

A Pediatrician's Perspective on ADHD

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[Read Dr. Flannery's Bio](#)

Note from Dr. Howard King, Founder of CEHL.org:

There are several reasons why this article is important. I wish I knew how to manage all the common emotional conditions of children, but it is impossible. ADHD is one condition with which I am not sufficiently familiar and many pediatricians feel ill equipped to treat.

For these reasons Mary Flannery's article is an important addition to this website.

Dr. Flannery writes in clear and direct language, illustrating a number of concepts through some examples of children afflicted with this condition.

She walks us through how a parent might describe such a child, beginning with the stress they cause at home, which gradually spills over to school. In desperation, the child and the parent often end up at the pediatrician's office, seeking relief.

But Dr. Flannery doesn't just focus on the child. She describes previously non-understood parental symptoms, from which the child's condition may have originated. She also points out how the management of such children often requires a team approach.

In short, Dr. Flannery's brief but comprehensive article provides many useful insights for parents and pediatricians, searching for guidance for this increasingly commonly diagnosed condition. - Dr. Howard King

A Pediatrician's Perspective on ADHD

Through the following case studies, which are fictional but based on typical histories, you'll find the answers to the following questions:

- What is ADHD?
- How is the diagnosis made?

- What are the treatments for ADHD?
- What else may be going on with my child?
- What are some myths about ADHD?

JASON, Age 7

Background

Ever since his parents can remember, Jason had been more active and noisier than his brothers at the same ages. They had long ago learned never to take him to the supermarket or to family picnics, where he would "run wild" and generally create havoc. At home, he seemed never to listen, and it took many requests for them to get him to follow even the simplest directions. His parents did their best to have him on regular routines for meals and bedtime, but his disruptive behavior was sapping their energy and taking their attention away from his two brothers, who were now also beginning to "act up."

Last year, in kindergarten, Jason made little progress in adhering to the classroom rules and routines. His teacher hoped he might outgrow his immature behaviors, such as interrupting, blurting out answers before he had heard the entire question, jumping out of his seat at the wrong times, pushing ahead of his classmates in line. He also cried "at the drop of a hat."

Diagnosis

First grade hadn't really gone any better, though, and so after winter vacation his mother took him to his pediatrician to try and find out what was wrong. Even though Jason was very well behaved in the pediatrician's office, his doctor suspected ADHD on the basis of the history. She gave his mother two questionnaires, one for the parents to fill out and one for his classroom teacher. His doctor also checked his file to make sure that vision and hearing checks were up to date.

Jason and his mother returned to the office two weeks later with the completed questionnaires. While Jason and his mother waited, the doctor "scored" the questionnaires and informed Jason's mother that he met the criteria for ADHD, Combined Type

The diagnosis of ADHD was made because, in both the home and school settings, Jason was exhibiting at least six out of nine inattentive behaviors and at least six out of nine hyperactive-impulsive behaviors. Fortunately, Jason did not exhibit many oppositional or anxious behaviors, which are also listed on the questionnaires. Oppositional Defiant Disorder (ODD) and/or anxiety often accompany ADHD. The pediatrician explained to his mother that even though he was sitting quietly in the office and listening attentively, this did not rule out ADHD. Children with ADHD usually do better in one-on-one situations and in novel settings, such as the pediatrician's office, which Jason visited fairly infrequently.

They can usually "hyperfocus" on action-packed TV shows and on video games. She also explained to his mother that:

- ADHD is a medical condition due to a deficiency of the neurohormones dopamine and norepinephrine in the brain;
- About 5% of the population suffers from it, that it is more common in boys;
- Medication and behavioral management are the most effective treatments;
- It is a disorder of behavioral disinhibition, and people who suffer from it have trouble regulating their own behaviors;
- People with ADHD have difficulty inhibiting the urge to let the mind wander and so they are inattentive to the task at hand; and
- ADHD interferes with the ability to inhibit the first reaction to a situation. They can't seem to give themselves time to evaluate the facts of a situation before expressing a feeling. And so children with ADHD often seem more "emotional" than other kids.

Treatment

Stimulants are the medications usually tried first for ADHD, and a child has about a 70% chance of responding to any one of them. They include methylphenidate (Ritalin, Concerta, Metadate, Methylin, Focalin) and amphetamine (Adderall and Dexedrine). They all work by increasing the levels of dopamine in the affected regions of the brain. Stimulants now come in several long-acting forms, which can last through the school day and sometimes even through evening homework time, and eliminate the need for trips to the school nurse for lunchtime doses.

Stimulants also keep the blood levels fairly steady, so that the child does not suffer from erratic ups and downs in attention and behavior. A nice feature of all the stimulants is that, if they are going to be effective, they work within the first day or two of the child receiving the right dose for him or her. Patients and their families don't have to wait for weeks to see an improvement, as is the case with most antidepressants. Also, blood tests are not required with these medications. Side effects include decreased appetite and insomnia. Jason's pediatrician also dispelled some myths about medications for ADHD that well-meaning family friends had passed on to his mother:

Myth: Stimulants interfere with growth.

Reality: Children with ADHD as a group tend to be shorter than their peers, but this is true whether or not they are on medication. These children then catch up at puberty and there are no differences in adult height.

Myth: Medications for ADHD cause adolescents to be more prone to substance abuse.

Reality: It is true that people with ADHD are more likely than their peers to become addicted to illegal substances than those who do not have ADHD. However, this is less likely to occur if they are on medication for the ADHD. In other words, medication for ADHD seems to have a protective effect against "self medicating" with other substances.

The doctor recommended that Jason start on a small dose of the stimulant Adderall, which his mother would give at breakfast. She was to gradually increase the dose until the symptoms both at home and at school disappeared entirely or at least greatly improved. The doctor gave his mother a set of slightly abbreviated Vanderbilt forms to help her track the effectiveness of the medication and she also gave her the name of a therapist skilled in helping children and families affected by ADHD. A follow-up appointment was scheduled.

Prognosis

Two weeks later, Jason and his mother returned. The happy news was that both at home and at school, Jason was able to pay attention and participate in activities without having to be constantly "redirected." He was still active but no longer acted as if "driven by a motor." For the first few days on the medication he had complained of headaches and bellyaches but these had gradually disappeared.**

Jason and his parents had already met once with the therapist. He was teaching his parents how to make directions and expectations for Jason crystal clear, and how to provide even more structure and predictability in his environment. The therapist was planning to see them again in two weeks.

The pediatrician made plans to follow up with Jason in a month. She explained that if Jason continued to do well on the medication, she would be able to lengthen further the intervals between follow-up appointments. She also explained that she thought Jason should continue to take his medication on weekends and over summer vacations, since he needed to be able to pay attention to his surroundings, including other people, all the time. If a child's ADHD is truly an issue for him only in school, then "drug holidays" make sense. But this is not usually the case.

EMILY, AGE 8

Background

Emily's parents were distraught when they arrived with her at her pediatrician's office. She had just been suspended from riding the school bus on account of throwing an apple at the driver and then swearing at him when he reprimanded her. This wasn't the first time their daughter had gotten into hot water with school personnel; her hyperactive and rebellious behavior had generated numerous complaints from teachers and from playground and cafeteria aides ever since kindergarten.

At home, she seemed never to have gotten over the "terrible two's." She couldn't sit still anywhere, except in front of the TV. Every request from her parents met with an argument, and she seemed to "pick fights" with her siblings on an almost hourly basis. A seemingly innocuous remark by another family member could set off a massive temper tantrum in Emily. The rest of the family was relieved whenever she wasn't around. This didn't happen too often, though, since her classmates and their parents avoided her as much as possible. Emily hadn't been invited to a birthday party in two years. Extended family members weren't too happy about having her at gatherings, either. The grandparents were starting to compare her to her Uncle Bill as a child. Bill was the "black sheep" of the family, who had never finished high school and couldn't seem to stay in a job or a marriage.

Emily was also having problems academically, and these were worsening now that she was in the third grade. Seldom did she complete her homework, and she usually didn't finish test papers. Her papers were very sloppy and hard to decipher. She never seemed to know what page the rest of the class was on. Her inattention and poor behavior were exacerbated by her chronic fatigue. She couldn't settle down to go to sleep until almost midnight, and then she had to be practically dragged out of bed in the morning for school.

Diagnosis

Questionnaires returned from school and home supported diagnoses of both ADHD, Combined Type and Oppositional Defiant Disorder (ODD). About half of all children with ADHD also have ODD, and the stimulant medications often help both conditions. Also, since these disorders are genetic, there is often a relative who had problems in school and may still be having worse than average problems with jobs and relationships. Only about half of all people with ADHD outgrow

the disorder during adolescence. Most of the hyperactivity seems to disappear, but adults who were "hyper" as children often report feeling an inner restlessness as well as having persistent problems showing up at work on time and meeting deadlines.

Treatment

The pediatrician advised the parents to seek counseling to help them with the tremendous stress their child's condition was placing on their marriage and on the rest of the family, and also for advice on how to manage Emily's behaviors. The counselor recommended structure, regular routines, consistency in discipline, and clarity in any instructions given to Emily. With her parents' permission, the counselor contacted Emily's classroom teacher to discuss classroom management and to make certain that everyone on the "team" was "on the same page."

The pediatrician also prescribed two medications for Emily, Concerta and clonidine (Catapres). Concerta, like other stimulants, often lessens the symptoms of both ADHD and ODD. Clonidine is a medication that is widely prescribed by child psychiatrists and pediatricians for children with ADHD who have insomnia. Emily's mother gave her the Concerta at breakfast and it "worked" for almost twelve hours. Emily was able to pay attention in school, stopped getting into constant arguments with everyone around her, and was able to sit down and get her homework done. Her papers got a lot neater, too. At around seven-thirty every evening, her father gave her a clonidine tablet and she would fall asleep about a half hour later. Although a little of the "old" Emily appeared in the early evening as the Concerta wore off, she was only mildly disruptive. She was better able to handle minor frustrations because she wasn't so tired all the time.

Also, on the advice of the counselor, her parents made sure she got more outdoor exercise every day in order to work off excess energy. This was easier to enforce since other kids were now seeking her out to play with them. She was allowed back on the bus and there were no more "incidents." Most importantly, Emily now knows that she's not "stupid" and she's not "bad."

STEPHANIE, AGE 10

Background

A fourth grader, Stephanie was a very well behaved child but often seemed a little "spacey." Although she almost never argued with her parents, they would have to ask her several times to do something around the house. She had lost numerous jackets and sweaters and at least twice a week didn't bring home a book from school that she needed for homework. She would put off starting her homework, and if something distracted her, she couldn't seem to get back "on track."

Her fourth grade assignments were much more demanding than the third grade work. Most of her classmates had been reading for pleasure since second grade, but Stephanie never read anything she didn't have to. When her progress report came home in October, her parents realized that she was in danger of failing both reading and social studies. The math and science grades weren't much better. She was described by her teachers as very quiet and well-behaved. Alarmed by the grades, her parents met with her classroom teacher, who in turn recommended that they take Stephanie to her pediatrician to find out what was wrong.

Diagnosis

After looking at Stephanie's report cards and teacher comments going back to first grade, the pediatrician suspected ADHD and also a learning disability. Questionnaires filled out by the parents and the teacher confirmed the diagnosis of ADHD, Inattentive Type. In addition, the pediatrician advised the parents to request that a complete psychoeducational evaluation be done by the school psychologist.

Treatment and Prognosis

After one-on-one testing, the school psychologist concluded that Stephanie had dyslexia and that she needed much more intensive special help with reading than she was now receiving. She started on a stimulant, which helped her keep track of her assignments and get her homework done. She also began daily sessions with the school's reading specialist. Her parents were taught by the reading specialist how to help Stephanie sound out the words, and she gradually began to read more fluently with lots of help both at home and at school. With better organization and with better reading skills, her performance improved in all her subjects.

Stephanie's story is not unusual, since up to one third of children with ADHD also suffer from at least one learning disability. Although her parents were relieved that there were explanations for her problems, they felt very badly that her problems hadn't been identified sooner, before she got so far behind. Unfortunately, both ADHD and dyslexia are generally diagnosed later in girls than in boys. This is probably because girls tend not to be disruptive and are therefore more easily overlooked.

JONATHAN, AGE 13

Background

Jonathan was a "great kid," liked and respected by peers, teachers and coaches. Until this year, seventh grade, he had always been an excellent student. After the first quarter of the year, though, he had been dropped from Honors classes because he was barely getting by in most of them and appeared to all his teachers to be very "stressed out." Even his performance on the soccer field was "slipping," and he was no longer a starter. He was up until "all hours" doing homework and had handed in two important long-range assignments late. At night, when he finally gave up on his homework, he would lie awake for hours, tossing and turning. Over the past few months, he seemed to develop a "short fuse," especially with his mother. He had begun to bite his fingernails, and his appetite had decreased.

Fortunately, his parents, instead of exhorting Jonathan to "try harder," were sympathetic as well as worried. His father, a successful executive, recalled his own struggles to stay organized in school. Now, he had a wonderful secretary who kept track of all his professional duties and told him what he had to do and when he had to do it. At home, his wife handled the checkbook and planning of all family and personal activities. She even reminded him when he was supposed to meet his buddies at the golf course!

Diagnosis and Treatment

Because of Jonathan's apparent anxiety and unexplained decreased performance, his parents took him to a psychologist who specialized in children and adolescents. After taking a detailed history, looking at report cards and teacher comments, administering some psychological questionnaires himself to Jonathan, he concluded that the boy suffered from both ADHD, Inattentive Type and from anxiety. He sent a copy of his report to Jonathan's pediatrician and recommended that medication for ADHD be started. He also recommended that Jonathan see him in weekly therapy sessions to address both the anxiety and the ADHD. The therapist used Cognitive Behavioral Therapy. After a few sessions, Jonathan began to understand what triggered his anxiety and he could control it better.

With the parents' permission, the psychologist contacted the school's guidance counselor. Special "accommodations"

were allowed Jonathan, including longer time to complete tests. At home, he began to use a special electronic timer, which he programmed to go off every half hour during his homework. This kept him from losing track of time and spending too much time on any one subject. The guidance counselor made sure that all of Jonathan's teachers informed his parents when term papers and other long range projects were due, so that they could help Jonathan budget his time. This job fell to his mother, of course, and friction between mother and son escalated. After a few weeks of this arrangement, the psychologist recommended to the parents that they hire a "coach" to take over from his mother. They found a student at a nearby college who came over twice a week to monitor Jonathan's progress on his papers, etc.

Jonathan had been able to compensate for his ADHD prior to seventh grade because of his high intelligence and the fact that the work did not require much in the way of planning and organizing. Also, in previous grades, he had only several teachers to get used to, and he wasn't changing classrooms all day long.

Because of his ADHD, he was deficient in "executive function," the ability to plan and organize. He also suffered from "time blindness," another feature of ADHD. This was why he couldn't keep track of time while doing his homework, and why he usually had not started work on projects until the night before they were due. When he "hit the wall" academically, he became extremely anxious, and this in turn further interfered with his ability to pay attention. Lack of sleep made both the anxiety and the ADHD worse.

With the benefit of the psychologist's detailed report, and after talking with Jonathan and his parents, the pediatrician decided to prescribe Strattera for the ADHD. Although anxiety frequently accompanies ADHD and seems to improve along with the ADHD when stimulants are prescribed, stimulants are not a good choice when the patient is extremely anxious. Strattera can be taken once a day, either morning or nighttime, or broken down into two smaller doses taken both morning and night. Jonathan's doctor told him to take the entire dose at night. Strattera often causes fatigue, and he hoped it would help the insomnia. It can also cause nausea, and the nighttime dosing didn't interfere with meals.

Prognosis

After a few weeks of therapy and Strattera, Jonathan became more rested and relaxed. He was able to complete his homework and, with the help of his academic coach, he learned to break down long range assignments into smaller parts and get them done on time. Because he was less anxious and fatigued, his performance in soccer also improved! Also, a long running "battle" between Jonathan and his mother, about whether or not he should have music playing as he did his homework, was resolved with the intervention of the coach. His mother was helped to accept that Jonathan could actually concentrate better with music in the background than in absolute quiet. This illustrates that every person with ADHD is different and why the treatment must be individualized to meet his or her needs. A "bonus" from Jonathan's successful treatment was that his father realized that he probably had ADHD, too, and he has done well on a trial of Adderall prescribed by his internist. Needless to say, the stress level in the entire household is now much lower.

KARA, Age 17

Background and Diagnosis

Kara's grades had started to go down second semester of her sophomore year and now, in the Fall of her junior year, they were even worse. Her parents, both teachers, wondered if she had ADHD. They took her to a neuropsychologist for an evaluation. The results of the very thorough psychoeducational evaluation showed that Kara did not have ADHD but that she was significantly depressed. The winter of her sophomore year, her grandmother had died. A couple of months later, her boyfriend had "dumped" her. Kara simply could not focus on her schoolwork, and furthermore she did not have the energy to do the work. The family history revealed that her mother had suffered from an episode of depression as a teenager.

Treatment and Prognosis

The neuropsychologist referred Kara to a competent therapist and she gradually began to feel better. In addition, the entire family began to meet with another therapist from time to time, so that they could learn how better to cope with family sorrows and other stressors. After a few weeks, Kara was better able to concentrate on her work, and her grades went up. Had she not improved with therapy, the therapist would have referred her to a psychiatrist to be put on an anti-depressant such as Prozac as an adjunct to the continuing talk therapy. Kara's story illustrates that, although ADHD should be considered when academic performance declines, it is also essential to consider other causes.

The above "cases" feature many aspects of ADHD. It is important to keep in mind that ADHD is a neurobiological condition and not the result of a moral failing, and that the child can almost always be helped. The diagnosis is based on family and behavioral history, both at home and at school, rather than on the results of blood tests or special brain scans. During the course of the evaluation, other psychological disorders (comorbidities) or learning disabilities may be uncovered and these can also be treated.

A team approach to treatment is the most effective, with lots of communication among members. Parents, teachers, guidance counselors, psychologists, therapists, "coaches," the prescribing physician and the child are all part of the team. As the child matures, he or she usually gains further insight into which medication regimens and behavioral modifications "work," and which treatments have lost their effectiveness and have to be modified or replaced. In conclusion, I'd like to leave you with the belief that every child with ADHD can, with the right management, reach his or her full potential.

The following are good sources of information about ADHD:

BOOKS

ANSWERS TO DISTRACTION by Edward M. Hallowell, MD and John J. Ratey, MD, paperback, Bantam Books, 1996

ATTENTION-DEFICIT HYPERACTIVITY DISORDER: A CLINICAL WORKBOOK, SECOND EDITION by Russell A. Barkley and Kevin Murphy, paperback, Guilford Press, 1998

STRAIGHT TALK ABOUT PSYCHIATRIC MEDICATIONS FOR KIDS, REVISED EDITION by Timothy E. Wilens, MD, paperback, Guilford Press, 2004

THE EXPLOSIVE CHILD, SECOND EDITION by Ross W. Greene, PhD, paperback, HarperCollins, 2001

Guilford Press also has several VIDEOS on ADHD.

WEBSITES

CHADD (Children and Adults with Attention-Deficit/Hyperactivity Disorder)

www.chadd.org

CEC (Council for Exceptional Children)

www.cec.sped.org

American Academy of Child & Adolescent Psychiatry

<http://www.aacap.org>

American Academy of Pediatrics

www.aap.org

Learning Disabilities Association of America

www.ldanatl.org

National Dissemination Center for Children with Disabilities

www.nichcy.org

ADHD, Combined Type This doctor used the Vanderbilt forms, available www.Vanderbiltchilddevelopment.us. To access these free forms yourself, look under "Clinical Services" and then find "Evaluation and Rating Scales" near the bottom of the page. Under this heading you can find Behavior Evaluation Scales for both teachers and parents. There are several different diagnostic questionnaires that can be used to make the diagnosis of ADHD, and the choice of form is usually based on the doctor's personal preference.