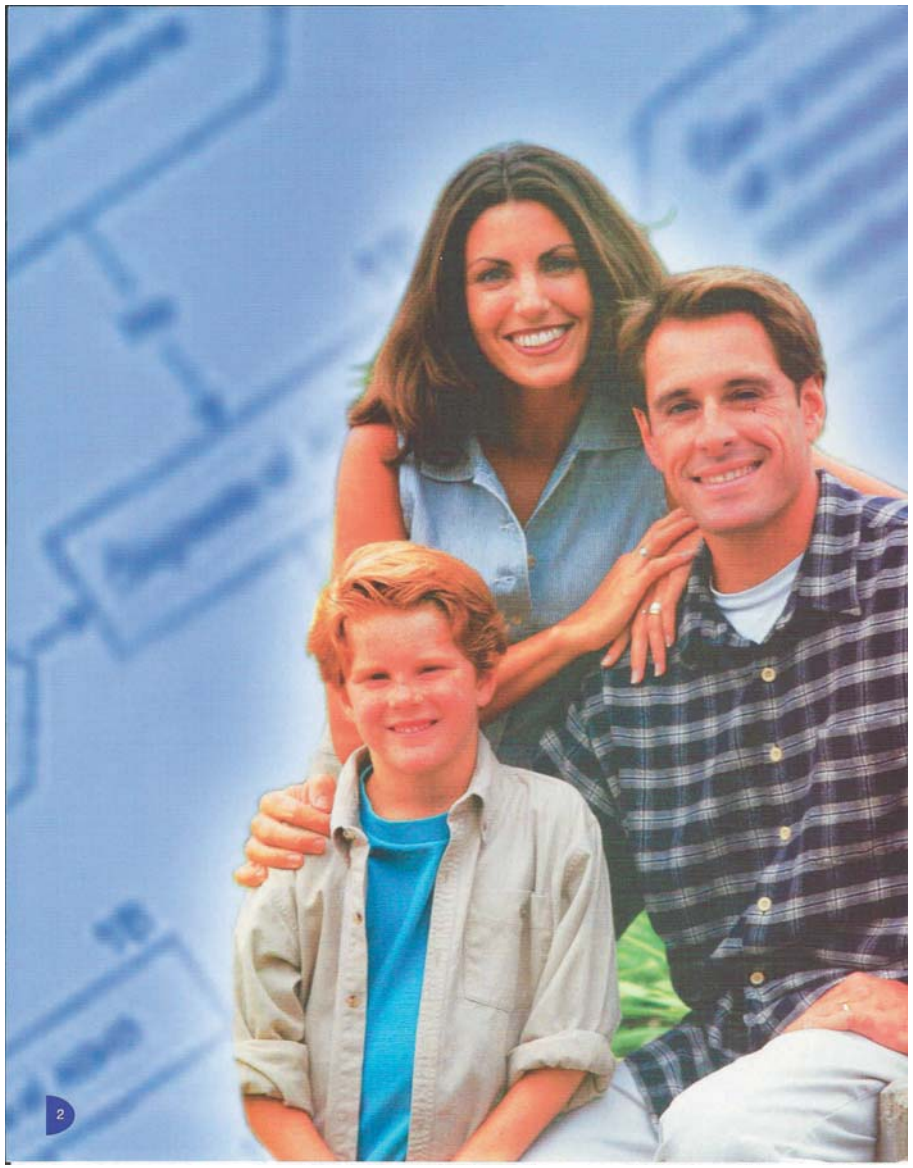


Introduction

Attention-deficit/hyperactivity disorder (ADHD) has been recognized as a medical condition since the early 1900s. Yet, outside of the medical establishment, awareness of ADHD remained limited until the early 1990s. It is likely that increased awareness has coincided with increased knowledge about the disorder. In fact, for a good many years, ADHD was called "minimal brain dysfunction" and was thought to be caused by minor head injuries, complications from birth, or an early infection. While these events may explain a few ADHD cases, the overall theories are now discredited.

We can now safely say that ADHD has a neurobiological basis—that is, there is a physical problem in the brain. Therefore, ADHD is not the result of bad parenting, divorce, sibling rivalry, or other family-related environmental factor. That said, even though ADHD has a biological basis, treatment that manipulates or intentionally alters the home and school environments in a particular way can positively affect how people function in these settings.

All of this takes a lot of work, and *ADHD and the Family: A Blueprint for Success* is intended to provide parents and/or caregivers of children with ADHD with an overview of the challenges they face. *Blueprint* seeks to present the families and their loved ones with ADHD with a primer—broad in scope but not too detailed—in the hope that it will enable these families to communicate more effectively and easily with the experts. This booklet also offers some tips and recommendations that can serve as the foundation for dealing with a child with ADHD. Although treatment can be very demanding, in the long run it will pay off in better behavior and decreased stress.

Of course, this booklet is not intended to help in the diagnosis of ADHD or to take the place of your physician or other healthcare providers.

What Is ADHD?

DOES THIS DESCRIBE **YOUR CHILD?**

Your son is a handful. Since about the age of 3, he has needed your constant attention. Always on the go, he seems to move nonstop from toy to toy and from room to room. After he started school, teachers complained of his constant fidgeting and continual verbal interruptions. Sure, he gets most of the answers correct, and yes, he is a very intelligent child, but the teachers say he still disrupts the class much too often.

Or perhaps your daughter is a dreamer. Early on she tended to daydream, to lose herself so completely that she often failed to respond when you called her name. She has always struggled to pay attention in class, and getting her to do her homework has become a constant struggle. She has difficulty following instructions, tends to miss details, and is disorganized and forgetful. Yet, the most frustrating part is that you know she is capable of doing the work, because at times she has shown she can do it. Because of this inconsistency, she has never quite lived up to your expectations *or* to her own natural abilities. (Although boys with ADHD display hyperactivity more often and girls more frequently display inattention, there are no hard and fast rules as to gender and ADHD.)

The children just described may live in the world of ADHD. Easily bored, constantly distracted by unimportant sights and sounds, these children flit from one thought or activity to the next, often blurting out the first thing that comes to mind. Children with ADHD often fail in school, have difficulty in relationships, and suffer from low self-esteem. As if that were not bad enough, symptoms most often continue into adolescence and even into adulthood. For adolescents, untreated ADHD may have a huge impact on their future. As for undiagnosed adults, the toll on emotional health caused by a lifetime of pain and frustration cannot be overstated.

CAUSES

ADHD is the most commonly diagnosed behavioral disorder in childhood, affecting between 3% and 7% of school-aged children, or well over 2 million youngsters. Although the causes of ADHD cannot be precisely stated, it is known that the symptoms arise from abnormalities in the brain. Research suggests that there is a chemical imbalance affecting the neurotransmitters in the brain. Neurotransmitters—dopamine, norepinephrine, and serotonin—are chemicals used by the brain to help send messages across the nervous system, specifically the space between cells called the neural gap. When there is an imbalance involving the amount of neurotransmitter available, the messages sent from cell to cell are sent incorrectly.

DIAGNOSIS

There is no single objective test (for example, blood test or MRI) to determine if someone has ADHD. Instead, a comprehensive evaluation is conducted. This extensive process includes an estimate of the child's developmental level, as well as an appraisal of his or her academic, social, and emotional functioning. Interviewing the parent or primary caregiver provides extremely important information as well. A profile of the child's behavior, a look at family history, and possible sources of distress (for example, family conflict) are particularly significant because they may help determine aspects of the treatment plan.

At the core of the evaluation process are the diagnostic criteria (the symptoms necessary for diagnosis) set forth in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th Edition (*DSM-IV-TR*™, 2000). The symptoms encompass three general areas: inattention, hyperactivity, and impulsivity. These general areas comprise the three subtypes of ADHD: (1) Inattentive Type, (2) Hyperactive-Impulsive Type, and (3) Combined Type (a combination of the inattentive and hyperactive-impulsive types).

The above behaviors can generally be said to affect all people for brief periods at one time or another in their lives, especially children. The difference with ADHD is in the frequency and severity with which these symptoms occur. ADHD is more than occasionally being absentminded, fidgety, or impatient. According to *DSM-IV-TR*, in order to be diagnosed with ADHD, a child must display symptoms for longer than 6 months, which must cause significant problems in at least two settings from among home, school, and social situations. Guidelines state that at least some symptoms must have been present before the age of 7, but many physicians believe some flexibility is called for since symptoms of inattention may go unrecognized for quite some time. As it is, ADHD sometimes remains undiagnosed well into adulthood.

To receive a diagnosis of ADHD

- **Predominantly Hyperactive-Impulsive Type:** a child must have six or more symptoms of hyperactivity/impulsivity
- **Predominantly Inattentive Type:** a child must display six or more symptoms of inattention
- **Combined Type:** a child must show six or more symptoms both of inattention and hyperactivity-impulsivity

Diagnosis also requires physicians to rule out other conditions that may imitate the symptoms of ADHD. For instance, problems in school could also be caused by impaired vision, attention lapses arising from epileptic seizures, or a middle ear infection that causes intermittent hearing loss. Once these medical conditions are ruled out, the physician will evaluate whether any other psychiatric disorders are present in addition to ADHD. Straightforward ADHD can be simple to treat. On the other hand, there are conditions that may coexist with ADHD (physicians use the term comorbid). Then, treatment often becomes more complicated and challenging, and may require the services of a psychiatrist because both conditions must be treated.

Symptoms of Inattention

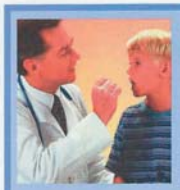
- ❍ Fails to pay close attention to details or makes careless mistakes
- ❍ Has difficulty maintaining attention in tasks or play activities
- ❍ Does not seem to listen when spoken to directly
- ❍ Does not follow directions and fails to complete schoolwork, chores, or, in adolescents, on-the-job duties
- ❍ Has difficulty organizing tasks or activities
- ❍ Avoids or dislikes tasks that require sustained mental effort (such as schoolwork or homework)
- ❍ Loses things necessary for tasks or activities (for example, toys, pencils, assignments, tools)
- ❍ Is easily distracted
- ❍ Is often forgetful in daily activities

Symptoms of Hyperactivity

- ❍ Fidgets with hands or feet or squirms in seat
- ❍ Leaves seat in classroom or in other situations in which remaining seated is expected
- ❍ Runs or climbs excessively when inappropriate
- ❍ Has difficulty playing or engaging in leisure activities quietly
- ❍ Is always on the go or acts as if "driven by a motor"
- ❍ Often talks excessively
- ❍ In adolescents,may be exhibited by feelings of restlessness

Symptoms of Impulsivity

- ❍ Blurts out answers before questions have been completed
- ❍ Has difficulty waiting turn
- ❍ Interrupts or intrudes on others (for example, butts into conversations or games)



Components of ADHD Diagnostic Evaluation

(Adapted from *The CHADD Information and Resource Guide to AD/HD.* See Sources on page 35.)

- Physical examination
- Parent-rated child behavior scales
- Teacher-rated child behavior scales
- Parent and child interviews
- Parent self-report measures
- Clinic-based psychological tests
- Review of prior school and medical records
- Intelligence testing (IQ tests) and educational achievement testing

Some Coexisting Disorders

- **Depressive disorders** – Generally, there is a wide range of types of depression, accompanied by an equally wide range of symptoms. Depressed or sad mood, lack of interest in normal daily activities, weight loss or gain, and too much or too little sleep are the most common symptoms. As a coexisting disorder with ADHD, depression usually occurs as a secondary condition.

- **Anxiety disorders** – When functioning normally as an alarm system, anxiety is a routine response to anticipated danger. But as a psychiatric disorder, anxiety can be disabling. As with depression, there is a wide range of types and symptoms, including generalized anxiety, panic attacks, phobias, and obsessive-compulsive symptoms. Excessive, sometimes overwhelming fear is the essential characteristic of all anxiety disorders.

- **Learning disorders** – A learning disorder is diagnosed when standardized tests in reading, mathematics, or written expression result in scores substantially below what is expected for the age, schooling, and level of intelligence of the child. Learning disorders relate to abnormalities in the processing of information caused by a biological malfunction. Significantly, children with ADHD are at high risk for reading disorder (once called dyslexia). In mathematics disorder, impairments exist in four distinct groups of skills: linguistic skills related to the conversion of written problems into mathematical symbols; perceptual skills that enable the recognition and understanding of symbols; mathematical skills needed for basic

addition, subtraction, multiplication, and division; and attentional skills that enable copying figures correctly. Written expression disorder, once thought to occur only with reading disorder, is now seen as separate and includes poor spelling, errors in grammar and punctuation, and poor handwriting as indications. Other categories of learning disorders include learning disorder not otherwise specified, communication disorder not otherwise specified, and mixed disorder of scholastic skills. Treatment of learning disorders does not include medication, but generally involves remedial education.

- **Conduct disorder** – Thought to be an outgrowth of oppositional defiant disorder, conduct disorder is characterized by more aggressive and potentially violent symptoms. Perhaps because it occurs in older children and adolescents, conduct disorder may involve some rather extreme behavior, such as fire setting, physical cruelty, use of weapons in altercations, and face-to-face criminal activity. Many different categories of medications can be used to treat the symptoms.

- **Bipolar disorder** – There are now two categories of bipolar disorder (once called manic-depression): bipolar I and bipolar II. Bipolar I relates to the classic definition of manic-depression: that is, the onset of euphoria, grandiosity, and hypersexuality, followed by a descent into major depression. Bipolar II has a lesser degree of mania and depression, but includes episodes of "mixed mania" and "complex cycling": that is, there are rapid swings between symptoms of agitation (rather than euphoria) and those of depression.

- **Oppositional defiant disorder** – Temper tantrums, refusal to obey rules, and deliberately annoying people are all characteristic of this disorder when they exceed the norm for children of the same age. Children with oppositional defiant disorder—which typically begins by 8 years of age, but can begin as early as 3—must display a pattern of hostile, negativistic, and defiant behaviors for at least 6 months. As with anxiety, oppositional behavior can be normal and is not considered a disorder unless the behavior causes significant functional impairment in social, academic, or work settings. Children with this disorder are often touchy, resentful, and spiteful, and tend to blame others for their mistakes.

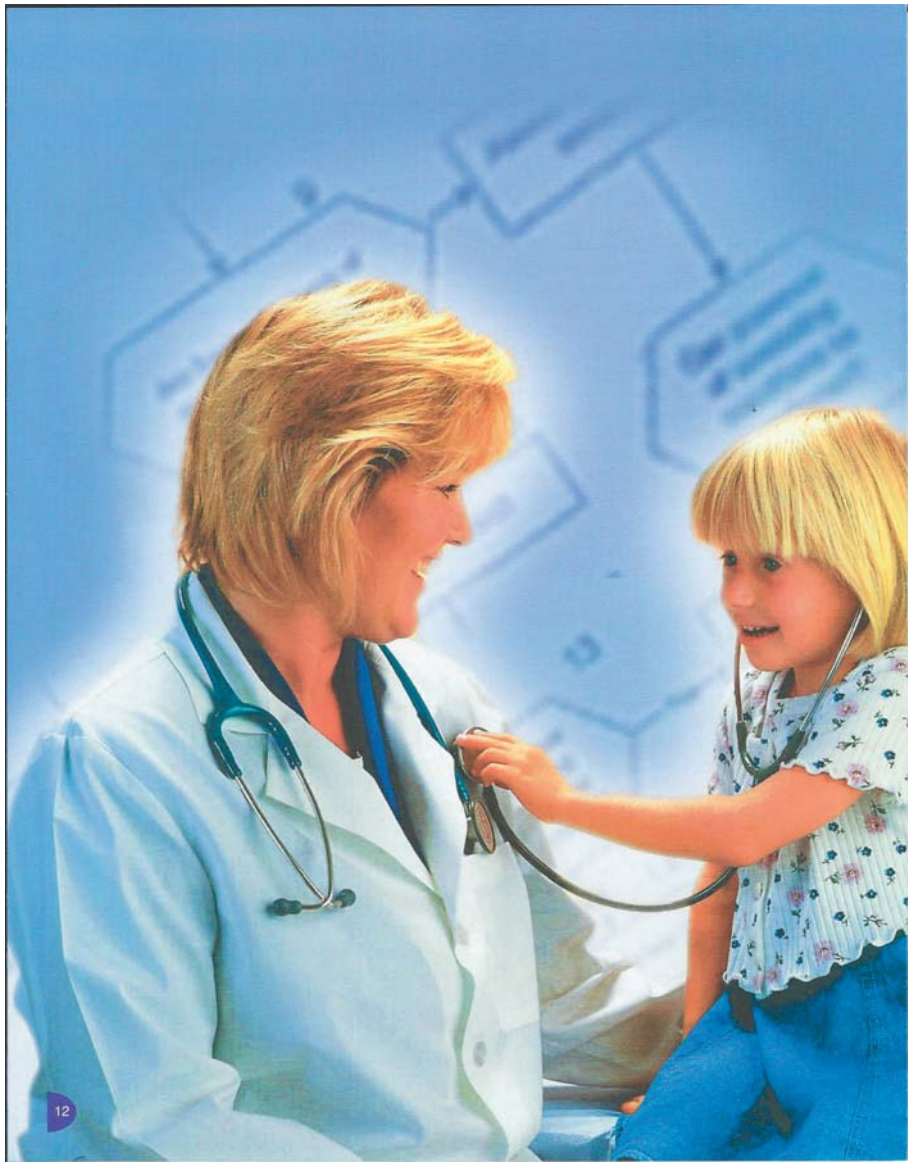
IMPACT

Since ADHD has a chemical basis, symptoms are present 24 hours a day, 7 days a week, for 52 weeks a year. The symptoms do not ease up as the day goes on or become more or less severe on weekends. For that matter, they do not go away in the summertime either. Symptom severity may increase or decrease at any time, but for the most part, these times are unpredictable, brief, and temporary. Accordingly, children with ADHD experience a wide range of impairments that negatively impact every aspect of their lives.

Children with ADHD often receive poor grades and lower-than-expected achievement and IQ test scores, because of a high level of distractibility, hyperactivity, or both. Inattention, along with poor organizational and study skills, results in poor test-taking ability, gaps in knowledge, and failure to complete homework and other assignments. Aggression and impulsiveness usually lead to peer rejection and isolation both in and out of class. Disruptive behavior results in constant friction with peers, parents, and school authorities.

These social and academic problems have far-reaching consequences. Children with untreated ADHD sustain injuries more often. As they grow older, the consequences of nontreatment become more severe. Alcoholism and drug abuse, smoking, car accidents, and other potential injuries can make ADHD a life-threatening condition. In adolescence, untreated ADHD may lead to so-called antisocial behaviors, such as teenage pregnancy and criminal activity, not only potentially destroying a child's future and harming his or her family, but also taking a toll on society as a whole.

ADHD is hard on everyone. The child with ADHD lives with the frustration of seemingly never being able to "get things right." He or she loses friends, gets in trouble in school, and fights with siblings. The weight of constantly "being wrong" translates into precisely that: He or she feels like a mistake, like someone who simply does not belong anywhere. Siblings and classmates experience pain, too. They may feel bullied by the child with ADHD, neglected by parents and teachers, and held to a different standard. Of course, the most serious burden falls on the parents or caregivers. Parents feel stymied and frustrated. Tougher discipline, less discipline, more love, tough love—nothing seems to work. Then a cycle of blame may occur within the family, with potentially harmful consequences. The frustration and anger will usually begin to ease once the diagnosis of ADHD is made and the treatment process begins.



Treatment

EFFECTIVE TREATMENT OF **ADHD**

Effective treatment of ADHD may require a wide-ranging, multimodal approach involving medical, psychological, and educational initiatives. For the child, educational interventions might include training in the development of social skills. Children are also taught how to improve study techniques and organizational abilities. Behavioral therapy, which involves motivating a child to change behaviors, will also be used at home, in school, and after school during recreation times. Along with initiatives designed to teach the child with ADHD, teacher-training and parenting skills courses may be necessary to maximize the benefits of a child's treatment plan.

Medication is necessary for many children with ADHD. Once a diagnosis has been confirmed, the first step for the physician is to ascertain which medication best controls the symptoms and has the mildest side effects. Managing the symptoms of ADHD goes a long way toward helping subsequent interventions be as effective as possible. Generally speaking, the combination of behavioral and medication therapies provides the most beneficial intervention in the treatment of ADHD.

MEDICATION

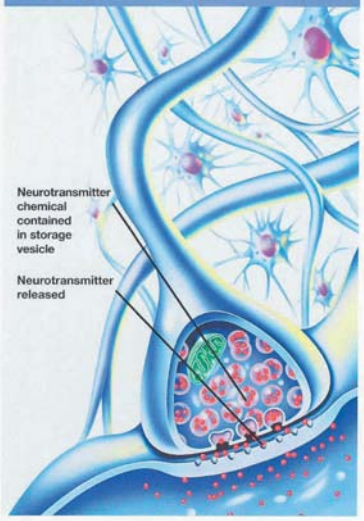
For most children with ADHD, medication serves as the foundation of their treatment plan. Medication is not used to control behavior, but rather to treat the symptoms and help the child with ADHD function more effectively.

Medications sometimes referred to as stimulants are the most successful treatments for ADHD. These medicines are thought to correct the chemical imbalance in the brain by making more dopamine and norepinephrine (two neurotransmitters) available, thereby allowing those areas of the brain that control attention, impulses, and regulation of behavior to function more normally. In fact, up to 90% of children with ADHD respond positively to this type of medication. For more than 60 years, medications in this class have been shown to dramatically reduce hyperactivity, decrease impulsivity, and improve the ability to focus, work, and learn. Examples of these medications used to treat ADHD include

- **ADDERALL XR™ and ADDERALL®** (mixed salts of a single-entity amphetamine product)
- **DextroStat® and Dexedrine®** (dextroamphetamine sulfate)
- **Ritalin®, Concerta®, Metadate® ER, and Metadate® CD** (methylphenidate HCl)

All of these drugs are effective. The right medication for each individual child should be determined only by a physician.

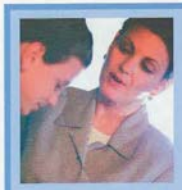
Neurotransmitters and the Neural Gap



LEFT: Artist's rendering of neurotransmitter release from a nerve cell in the brain. Appropriate levels of neurotransmitters allow the brain to function more normally.

TREATMENT EFFECTS ON SCHOOL-AGED CHILDREN

The following table describes the beneficial effects that may be experienced by patients with ADHD who respond favorably to stimulant medications. It is adapted from "Practice Parameters for the Assessment and Treatment of Children, Adolescents, and Adults With Attention-Deficit/Hyperactivity Disorder," published in the *Journal of the American Academy of Child and Adolescent Psychiatry* (see Sources on page 35).



Specific Beneficial Effects Documented in Groups of ADHD Stimulant Responders

- Motor effects
  - Reduce activity to the level of normal peers
  - Decrease excessive talking, noise, and disruption in the classroom
  - Improve handwriting
  - Improve fine motor control
- Social effects
  - Reduce anger
  - Reduce bossiness with peers
  - Reduce verbal and physical aggression with peers
  - Reduce impulsive stealing and property destruction
  - Reduce defiance and oppositional behavior with adults
  - Decrease intensity of behavior
  - Improve peer social status
  - Improve ability to play and work independently
  - Improve mother-child and family interactions
- Cognitive effects
  - Improve sustained attention
  - Improve short-term memory
  - Reduce distractibility
  - Reduce impulsivity
  - Increase the amount of academic work completed
  - Increase the accuracy of academic work

BEHAVIORAL THERAPY

Before undertaking any behavioral therapy, a child must be evaluated. The first evaluation establishes the baseline behavior (the child's behavior before treatment begins). Subsequent frequent evaluations measure the degree of success of the treatment plan by comparing the child's evolving behaviors with the baseline behaviors. The idea behind behavioral therapy is to induce changes in the baseline behavior by controlling the consequences of the child's conduct. Stated briefly, it is simple cause and effect—complete the task, receive the reward. The belief is that by positively reinforcing these new learning experiences, the child will stop negative behaviors.

Behavior modification tries to "shape" behavior in a gradual and progressive process. As the desired behavior occurs more often compared with baseline, rewards are given. Rewards are withdrawn when the child stops progressing. This encourages a child to begin earning rewards again and to continue to move up the scale from baseline. Once the behavior becomes the norm, rewards are withdrawn or "fade."

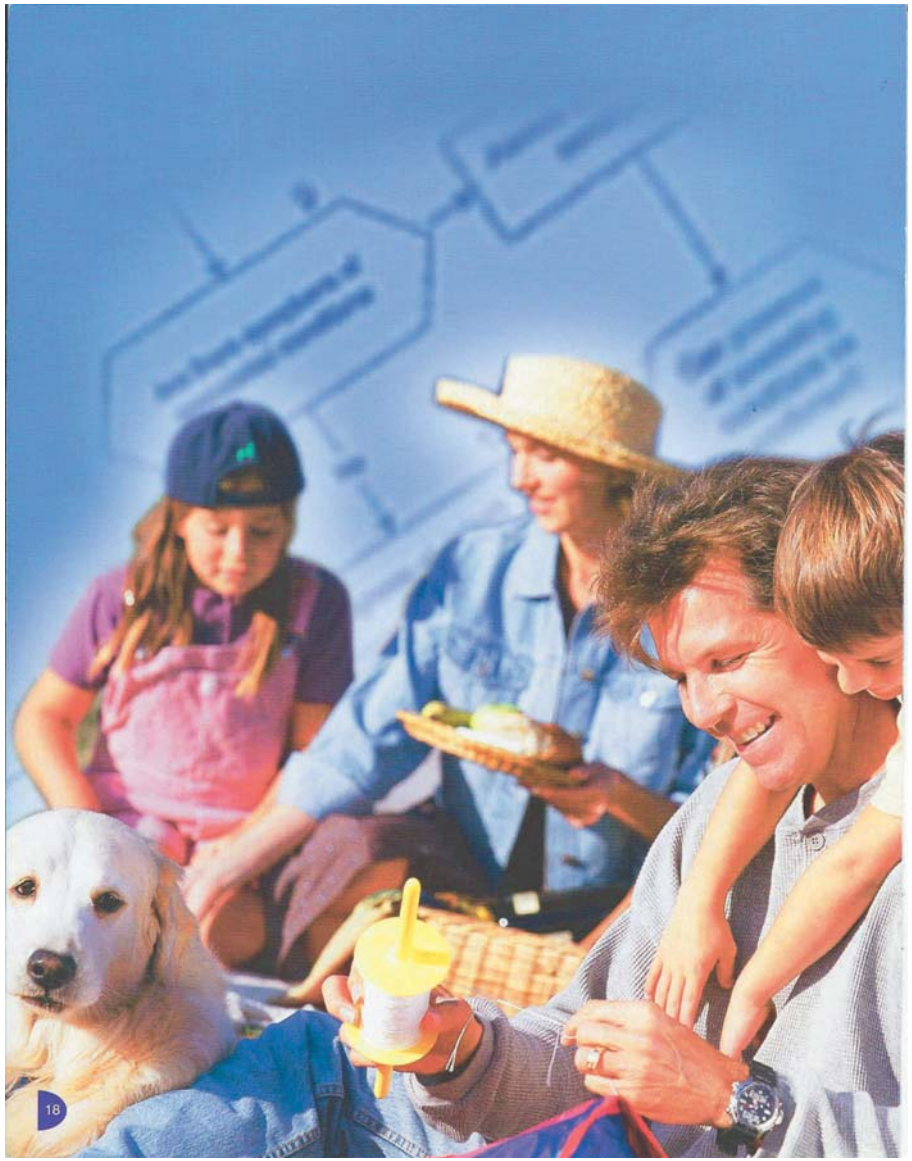
Behavior modification uses ordinary people as treatment agents. As such, it should be noted that this type of therapy places the most responsibility on parents and teachers. Because school and home are the two settings most affected by ADHD, they are the two environments most frequently used to induce change. For example, a teacher may be asked to monitor the percentage of classwork a child completes each day and, when deserved, to provide a reward. The reward, for example 5 minutes of free-time activity, serves as positive reinforcement of the completed task. Another technique is the introduction of "feedback" to the child. Here a token system provides the positive reinforcement. It is important that bad behavior not be unintentionally rewarded. For instance, a child who throws a tantrum should not be given candy in order to be silenced; this only reinforces the bad conduct.

THE TEAM

As you can see, an ADHD multimodal treatment plan requires what can only be called a "team" approach. The parent or other primary caregiver, as his or her child's "head coach," must manage the team in order to maximize the benefits of the treatment plan. He or she has the most familiarity with the child's symptoms and any problem areas that have a negative impact on the child's behavior, especially at home. Therefore, the parent takes part in every step of the treatment process, from evaluation and diagnosis to the design and implementation of the various modes of treatment. The parent serves as the hub in the communication wheel, coordinating contacts and directing the flow of information among all participants in the treatment plan. Ideally, all the team members—that is, the parents and family, school officials, and healthcare professionals—will achieve a clear understanding of how the child experiences ADHD.

Additional Behavior Modification Techniques

- **Self-mediated strategies** – Children self-monitor and self-reinforce rewards for meeting determined goals
- **Modeling** – Modeling programs help children develop social skills and use role-playing to teach appropriate behavior
- **Cognitive-behavioral strategies** – Problem-solving and anger-management skills are taught so they can be used in particular situations. Also, self-affirmation is used to change negative self-images and self-sabotaging belief systems
- **Peer-mediated interventions** – Peers monitor behavior and distribute tokens when earned. Peers may also become members of a team in which the rewards given depend on the individual with ADHD achieving goals. This must be monitored in order to avoid a negative impact on peer relations



Effective Parenting

THE ROLE OF "HEAD COACH"

The role of "head coach" requires a great deal of time, energy, and commitment. In short, it is hard work, but it can be very rewarding. Chances are parents will have good days and bad days, and, like any team, will win some and lose some. This is perfectly normal. At one time or another, outside pressures are bound to affect the progress of the treatment plan. Or it is possible that you may be starting out with a distinct disadvantage—you may be a working single parent, or you may have limited income and a limited amount of time to devote to the treatment program. It may sound trite, but all that is required is that you do the best you can. If you do, your child will benefit. Perhaps some assistance will help you overcome certain limitations. Recruit grandparents, friends, coworkers, and neighbors to your child's team. Educate as many people as possible about the realities of ADHD—tell people like the school bus driver and the owner of the corner store about your child. Knowledge may bring understanding, and understanding may bring about change. Remember, by controlling the environment in a specific way, behaviors will change.

FINDING A CLINICIAN

The first step as head coach is to "hire" a team doctor—ideally, a clinician (specialist) with extensive experience in ADHD treatment. Approach your child's pediatrician or family practioner, as he or she is already a team member. If your physician does not offer diagnostic and assessment services, as well as treatment planning, he or she will probably offer a referral. Do your homework and be prepared to ask questions. Seek the specialist you feel meets the qualifications you require.

He or she must be an advocate for you and your child, at times communicating with the doctor or school officials. Hopefully, this booklet will provide enough background information to enable you to become familiar with some of the tools used in ADHD treatment.

The clinician you choose may not be a physician; he or she may be a psychologist or other healthcare professional not qualified to prescribe medications. In that case, you may have to coordinate between your child's doctor and the clinician in order to have medication prescribed.

Some of the Right Questions





- How many patients with ADHD have you treated?
- What types of evaluations of my child will you be conducting?
- Do you follow a multimodal approach involving behavioral and psychological treatment as well as medication?
- Do you recommend parent-, child-, and teacher-training programs?
- Are you qualified to evaluate my child for coexisting disorders (a psychiatrist may be necessary)?

INFORMING YOUR CHILD

Children with ADHD are usually very aware of their condition even without knowing precisely what it is. These children are likely to compare themselves with others both at home and in school. They know when they are not doing well in school, or when there is friction between them and other students and teachers. Most children inevitably sense how they are viewed by others, whether it be at home, in school, or at extracurricular activities. In light of this, parents who do not tell their child about ADHD may be unintentionally making matters worse.

As you learn the facts about ADHD, you should choose the right time to share this information with your child. If you do not, your child might try to fill in the facts for himself or herself. The facts as children see them may take a very negative turn. Uninformed children are likely to see themselves as stupid and lazy, and perhaps, even worse, as bad children. Knowledgeable children will probably be more willing to take positive action and join the treatment team once they understand the definition and nature of their condition.

Of course, how much and what type of information you share with your child depends on his or her age and how much he or she can grasp. Younger children aged 6 or 7 should be given concrete examples, such as "you don't wait your turn" or "you leave your chair too often." As the child advances in age, the explanations will change accordingly. Older children can grasp concepts, so discussing individual symptoms and defining each one, and then offering suggestions on how to deal with the effects, becomes possible.

The older children become, the greater the emotional impact of ADHD. So it is helpful for children to have sufficient knowledge with which to counter any self-defeating belief systems that may develop from ignorance of their condition. At the very least, children may feel relieved that any assumptions they have had about being stupid or lazy are simply not true.

SIBLINGS

Just as the child with ADHD needs the facts in order to cope better, so should the rest of the family be informed about how the condition affects them and the steps that will be taken to manage the disorder. Brothers and sisters need to understand as much as they are capable of understanding. They too will fill in the gaps, reading into the family situation parts of what they have been told, adding bits and pieces of overheard conversations, and finally throwing into the mix things that spring from their imaginations.

Siblings need to understand why their brother or sister receives special attention at what they may feel is their expense. Since they already feel excluded, keeping them in the dark may only compound the negative effect. Once again, age is a factor affecting the concerns of siblings. Younger children may fear "getting" or "catching" ADHD. Or they may feel responsible and need reassurance. Older children may feel ashamed if they attend the same school. These children need to be armed with information both to overcome embarrassment and to explain their sibling's condition. Emphasizing their part on the treatment team may help them feel better and may help lay the foundation on which to build their own self-esteem.

BUILDING SELF-ESTEEM

A basic, yet very important aspect of ADHD treatment is the building of self-esteem. There is an old saying that applies to this idea: "Nothing succeeds like success." Parents should identify those areas in which their child shows the most ability—in other words, where he or she has already experienced some success. From this point, parents reinforce this "success" so that it may serve as the foundation for accomplishing positive results in the various treatment approaches. One way to reinforce a child's skills is to have him or her make use of a particular ability by helping others, whether at home or elsewhere. All children need to feel that they have some value to the world at large; at the very least, they need recognition. As we shall see, focusing positive attention on a child can be a powerful instrument for helping to build self-esteem.

As you teach these life skills, one result is certain—your child will make mistakes. This allows you and your child to confront the fear of making mistakes, as opposed to the consequences of actual mistakes. The difference is telling. Actual mistakes are a natural part of life and the learning process.

Quick Tips for Building Self-Esteem

- ❍ Recognize and build on existing intellectual, artistic, and athletic strengths
- ❍ Teach responsibility by making your child responsible (start with minor responsibilities and build)
- ❍ Teach decision-making skills by allowing your child concrete choices at home
- ❍ Reinforce self-discipline by providing your child with a voice in determining the consequences of negative behavior
- ❍ Develop problem-solving skills by reviewing specific problems and then reviewing all available options
- ❍ Offer encouragement and positive feedback by being attentive to the good behaviors as well as to the bad ones

THE HOME

Experts in the field of ADHD highly recommend that parents seek training from a qualified mental health professional skilled in the treatment of the disorder. As part of the parent-teaching process, the "look" of the home environment will be evaluated. Parents will be interviewed to determine what happens during parent-child interactions. It is important not to read into the interview what is not there. Blame is not being assigned. The interview will help establish the changes that must be made to the family environment. Pertinent questions will determine the ways in which a child's bad behavior is being inadvertently reinforced. Also, a child's specific characteristics need to be examined in order to uncover the ways in which they have affected family interactions. The child's positive behavior will also be determined, along with ways in which parents can acknowledge and encourage more of the same.

WHAT TO DO

Just as important as what to do is how you do it. Remember, consistency is critical to managing behavior. You may choose to implement some or all of the following steps.

• Increase positive behavior
As positive reinforcement, attention and praise can motivate the child accustomed to negative attention to change disagreeable behaviors.

• Decrease negative behaviors

Ignoring – This is the flip side of positive attention. Ignoring the child who is acting inappropriately often results in the eventual decrease in the bad behavior. Patience is required, as the target behavior may get worse before it gets better, especially when the bad behavior has been reinforced in the past.

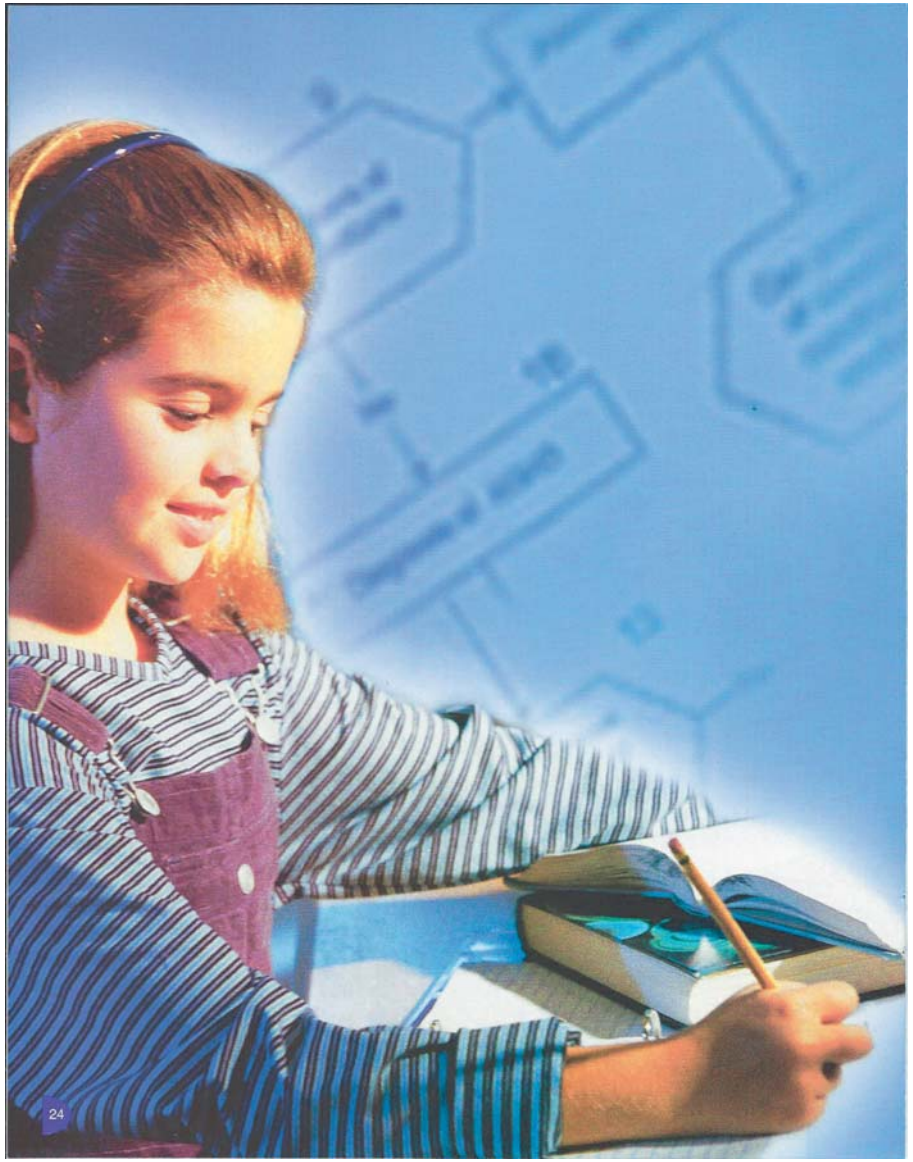
Timeout – This is the withdrawal of the opportunity for attention and positive reinforcement. Usually the child is restricted to a small area for a specified amount of time. This area should not provide any possibility for reinforcement, such as a television or video game. Timeout may make a child rebellious and combative when first attempted. So it is very important for parents not to reinforce the negative behavior by giving in and letting the child off the hook. Otherwise, it may become impossible to implement this very valuable tool.

Loss of privileges – This usually involves older children and adolescents. It prohibits certain activities, such as television watching, playing video games, and talking on the telephone. Loss of privileges can be a very effective deterrent to misbehavior when it is posed as a parental response to rule violations.

Compliance training – Parents give a child certain commands, such as "put the toy away before playing with a different one," and then provide the appropriate outcomes. Parents are told to issue brief, precise commands. Vague commands and commands that require multiple actions on the part of a child may lead to misunderstanding and noncompliance.

Token economy systems – This is a system that uses a particular item as reinforcement. The item may be a star on a chart or, possibly, actual chips. The chips are awarded for good behavior and achieving goals, and lost (or "costed") for bad behavior and failing to achieve goals. The token or chip is the coin of the economic system, redeemable for tangible rewards at specified times. The rules of the token system are determined and, to avoid misunderstandings, posted:

- A list of behaviors for which tokens are to be awarded and the number of tokens earned for each behavior
- A list of behaviors for which tokens are lost and the cost in tokens for each behavior
- A list of rewards for which tokens can be exchanged and the number of tokens each reward costs
- The economy must be detailed—for example, how and when tokens are awarded, deducted, and exchanged for rewards



ADHD and Education

INTERVENTIONS AT SCHOOL

The next facet or mode of ADHD treatment—interventions at school—calls for parents to entrust much of the day-to-day responsibility for treatment to school authorities. At this point, the parent as case manager comes to the fore. Working closely with the clinician, parents must advocate for their child by gaining cooperation and support from school authorities, in effect enrolling the school district onto the treatment team.

This should not present a problem, as teachers are usually very willing to deal with issues brought about by ADHD in the classroom. Just like parents, teachers frequently feel unprepared to cope, perhaps lacking specific knowledge about the types of interventions available to treat ADHD in the classroom. Sometimes, though, you may meet some resistance from teachers. Teachers may not always be open, sympathetic, or willing to entertain open, ongoing dialogue regarding the needs of your child or the management of ADHD. Often the rationale behind their objection is understandable. For instance, a teacher may feel legitimate concern about too large a portion of limited resources being used for one child at the expense of others. Then again, there are times that a teacher's objection will have no basis in scientific fact—he or she may claim that there is no such thing as ADHD.

Faced with this type of objection, you may want to try a two-pronged approach. First, you could attempt to educate the teacher about ADHD, sharing some of the knowledge you have acquired. If that does not work, advise the principal. At no time should you, as parent and advocate, be thwarted. As a matter of fact, the United States government guarantees protection to children academically harmed by ADHD under two federal laws.

SPECIAL EDUCATION OR RELATED SERVICES – SECTION 504 AND IDEA

The following is a brief summary of two federal laws that may potentially apply to the child with ADHD. By no means is this synopsis meant to cover all aspects of both laws. Parents should not make any decisions about which law to seek protection under until they learn as much as possible about both laws—*especially the differences between them.* Ask your physician or clinician for the educational brochure *Seeking Academic Help for the Child With ADHD*, provided by Shire US Inc. If it is not available and you can access the Internet, go to www.ADHDSupportCompany.com/library.html and download the *Section 504/IDEA Brochure.* Section 504 of the Rehabilitation Act of 1973 and the Individuals with Disabilities Education Act (IDEA), as amended in 1997, both guarantee a *free appropriate public education* for children with disabilities. Under both laws, children with ADHD must receive educational opportunities that are *comparable* (not necessarily equal) to the opportunities received by children without disabilities. By the same token, they should be allowed to participate with other children in nonacademic and extracurricular activities.

The most significant difference between the two laws is in eligibility requirements. IDEA requires that a student be capable of learning *only* with special education services. This means that the student must have a uniquely designed *instruction* plan. Section 504, on the other hand, allows for special education or related services. "Related services" means that the child requires some consideration—for example, he or she may be allowed more time to take a test. Still, the test must be exactly the same as the test taken by the other students. In effect, related services widen the umbrella of protection available to students in need of treatment for ADHD. Besides eligibility requirements, the laws offer different services and safeguards and different evaluation processes. Most important, the requirements placed on local school districts differ somewhat between the two laws. Generally speaking, IDEA has more stringent rules across the board.

WHAT YOU CAN DO

Previously, we reviewed some of the family-based initiatives in behavioral therapy that will help the child with ADHD. Now we turn to the classroom. Once a diagnosis of ADHD has been made, parents should approach the teacher and discuss some of the simpler ways to safeguard against the symptoms interfering with schoolwork. For instance, to counter a child's forgetfulness, you may ask if two textbooks could be made available—one for home and one for school. You may also wish to receive advance notice of homework assignments and the dates of tests. On your own, you can help your child learn to use organizing systems, such as a file cabinet with color-coded inserts or a wall board to keep track of assignments.

HOMEWORK

As a parent, you will need to take an active part in your child's homework assignments and to maintain a positive attitude while you do so. Once again, you will need to provide the positive reinforcement and support necessary to induce the changes required for successful ADHD treatment.

Organization is very important if your child is going to get the most out of doing homework. It is a good idea to break down assignments into manageable sections, especially if the task is large and repetitive, such as arithmetic or spelling. After each section is completed, give your child a brief break and check the work to be sure he or she is up to the task. Breaking down the steps involved in long-term assignments and posting a checklist also works especially well. Along those lines, making handy lists for everything from class schedules and locker combinations to goals and accomplishments may help to maintain focus and serve as reminders.

Note: If your child seems to be having more difficulty concentrating at home than at school, the cause may be related to his medication. Talk with your physician. He or she may recommend a long-acting, once-a-day medication that extends the duration of effect beyond school and helps to provide effective coverage at home.

Parental Responsibility

- ❍ Create the proper homework environment—quiet place, regular schedule, necessary supplies
- ❍ Make sure all the teacher's instructions and requirements are understood
- ❍ Be aware of how much difficulty your child has with the work and inform the teacher
- ❍ Set homework goals and reinforce achievement
- ❍ Find ways to keep the child motivated—praise, allow self-monitoring
- ❍ Organize the assignments

ADHD IN THE CLASSROOM

There are two strategies for dealing with ADHD in the classroom. One strategy targets the child's work productivity rather than directly targeting the behaviors. In this model, children are encouraged to direct their energy and resources toward accurately completing schoolwork. As a by-product of the work, negative behaviors decrease as productivity increases. Many experts favor this approach because it enables schools to accomplish their principal objective—that is, to educate students. The alternative strategy involves targeting the behaviors directly. Interestingly, some studies have shown that even when the targeted behaviors improve, the child's academic performance often does not. While targeting academic performance is probably preferable, at times it may be necessary to target specific behaviors, especially when disruption interferes with the progress of the class or the child's peer relationships.

Regardless of the approach, adjustments must be made in the classroom in order for the child to achieve academic success. Accommodations may mean changes in the physical environment, such as seating a child near the teacher and away from potential distractions. The teacher should also develop techniques that will help the child follow directions. Making eye contact while giving brief, precise directions and, at the same time, speaking softly will enable a child to focus better. A good technique for being sure the child with ADHD understands instructions is to have the youngster repeat the details. The teacher's patience may be tested when the child fails to comprehend instructions. Therefore, maintaining a calm demeanor and soft voice when repeating instructions is essential. If it becomes necessary for the teacher to repeat instructions too often, he or she will need to decide upon consequences for the child's behavior.

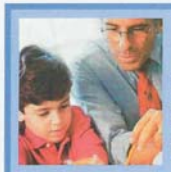
There are also strategies for increasing productivity and task completion in the classroom. Lessons can be given in small, more manageable parts along with frequent feedback, just as parents do with homework. Class assignments and tasks should be handled in the same way, only individual goals should be set and completion reinforced by the teacher.

Not only do teachers assume responsibility for all the classwork, but they are responsible for behavioral interventions as well. Many of the teacher-mediated programs are the same as those used in the home. Token economies, timeout, and attention have all been used to successfully decrease bad behavior. Reprimands are also effective, especially when used together with praise. In fact, a reprimand alone may actually increase misbehavior. Some experts advise teachers to deliver reprimands in a soft voice, while making eye contact.

Peer-mediated interventions with children of the appropriate age are also used in the classroom because of the obvious influence school-aged children have on one another. Peers can be trained to dispense rewards and attention for good behavior, and to be monitors in token economy systems. Generally, classmates are told to ignore the inappropriate behaviors and to praise the appropriate ones, thereby avoiding potential friction. Sometimes in interventions that have shown a good degree of success, the child with ADHD is called on to monitor and reinforce his or her own behavior.

COMBINATION HOME/SCHOOL PROGRAM

A very effective and practical intervention is the home/school–mediated system. This program uses teacher ratings of particular behaviors on report cards sent home with a child. In turn, parents provide the rewards earned by a positive report. This system is very practical because it is less demanding of teachers and less draining on a school's resources.



Home/School Report Card Program

- Teachers and parents must agree on which behaviors to include
- Define target behaviors
- Establish positive and negative criteria
- Designate specific rewards at home
- Determine areas of responsibility (teacher rates at specific time[s] of day, child brings home report card, parent gives reward)
- Change when needed, such as adding or subtracting targeted behaviors
- Explain program to child

PEER RELATIONS

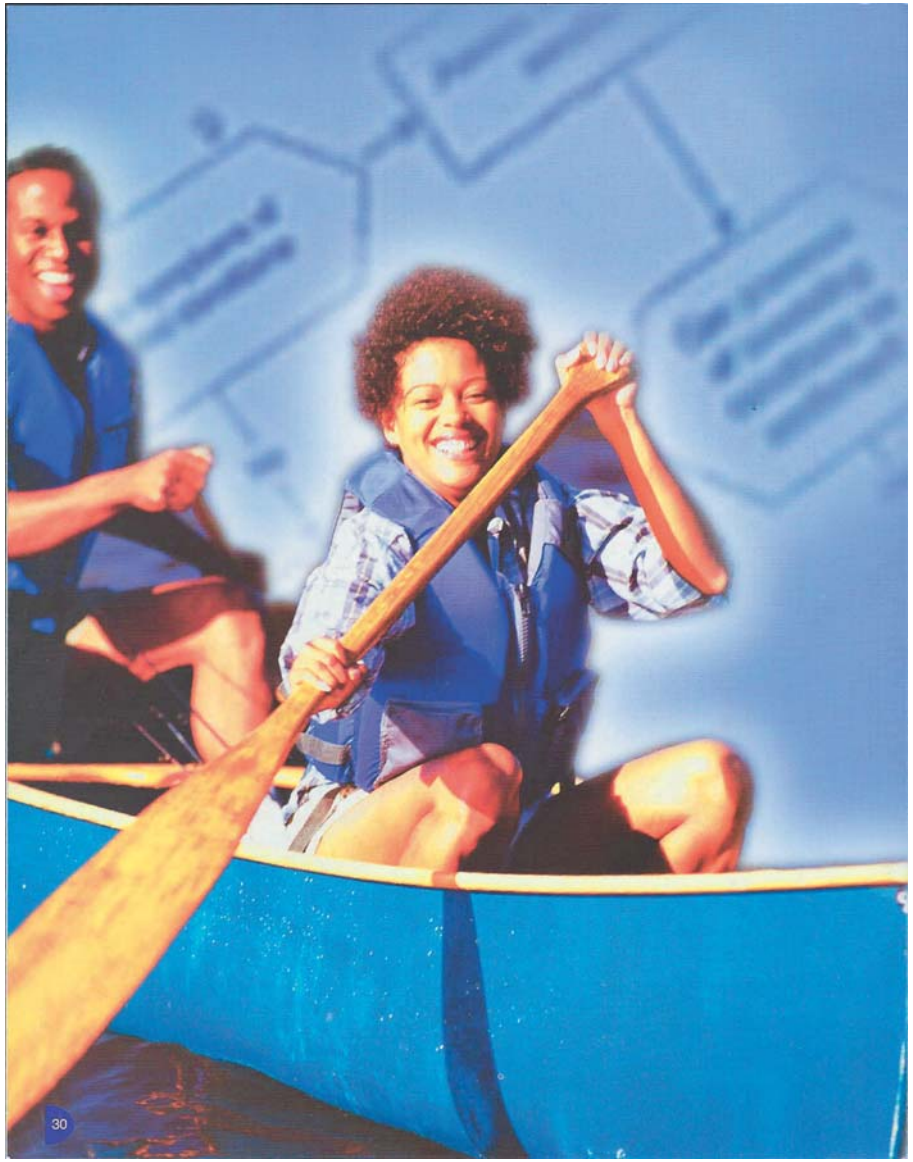
We have seen that ADHD can damage relationships at home and cause academic problems in school. Yet there is a third area that prompts parental concern—peer relationships. How social problems become apparent depends on the individual and may reflect which subtype of ADHD a child has. One child (hyperactive-impulsive type) may aggressively approach others, while another (inattentive type) may make clumsy efforts to be included in activities. "Aggressive" and "clumsy" describe behaviors that may illustrate the lack of two distinct social skills. The clumsy child demonstrates a clear lack of knowledge about what constitutes correct social behavior. The aggressive child, on the other hand, may know exactly what to do in different situations but still fails to behave appropriately.

AFTER-SCHOOL SOCIAL SKILLS TRAINING

Just as there are parent and teacher training programs, social skills training is available for children with ADHD. This type of training is tailored to meet the different needs of inattentive and hyperactive children. Social skills training attempts to teach those children with a lack of knowledge of appropriate behavior how to behave in specific situations. Basic instruction, coaching, and the modeling of appropriate behaviors provide the knowledge, and role playing and behavior rehearsal are likely to be used to reinforce this knowledge through actual practice. As the behaviors are learned, the skills are enhanced with positive reinforcement and some of the other techniques previously described.

Meanwhile, the child who knows what to do but exhibits self-defeating behavior, such as aggression or withdrawal, is approached differently. His or her behavior needs to be addressed directly and changed by using the same behavioral modification techniques that target disruptive behavior in children in the classroom. Aggressive behavior, such as hitting, is punished with timeout or loss of privileges. On the other hand, children prone to withdrawing from social interactions may do so because of a lack of confidence, which could be addressed by programs similar to the one described above. The more extreme cases of withdrawal may be due to an anxiety disorder that needs to be treated before further assessment.

The ultimate goal of social skills training is to have the child who succeeds in practice sessions reproduce that success in real-life settings. For this purpose, practice sessions attempt to reflect actual situations. Parents also help by learning to reinforce positive behavior during those times the child spends outside the clinical environment.



ADHD and Other Populations

ADOLESCENCE

As children grow up, obvious hyperactivity tends to look more like restlessness than like a state of constant motion. Other characteristics associated with ADHD in adolescents are much the same as those in younger children: inattention, poor impulse control, poor organizational skills, difficulty setting and keeping priorities, and weak problem-solving abilities. These symptoms result in

- Academic underachievement
- Low self-esteem
- Poor peer relations
- Erratic work record

There is one significant difference between how ADHD affects adolescents compared with children. The consequences of risk-taking behavior in adolescents is greater than in children. For example, compared with adolescents without ADHD, those with the disorder have a driving record that produces more tickets, more accidents, and more injuries. These problems arise from poor driving performance and need to be addressed directly. Also consistent with negative risk-taking, higher rates of verbal and physical aggression may often lead teens with ADHD to a direct confrontation with the legal system.

Tips for Managing Teen Drivers

- Provide supervised driving time under diverse driving conditions
- Practice actions to take in various emergency situations
- Forbid teens to own cars (statistics show that teens owning cars results in more accidents); loan your teenager the family car
- Always enforce rules prohibiting drinking and driving
- Decide on rules and consequences relating to teen driving issues
- Always enforce these punishments immediately

STRATEGIES

Chances are that the adolescent with ADHD has already experienced numerous therapeutic efforts. If there has been a limited amount of success, the teen may have self-esteem issues and be difficult to motivate. On the other hand, the adolescent may demonstrate insight regarding his or her condition that younger children are incapable of having because of their age. The possibility for more mature interaction between the adult and the adolescent offers an opportunity for a supportive relationship to develop, which will favor the teen's development.

A supportive therapeutic relationship can form between the child and either a teacher or a coach, or even a young adult tutor hired to teach social and play skills once or twice a week. As part of a group, a teen might join a team and interact with his or her peers under adult supervision. A summer camp—either a regular or special program, depending on the severity of symptoms—may improve social and recreational skills. Hiring a coach who specializes in goal-setting and skill development, and has an understanding and ability to use behavior modification techniques, can provide a therapeutic boost to an adolescent's self-esteem.

GIRLS WITH ADHD

In many ways, ADHD affects girls the same as boys. However, there are differences. Girls may share all the core symptoms and may obtain low scores on IQ and achievement tests; they may also display serious impairment on measures of school, social, and family functioning.

That said, it may come as a surprise that many experts believe girls with ADHD are both underdiagnosed and undertreated.

Examination of the symptoms may provide a possible explanation. Girls display more inattentive symptoms, as opposed to hyperactive-impulsive ones, and thus may "slip under the radar" and remain undiagnosed. There are other reasons girls may never be sent for treatment. Generally, girls are not rebellious; they are not as defiant or disruptive as boys. Instead, hyperactive girls may appear as "tomboys," be physically very active, and take the same risks as do boys. Hyperactive girls are often disorganized and messy, but they are probably easier to get along with at home and in school than are hyperactive boys.

Much like inattentive boys, inattentive girls are daydreamers whose minds drift in school. They have trouble concentrating and are forgetful and disorganized. Inattentive girls worry about school and may become easily overwhelmed. The girl with the Combined Type of ADHD may talk a lot rather than be hyperactive and may seem overemotional. Such girls have trouble staying on one topic in a conversation and have difficulty organizing their thoughts.

Finally, girls face the same potential future consequences associated with ADHD as do boys. Girls with untreated ADHD are at risk for a range of social, psychological, and educational problems that can have destructive outcomes in adulthood.

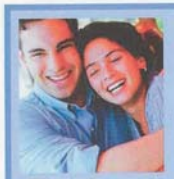
ADULTS WITH ADHD

In 1976, researchers recognized symptoms of attention-deficit disorder (ADD) in adults. Nevertheless, until the 1990s, the medical establishment still generally believed that ADHD disappeared either at the onset of puberty or, at the latest, by the end of adolescence. Today, adults often seek treatment after their child has been diagnosed, and parents educate themselves about the condition and recognize the symptoms from their own childhood. Adults often went undiagnosed as children because of a high degree of intelligence, compliant behavior, and personal charm. As children, they may have developed coping mechanisms that enabled them to manage the symptoms of ADHD. A common factor in the history of adult patients is a degree of educational and career success. Eventually, the adult reaches a level of responsibility and competence in which native intelligence and coping strategies prove insufficient for the job.

In part, the surge in the diagnosis of adult ADHD has helped lead to new lines of research. Unfortunately, molecular studies of genes have produced inconsistent findings, yet family, twin, and adoption studies offset genetic research with strong indications that ADHD is a familial condition with a strong genetic component.

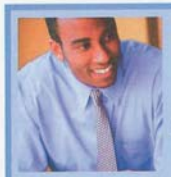
The numbers regarding adult ADHD cannot be stated with any degree of certainty. Estimates of the number of adults affected range from 2% to 7%. The male-female ratio has been shown to be 2 to 1 in some samples, while other samples show an equal rate of occurrence. In follow-up studies of children with ADHD, about 50% function well as adults, while the other half continue to live with some degree of impairment in:

- Attention
- Impulse control
- Problem-solving strategies
- Self-esteem
- Peer and marital relations
- Work record



Diagnosis of ADHD

The diagnosis of ADHD in adulthood requires a complete psychiatric evaluation, a review of childhood history, and, if possible, an interview with a spouse, parent, or significant other. A physical examination and neuropsychological testing should be performed to rule out other causes for the symptoms. Often a diagnostic interview is used, which may help identify other co-existing disorders. Adults with ADHD are also often diagnosed with substance abuse, anxiety disorders, and chronic low-level depression (called dysthymia). ADHD in adults looks much as it does in children, except that much less hyperactivity is present. Still, inattention and impulsivity can have a major effect on functioning at work and in social relationships. The problems in spousal relationships and the negative effects on parenting abilities can seriously harm families. With some adults, reduced levels of income, apparently due to academic underachievement and job instability, only add to family problems.



Adult Treatment Model

- Education for patient, family, or other significant individuals
- Consideration of vocational evaluation, counseling, or training
- Medication
- Psychosocial interventions
  - Individual cognitive therapy
  - Family psychotherapy if familial dysfunction is present
  - Referral to support groups

Self-help books and support groups, such as Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD) and the National Attention Deficit Disorder Association (ADDA), offer extensive educational resources. Loved ones may also help provide feedback to the patient and physician about how the treatment is progressing. This is particularly important should the patient's commitment to treatment waver, as often happens when a patient fails to recognize the positive effects of medication.

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