ADHD Medication: a Letter from Dr. Gray

After specializing in the medical assessment and treatment of ADHD for the past 20 years, I have seen what a positive impact medication can have on an individual’s ability to learn, to sustain relationships, and to maintain a healthy self-esteem. When taking medication, it is important to consider lifestyle factors and the potential emergence of side effects in order to maximize your ability to focus. The most important message I want you to consider in this process is that ADHD should be treated on an individual basis, and the pharmaceutical recommendations should be specific to you. It is not a “one size fits all” process and must be accompanied by supportive treatment beyond medication. In most cases, we recommend coaching and behavioural support alongside the medication trial.

In general, medication is often an effective way to “kick-start” change. It can help an individual define and follow through on goals and to build skills that have previously been inconsistent. The best part of combining a medication trial with coaching initiatives is that the skills learned during treatment will remain even if you decide to stop taking medication.

One of the first questions people ask me is, “How long will I need to take medication?” There is no easy answer, but I can generally say that many people do not stay on medication indefinitely. Often individuals find that medication can help them learn more about themselves, and if they are committed to using other treatment methodologies, they are able to reassess at several life stages whether they want to continue medication. It is really only part of the solution, but it certainly can help support a positive change.

Here are two analogies I use when explaining ADHD medication:

➔ **Putting on glasses:** Taking ADHD medication is like putting on glasses for a person who has trouble seeing. The stimulant medications only work for the duration that you “are wearing them”. That means that for a defined time period you are able to regulate your focus more effectively and then when you “take them off”, the medication is out of your system until the next day. This also helps us realize the importance of medication outside of school/work hours. It can help you focus every day while grocery shopping, driving to work, or conversing with a friend. It can help bring clarity, which will be the foundation for building skills.

➔ **Driving up to a stop sign:** The medication doesn’t make changes for you, but it can help you “pause at a stop sign”. It can help you to be in a position to think before acting. The actual “doing” is up to you. Whether you turn left, or right, or drive right through is your decision. This is why it is so important to work on your own skills and build personal goals, so that you can take advantage of your new ability to pause. The medication isn’t going to change you; you will have to decide what you want to do with your new ability. And
remember too, if you build new skills while on a medication, it means you can choose to stop taking it down the road. The skills will remain even when you are no longer taking the stimulant.

→ **BUT, what is it doing to the brain?** One of the biggest reasons people are hesitant about medication is because they are worried that it is going to cause sedation, inhibit creativity, or change their personality. Once you understand what the medication is actually doing in the brain, you realize it is actually going to allow more personality to emerge. It is not a medication that sedates, but stimulates!

Let me explain. The prefrontal cortex is the part of the brain that coordinates executive functioning, helping you to start tasks, stay on task, block out distractions, use working memory, and regulate your emotions. It helps organize the brain and manage projects and tasks from start to finish. In essence, the prefrontal cortex is the part of the brain that is supposed to organize all the functions of the brain so its role can be compared to that of the conductor of an orchestra or the secretary of the brain.

When somebody has ADHD, it means that their prefrontal cortex is experiencing inconsistent levels of neurotransmitters. This means the conductor or secretary “falls asleep on the job”. You can imagine what the orchestra sounds like when the conductor is sleeping. Medication helps keep the conductor of the brain stay awake and stimulated, so that all the parts of the brain can work to the best of their ability! ADHD medication essentially evens out the neurotransmitters to the pre-frontal cortex, so individuals can be more consistent with their focus.

**Does medication work for everybody?**

No, medication does not work for everybody and should not be recommended for every patient. For example, Methylphenidate has been found to be ineffective for 25% of people who appear to be genetic non-responders. That being said, I have seen some amazing results with ADHD medication when the optimal type and dose are prescribed. After careful understanding of your personal symptoms and your lifestyle, I will endeavour to prescribe a medication and dosage that will provide support with minimal side effects. I will also keep a very close eye on height, weight, blood pressure, self-esteem, and mood.
Medication Options

ADHD medication options continue to improve. Today, there are four medication groups to choose from, each with pros and cons depending on your symptoms and lifestyle.

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<tr>
<th>MEDICATION</th>
<th>DR. GRAY’S NOTES</th>
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<tbody>
<tr>
<td><strong>A: Amphetamine</strong></td>
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<tr>
<td>1: Adderall and Dexedrine</td>
<td>I don’t prescribe Adderall or Dexedrine IR often because many individuals say they feel irritable as the medication is wearing off. There is also the potential for abuse due to its crushable tablet format.</td>
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<td>2: Vyvanse</td>
<td>I find Vyvanse works well for many individuals because of its more even distribution. It is released slowly in the bloodstream through an enzyme process, which makes individuals feel a more steady and subtle stimulant effect. It also seems to work a little longer, with up to 12 hours of coverage.</td>
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<td><strong>B: Methylphenidate</strong></td>
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<tr>
<td>1: Biphentin</td>
<td>Biphentin is a great option when individuals need a “bigger kick” in the morning, as it releases a burst of stimulant initially (40% immediate release), and then the rest slowly releases throughout the day. It is also great for people who have trouble swallowing pills, as it can be sprinkled on food. It can sometimes be used in conjunction with a different stimulant as an add-on medication if individuals need extended coverage beyond the 10 hours of a medication such as Concerta.</td>
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<tr>
<td>2: Concerta</td>
<td>Concerta is a reliable stimulant medication that lasts approximately 10 hours and has a very even delivery system (22% immediate release). It releases when it comes in contact with water, so most people find it provides a stable daily effect. It generally works very well with minimal side effects.</td>
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<td>3: Ritalin</td>
<td>Ritalin IR was the first stimulant medication used for ADHD and lasts less than 4 hours. I generally do not recommend its use except in very rare cases because it can be potentially abused, and many people feel it can create an “on/off” effect that is undesirable.</td>
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Strattera is a non-stimulant medication that works more slowly and subtly than the stimulants mentioned above. The downside is that it can take up to several months to make a noticeable difference. The upside is that it offers 24-hour coverage and often helps reduce anxiety. It also often helps with emotional regulation and awareness. I frequently use it in conjunction with a stimulant to help offer support around the clock.

Wellbutrin is often referred to as a secondary medication for ADHD. That means that it can be used for individuals when stimulant medication isn’t appropriate. It also supports mood, so it can target feelings of being down, or longstanding issues related to reactionary depression. It can also be a good medication to use when individuals are trying to stop smoking. Like Strattera, it can require several weeks to “kick in”, so you have to be a little more patient.

Selecting the Right Medication

The symptoms of ADHD manifest differently for each individual. It is important to understand the intricacies of the symptoms before selecting a medication. I take into consideration:

- Age of patient
- Required duration of support
- Genetic response
- Co-morbidities
- Symptoms
- Cost of the medication
- Diet
- Exercise
- Sleep
What might I expect when starting a stimulant?

Our goal is for you to be treated by the medication while experiencing minimal side effects. Any negative side-effects should be compared with the potential risks of not taking the medication and not receiving the benefits. A periodic review of medication support is required to monitor treatment response.

The First Few Days

When trying a low dose of stimulant, you may find any of the following outcomes:

1. **You don't notice anything.** This could be because the medication is too low of a dose, or it could be that you are a genetic non-responder. If you don't notice any positive changes, but there also aren't any negative side effects, follow my instruction to go up in small increments.

2. **You notice a big difference and feel like everything is much clearer.** Some people notice a very big difference and feel an effect immediately. When this happens, you may still follow the instruction to try small increments in order to figure out the optimal dosage.

3. **You may notice a change, but then it flat lines.** This is usually when a dose is too low. You noticed an effect, but it is not lasting long enough. You should explore this with me, but likely move up your dose in small increments.

4. **You may experience a side effect you don't like.** If you experience a side effect that is undesirable, please stop taking the medication and book an appointment with me.

5. **The medication might feel too strong, or create some anxiety.** If the medication is too high of a dose, individuals usually describe that they feel “uncomfortable” or “over-stimulated”. If this happens to you, the best way to describe it is that “it's working, but I don't like it”. Please document this, and book an appointment with me. I will likely reduce the dose. Do not take the medication again if you have experienced a feeling like this.

6. **You might feel more emotional.** In any of these cases, close conversation with your doctor and ideally your coach/therapist will allow you to figure out whether the medication might be too low, or not a good fit. Some people experience emotionality when being treated medically. This is not a reason to stop the medication. It can feel overwhelming if the medication is working because you may feel that you are having clarity for the first time, or you may feel some regret that you have had to feel so frustrated for so long.

**Most importantly, don't do it alone!** It’s important that you keep track of how you are feeling and share with someone you trust that you are trying medication. Use the Springboard Medication Tracking Sheet to help you out. It may not necessarily be the medication “not working” or giving a negative side effect; it may be your emotional reaction to the medication.
Ways to help avoid side effects

1. Eat a good breakfast.
2. Drink at least 6-8 glasses of water a day.
3. Limit caffeine use. (Caffeine is a stimulant too, so to avoid having a feeling of “overstimulation”, it is really important to use the medication in isolation)
4. Take the stimulant medication by 9am.
5. Exercise at least 20 minutes a day, ideally before breakfast. If you can get daily exercise in your routine, I am often able to reduce the dose of stimulant. Exercise is in essence doing the same thing to your pre-frontal cortex as medication!
6. Limit cigarettes, as nicotine is also a stimulant.
7. Limit screens (television, computers, and video games) before bed as the light may interfere with the production of melatonin, which triggers sleep.

Physical Side Effects

→ **Will I lose weight?** Sometimes, but not necessarily. It has been my experience that if an individual can be more focused to sit and eat their lunch with better focusing skills, then their weight can be positively influenced. Stimulant medication can decrease appetite especially mid-day, so there needs to be a plan in place to ensure you get the appropriate amount of food at meal time. Make sure you boost your food intake with a big breakfast and a significant after-work snack.

→ **Will I develop a tic?** Tics are rare. Stimulants do not cause tics, but they can bring out a tic that had been dormant. Screening for tics in family history is an important step as well as keeping dosage as low as possible. There are some cases where stimulant medication can treat an existing tic. This is particularly the case when the tic is related to anxiety; treating ADHD can help reduce anxiety, which can help improve a tic.

→ **Will my blood pressure increase?** Stimulants may increase both pulse and blood pressure. It is an important part of the medical follow up to keep an eye on blood pressure regularly to ensure it stays in a normal range. It is also common for blood pressure to decrease as a result of medication due to a reduction in anxiety.

→ **What are the other potential physical side effects?** It is my experience that it is generally unacceptable to continue medication if you have side effects, and that with dosage adjustment, and positive lifestyle choices, many individuals are able to minimize side effects and benefit from the medication.
Emotional Side Effects

→ Will I be stigmatized? Medications are now long-acting so you can take them in the morning before work. Medication can be a private experience and should not create any stigma at all. In fact, stigma is more likely seen towards individuals who are struggling with behaviour management, and when a medication is helping them, they are usually having an easier time fitting in across all domains of their lives.

Behavioural Side Effects:

→ Will I have trouble sleeping? Some individuals have trouble sleeping if a stimulant is taken too late in the day. It is important to monitor your sleep and keep track of when the medication is taken. It is also possible to use the non-stimulant medication, Strattera, if you have significant sleep issues. Of note, we often find that once you are taking medication and feeling happy about what you accomplished during the day, you in fact have an easier time falling asleep!

→ Will my personality change? With the correct dosage, the exact opposite should happen: the medication will allow you to better manage executive functioning tasks so that your personality can shine through. When correctly prescribed, medication should not affect personality or creativity. If a patient ever reports losing their “zip”, we take them off medication right away because this is unacceptable. Generally speaking, clients of all ages describe feeling more like themselves and in control of previous frustrations.

Women and ADHD Medication

Women are vulnerable to unique potential side-effects due to varying hormonal levels on a monthly cycle. This can make a woman’s consistent support from the medication more unpredictable. Additional complicating experiences, such as pre-menstrual symptoms, pregnancy, and menopause, need to be monitored and considered when determining the optimal medication and dosage.

Please let me know if you have any other questions!

A. Gray

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