

DOCUMENT RESUME

ED 368 136

EC 302 892

AUTHOR Parker, Harvey C.; And Others  
 TITLE Medical Management of Children with Attention Deficit Disorders: Commonly Asked Questions.  
 INSTITUTION American Academy of Child and Adolescent Psychiatry, Washington, DC.; Children with Attention Deficit Disorders, Plantation, FL.  
 PUB DATE 91  
 NOTE 4p.  
 PUB TYPE Information Analyses (070) -- Journal Articles (080)  
 JOURNAL CIT CHAPTER; p17-19 Fall-Win 1991

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Attention Deficit Disorders; Clinical Diagnosis; \*Drug Therapy; \*Medical Services; \*Stimulants; Student Characteristics; Teacher Role  
 IDENTIFIERS \*Antidepressants

ABSTRACT

This brief article uses a question and answer format to review basic information about medical management of children with attention deficit disorders (ADD). Questions address: characteristics of ADD; how parents and teachers can tell if a child might have ADD; types of services and programs which help these children and their families; medications prescribed for ADD children; how psychostimulants appear to help ADD children; common side effects of psychostimulant medications; the use of tricyclic antidepressants in treating ADD; side effects of tricyclic antidepressant medications; ADD children who do not respond well to medication; dispensing of medications at school to an ADD child; monitoring of effectiveness of medications and other treatments; the role of the ADD child's teacher; and refutations of common myths associated with ADD medications. (DB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

# Medical Management of Children with Attention Deficit Disorders Commonly Asked Questions

by

Children with Attention Deficit Disorders (CH.A.D.D.)  
American Academy of Child and Adolescent Psychiatry (AACAP)

Harvey C. Parker, Ph.D.  
CH.A.D.D., Executive Director

George Storm, M.D.  
CH.A.D.D., Professional Advisory Board

Committee of Community Psychiatry and Consultation to Agencies of AACAP

Theodore A. Petti, M.D., M.P.H., Chairperson

Virginia Q. Anthony, AACAP, Executive Director

This article may be reproduced and distributed without written permission. Tear out for easy use.

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it.  
Minor changes have been made to improve  
reproduction quality.

Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
policy of the Department of Education.

ED 368 136

## 1. What is an Attention Deficit Disorder.

Attention deficit disorder (ADD), also known as attention deficit hyperactivity disorder (ADHD), is a treatable disorder which affects approximately three to five per cent of the population. Inattentiveness, impulsivity, and oftentimes, hyperactivity, are common characteristics of the disorder. Boys with ADD tend to outnumber girls by three to one, although ADD in girls is underidentified.

Some common symptoms of ADD are:

1. Excessively fidgets or squirms
2. Difficulty remaining seated
3. Easily distracted
4. Difficulty awaiting turn in games
5. Blurts out answers to questions
6. Difficulty following instructions
7. Difficulty sustaining attention



8. Shifts from one activity to another
9. Difficulty playing quietly
10. Often talks excessively
11. Often interrupts
12. Often doesn't listen to what is said
13. Often loses things
14. Often engages in dangerous activities

However, you don't have to be hyperactive to have an attention deficit disorder. In fact, up to 30% of children with ADD are not hyperactive at all, but still have a lot of trouble focusing attention.

## 2. How can we tell if a child has ADD?

Many factors can cause children to have problems paying attention besides an attention deficit disorder. Family problems, stress, discouragement, drugs, physical illness, and learning difficulties can all cause problems that look like ADD, but really aren't. To accurately identify whether a child has ADD, a comprehensive evaluation needs to be performed by professionals who are familiar with characteristics of the disorder.

STRESS  
DISCOURAGEMENT  
PHYSICAL ILLNESS  
LEARNING DIFFICULTIES  
FAMILY PROBLEMS

The process of evaluating whether a child has ADD usually involves a variety of professionals which can include the family physician, pediatrician, child and adolescent psychiatrist or psychologist, neurologist, family counselor and teacher. Psychiatric interview, psychological and educational testing, and/or a neurological examination can provide information leading to a proper diagnosis and treatment planning. An accurate evaluation is necessary before proper treatment can begin. Complex cases in which the diagnosis is unclear or is complicated by other medical and psychiatric conditions should be seen by a physician.

Parents and teachers, being the primary sources of information about the child's ability to attend and focus at home and in school, play an integral part in the evaluation process.

## 3. What kinds of services and programs help children with ADD and their families?



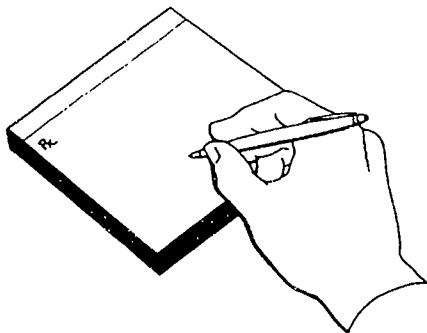
Help for the ADD child and the family is best provided through *multi-modal* treatment delivered by a team of professionals who look after the medical, emotional, behavioral, and educational needs of the child. Parents play an essential role as coordinators of services and programs designed to help their child. Such services and programs may include:

- Medication to help improve attention, and reduce impulsivity and hyperactivity, as well as to treat other emotional or adjustment problems which sometimes accompany ADD.
- Training parents to understand ADD and to be more effective behavior managers as well as advocates for their child.
- Counseling or training ADD children in methods of self-control, attention focusing, learning strategies, organizational skills, or social skill development.
- Psychotherapy to help the demoralized or even depressed ADD child.
- Other interventions at home and at school designed to enhance self-esteem and foster acceptance, approval, and a sense of belonging.

C 30 2892

#### 4. What medications are prescribed for ADD children?

Medications can dramatically improve attention span and reduce hyperactive and impulsive behavior. Psychostimulants have been used to treat attentional deficits in children since the 1940's. Antidepressants, while used less frequently to treat ADD, have been shown to be quite effective for the management of this disorder in some children.



#### 5. How do psychostimulants such as Dexedrine (dextroamphetamine), Ritalin (methylphenidate) and Cylert (pemoiline) help?

Seventy to eighty per cent of ADD children respond in a positive manner to psychostimulant medication. Exactly how these medicines work is not known. However, benefits for children can be quite significant and are most apparent when concentration is required. In classroom settings, on-task behavior and completion of assigned tasks is increased, socialization with peers and teacher is improved, and disruptive behaviors (talking out, demanding attention, getting out of seat, noncompliance with requests, breaking rules) are reduced.

The specific dose of medicine must be determined for each child. Generally, the higher the dose, the greater the effect and side effects. To ensure proper dosage, regular monitoring at different levels should be done. Since there are no clear guidelines as to how long a child should take medication, periodic trials off medication should be done to determine continued need. Behavioral rating scales, testing on continuous performance tasks, and the child's self-reports provide helpful, but not infallible measures of progress.

Despite myths to the contrary, a positive response to stimulants is often found in adolescents with ADD, therefore, medication need not be discontinued as the child reaches adolescence if it is still needed.

#### 6. What are common side effects of psychostimulant medications?

Reduction in appetite, loss of weight, and problems in falling asleep are the most common adverse effects. Children treated

with stimulants may become irritable and more sensitive to criticism or rejection. Sadness and a tendency to cry are occasionally seen.

The unmasking or worsening of a tic disorder is an infrequent effect of stimulants. In some cases this involves Tourette's Disorder. Generally, except in Tourette's, the tics decrease or disappear with the discontinuation of the stimulant. Caution must be employed in medicating adolescents with stimulants if there are coexisting disorders, e.g. depression, substance abuse, conduct, tic or mood disorders. Likewise, caution should be employed when a family history of a tic disorder exists.

Some side effects, e.g. decreased spontaneity, are felt to be dose-related and can be alleviated by reduction of dosage or switching to another stimulant. Similarly, slowing of height and weight gain of children on stimulants has been documented, with a return to normal for both occurring upon discontinuation of the medication. Other less common side effects have been described but they may occur as frequently with a placebo as with active medication. Pemoline may cause impaired liver functioning in 3% of children, and this may not be completely reversed when this medication is discontinued.

Over-medication has been reported to cause impairment in cognitive functioning and alertness. Some children on higher doses of stimulants will experience what has been described as a "rebound" effect, consisting of changes in mood, irritability and increases of the symptoms associated with their disorder. This occurs with variable degrees of severity during the late afternoon or evening, when the level of medicine in the blood falls. Thus, an additional low dose of medicine in the late afternoon or a decrease of the noontime dose might be required.

#### 7. When are tricyclic antidepressants such as Tofranil (Imipramine), Norpramin (desipramine) and Elavil (amitriptyline) used to treat ADD children?

This group of medications is generally considered when contraindications to stimulants exist, when stimulants have not been effective or have resulted in unacceptable side effects, or when the antidepressant property is more critical to treatment than the decrease of inattentiveness. They are used much less frequently than the stimulants, seem to have a different mechanism of action, and may be somewhat less effective than the psychostimulants in treating ADD. Long-term use of the tricyclics has not been well studied. Children with ADD who are also experiencing anxiety or depression may do best with an initial trial of a tricyclic antidepressant followed, if needed, with a stimulant for the more classic ADD symptoms.

#### 8. What are the side effects of tricyclic antidepressant medications?

Side effects include constipation and dry mouth. Symptomatic treatment with stool softeners and sugar free gum or candy are usually effective in alleviating the discomfort. Confusion, elevated blood pressure, possible precipitation of manic-like behavior and inducement of seizures are uncommon side effects. The latter three occur in vulnerable individuals who can generally be identified during the assessment phase.

#### 9. What about ADD children who do not respond well to medication?

Some ADD children or adolescents will not respond satisfactorily to either the psychostimulant or tricyclic antidepressant medications. Non-responders may have severe symptoms of ADD, may have other problems in addition to ADD, or may not be able to tolerate certain medications due to adverse side effects as noted above. In such cases consultation with a child and adolescent psychiatrist may be helpful.

#### 10. How often should medications be dispensed at school to an ADD child?

Since the duration for effective action for Ritalin and Dexedrine, the most commonly used psychostimulants, is only about four hours, a second dose during school is often required. Taking a second dose of medication at noon-time enables the ADD child to focus attention effectively, utilize appropriate school behavior and maintain academic productivity. However, the noon-time dose can sometimes be eliminated for children whose afternoon academic schedule does not require high levels of attentiveness. Some psychostimulants, i.e. SR Ritalin (sustained release form) and Cylert, work for longer periods of time (eight to ten hours) and may help avoid the need for a noon-time dose. Antidepressant medications used to treat ADD are usually taken in the morning, afternoon hours after school, or in the evening.

In many cases the physician may recommend that medication be continued at non-school times such as weekday afternoons, weekends or school vacations. During such non-school times lower doses of medication than those taken for school may be sufficient. It is important to remember that ADD is more than a school problem — it is a problem which often interferes in the learning of constructive social, peer, and sports activities.

#### 11. How should medication be dispensed at school?

Most important, regardless of who dispenses medication, since an ADD child may already feel "different" from others, care should be taken to provide discreet reminders to the child when it is time to take

medication. It is quite important that school personnel treat the administration of medication in a sensitive manner, thereby safeguarding the privacy of the child or adolescent and avoiding any unnecessary embarrassment. Success in doing this will increase the student's compliance in taking medication.

The location for dispensing medication at school may vary depending upon the school's resources. In those schools with a full-time nurse, the infirmary would be the first choice. In those schools in which a nurse is not always available, other properly trained school personnel may take the responsibility of supervising and dispensing medication.

### 12. How should the effectiveness of medication and other treatments for the ADD child be monitored?

Important information needed to judge the effectiveness of medication usually comes from reports by the child's parents and teachers and should include information about the child's behavior and attentiveness, academic performance, social and emotional adjustment and any medication side-effects.

Reporting from these sources may be informal through telephone, or more objective via the completion of scales designed for this purpose.

The commonly used teacher rating scales are:

- Conners Teacher Rating Scales
- ADD-H Comprehensive Teacher Rating Scale
- Child Behavior Checklist
- ADHD Rating Scale
- Child Attention Problems (CAP) Rating Scale
- School Situations Questionnaire

Academic performance should be monitored by comparing classroom grades prior to and after treatment.

It is important to monitor changes in peer relationships, family functioning, social skills, a capacity to enjoy leisure time, and self-esteem.

The parents, school nurse or other school personnel responsible for dispensing or overseeing the medication trial should have regular contact by phone with the prescribing physician. Physician office visits of sufficient frequency to monitor treatment are critical in the overall care of children with ADD.

### 13. What is the role of the teacher in the care of children with ADD?

Teaching an ADD child can test the limits of any educator's time and patience. As any parent of an ADD child will tell you, being on the front lines helping these children to manage on a daily basis can be both challenging and exhausting. It helps if teachers know what to expect and if they receive in-service training on how to teach



and manage ADD students in their classroom.

Here are some ideas that teachers told us have helped:

- Build upon the child's strengths by offering a great deal of encouragement and praise for the child's efforts, no matter how small.
- Learn to use behavior modification programs that motivate students to focus attention, behave better, and complete work.
- Talk with the child's parents and find helpful strategies that have worked with the child in the past.
- If the child is taking medication, communicate frequently with the physician (and parents) so that proper adjustments can be made with respect to type or dose of medication. Behavior rating scales are good for this purpose.
- Modify the classroom structure to accommodate the child's span of attention, i.e. shorter assignments, preferential seating in the classroom, appealing curriculum material, animated presentation of lessons, and frequent positive reinforcement.
- Determine whether the child can be helped through special educational resources within the school.
- Consult with other school personnel such as the guidance counselor, school psychologist, or school nurse to get their ideas as well.

### 14. What are common myths associated with ADD medications?

**Myth:** Medication should be stopped when a child reaches teen years.

**Fact:** Research clearly shows that there is continued benefit to medication for those teens who meet criteria for diagnosis of ADD.

**Myth:** Children build up a tolerance to medication.

**Fact:** Although the dose of medication may need adjusting from time to time there is no evidence that children build up a tolerance to medication.

**Myth:** Taking medication for ADD leads to greater likelihood of later drug addiction.

**Fact:** There is no evidence to indicate that ADD medication leads to an increased likelihood of later drug addiction.

**Myth:** Positive response to medication is confirmation of a diagnosis of ADD

**Fact:** The fact that a child shows improvement of attention span or a reduction of activity while taking ADD medication does not substantiate the diagnosis of ADD. Even some normal children will show a marked improvement in attentiveness when they take ADD medications

**Myth:** Medication stunts growth

**Fact:** ADD medications may cause an initial and mild slowing of growth, but over time the growth suppression effect is minimal if non-existent in most cases

**Myth:** Taking ADD medications as a child makes you more reliant on drugs as an adult.

**Fact:** There is no evidence of increased medication taking when medicated ADD children become adults, nor is there evidence that ADD children become addicted to their medications.

**Myth:** ADD children who take medication attribute their success only to medication.

**Fact:** When self-esteem is encouraged, a child taking medication attributes his success not only to the medication but to himself as well.

### Summary of Important Points

1. ADD children make up 3-5% of the population, but many children who have trouble paying attention may have problems other than ADD. A thorough evaluation can help determine whether attentional deficits are due to ADD or to other conditions.

2. Once identified, ADD children are best treated with a *multi-modal* approach. Best results are obtained when behavioral management programs, educational interventions, parent training, counseling, and medication, when needed, are used together to help the ADD child. Parents of children and adolescents with ADD play the key role of coordinating these services

3. Each ADD child responds in his or her own unique way to medication depending upon the child's physical make-up, severity of ADD symptoms, and other possible problems accompanying the ADD. Responses to medication need to be monitored and reported to the child's physician.

4. Teachers play an essential role in helping the ADD child feel comfortable within the classroom procedures and work demands, sensitivity to self-esteem issues, and frequent parent-teacher contact can help a great deal.

5. ADD may be a life-long disorder requiring life-long assistance. Families, and the children themselves, need our continued support and understanding

6. Successful treatment of the medical aspects of ADD is dependent upon ongoing collaboration between the prescribing physician, teacher, therapist and parents.