

ADHD Information & Resources Handout

What is ADHD?

Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder. Symptoms appear in childhood and may continue into adulthood. People with ADHD find it difficult to focus attention, regulate impulses, and control the urge to be physically active. Even emotions can be hyper-reactive.

ADHD affects about one in twenty children. Over half are still impaired by symptoms as adults. Adults with ADHD are easily distracted, struggling with mental restlessness, disorganization and procrastination. They have difficulty beginning and completing tasks, managing time and controlling behaviours and impulses. Some find it hard to manage their emotions, and may be labelled as “thin-skinned”, “hypersensitive” or “short-fused”. People with ADHD often channel their physical restlessness into work or sports activities. Some self-medicate with stimulants (e.g. caffeine, nicotine) or illicit drugs (e.g. cannabis, cocaine, speed). ADHD symptoms can profoundly affect personal and work lives, leading to a chronic sense of under-achievement and low self-esteem.

What causes ADHD?

While the exact cause is unknown, ADHD is most often inherited. ADHD can also be caused by traumatic brain injury, lack of oxygen, neurological damage, infection, premature birth or prenatal exposure to substances such as alcohol or nicotine.

ADHD is a neurodevelopmental condition. It is not caused by poor parenting or psychological stress. However, the environment can affect the expression and progression of ADHD.

ADHD is characterized by dysfunction in particular neurotransmitter systems (e.g. dopamine, noradrenaline) which are essential to normal brain function. The transmission of information in the nervous system appears to be impaired – as if the “go” and “stop” signals are delayed. Studies of brain function in people with ADHD reveal impairment in regions responsible for regulating certain behaviours, including initiating tasks, inhibiting unwanted behaviour, predicting consequences, retaining information and planning for the future. Appropriate treatment can diminish these symptoms and improve function.

Why have a diagnostic assessment?

People who have difficulty concentrating, or cannot sit still, do not necessarily have ADHD. ADHD is a medical diagnosis, and a full assessment is required. Unfortunately, there is no definitive laboratory test.

People request diagnostic assessments for many reasons: Teachers may recommend an assessment to parents after noticing a student’s difficulty paying attention or sitting still in the classroom.

Increased information on ADHD in the media and online has led to more self-referrals among adults. Once a child is diagnosed, parents may seek assessment for themselves if they recognize ADHD symptoms in their own behaviour. However, an individual comes to a healthcare professional, the first step is to discuss their problems and concerns.

What does a diagnostic assessment involve?

A diagnostic assessment includes an interview with the individual and/or people who know them well (parents, spouse, teachers, etc.) about symptoms and impairments. Psychological evaluations can help assess any learning and/or social issues. Other possible causes (medical or psychiatric) of symptoms are investigated. ADHD is only diagnosed if the symptoms are not caused by another condition and impair function. Exploring associated problems and conditions helps to establish an effective and personalized treatment plan. The affected individual, healthcare professional, and/or family must decide what (if any) treatment is needed.

A diagnosis of ADHD can explain symptoms. It is bittersweet and acceptance may take time, but people with ADHD and their families are often relieved to know the cause of the problem. Parents are freed of the burden of guilt. Raising a child with ADHD can be challenging and difficult, but poor parenting is not the cause.

A diagnosis of a chronic condition is seldom welcome, but it does open the door to treatment.

What is the treatment for ADHD?

Medication can dramatically improve symptoms, but is never enough on its own. When a child or adolescent is affected, the parents, student and school must work together to implement learning strategies and adjust parenting methods. Workplace accommodations may be required for adults. Resources, such as parent training or cognitive behavioral therapy for adults, are slowly becoming more available through the public healthcare system. Clinicians can also recommend academic accommodations. People with ADHD and their families should be empowered to make informed decisions regarding all aspects of treatment.

If these interventions do not reduce ADHD-associated impairments, pharmacological treatment may be helpful. Medication for ADHD can improve ability to focus by facilitating the flow of nerve signals, improving the transmission of information. A trial of more than one medication at more than one dose may be required to find the optimal approach for everyone. No medication decision is forever and it is suggested that regimens should be evaluated at least twice a year.

Several medications are available. The most common and most effective are stimulants – methylphenidate and amphetamines. Each comes in short-, intermediate- and long-acting forms. Common side effects include decreased appetite and sleeping difficulties. Those taking stimulants may be overly quiet or sad if the medication is too strong, or become irritable as it wears off.

If stimulants are not effective or have prohibitive side effects, the non-stimulant options in Canada are atomoxetine and guanfacine XR. Whatever pharmacological treatment is chosen, medication is started at a low dose, and then slowly increased to achieve maximum symptom control with minimal side effects. In some cases, other medications may be helpful if typical ADHD medications are not adequate.

Once the correct medication and the correct dose are determined, further evaluation can identify whether additional interventions are required. Any co-existing mood or anxiety disorder must be considered in the treatment plan. Stimulants can aggravate certain anxiety disorders. Several antidepressants act on noradrenaline or dopamine, and can assist with ADHD symptoms. (The specific effects of these drugs on ADHD have not yet been studied.) When ADHD co-exists with depression or anxiety disorders, treating the most disabling condition takes priority.

ADHD medications are effective in 50-70% of cases. Although generally well tolerated, like all drugs, they can have side effects. Discuss any potential treatment with your clinician and pharmacist. Although your healthcare provider will recommend evidence-based treatment options, each person is unique. Only a supervised medication trial can determine how it impacts your child or yourself.

Additional information on ADHD medications is available on the CADDRA website (<http://www.caddra.ca>).

Online Resources:

www.caddac.ca (Centre for ADHD Awareness, Canada)

<http://www.attentiondeficit-info.com> (Quebec, bilingual)

www.associationpanda.qc.ca/ (Quebec, in French)

www.chadd.org (U.S. website)