



ADHD Treatment and Medication: What Do You Need to Know as an Educator?

LaVonne Kirkpatrick

How Attention Deficit Hyperactivity Disorder (ADHD) can best be treated is a matter of intense debate. Typically, current treatments involve medication, behavioral therapy or both. Educators need to be aware of the pros and cons of stimulant medication. They also should realize that the abuse and misuse of ADHD medications are real. The author shares knowledge teachers need in order to be more informed about ADHD and to work more effectively with ADHD children and families.

During your teaching career, you may have felt challenged and uncertain in working with a child who was not paying attention, couldn't seem to sit still, and was not learning in the classroom setting. Perhaps you placed a phone call or a series of phone calls to parents voicing your concern. You may have had face-to-face conferences with them as well. Did the conversations result in parents asking a doctor about using stimulant medication to help their child in focusing and being more attentive? Were the terms

“ADD” or “ADHD” used?

Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD)? Which is the right name? While the condition has been known for over 100 years, it has not always been called the same thing.

As a result of studies conducted in the 1970s and 1980s, researchers began to recognize the existence of different types of attention deficit. Even though different types have major differences, they are more alike than different. Consequently, doctors began to see that different types are all part of the same major condition.

The American Psychiatric Association publishes official guidelines for naming and diagnosing mental disorders. This book, called *Diagnostic and Statistical Manual of*

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Mental Disorders (DSM), is updated regularly as more scientific knowledge is learned. In 1994, when *DSM-IV* was published, the name ADD (attention deficit disorder) was "officially" changed to ADHD because of the advances in research.¹

ADHD is the most common behavioral disorder in children. Professionals who diagnose ADHD use the criteria of the *DSM*. The *DSM-IV-TR*, which is the most recent version, classifies the disorder into the following three subtypes:

- Predominantly inattentive
- Predominantly hyperactive/impulsive
- Combined²

Some doctors and mental health professionals, however, still continue to use the term ADD. If this is a student's diagnosis, most likely he or she has the inattentive type of ADHD. Such an individual is easily distracted and just can't seem to pay attention. Additionally, this child may be forgetful and disorganized, as well as often appearing to be daydreaming. This is definitely not the individual described as "bouncing off the walls" or being "incapable of sitting still."

ADHD is the term currently being used in diagnosing all subtypes of this disorder. Therefore, whether a student is primarily inattentive, primarily hyperactive/impulsive or a combination of the two, for simplification the term ADHD will be used when referring to this disorder throughout this article.

Prevalence and Consequences

ADHD is far from a benign disorder. According to the International Consensus Statement on ADHD of January 2002, studies suggest that those who have this disorder are far more likely than the general population to drop out of school (32–40 percent), to graduate rarely from college (5–10 percent), to have few or no friends (50–70 percent), to under perform at work (70–80 percent), to engage in antisocial activities (40–50 percent), and to use tobacco or illegal

drugs more than the normal population. In addition, children growing up with ADHD are more likely to become pregnant as a teenager (40 percent), experience sexually transmitted diseases (16 percent), to speed excessively and be involved in multiple car accidents (20–30 percent), and to experience depression (20–30 percent) and personality disorders (18–25 percent) as adults.³

Approximately 3–5 percent of the school-aged population in the United States is thought to have ADHD, although some experts would place the percentage at an even higher rate. Being diagnosed as having ADHD increases the likelihood of having several other problems as well. Individuals with ADHD are at risk for such conditions as oppositional defiant disorder, conduct disorder, learning disabilities, anxiety and depression. This phenomenon of coexisting conditions is referred to as comorbidity.⁴

Children with ADHD have been identified in every country in which ADHD has been studied. While it has long been thought that ADHD is more common in boys than girls, recent research indicates that the actual numbers may be almost equal.⁵ Boys with ADHD are typically more aggressive than girls. Therefore, girls are often older than boys by the time they are diagnosed, and they are less likely to be referred for treatment.⁶

Treatment

Despite these serious consequences, studies point out that less than half of those with the disorder are receiving treatment. As a teacher of ADHD children, you need to become more informed on this topic. No doubt you are well aware of how challenging your job can be; you definitely want to obtain the very best possible information for the children in your classroom and their parents or caregivers.

How ADHD can best be treated is a matter of intense debate. Typically, current treatments involve medication, behavioral ther-

apy or both. Although these traditional treatments are extensively used and well known, the following overviews on medications and therapy may be helpful.

Medications

If a family is considering medication for their child, he or she should first undergo a thorough, comprehensive assessment to clarify the diagnosis and to identify any other medical, psychological or learning problems that may be present. Next, a treatment plan should be developed in consultation with the physician or other medical/mental health professional. In this planning stage all parties (child, family and medical professional) should work as a team to consider the various options available for treatment.

Stimulant medications are the most commonly prescribed drugs to relieve ADHD symptoms. Most popular are Ritalin, Methylphenidate, Adderall, Dexedrine, Cylert, and Concerta. Antidepressants such as Desipramine, Imipramine, and Wellbutrin may be prescribed for children who don't respond to stimulant medications or who have other psychiatric problems. A third group of drugs sometimes prescribed for ADHD children are anti-hypertensive or blood pressure-lowering drugs such as Clonidine or Tenex.⁷

At the beginning of the medication trial, careful monitoring is essential. If the first medication is not helpful or produces negative side effects, the prescribing professional will need to adjust the dosage or timing or both. If the response is not positive after adjustments are made, another medication may need to be tried.

According to the new treatment guidelines for ADHD from the American Academy of Pediatrics, children may respond favorably to one stimulant but not another. As a result, physicians should not switch to a non-stimulant medication for treating ADHD until the child has been tested on at least two or three different stimulants across a full range of doses without showing any significantly

positive response.⁸

With over 150 controlled double-blind studies of stimulant use in children with ADHD, the findings concerning medication treatments are well documented. However, as a knowledgeable educator, you need to be aware of both the pros and cons of giving a child stimulant medication.

Several positive aspects of using stimulant medications are among the following:

1. These medications are relatively easy to use and they work quickly. Therefore, the parents and child (and you) will know in a short period of time whether they are going to help or not. Short-acting preparations generally are effective for about four hours. Longer-acting newer preparations are more variable, with some lasting up to ten or twelve hours. Since there can be wide individual variation, however, the exact lasting effect of the medication only will become known once the medication is tried.
2. Evidence indicates stimulant medications improve both behavior and school performance.
3. The medications are relatively inexpensive.
4. Stimulants have been used as a treatment for many years, so doctors have considerable experience in prescribing them.
5. Medication may provide immediate relief for a child who is about to be expelled from school or whose family is experiencing a "melt-down" under the strain of the situation.⁹

Current evidence indicates that stimulant medications are safe and well tolerated by most children. Most side effects occur early in the treatment, appear short-lived and usually can be managed successfully through adjusting dosage or by changing medications. Medication often can help a multimodal (combination) treatment program be more effective. Although no adverse effects of long-term use of stimulant medications

currently are known, there is a definite need for long-term safety studies.¹⁰

Stimulant medications, however, are not without negative aspects. As a teacher, you need to possess this information so you can play a valuable role in providing feedback to parents or your student's physician. Some of these concerns are as follows:

1. About 20 to 30 percent of children with ADHD do not respond to stimulant medication.
2. Children's appetites may be suppressed by stimulants, thereby initially affecting growth and normal weight gain.
3. A few children complain of frequent stomach aches and/or headaches while taking stimulant medication.
4. Some children may be especially difficult to manage later in the day or evening when the medication has worn off.
5. Children on stimulants also may have trouble falling asleep.
6. A very small percentage of children on stimulant medication develop latent tics. These involuntary movements may include eye blinking, shrugging, and/or clearing of the throat. It is estimated that 7 percent of children with ADHD have tics or Tourette's syndrome, a chronic disorder that involves vocal and motor tics, while 60 percent of children with Tourette's have ADHD. Although recent research indicates the development of Tourette's in children with ADHD is not related to stimulant medication, a cautious approach to using stimulants is recommended if there is a family history of Tourette's or tics.¹¹
7. Some children experience embarrassment if they have to get their medication from the nurse during the school day.

Therapy

Children with ADHD often benefit greatly from behavior therapy or counseling, which may be provided by a psychiatrist, psychologist, social worker, licensed professional

counselor, marriage and family therapist or other mental-healthcare professional. Psychotherapy, behavior therapy, family therapy, social skills training, parenting skills training and support groups are among available treatment options.¹²

Through psychotherapy, older children and adults with ADHD talk about various issues that are bothering them and explore negative behavioral patterns they have been exhibiting. In this way, they learn more effective ways to deal with their symptoms. Some individuals with ADHD also may have coexisting conditions, such as depression and anxiety disorder. In these cases of comorbidity, counseling therapies may help both the coexisting problem as well as the ADHD.

Behavior therapy helps both teachers and parents learn strategies for dealing with the behavior of ADHD children. Some of these contingency management procedures include token reward systems and timeouts. Behavior modification utilizing contingency management strategies has proven especially beneficial for individuals with ADHD.

Since children with ADHD are not the only ones affected by this condition, family therapy may assist both parents and siblings to deal with the stress of living with an ADHD child. Parents, often feeling hopeless and alone, are depressed and frustrated with the challenge of raising a child with ADHD. Additionally, siblings are significantly affected and should be educated about ADHD. It is important to assure younger brothers or sisters that ADHD is not a transmittable disease in order to prevent fear or avoidance of the ADHD brother or sister. Older siblings also may need assistance in understanding the symptoms of ADHD and how to help their younger ADHD sibling. Being more knowledgeable will help them to deal with unpleasant situations and to avoid embarrassment, especially in front of their peers.¹³

Social skills training can help children

learn appropriate social behaviors. Most children with ADHD have great difficulty in developing and maintaining peer relationships. ADHD symptoms such as inattentiveness or impulsivity certainly can cause the child to have difficulty displaying the appropriate behaviors. However, even more problematic is that the child often does not learn appropriate behaviors or social cues that guide all of us in our social relationships. Sometimes it is necessary to relearn what is appropriate, as well as to pay attention to social cues. For many children with ADHD, the ability to read body language is a concept they do not comprehend.

Training in parenting skills can assist the parents in developing ways to understand and guide their child's behavior. For example, the American Academy of Pediatrics recommends the following three principles:

- setting clear and specific rules
- providing consistent consequences for inappropriate behavior and positive rewards for appropriate behavior
- using these rewards and consequences on a regular and long-term basis.¹⁴

Structure also is vital for an ADHD child. These children, in particular, need a stable, daily routine and clear organization in the home as well as at school. Even a simple routine that creates a designated place for items such as backpacks and toys will save the child and the parent a great deal of frustration.

Support groups offer ADHD children and their parents and families a network of social support, information and education. In addition, support groups aid parents in feeling less alone, allowing them to share their mistakes, frustrations and successes with others in similar situations.

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD) is one of the better-known organizations serving individuals with ADHD. Local CHADD groups offer various activities: support groups, community resource information,

monthly meetings on topics of interest, outreach programs and networking opportunities with other adults, parents and professionals interested in ADHD.¹⁵

Generally, best results occur when a team approach is used with parents/family, school personnel and therapists or physicians working together. Also extremely important is making every effort to work with your student's parents and referring them to reliable sources of information to assist their efforts with their child.

Abuse and Misuse of ADHD Medications

In recent years, various headlines in the media have caught the attention of the general public as well as parents, educators and healthcare providers:

- "School Officials Report Student Prescription Drug Problems"
- "Survey Finds 1 in 5 Teens Getting High On Medications, Over-Counter Drugs"
- "Students Abuse Adderall to Improve Concentration"

How widespread is the problem of illicit stimulant medication use? Results from two recent studies help provide answers to that question. In one study, over 1500 students in grades six through eleven reported their use, misuse and diversion (trading, selling or offering) of prescription stimulant medication. An anonymous, web-based survey allowed middle and high school students to respond in an honest, non-threatening way.¹⁶

Illicit use of stimulant medication was reported by approximately 4.5 percent of students surveyed, including students who had not been prescribed medication, as well as those who had prescriptions but also were using their medications inappropriately. The rate of illicit use was about 2.5 times greater among males than females.

Of the students who reported prescription stimulant use, 23.3 percent reported being approached to sell, give away or trade their prescription drugs. Females (29.6 percent) were more likely than males (20.6 percent)

to be approached. High school students (46.4 percent) were significantly more likely than middle school students (13.1 percent) to be approached for diverting their stimulant medications.¹⁷

The use of alcohol, tobacco and other drugs for students who properly used their medically prescribed stimulants was very similar to the behaviors of those students who did not use any stimulant medications. Findings in this study indicated that middle and high school students who properly used prescribed medication for ADHD were not at higher risk for other substance misuse.

In a second study, a representative sample of nearly 11,000 randomly selected college students completed a web-based survey regarding the non-medical use of prescription stimulants and other substance-use behaviors.¹⁸ Past year rates of non-medical (illicit) use of prescription stimulants ranged from zero to 25 percent, depending on the individual college. Illicit use was higher among college students who were male, white, members of fraternities or sororities and earned lower grade-point averages. Use rates were higher at colleges in the northeast region of the United States and also at colleges with more competitive admission standards.

Similar to the middle and high school students participating in the first study, those college students illicitly using prescription stimulants were more likely to display other risky behaviors as well. Behaviors these students engaged in more frequently included the following: smoking; binge drinking; using marijuana, Ecstasy, and cocaine; driving after binge drinking; and being the passenger of a drunk driver.¹⁹

Various implications appear for practice and policy from these studies. Physicians, pharmacists and various school personnel, such as nurses, social workers, counselors, principals and classroom teachers, should be educated to pay particular attention to the use and misuse of prescription medica-

tions among school-age children and adolescents. School personnel, particularly at the middle school and high school levels, can play a helpful role in monitoring whether students who are prescribed stimulant medication are being approached to divert their medications. Monitoring, however, becomes increasingly more difficult, if not impossible, at the college level.

Additionally, school policies can be developed that require school health professionals to administer and monitor stimulant medication. Currently, some schools still permit students to carry their own. Finally, it is still important to realize that not all schools have written policies regarding prescription drugs.

Perhaps the most important implication of these results is that educators, as well as parents and health professionals, need to be aware that the misuse and abuse of ADHD medications are real. Illicit stimulant users from middle school age through college are more likely to be involved in other risky behaviors, such as binge drinking and cigarette smoking. Informed school personnel should educate their students about the appropriate steps to take if and when a peer asks for medication. With such training in place, these students will be better prepared to deal with such situations, should they arise.

Parents ultimately will be the decision makers about the best treatment option for their ADHD child. Their choice may or may not include medication. As an educator, it is not your place to prescribe medication for your students. However, it is your place to be informed.

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