

Guidelines for Treating Children with ADHD *continued* (Conture, 2001), you may be better able to show how speech flow can be disrupted at various locations along the “hose,” such as the lips, the larynx, etc. With concrete examples, the child is better able to understand and retain the information.

- Use frequent praise and establish a reward system that changes over time to keep the child motivated and interested. Children with ADHD often crave attention and excel in positive environments where they are surrounded by support.

- Increase the child’s self-monitoring skills and awareness of how behaviors affect interactions with others. Focus on the child’s ability to accurately assess his speech in a variety of speaking situations ranging from simple to complex. Then teach problem solving skills to allow him to change these behaviors accordingly.

- Address overall communication skills. By introducing and modeling appropriate skills such as eye contact, volume, rate, listening skills yourself, you will help to increase the child’s confidence and self-esteem while reducing speech-related anxiety.

- To foster generalization of new skills, explore grouping the child with other children who have similar characteristics. The desensitization gained by such a meeting frequently reduces anxiety and promotes more fluent speech. It is also an optimal setting to practice fluency strategies, social skills and overall behavioral management.

- Instruct parents on ways to minimize activities that may reduce the child’s ability to focus or promote aggressive and impulsive behavior. For example, many television programs, video games and movies contain levels of violence that can significantly affect a child with ADHD who is already prone to aggressive behavior (Barkley, 2000). In addition, there is some evidence that the **amount** of television children watch prior to age three is linked with attention problems in the school years (Christakis, 2004). Thus, it is recommended that parents closely monitor their child’s television habits.

For More Information On Attention-Deficit/Hyperactivity Disorder

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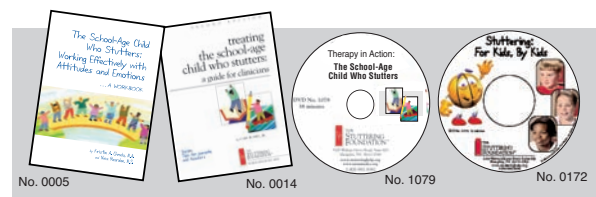
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For more information about working with school-age children who stutter, visit www.stutteringhelp.org



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ADHD and Stuttering

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What is ADHD?

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder characterized by three primary symptoms: short and inconsistent attention span, impulsive behavior, and hyperactivity. ADHD affects approximately 3%–7% of children in the United States with a male/female ratio of about 2 to 1. There are three subtypes of ADHD:



- (1) ADHD predominantly inattentive type,
- (2) ADHD predominantly hyperactive-impulsive type and,
- (3) ADHD combined type.

Parents of children with ADHD frequently notice that their child has **consistent** difficulty with:

- Paying attention while following instructions, especially during rote or routine tasks;
- Returning to tasks once they have been distracted;
- Paying attention to details and completing assignments;
- Considering multiple options and consequences before acting;
- Pacing, fidgeting and squirming in their seat;
- Talking excessively without considering the needs of the listener;
- Controlling aggressive or defiant behavior.

According to diagnostic criteria, ADHD symptoms must be seen prior to age seven but often appear as early as age three. Additionally, children must exhibit ADHD symptoms in two or more environments such as 1) school, 2) home, and 3) other social settings.

These symptoms must result in significant impairment academically, socially, or occupationally. It is typical for a child with ADHD to experience severe difficulties in school, to demonstrate serious social interaction problems, to struggle to complete assignments or household tasks, and to engage in conflict with parents or other adults.

ADHD is **not the direct result** of other mental disorders, a learning disability, a developmental disorder, anxiety, or depression, although these conditions often co-occur with ADHD.

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Treatment for ADHD Symptoms

The treatment strategy with the strongest scientific support for ADHD continues to be stimulant medications. The most common stimulant medications include Ritalin, Adderall, and Dexedrine. They are effective in approximately 70%–80% of cases.

Several recent case studies have suggested that the use of stimulant medications may actually increase stuttering. As a result, non-stimulant medications such as Strattera have been tried when ADHD coexists with stuttering. Results suggest that these non-stimulant medications may actually reduce stuttering when combined with speech therapy (Burd & Kebeshian, 1991; Lavid, Franklin, & McGuire, 1999; Riley & Riley, 2000). However, the non-stimulant medications do not appear to be as effective as the stimulant medications in handling the primary symptoms of ADHD.



Parents and clinicians must remember that these reports are based on a small number of cases, making it difficult to reach conclusions about stimulant or non-stimulant medications and stuttering. More controlled clinical research needs to be conducted on the effects of all medications and the frequency of stuttering. **Families are strongly urged to discuss these findings with their doctors and explore which options are best for their child.**

Speech and Language Characteristics of People with ADHD

It has been estimated that as many as 45% of children with ADHD have some form of speech and language impairment (Tirosch & Cohen, 1998). The most common deficits include: impaired social skills, reduced ability to problem solve, auditory processing issues, limited ability to extract detailed information, and becoming fixated on specific topics (Michon, 1999).

Many other disorders that are linked to ADHD can have a significant effect on one's ability to organize and formulate thoughts and ideas.

These include: anxiety disorders, major depression, and conduct disorders. It has also been well documented that learning disabilities occur in as many as 60% of individuals with ADHD. Thus, any approach must target all of the presenting symptoms as well as



the child's performance in school and social situations.

Stuttering and ADHD

Little is known about the specific characteristics of stuttering in children with ADHD other than the fact that the patterns of disfluencies are consistent with those of children who stutter who do not have ADHD.

If the prevalence of ADHD in school-age children is 3–6%, what is the prevalence of ADHD in children who stutter? The literature suggests that the prevalence of ADHD in school-aged children who stutter is between 4–26% (Ardnt & Healey, 2001; Conture, 2001, Riley & Riley, 2000). However, clinical findings often report that significant attention and impulsivity issues, without a current diagnosis of ADHD, negatively affect the outcome of stuttering treatment. Thus, clinicians must be on the lookout for both diagnosed and **undiagnosed** disorders of attention/impulsivity that may influence therapy outcomes.

Guidelines for Treating Children with ADHD

- Structure activities according to a consistent, organized schedule that the child has helped to create. Post these routines in the therapy room so that the child is aware of the schedule and what is expected of him or her. It is helpful to schedule in play breaks so the child knows that something fun is ahead.
- Make therapy personal by focusing on the child's interests. For example, if a child is interested in sports, build the session around a game of football. You can use the rules of the game as content for discussion and create a reward system based on the number of yards a team advances or on touchdowns scored.
- Keep instructions simple, clear and concise. Present directions multiple times and **have the child repeat them back** before responding. This will lead to long-term retention of the material and increased learning.
- Provide visual cues, concrete examples and/or drawings to assist in comprehension. For example, by using the analogy of the garden hose

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