https://www.caddra.ca/public-information/parents/

ADHD and Parents…

What is ADHD?

Attention Deficit Hyperactivity Disorder (ADHD) is a diagnosis that usually emerges in childhood. To diagnose ADHD we look at three main groups of symptoms: *inattention, hyperactivity and impulsivity*. Many people experience these symptoms, so for the diagnosis to be made, these symptoms must be at a level that causes impairment for the child, adolescent or adult in their daily life. The occurrence of these three symptoms determines the type of ADHD diagnosed. Children and adults who have hyperactive and impulsive symptoms are referred to as *Predominately Hyperactive-Impulsive ADHD*. Those who exhibit mainly inattention are referred to as *Predominately Inattentive ADHD*, (often still referred to as ADD). Those who have all three symptoms are referred to as *Combined ADHD*. This is the type diagnosed most often.

ADHD is the most common mental health disorder diagnosed in children. It affects 5-9% of school-aged children. For those with ADHD in childhood, the symptoms will continue to be severe enough to qualify for a diagnosis in 80% of adolescents and in over 50% of adults. Approximately 8-10% of males and 3-4 % of females under the age of 18 years have ADHD. Since an equal number of men and women are diagnosed as adults (4-5%), many specialists believe that a lot of girls with ADHD are missed. This is because girls often do not have the hyperactive component that makes ADHD easier to recognize. The symptoms of the inattentive type of ADHD are not as easy to spot as in the other types, but may become more obvious in adolescence or adulthood. Although there are some differences in symptoms and the occurrence of related disorders between males and females, the impact of the disorder on patients and their families is fairly consistent.

The symptoms and types of ADHD can change dramatically throughout life. Hyperactivity and impulsivity may decrease as people get older, but the demands on their attention and other thinking skills may increase.

The History of ADHD

ADHD, or other disorders with similar symptoms, have been known for more than a century. In the early 1900s, the symptoms of ADHD were thought to be caused by central nervous system injuries such as trauma or infection. By the 1960s, the term “minimal brain damage” was used to describe the disorder. The term “Attention Deficit/Hyperactivity Disorder”, now used, more closely describes the symptoms of the condition. ADHD is currently recognized throughout the world as a condition that can be assessed, diagnosed and treated.

ADHD may seem to be more common today than in the past but this is largely due to the increase in research and media attention. Research has encouraged awareness within the professional community, leading to better diagnoses. Media coverage, although not always accurate, has heightened public awareness of the condition.

The Roots of ADHD

Neurons transport information and signals in the brain. ADHD is suspected to affect the flow of transmissions through the neurons. Through doing research, we know that there are certain chemicals in the brain that help with these transmissions. There seems to be a shortage of these chemicals in people with ADHD, but we are not sure why.

We do know that one area of the brain that is affected is the frontal lobe. As well as managing attention, this part of the brain is used for other things like: organizing, reviewing the past (hindsight), planning ahead (foresight), and trying to remember more than one thing at a time (active working memory). All of these skills are important for problem solving. We also know that the frontal lobe is in charge of things like time management (making sure that you have enough time to get things done) and social skills (learning ways to interact with other people). All of these things are called *executive functioning skills*. These skills are needed in order for children to get their work done well and on time. They also need these skills just to remember that they have work to do.

Research is pointing to a possible dopamine deficiency in certain parts of the brain. It is unclear whether individuals with ADHD do not produce enough dopamine, are unable to use it properly, or if they require more dopamine than the average person. The chemical serotonin may also be involved in some way. This chemical is very important in the brain's ability to detect and even to regulate the other chemicals. Noradrenaline, a substance that may act on our brain's ability to adapt to stress, may also be involved.

We know that most of the time ADHD is hereditary. This means that it is passed down to children through their parents' genes. ADHD has the same degree of hereditary as height. Chances are that if you are tall, your children will be as well. It works the same way with ADHD. Often parents are diagnosed with ADHD after their children are diagnosed. Years ago, doctors were not very good at diagnosing ADHD so many people who had it were missed. This is why it may look like more and more people today have ADHD, but it may be that we are just better at recognizing it.

How Do We Diagnose ADHD?

Contrary to popular belief, every child entering a doctor's office presenting symptoms of inattention, impulsiveness and/or hyperactivity does not immediately receive a diagnosis of ADHD. A specialist's ability to evaluate other possible causes through observation and testing is very important. The diagnosis of ADHD is made by ruling out other reasons for the symptoms as well as looking at information that would support a diagnosis of ADHD.

The diagnosis of ADHD is based upon observing symptoms that seem to occur consistently (though perhaps not constantly). The psychologist or physician will use parent symptom rating scales that will help to diagnose the disorder with some level of certainty. Your child's teacher will usually be asked to complete these scales. The symptoms need to be observed in at least two environments for ADHD to be diagnosed. There must also be at least some symptoms present before the age of seven, and they must be present for at least six months. Your child should usually have a physical exam performed, as well as a hearing and eyesight test, to rule out any physical reasons for the

symptoms. It is also recommended that a psychoeducational assessment be done to determine whether other learning disabilities may coexist with the ADHD or be the cause of the symptoms.

The Treatment of ADHD

The best approach to treating ADHD is called *multi-modal* and includes *psychosocial supports* combined with *medication.* Psychosocial interventions include: educating families with information about ADHD and its management; parent, teacher and child training; school accommodations and supports; and behavioral interventions. *Psycho-education*, or education about ADHD, is one of the most effective ways of managing ADHD. This may be the most important factor when looking at whether the person will continue with their treatment. The more educated the family and the individual are about ADHD, the better they will be at implementing the treatment. Effective medication treatment requires regular follow-up visits with a specialist.

There are two types of medication that are most commonly used for ADHD. The type used most often is known as *stimulant medication*. These medications have been around for more than fifty years, with thousands of research papers on their safety and effectiveness. The earliest stimulant medications are called Ritalin and Dexedrine and last a short time (usually about three to four hours). However, in the last decade, time–released versions that only need to be taken once a day, are available. Medications such as Adderall, Biphentin, Concerta, Foquest, and Vyvanse can last eight to fourteen hours. These time-released capsules or tablets help prevent medication levels from fluctuating during the day and carry the child through the whole school day and into the early evening. Children don't have to remember to take their medication several times a day, and they often feel less stigmatized if they do not have to take medication at school. Some children metabolize these medications more quickly than others and may not see benefits for as many hours.

The other type of medication that is also used for ADHD is a non-stimulant medication called Strattera. It may be used if you have problems with anxiety or if your doctor thinks that it will be more suitable for you. There are a few other medications that are not used for ADHD as often, but may also be of help.

In uncomplicated cases of ADHD, medication management is fairly straightforward and typically effective with minimal side effects. Some of the medications used for ADHD may have short-term side effects that go away after the person's body gets used to them. There are many choices in medication these days and your doctor will work with you to find the right medication and the correct dose that works the best for you, with the least amount of side effects. Adolescent girls may need to adjust their dose according to their hormone cycle.

Once any kind of treatment is started, the symptoms should be monitored to evaluate the level of improvement.

For information written specifically for parents on ADHD, assessment, treatment, school advocacy, parent info, support and more, please access www.caddac.ca