What Is ADHD?
Attention Deficit Hyperactivity Disorder (ADHD) is the most commonly diagnosed behavioral disorder of childhood, estimated to affect 3 to 5 percent of school age children. Its core symptoms include developmentally inappropriate levels of attention and concentration, activity, distractibility, and impulsivity (NIMH 1998).

The official definition appears in the Diagnostic and Statistical Manual of the American Psychiatric Association and states: ADHD is a disorder that can include a list of nine specific symptoms of inattention and nine symptoms of hyperactivity/impulsivity. The definition includes four subtypes of ADHD: ADHD - Inattentive type, ADHD - hyperactive/impulsive type, ADHD - combined type, and ADHD - not otherwise specified.

ADHD is characterized by a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development. ADHD children usually have pronounced difficulties and impairments resulting from the disorder across multiple settings including in the home, at school, and with peers. The adverse effects are long term on later academic, vocational, social, emotional and psychiatric outcomes.

What Is TheControversy Surrounding ADHD?
ADHD is not without controversy. Opinions are varied and diverse in medical, clinical, and educational arenas and raise uncertainty about the disorder and its long term consequences, whether it should be treated, the course of treatment, and what interventions are most effective. The opinions range from believing that the condition is a disorder to viewing the condition as a normal childhood developmental process. Other controversies and concerns about ADHD:

• Can it be reliably diagnosed? ADHD is not clinically observable and is not detected through laboratory tests such as a blood test, x-ray, or diagnostic test. This raises further the spectrum of opinion and controversy. There is not an independent, valid test to detect ADHD, and there are no data to indicate that ADHD is due to a brain malfunction. Further research is needed to establish the validity of the disorder. The diagnosis can be made reliably using well tested diagnostic interview methods.
The use of psycho stimulants to treat the condition has increased significantly in recent years. Psycho stimulants such as amphetamine, methylphenidate, and pemoline are the most widely researched and commonly prescribed treatments for ADHD. This increase in the production and use of psycho stimulants has intensified concerns about the use, overuse, and abuse of these treatments.

The increased frequency of the diagnosis of ADHD in children raises the issue of whether there is over diagnosis of ADHD. Although it is estimated that 3 to 5 percent of children in the United States have ADHD, wider ranges of diagnosis have been reported. The commonly diagnosed behavioral disorder of childhood and the frequency of treatment with psycho stimulants represent a major health problem (NIMH 1998).

It is difficult to differentiate ADHD from other behavioral problems and to determine the boundary between the normal population and those with ADHD.

ADHD often does not present as an isolated disorder (existing alone), and comorbidities (coexisting conditions) may make research studies and a valid diagnosis of the disorder difficult.

Note: There are many reasons and causes of hyperactivity in children. Hyperactivity must be distinguished from high activity level. The “high nuisance value” of the symptoms of the condition often promotes diagnosis of ADHD.

How is ADHD Observed in the Population?

All experts on ADHD agree that it is much more commonly observed in boys than in girls, and this condition occurs in all major ethnic groups. Children of all socioeconomic groups manifest ADHD; however, some investigators maintain that children from more economically deprived backgrounds display ADHD symptoms with a greater frequency. Similarly, these symptoms can occur in children of all intellectual levels.

What is the Impact of ADHD on Individuals, Families, and Society?

Children with ADHD experience the negative consequences of not being able to sit still and pay attention in class. They experience peer rejection and engage in various disruptive behaviors. Their academic and social difficulties have far-reaching and long-term consequences. Their “nuisance value” in the classroom is high. These children have higher accident rates, and later in life, children with ADHD, in combination with conduct disorders, experience other risk factors such as drug abuse, antisocial behavior, and accidents of all sorts. For many individuals, the impact of ADHD continues into adulthood.

Families who have children with ADHD, as with other behavioral disorders and chronic diseases, experience increased levels of frustration, marital discord, and divorce. In addition, the direct costs of medical care for children and youth with ADHD are substantial. These costs create a serious burden for many families because they frequently are not covered by health insurance.

In society, these individuals consume a disproportionate share of resources and attention from the health care system, criminal justice system, schools, and other social services agencies. These costs are large. For example, it is estimated that additional public school expenditures for students with ADHD may have exceeded $3 billion in 1995. In addition, ADHD, in conjunction with coexisting conduct disorders, may contribute to societal problems such as violent crime and teenage pregnancy.

Features of ADHD

Symptoms must have been present before age 7 years
Symptoms must be present in two or more settings
There must be clear evidence of interference with developmentally appropriate social, academic, or occupational functioning
Symptoms must have persisted for at least 6 months

Diagnostic Criteria

Inattention: Often
Fails to give close attention to details/makes careless mistakes in school work
Has difficulty with sustained attention in tasks or play activities
Does not seem to listen when spoken to
Does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace
Has difficulty organizing tasks and activities
Is often forgetful in daily activities
Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort
Loses things necessary for tasks or activities
Is easily distracted by extraneous stimuli such as noises or activity from others.

**Hyperactivity-Impulsivity**

*Hyperactivity*: Often...

- Fidgets with hands or feet or squirms in seat.
- Leaves seat in classroom or group setting.
- Runs about or climbs excessively in situations in which it is inappropriate.
- Has difficulty playing or engaging in leisure activities.
- Is often “on the go” or acts as if “driven by a motor”.
- Talks excessively.

*Impulsivity*: Often...

- Blurts out answers before questions have been completed.
- Has difficulty awaiting turn.
- Interrupts or intrudes on others.

**What Other Disorders Tend to Occur with ADHD or to be Mistaken for ADHD?**

**Specific Learning Disabilities**

40% of children with ADHD also meet the guidelines for various forms of SLD in the areas of written language, reading, speech/language, math, and fine and gross motor functioning.

**Oppositional Defiant Disorder/Conduct Disorder**

60% of ADHD children may present with behavioral difficulties so extreme that they also meet the criteria for ODD or CD.

**Tourette's Disorder**

One of every 200 children has Gilles de la Tourette Syndrome (motor tics/vocal tics)

This disorder emerges during the same period when adults begin to recognize the persistence of the ADHD child’s difficulties.

**Anxiety Disorders and Response to Trauma**

High levels of anxiety can interfere with a person’s memory. Children may have restless behaviors or difficulty concentrating because they are nervous or tense. They may have undergone traumatic experiences, such as natural disasters, major traumatic physical injury, or extensive physical or sexual abuse (may display concentration difficulties, tend to startle easily and be overactive/over-reactive in or to their environment)

**Mood Disorders**

**Depression**

- Mania: elevated or irritable mood, inflated sense of esteem, talkative, greater distractibility, agitation, thoughts are racing.
- Episodic, fails to respond to psycho stimulant medication, family history of Bipolar Disorder.

**Response to Chaotic Environment**

Difficulties arise in that the response styles that are adaptive for surviving a chaotic environment at home or in the neighborhood are not the response styles that encourage success in the school setting.

**Recommendations for Teaching (Working with) Children with Attention Deficit Disorders**

Some clinicians, psychiatrists, psychologists, and educators maintain that the single most important guiding principle in helping ADHD children is to create a loving relationship with the child. Whether parents, teachers, coaches, or older brothers and sisters, the caring relationship is the essential ingredient.

The most effective treatment of ADHD requires full cooperation of parents, teachers, care givers, and medical professionals working closely together in the interest of the child.

Some recommendations are:

- Seat ADHD child near the teacher’s desk, but include child as part of the regular class seating
- Place child up front with his back to the rest of the class to keep other students out of view
- Surround ADHD child with “good role models,” those that the student views as “significant others.” Encourage peer tutoring and cooperative collaborative learning.
- Avoid distracting stimuli. Try not to place the ADHD child near air conditioners, high traffic areas, heater, doors, or windows.
ADHD children do not handle change well so avoid: transitions, changes in schedule, physical relocation, disruptions. Monitor closely on field trips.

Be creative! Reduce stimuli in the study environment.

Encourage parents to set up appropriate study space at home with routines established such as set times for study, parental review of completed homework, and periodic notebook and/or book bag organized.

Reward more than you punish in order to build self esteem.

Praise immediately any and all good and acceptable behavior and performance.

Change rewards if not effective in motivating behavioral change.

Find ways to encourage the child.

Teach the child to reward him/herself. Encourage positive self-talk (i.e. “You did very well remaining in your seat today. How do you feel about that?”). This encourages the child to think positively about him/herself.

Other Educational Recommendations Include:

Consideration of educational, psychological, and/or neurological testing to determine the child’s learning style, cognitive ability, and to rule out learning disability.

Private tutor and/or peer tutoring at school.

Social skills training and organizational skills training.

Training in cognitive restructuring (positive “self-talk” i.e. “I did that well” ).

Use of a word processor or computer for school work.

Individualized activities that are mildly competitive or non-competitive such as bowling, walking, swimming, jogging, biking, karate. Note that ADHD children may do less well in team sports.

Involvement in social activities such as scouting, church groups, or other youth organizations which help develop social skills and self esteem.

Allowing the child to play with younger children if that’s where they “fit in.” The child can develop valuable social skills from interaction with younger children.

There are no quick fixes for managing and treating the ADHD child. The best intervention is a comprehensive approach that combines the collaborative and cooperative efforts of home and school with medical, psychological, and behavioral treatment.