ADHD Treatment in Children
Dr. Ujwala Agharkar

Dr. Hendler: Hello and welcome to KP Health Cast. This is Dr. Peter Hendler and today’s guest is Ujwala Agharkar, who is a board certified child psychiatrist who did her training at UC Davis and has been with Kaiser since 1993. Today, we will be discussing medical treatment for children who have ADHD. Welcome Ujwala.

Dr. Agharkar: Thank you Peter.

Dr. Hendler: Well, we’ll ask the obvious question first. What is ADHD?

Dr. Agharkar: ADHD stands for Attention Deficit Hyperactivity Disorder. It is a common disorder diagnosed in childhood. The symptoms that characterize ADHD include inattentiveness, impulsivity, and hyperactivity. For example, a child with ADHD is often reported to have the following problems: can’t pay attention, forgets to turn in assignments, doesn’t listen, can’t sit still, is disruptive in class, interrupts others, and such. Although all children show these behaviors to some extent, children with ADHD show these behaviors with much greater severity compared to other children their age.

Dr. Hendler: Very interesting. How common is ADHD?

Dr. Agharkar: About 3 to 7 percent of all school-age children are diagnosed with ADHD.

Dr. Hendler: And if a child is diagnosed, how would that be treated?

Dr. Agharkar: Although many types of behavior and school interventions can help these children, research clearly demonstrates the efficacy and superiority of medications in treating these symptoms.

Dr. Hendler: Well how do the medications help?

Dr. Agharkar: A majority of studies have shown that ADHD is related to disturbances in neurotransmitters in the brain. These are chemicals in the brain that regulate our alertness and behavior. The most commonly affected chemical is dopamine. Most medications used for treating ADHD increase dopamine activity in certain parts of the brain. Another chemical affected to a lesser extent is noradrenaline and there are some medications that work on that chemical.

Dr. Hendler: What are the medications used for treating ADHD?

Dr. Agharkar: The most common medications for treating ADHD are called stimulants. These include like Ritalin, Dexedrine, Adderall, Concerta, etc.
Dr. Hendler: What if my child is not hyperactive and only has concentration problems?

Dr. Agharkar: Stimulants are still the best treatment for hyperactive children as well as children with the inattentive subtype of ADHD, which was previously known as ADD.

Dr. Hendler: How will the doctor decide which medicine to use for my child?

Dr. Agharkar: All stimulants are alike in their effectiveness and side effects. The differences are generally in terms of whether it’s a pill or a capsule, the duration of effect because some may be as short as three hours and some may have a more sustained effect for 12 hours, or the doses that they are available in. A decision is usually made based on the child’s age, their school and activity schedule, their ability or willingness to swallow pills, and sometimes family history also helps, like if a sibling or a cousin has been on a certain medication and has done well, that may be a good starting point.

Dr. Hendler: Well, you told me not to throw you any curve balls but I can’t help it. Right here you’re saying if a sibling or a cousin has done well, that kind of suggests that it might be more likely that a sibling or a cousin would have it than somebody else, which makes me ask you, is this hereditary or does it run in families?

Dr. Agharkar: It does have a hereditary basis, it does run in families, but unfortunately we don’t have a lot of parents who were diagnosed just because...

Dr. Hendler: Thank goodness.

Dr. Agharkar: They get diagnosed after their child is diagnosed...

Dr. Hendler: Right.

Dr. Agharkar: And then they realize, “oh, maybe I have this too”.

Dr. Hendler: Alright, I’m sorry for this question but, this is not necessarily something that will make somebody be not successful. I would imagine that somehow plenty of parents that have nice jobs and are quite successful had ADHD when they were children.

Dr. Agharkar: Yeah, yeah.

Dr. Hendler: Okay, what are the common side effects of these medications?

Dr. Agharkar: The commonest side effect of stimulants is a decrease in the child’s appetite. Most children get over it but a few may fail to gain weight as they should. So one of the things that the doctor commonly monitors with these medications is the child’s height and weight and we make sure that they are staying on the growth curve. Making sure that the child eats a good healthy breakfast every day, and then a good dinner in the evening can minimize this problem. It’s usually appetite at lunchtime that’s affected.
There are other ways to work around this problem, like adjusting the dose or taking breaks from the medication, or sometimes even using supplemental nutrition like Ensure or something like that. Some children may have trouble falling asleep, but this does not seem to be as common, especially with the newer medications. And very few children have a slight stomachache or headache and these are usually transient and go away within a few days. Some children may have mood changes with these medications. If these are mild, it’s important to let the doctor know the timing of the mood changes in relation to the medication. Like, is this happening in the morning or at the end of the day? In most cases, minor adjustments or sometimes switching to a different stimulant will eliminate the problem. Kids who have severe mood changes usually have other disorders such as autism or mood disorders and they may need other types of medications.

**Dr. Hendler:** I have to say that if I just think about this and a kid has hyperactivity, it seems counterintuitive that you would give them a stimulant. Do you have any comment on why that would work? It would seem to me that if they’re hyperactive it’s almost like they’re too stimulated.

**Dr. Agharkar:** That’s a good question, a commonly asked question. It is a paradox in a way but the area of the brain that these medications stimulate is the center for alertness and being attentive and that’s what helps.

**Dr. Hendler:** Are there any serious side effects for these medications?

**Dr. Agharkar:** As with any medication, there are some serious side effects but these are extremely rare, especially in kids who are otherwise healthy. Some children develop tics. This is a neurological problem in which the child may show repetitive movements such as blinking of the eyes, facial grimacing, throat clearing, etc. If the child develops tics it is important to consult with the doctor, as it may impact the decision to continue treatment with stimulants. Another rare problem with the medications might be cardiovascular problems. In children, the symptoms might include rapid heartbeat, increase in blood pressure, dizziness, or such symptoms. Again, this is extremely rare in otherwise healthy children and it’s of more concern for children who have congenital heart disease or other heart disease, or who have a family history of sudden death, where a member has died at an early age due to heart problems. So to summarize, with physically healthy children, the side effects are usually very mild and in general these medications are very well tolerated. There are no permanent, long-term side effects with these medications and other than routinely checking the child’s growth and doing well-check exams, there are no ongoing blood tests or any other type of monitoring required.

**Dr. Hendler:** Are there any other kinds of medications for treating ADHD, other than these stimulants we have discussed?

**Dr. Agharkar:** Yes, there are some non-stimulant medications such as Strattera and antidepressants like Wellbutrin. Generally these are used only in special circumstances when stimulants cannot be used or may not work as well or may have failed. Examples
might include children with ADHD who have additional diagnosis of Tourette’s disorder, bipolar, manic depressive, mood disorders, etc.

**Dr. Hendler:** Does a child need to take these medications every day?

**Dr. Agharkar:** It’s better to take these medications seven days a week to maintain consistency and because of the fact that ADHD also affects other areas, other than school, such as the child’s ability to listen to the baseball coach or the soccer coach, or their behavior in church, or when they are invited to a friend’s birthday party, or even just doing chores at home. However, they can be taken only on school days and usually we do this only if the child is on relatively low doses. Sometimes, for kids who are not gaining weight, we might advise a medication break during the summer vacation to help them catch up on their growth.

**Dr. Hendler:** Is this is a life-long treatment?

**Dr. Agharkar:** Although ADHD is a life-long disorder, the need for medication treatment may not necessarily be life-long. The need for ongoing treatment is evaluated by having regular visits with the doctor and discussing this. Most children remain on the medication at least through their school years.

**Dr. Hendler:** Will this kind of medication change the child’s personality?

**Dr. Agharkar:** This is a very commonly asked question and many parents are concerned that their child might become a zombie or they may not be as creative if they start the medication and this doesn’t happen. It does not affect the child’s intelligence or creativity. It’s like wearing eyeglasses. Finding the right medication is like finding the right eyeglass prescription for a child. And when it’s correctly done, children can focus better and are actually much more productive.

**Dr. Hendler:** You know, my next question is really related to that. If you listen to just the lay radio and the lay media and you just, you know, read magazines, there’s a lot of people who are not medically trained who speak negatively about the idea of treating children with pharmacologic agents and they think that you should be able to overcome this strictly behaviorally or holistically and not go to actual medications. There’s a lot of people who feel strongly about that. Maybe you could comment on some of the actual results of what happens when people are treated like that. Obviously, there must be real evidence that this works and improves the children, otherwise, it wouldn’t be done. Maybe you could comment on that.

**Dr. Agharkar:** This is actually one of the most researched areas, I would say, in child psychiatry or behavioral problem areas in children and it’s very, very well researched and documented. There are huge studies with thousands of kids where medication has really proven to be superior and these studies have included comparing other interventions like behavior interventions compared to medications, combining the two, and in all those studies medications have clearly shown to have superior effect. And people get scared
because they’re afraid of side effects and such but when you really look at the incidents of that, it is so mild.

**Dr. Hendler:** So the truth speaks for itself, even though the truth is not what the popular opinion would seem to be.

**Dr. Agharkar:** Yeah, I would say so.

**Dr. Hendler:** Well thank you very much for being here with us today and giving us this interesting talk.

**Dr. Agharkar:** Thank you for having me over.

**Dr. Hendler:** I would also like to thank our audience for listening to our podcast today on ADHD medications. KP Healthcare is created by the people at Kaiser Permanente in Fremont, Hayward, and Union City California. These podcasts are for general information only and are not intended to be used as a substitute for medical advice given to you by your personal physician. If you or your family member have any of the conditions discussed in our podcast, we encourage you to discuss your individual case with your personal physician, as every case is different, and your physician is in the best position to know what’s best for you. You can find all of our podcasts on our home page at [http://www.kphealthcast.org](http://www.kphealthcast.org). You can e-mail us at castmaster@kphealthcast.org. We’d love to hear from you. Check our home page regularly for new topics and, as usual, be on the lookout for new ways to THRIVE.