



Treatment of ADHD

in Children, Adolescents & Adults

A diagnosis
is made on
the basis of a
collection
of evidence
and the elimination
of other possible
causes for the
SYMPTOMS

What is ADHD?

Attention deficit hyperactivity disorder (ADHD) is a recognized medical condition that often requires medical intervention. Establishing a diagnosis of ADHD is complex. In children, it requires information that can be obtained from multiple sources, including parents, physicians, and teachers. In adults, it requires a careful history that looks for signs going back to childhood. The criteria for making the diagnosis of ADHD can be found in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition, published by the American Psychiatric Association. While ADHD cannot be cured, both pharmacological and behavioural therapies have been shown to improve the symptoms of ADHD.

A Total Treatment Program

The treatment and management of the symptoms of ADHD consist of two major approaches:

1. Medication
2. Behaviour management

Combining psychosocial interventions and medication can be beneficial. When thinking about a treatment program for ADHD, it is helpful to remember that one goal is to improve quality of life for patients living with ADHD and for their families.

Medication

Studies show that children who receive adequate treatment for ADHD show improvements in a range of ADHD-related outcomes; they may also be at lower risk for substance abuse. Research from a landmark study by the National Institute for Mental Health in the U.S. found that children who received medication, alone or in combination with behavioural therapy, showed significant improvement in their behaviour and schoolwork, as well as better relationships with their classmates and family. Medical treatment has also been shown to effectively reduce ADHD symptoms in adults.

There are several types of prescription medications available for the treatment of ADHD symptoms. Different ADHD treatments have different dosing schedules: some are taken three times a day, some twice and some once. It is important to understand and follow the treatment schedule as prescribed.

Stimulant Medications

You may be wondering why a stimulant medication is used to treat someone with ADHD. It is theorized that abnormalities in dopaminergic and noradrenergic

systems may lead to decreased activity or stimulation in certain areas of the brain in people with ADHD. Stimulant medications may work by blocking the reuptake of dopamine and norepinephrine, and increasing the release of these chemicals.

Types of Stimulant Medication for Children, Adolescents & Adults

Below are the medications available in Canada for the treatment of ADHD.

Stimulant medications come in three general categories based on their duration of action:

- **Short-acting:** Typically taken two to three times a day, with the first pill taken in the morning, another at lunch time, and the third after school.
- **Intermediate-acting:** Typically taken once or twice a day.
- **Long-acting:** Typically taken once a day, in the morning and last throughout the day.

Stimulant medication	# of times a day	Approved in Canada for use in:
Methylphenidates		
Long-acting CONCERTA® BIPHENTIN	1 1	Children*, adolescents, adults
Intermediate-acting RITALIN SR (sustained release)	**	Children*, adolescents, adults
Short-acting RITALIN (immediate release)	2-3	Children*, adolescents, adults
Amphetamines		
Long-acting ADDERALL XR VYVANSE	1 1	Children*, adolescents, adults
Intermediate-acting DEXEDRINE spanules (sustained release)	1	Children*, adolescents, adults
Short-acting DEXEDRINE (immediate release)	2-3	Children*, adolescents, adults

*Age 6 and older. ** Dosing should be based on the consideration that RITALIN SR has a duration of approximately 8 hours.

Non-Stimulant Medications

Non-stimulant medications work by inhibiting the reuptake of norepinephrine.

Below is the non-stimulant medication available in Canada for the treatment of ADHD.

Non-stimulant medication	# of times a day	Approved in Canada for use in:
Long-acting STRATTERA	1-2	Children*, adolescents, adults

*Age 6 and older.

Side Effects

Like all medications, those for ADHD may have some side effects for children, adolescents and adults, which vary from one medication to another. Of course, not everyone will experience side effects, but for those who do, side effects can generally be managed. Severe side effects from ADHD medications are rare. It is important to be aware of and understand any side effects experienced and to discuss them with your physician. Sometimes adjustments in dosing and timing of drug administration may help. An understanding of the side effect profile of each medication may afford a better "fit."

“While side effects can occur, they can generally be managed”

Common side effects are trouble getting to sleep, loss of appetite or weight loss, stomach ache, dizziness, tiredness, constipation, headache and jitteriness. Additional side effects can include irritability, agitation, hostility, anxiety and sometimes suicidal thinking.

Abuse of stimulant medications can lead to dependence. It is important to tell your doctor if you have ever abused or have been dependent on alcohol or drugs, or if you are now abusing or are dependent on alcohol or drugs.

This section does not contain a complete list of side effects. It is important to tell your doctor about any unexpected effects you or your child are feeling. Talk to your doctor about any medications that you or your child are taking and provide a full history of your or your child's health and any family illnesses.

Tips for minimizing side effects

- Loss of appetite — To deal with reduced appetite, eat healthy snacks throughout the day and push dinner to a later time when the medication has worn off. You might also consider protein shakes, energy bars, or liquid meals.
- Insomnia — If getting to sleep is a problem, ask your doctor if it is possible to take the medication earlier in the day. Also, avoid caffeinated beverages, especially in the afternoon or evening.
- Upset stomach or headaches — Don't take the medication on an empty stomach. This can cause nausea, stomach pain, and headaches.
- Dizziness — Have your or your child's blood pressure checked by your doctor. Making sure you're drinking enough fluids may also help.
- Mood changes — If you or your child are experiencing irritability, depression, agitation, or other emotional side effects, it is important to inform your doctor.

How Can I Tell If the Medication Is Working?

Medications should reduce the overactivity, impulsivity and inattention typical of ADHD. Be aware of any and all changes in behaviour and symptoms and report any concerns to your doctor. For parents with children in school, it's a good idea to maintain regular contact with teachers who can monitor any changes in behaviour.

“Monitor behaviour and symptoms and report any concerns to your doctor”

How do I Manage Changes in Medication or Dosing?

If your physician has changed your medication or the dose you are taking, it is important to monitor any changes you or your child experiences.

As with all drugs, individual patients may respond differently to the same medicine. This difference in treatment response can also apply to patients who switch from one ADHD medication to another.

Remember to discuss with your doctor the possible side effects and any other medication that you or your child may be taking. This information will help your doctor make any necessary adjustments in medication.

Behaviour Management

Children and adolescents

Behaviour management techniques are useful for parents and teachers, in both home and school settings. Developing consistency across school, home and community settings and among parents, teachers and therapists is crucial to the success of behavioural therapy, but can be a challenge to achieve. In order to get positive results, it is important that anyone who interacts with the child or adolescent with ADHD (parents, teachers, healthcare professionals, etc.) be actively involved in and supportive of the behaviour management therapy.

Behaviour management, as part of a total treatment program, is a core strategy for treatment of ADHD. Some behavioural adjustments may include:

- Asking your child's teacher to move your child to the front of the room.
- Establishing daily checklists.
- Focusing on success.
- Reinforcing your child's self-esteem and good behaviour.

Adults

Behaviour management for adults may include a range of interventions, such as short-term counselling or problem-solving around work issues or activities of daily living. Improved insight into how ADHD affects daily life can often lead patients to make significant life changes that can decrease their stress.

ADHD and Comorbid Disorders

ADHD is often accompanied by other coexisting conditions. For example, some people with ADHD may also have one or more of the following disorders:

- Learning disorders
- Anxiety disorders
- Mood disorders (depression, dysthymia)
- Bipolar disorder
- Substance use disorders
- Borderline personality disorder
- Antisocial personality disorder
- Conduct disorder, oppositional defiant disorder (in children)
- Other disorders, including Tourette's syndrome

Some people with ADHD may require different interventions to help treat a coexisting disorder as well as the symptoms of ADHD. Talk to your doctor if you think you or your child may also have a coexisting disorder.

TAKING ACTION

As a person with ADHD or the parent of a child with ADHD, you are expected to play a significant role in decisions regarding treatment choices. In order to make informed decisions, you need to ensure you have access to information related to ADHD. But sometimes the treatment, care or support you need is not readily available.

For these needs to be met, you may sometimes have to negotiate with your healthcare team, insurance company or public healthcare provider. To be most effective, you must first determine your needs. Be sure to ask for information on all treatment options, including those that may not be immediately available. Decide what your goals and values are, what risks you are willing to take, and what benefits are most important to you.

When the responsibility for healthcare decisions is shared, you are more likely to choose the options that best meet your needs. Give yourself permission to ask questions and express your wish for more information.

The medication you have been prescribed may not be covered by the insurance plan your employer has subscribed to. This might be due to the structure of your insurance coverage or a change in how or under which insurer you are covered. If you have been prescribed a medication and your private insurance company will not cover the cost, consider working with your employer to advocate for coverage.

If you do not have private insurance, you may be eligible for coverage through your provincial/territorial public drug plan. The drug plans for each province and territory are different in terms of which drugs are covered and who is included in the plan. Public drug plans mainly cover seniors, individuals who require social assistance and other groups for whom drug costs represent a significant financial burden.

In some situations, pharmacists may dispense a generic version of a prescribed medication. This can be due to the rules of your public or private drug plan. If you have received a generic version of a medication, notify your physician. In some cases, this practice requires the permission of the patient and/or the patient's physician.

Talking to Your Doctor

You may wish to consider the questions below before talking to your doctor about developing the most effective total treatment program for you or your child.

- What treatment program would you recommend to address my or my child's ADHD symptoms?
- What can I do to help improve my or my child's ADHD symptom management?
- Can you suggest strategies to help me measure my progress or that of my child?
- How can I communicate progress in a way that is useful to you?

Follow-up

Communicating effectively with your doctor is important in finding the treatment options that work best for you. Before visiting your doctor, you may want to think about whether your or your child's current treatment program is meeting your needs.

- Is the treatment program helping you or your child to manage the symptoms of ADHD effectively?
- Does the administration of medication present any problems?
- If you are undergoing behavioural therapy, is it helping?
- Do you or your child require any special interventions (e.g. a specialized education program)?

People with ADHD differ in their needs and should not be subjected to a one-size-fits-all solution. That's why it is so important for people with ADHD and their doctors to have access to a full range of medications and treatment options to deal with ADHD. Ask your doctor about what treatment options might best suit you or your child.



Treatment
is most
effective
when those
involved work
together as a
TEAM



19 Green Belt Drive
Toronto, Ontario M3C 1L9

Member



All trademarks used under license.
All other third party trademarks are trademarks of their respective owners.
© 2013 Janssen Inc.
CJCB120256E