

ADHD: Diagnosis + Treatment = Successful Outcomes

Contributed by Ken Lerner, MD

 *Elliot Behavioral Health Services*

What is ADHD?

It is a disorder due to a deficiency of one or several substances called neurotransmitters that are found in all human brains. Specifically, the neurotransmitters that are in short supply in ADHD are dopamine and norepinephrine. Although dopamine and norepinephrine have a variety of functions within the nervous system, and can play a role in anxiety, depression, substance abuse, wakefulness, and other states, they are particularly important in the maintenance of focus and concentration, regulation of physical and social activity and control of impulses.

How do you get it?

ADHD is genetically transmitted, and is generally found to affect more than one individual in a given family, often from several generations.

What are the symptoms?

The symptoms and signs of ADHD most commonly appear between ages 4 and 10, and become problematic in the early school years. Most often, affected children have difficulties in learning because they cannot pay attention, are easily distracted, blurt out and interrupt teachers, parents and peers, and shift activities frequently. They have difficulty remembering or understanding what they have just read, and find doing

Attention Deficit-Hyperactivity Disorder (ADHD) is a relatively common neurological condition that effects as many as 5-10% of all boys, 1-2% of all girls, and can cause a variety of difficulties in academic performance, socialization, decision making, personal planning and organization.

homework fatiguing because of the effort required to concentrate for more than a few minutes at a time. They also cannot complete multi-step tasks unless instructions are written out, and even then, often don't complete these tasks. The almost complete inability of ADHD kids to learn from experience is extremely frustrating for parents and teachers. Mistakes are constantly

repeated and the lessons of experience are seldom learned. It seems that, behaviorally, they are always starting over from the beginning. Although 10-20% of children have the purely "attentional" variant of the condition, the majority are also hyperactive, and are unable to sit in one place for very long, seem to always "be on the go," shift from one activity to the next in rapid succession, and never appear to tire. These kids have the "combined" type of ADHD. Occasional children can pay attention fairly well, but mainly demonstrate constant hyperactivity, and are said to have the "hyperactive" type of ADHD.

A further complication of the combined and hyperactive forms of ADHD is oppositional and defiant behavior. These children are argumentative, annoying, often do not recognize personal spatial boundaries, and deliberately defy peers and authority figures. They consistently ignore or break rules. Some children exhibit this type of behavior to an extreme, either with or without the other characteristics of ADHD, and are described as having "oppositional-defiant" disorder.

How is ADHD recognized?

There is no foolproof diagnostic test for the disorder. The determination is based on the behavioral observations of parents, teachers, with consultation and evaluation by psychologists and psychiatrists, and with the use of established ADHD behavioral grading forms, such as the Connors and SNAP scales, filled out by parents and teachers. Since ADHD tends to “run in families,” thorough review of family educational and psychiatric history is essential.

How is it treated?

The treatment of ADHD has been studied for many years, especially since the 1980's. Literally thousands of children with confirmed ADHD have been followed in several centers, often for several years, in trials of medication only, behavioral therapy only, and medication combined with behavioral therapy. These studies have clearly and repeatedly shown that in children confirmed to have ADHD, there is no alternative to medication. However, behavioral therapy is often very useful as supplemental therapy for improving study habits and organizational skills, dealing with family relational issues, and dysfunctional social behaviors.

Why do we treat ADHD?

Studies consistently show that children with untreated ADHD have an increased dropout and/or failure rate in school but also have significant problems with social adaptation. They have difficulty recognizing social cues, are impulsive and are prone to make poor choices and decisions. As they become adolescents, they tend to associate with marginalized peers and often defy authority. The motor vehicle accident rate in untreated ADHD kids can be up to four times that of non-ADHD children, and substance abuse rates are also considerably higher than for non-ADHD children. Despite the problem of medication side effects, the drawbacks of non-treatment are clear.

Although ADHD often exists by itself, in a large proportion (perhaps as high as 30-50%) of children, it is coexistent with other disorders such as depression, anxiety, obsessive-compulsive

disorder, Tourette's disorder, bipolar disorder, and others. When this occurs, both diagnosis and treatment become more complicated. However, successful outcomes can still be achieved if a proper evaluation and treatment are carried out.

If untreated, consequences are devastating.

Whether or not ADHD exists as a single entity, or in combination with another psychiatric condition, the risks of not treating it, or of misdiagnosis are serious and can have life long deleterious effects as the child develops and matures. As in most illnesses that have their onset in childhood, the benefits of early diagnosis and treatment are considerable if negative life long consequences are to be avoided.

For more information contact Elliot Behavioral Health Services at 668-4079. This article was first printed in Your Mental Health Matters, Summer 2005 issue.