

What treatment works best for attention deficit/hyperactivity disorder (ADHD)?

Brown RT, Amler RW, Freeman WS, Perrin JM, Stein MT, Feldman HM,
Pierce K, Wolraich ML and the Committee on Quality Improvement,
Subcommittee on Attention-Deficit/Hyperactivity Disorder

The Bottom Line:

Attention deficit/hyperactivity disorder (ADHD) is best treated with stimulant medications, although a combination of drug therapy and behavioural therapy is effective and may reduce the amount of medication needed. No one drug was better than another.

What problem is being addressed?

[Attention Deficit/Hyperactivity Disorder \(ADHD\)](#) affects about 5% of school aged children and causes disruptions of family life and school. Stimulant medications have been used for more than 20 years to treat the symptoms of ADHD, but some parents who are concerned about the side effects prefer to use other, non-drug interventions. This study compares these treatments and reports on the effectiveness of each relative to the other.

What intervention is being tested?

Any type of intervention designed to address the impulsive, sometimes aggressive, and generally overactive behaviour of children with a diagnosis of attention deficit hyperactivity disorder. These interventions include stimulant medications (the standard treatment for ADHD), as well as behaviour therapies and family therapies used alone or in combination with drug therapy.

What is the *real scientific* evidence?

The authors reviewed studies examining the benefits and risks of different types of treatments for ADHD, including comparisons of single treatment interventions to multiple treatment interventions (e.g., drug alone compared to drug and family therapy, or drug and child behavioural therapy).

These studies were located through literature reviews conducted by the McMaster Evidence-Based Practice centre (supported by the Agency for Healthcare Research and Quality), the Canadian Coordinating Office for Health Technology Assessment, and the NIMH-supported Multimodal Treatment for ADHD trial. These were supplemented by a further literature search and review by the Committee.

The evidence from these studies supports the use of stimulant medications as the most effective treatment for ADHD in children and adolescents. Behaviour therapy alone was only slightly effective in treating the symptoms of functioning in children with ADHD. Combining behaviour therapy and drug therapy seemed to improve behaviour and function and may reduce the amount of medication needed. Comparisons of different medications used in drug therapy did not find one superior to another.

This evidence formed the basis of a [practice guideline](#) issued by the [American Academy of Pediatrics' Committee on Quality Improvement](#) in (date?).

The preceding is a summary of: Brown RT, Amler RW, Freeman WS, Perrin JM, Stein MT, Feldman HM, Pierce K, Wolraich ML and the Committee on Quality Improvement, Subcommittee on Attention-Deficit/Hyperactivity Disorder. Treatment of Attention-Deficit/Hyperactivity Disorder: Overview of the Evidence. *Pediatrics* 2005, 115: 749-757.