

Attention Deficit/Hyperactivity Disorder

Definition:

Children with ADHD have difficulty with executive functioning and/or inhibiting spontaneous behaviors. This is also known as Attention Deficit Disorder (ADD).

Characteristics:

Children with ADHD/ADD often have difficulty interacting socially because they are impulsive and struggle to control these impulses. They often have difficulty completing tasks and demonstrate disorganization in their approaches.

Causes:

Current research indicates that deficits in response inhibition are the primary characteristics of ADHD (Barkley, 1997). The frontal lobe, basal ganglia, caudate nucleus, cerebellum, as well as other areas of the brain, play a significant role in ADHD because they are involved in complex processes (executive functions) that regulate behavior (Teeter, 1998). Executive functions include such processes as inhibition, working memory, planning, self-monitoring, verbal regulation, motor control, maintaining and changing mental set and emotional regulation. According to a current model of ADHD developed by Dr. Russell Barkley, a problem with response inhibition is the core deficit in ADHD. This has a cascading effect on the other executive functions listed above (Barkley, 1997).

Possible Contributing Factors:

- fetal exposure to toxic substances (e.g., alcohol and tobacco)
- heavy use of anesthetics
- exposure to lead
- heredity

Implications for Speech and Language:

Organization is important for language development. Children who have difficulty organizing pieces of information also have difficulty organizing and sequencing story components. As a result, they often have a hard time getting their point across to others. Additionally, children who have difficulty focusing in the classroom frequently miss important linguistic information, such as vocabulary specific to a lesson.

Children who have ADD/ADHD often present with speech-language testing results that show low receptive skills relative to expressive language skills. This is often a result of difficulty following directions and maintaining attention during testing tasks. It is important to minimize visual and auditory distractions during testing sessions. Frequent breaks may be necessary, as well as prompts to maintain attention to the tasks.

Diagnosing this disorder:

Speech-language pathologists do not diagnose ADHD but often treat children who have ADHD and language delays and disorders.

No single test can diagnose a child as having ADHD. Instead, a licensed health professional needs to gather information about the child, and his or her behavior and environment. A family may want to first talk with the child's pediatrician. Some pediatricians can assess the child themselves, but many will refer the family to a mental health specialist with experience in childhood disorders such as ADHD. The

pediatrician or mental health specialist will often consult with each other to determine if a child has ADHD.

Treatment:

Speech-language pathologists often work with children who have symptoms of or have been diagnosed with ADD/ADHD in conjunction with a communication disorder.

Children with ADHD often benefit from visual structure that supports organization of material. Routines are important. When activities are consistent, children do not need to use the same level of cognitive resources to get through activities as they do when routines are new.

Clocks and timers with visual and auditory features are useful tools in intervention. Creating and following simple schedules can often be used to help children with ADD/ADHD anticipate what is coming next.

Set clear expectations and rules. Help children organize information visually as they listen. This will then become a process that is automated, allowing them to listen and retain information better.

Resources:

Books:

- *Smart but Scattered* by Peg Dawson
- *Coaching Students with Executive Skills Deficits*
- *Lost at School* by Ross Greene
- *Zones of Regulation* by Leah Kuypers
- *ADHD and the nature of self-control* by R.A. Barkley

Websites:

- ADD/ADHD Parenting Tips: Helping Children with Attention Deficit Disorder: www.helpguide.org/mental/adhd_add_parenting_strategies.htm
- American Speech-Language-Hearing Association: <http://www.asha.org/public/speech/disorders/ADHD/>

References:

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