CHAPTER 6: PSYCHOSOCIAL INTERVENTIONS AND TREATMENTS

Introduction
ADHD is a chronic neurobiological disorder that impacts all aspects of the individual's daily life across the lifespan, including social and emotional functioning, academic/work-related success, relationships, marriage, family life and physical health. Therefore, a comprehensive, collaborative, multimodal approach tailored to meet the unique needs of each individual is not only important but essential.

The primary care provider is in the unique position of being able to follow an individual with ADHD across the lifespan. Establishing trust and rapport from the onset with the patient and family is crucial to optimal care and is vital for treatment success. The partnership that develops between the patient, the family and the primary care provider is the cornerstone of successful management and coordination of care. For the adolescent with ADHD, privacy concerns are heightened and more time to establish rapport may be required before the adolescent is willing to engage in changing their lifestyle.

Be aware of gender differences\(^ {151, 152} \). Females are more likely to have inattentive-type ADHD. Girls can be more anxious and motivated to please others, especially at a younger age. On the surface they appear to be coping, but their underlying impairments can be hidden or ignored. As a result, ADHD may be undiagnosed or under-treated.

The family, school/college/workplace, the physician and other professionals are all critical parts of the treatment team that supports the individual with ADHD. Being active participants in all aspects of treatment, including decision-making, is the cornerstone of care, ensuring open communication and improved adherence at all ages and stages of life.

Psychosocial Intervention Overview
Research has shown that combined therapy using medication plus psychosocial interventions (multimodal) is the most effective way to deal with the core symptoms of ADHD and the resulting impairments\(^ {103, 153-161} \). These interventions can be broken into four main categories:

a. **Psychoeducation**\(^ {96, 162, 163} \) is most relevant for individuals eight years and older and is designed to empower the patient and his/her supports with knowledge about the disorder, its impacts and how to function optimally while having ADHD. These approaches can also include strategy instruction, self-talk and organizational skill development. Topics might include information on sleep management, anger, organizational skills, etc.

b. **Behavioural interventions**\(^ {88-93} \) can be implemented at any age. These include the thoughtful application of rewards, consequences, response cost, point systems, token economies (in group settings such as classrooms), environmental management, ADHD coaching and lifestyle change (diet, exercise, sleep).

c. **Social interventions**\(^ {164-175} \) are useful across the lifespan and include social skills training, anger management, supervised recreation and parent training.

d. **Psychotherapy**\(^ {97-99, 101-110, 144, 176} \) for adolescent and adult ADHD with/without comorbid conditions (such as poor self-esteem, depression and anxiety) includes: self-talk, cognitive behavioural therapy, interpersonal therapy, family therapy, expressive arts therapy, play therapy and supportive counselling (typically for adjustment problems and less severe emotional concerns).

e. **Educational/vocational accommodations** include academic remediation, specialized educational placements and workplace interventions.
Individuals with ADHD function best in a consistent, structured, predictable environment where rules, goals, expectations, consequences and incentives are visibly posted in a prominent location for all involved to follow routinely. These should be simple, clear, and few in number. Immediate consequences and positive reinforcement are best, and close monitoring of successes and failures is essential to ensure a positive outcome.

**Specific Psychosocial Interventions**

The following guidelines can be readily incorporated into daily office practice and can help the physician provide some of the necessary psychosocial supports required by individuals with ADHD and their families. These supports may not otherwise be available elsewhere in the community or may be inaccessible because of cost or lengthy wait lists. The following techniques stem from evidence-based research.

Physicians may choose to start with one or two areas of concern, select a few strategies from the list, and then model the desired behaviour and state the expected outcome to the patient or their caregivers. It is critical to assign the individual homework in order to practice these skills.

As a physician, remember that some techniques work some of the time and others most of the time. Find out which is most effective for your patient and their family. Patience, consistency and understanding are fundamental elements of successful treatment and the key to future success, happiness and fulfillment in life for the individual with ADHD, no matter what their age.

**Psychoeducation Interventions**

Education should start with questions about what the patient and family already know or think they know about ADHD and about people they are acquainted with who have it. Educate the individual with ADHD regarding the diagnosis, assessment, possible investigations/tests and myths. Explain the treatment options in detail, including pharmacotherapy and psychosocial interventions and the risks and benefits of each, as well as the importance of using both in combination. Give handouts on ADHD, medications, websites, books, videos, community resources, support groups, parent training and social skills, as well as strategies for successful management. A useful website for adults to learn more about their condition is www.totallyadd.com

**Practice Point: Common Reasons Why Physicians Avoid Psychoeducation**

1. “I don’t have the time.” Materials downloaded from websites or copied from the CAP-Guidelines can assist the physician when explaining about ADHD.

2. “I want to do group-based education but I don’t have the space.” Convert your waiting room to a group room after the last appointment of your day. It will likely hold ten or more people. You can then give a session on specific topics like behavioural interventions or medications to several people, making the dissemination of information more efficient. Attendees with common concerns will also be able to support each other.

3. “I expect that if they have a question they will ask me.” ADHD patients often need their questions drawn out so don’t make the assumption that they actually have the information that they require.

**Behaviour Management**

Identify goals and target behaviours to change: There are many symptoms within ADHD but the behavioural task is to pick specific symptoms (no more than one or two at a time) to work on. Goals must be tailored
to meet the individual’s needs and be appropriate for different ages and stages of development. Goals may change over time as circumstances change.

Examples include:

1. preschooler with temper tantrums – respond positively to desired behaviour and use ignoring and good time out techniques to respond to unwanted behaviour (e.g. 1-2-3 technique)
2. school age – use lists and agendas, teacher reminders, use positive incentives
3. adult – keep items like cell phones and keys in a designated, visible location. Post lists as reminders to check for necessary items each morning before leaving home.

**Structure the day and the environment:** Once habits are reinforced consistently, they may become automatic. Promote routine, consistency and follow-through as much as possible, especially for morning activities, after school/work and bedtime. Post rules/checklists, which should be clear, few in number and placed in obvious locations (fridge, bedroom, office etc.). Use sheet protectors and dry-erase markers so that the lists can be checked off and reused. Habits take a little longer to develop in ADHD patients so incentive strategies are often necessary.

**Help select positive incentives to promote desired behaviours:**

1. These incentives must be appropriate for age, developmental stage and economic ability. They must fit with the family’s beliefs/cultural systems. They should include activities the individual can do and items that they can earn (e.g. stickers, toys for younger children, tokens, video games, TV, favorite meals, etc.)[150,151]. For younger children, the rewards should ideally be frequent, small, tangible and immediate. For older patients, natural consequences can be highly motivating (e.g. keys to the car for the adolescent, allowances, better curfew times, special outings etc.).
2. These incentives need to be changed often to keep their interest as individuals with ADHD have a need for novelty. Variable reinforcements can be even more powerful (e.g. “When you do..., then you can choose from the mystery prize box”).
3. Use positive incentives while avoiding negative threats e.g. “When you do...then you will receive...” (something positive). This promotes a natural work ethic that also enhances self-esteem and pride in achievement. Impulsive behaviour is often a lifelong theme. Children with ADHD can be demanding and they need to know that they can earn their desired reward by working for it. Work first, fun later! One needs to use similar techniques with the adult with ADHD who may still lack frustration-tolerance and patience to wait for rewards.

**Parent training**[181,182,195], Children with ADHD can be challenging and may irritate authority figures. Research shows that they can be stressful for parents[196]. They draw negative attention to themselves. Positive parenting approaches and maintenance of generational boundaries are essential. Information for parents is available online in the parent section of the CADDRA website ([www.caddra.ca](http://www.caddra.ca)) and on the CADDAC website ([www.caddac.ca](http://www.caddac.ca)). Parents should also be directed to local mental health agencies which often have parenting programs.

**Help them use agendas, organize, keep appointments and be on time:** Encourage proper use of calendars (month-at-a-glance calendars are best), checklists, agendas, electronic devices, sticky notes, whiteboards, colored folders, timers etc.

**ADHD Coaches:** While there is no coach accreditation body in Canada, there are many individuals who call themselves ADHD coaches. They are typically occupational therapists, social workers or health care providers. Some of these individuals have ADHD themselves and likely understand the suffering that...
happens but caution should be exercised if the coach exceeds his/her competence and training. A coach's role is to help the patient be accountable on specific behavioural agendas through weekly follow-up meetings and reminders. Their role is to assist the patient make fundamental lifestyle changes by promoting good habits. If used, they should be part of a treatment team which includes a physician (who handles the medication) and a psychologist/social worker who can provide individual therapy, as well as other relevant professionals.

**Promote healthy lifestyle changes**\(^\text{185}\): Individuals with ADHD often struggle with their own daily physical needs (e.g. sleep, meals, personal hygiene, house cleaning) and must create a balanced lifestyle by developing regular habits and routines. The physician can instruct a patient to: make self-care a priority; promote exercise on a regular basis (such as brisk walks, weight training, bike rides, sports, etc.) as this decreases stress and frustration, improves focus and cognitive clarity, increases endorphins, improves mood and restores a sense of well-being\(^\text{114-116}\). Consistent sleep hygiene and good nutrition are essential ingredients for a healthy lifestyle.

**Social Interventions**

**Showcase the patient’s strengths and talents:** The physician can point out a particular attribute identified in the office and encourage increased development of skills in the area. Gardner’s Multiple Intelligences\(^\text{197}\) is a useful framework as it focuses on non-traditional aspects of ability (i.e. artwork, dance, music, sports, chess, etc.).

**Model some socially-appropriate skills in the office**\(^\text{198}\): For example, model how to properly greet peers and others on the playground, at college or in the workplace, or how to manage a difficult co-worker, boss etc. Assign homework and have them practice those skills.

**Anger management:** This is often a major problem for someone with ADHD, and presents across all ages. Appropriate conflict resolution strategies must be put into place. Creating an environment of safety is the first priority and sometimes social service or enforcement agencies must be involved. However, if involved, there is an opportunity to create an emotional contract which can be of benefit to the family.

**Social skills training:** Many children with ADHD have social awkwardness. They want to have friends but may annoy their friends by their silly, immature and self-centered behaviour. Sometimes they miss social cues or misunderstand social conventions like when to ask to join in or when not to interrupt. It is important to note that there is a spectrum of impairment in social skills. Some levels of impairment may be due just to ADHD, but for others there may be sufficient impairment in social skills and related problems to warrant an evaluation for a possible Autism Spectrum Disorder (ASD) diagnosis. Making friends is an important skill set that both the school and parents can facilitate. Good friendships can be a protective factor in reducing some of the negative outcomes associated with ADHD\(^\text{199}\). When social problems continue into adulthood, the ADHD individual may find themselves isolated or overlooked for promotion. Local adult ADHD support groups can often help.

**Psychotherapy**

**Emphasize the positive during the visit:** A simple word of encouragement, praise or recognition\(^\text{111}\) from the physician for appropriate behaviour observed or reported during the appointment can ameliorate the constant stream of complaints from home, school, college, partner and parents. Others (parents, significant others) can improve their relationship with the patient by transferring this approach to many different situations.
Boost self-esteem: Encourage verbal and tangible recognition for accomplishments. For youth, have parents, teachers and coaches give certificates, medals, plaques, stickers and check marks. Use a point system or tokens. For adolescents, place the individual in a leadership role which will promote continued motivation and build skills. For teenagers and adults, encourage them to reflect on accomplishments, possessions, talents, skills, traits, social memberships etc. Humour is a very effective means of helping them keep life in perspective.

Relaxation therapies: When individuals with ADHD are overwhelmed, they have a low tolerance for frustration and can experience angry outbursts (i.e. “have a short fuse”). Physical activity and breaks can help decrease stress and diffuse frustration. Relaxation techniques, such as meditation, deep breathing exercises, yoga or music can also be helpful, although research is limited and findings are mixed.

Cognitive behavioural intervention (CBT): Further explanation in supporting document 6B. CBT is a well-established type of psychotherapy that challenges the person’s underlying negative thinking and beliefs in favour of a new thinking construct. It is widely used for mood and anxiety disorders and recent research shows its value in adults with ADHD 97, 98, 171, 173-175. It can also be of benefit to adolescents but the evidence is not as robust, probably as CBT requires motivation and commitment to change and that might be lacking in the adolescent. While CBT is used in children with anxiety disorders, it has not been used successfully in children with ADHD 148, 200.

Supportive psychotherapy: It is best to pick a specific symptom to work on but the intent is to help provide a perspective that the individual with ADHD may not have, as well as encouragement and problem-solving strategies.

Family therapy: As ADHD is a highly heritable disorder 43, there are often negative interpersonal dynamics between the parents and conflicts with the children. As a result, there is often a need to address family issues, lack of structure and the conflicts that exist. The central goal of family therapy is to reduce the level of negative emotions and to address the family’s approach to problem-solving and conflict resolution.

Educational/Vocational Interventions 201-203

Individuals with ADHD suffer significant deficits in executive functioning (time management, organization, etc.) which can cause marked impairment at school/college and work. This places the individual with ADHD at a significant disadvantage for completing tasks, projects and tests on time. Their daily performance may be negatively affected and future achievements seriously compromised due to careless errors, misread questions, late assignments or completed assignments not handed in, etc. Teachers can access help and advice on how to deal with these issues through the www.teachadhd.ca website.

Make classroom recommendations: CADDAC (www.caddac.ca), a sister organization to CADDRA, hosts a comprehensive guide to classroom accommodations on its website. The Calgary Learning Centre (www.calgarylearningcentre.com) also provides online resources. Classroom adjustments can include having the student seated away from distractions (pencil sharpeners, windows, doors, pets etc.) and beside good role models, if possible. Allow movement breaks (i.e. allow the student to clean the whiteboard, collect papers, run errands etc.). Appropriate fidget toys such as bracelets, special cushions, chewing gum, and the use of headphones to decrease distractions while doing desk work can be useful in certain cases.

Structure the environment: A firm, organized, yet flexible teaching style is a good fit for a student with ADHD. Have reminder lists posted on or inside desks and lockers. Have teachers or homework buddies check agendas and ensure that proper homework materials go home. Have an extra set of textbooks at home if possible. Allow the student to submit work to the teacher after deadlines.
**Vocational testing:** Adolescents will often benefit from vocational testing by grade 11 so they can understand that school is a stepping stone to a future career of one’s choice. Some adolescents with ADHD start losing interest in school and there is a high drop out rate. They also have difficulties, particularly in their first year, at college or university due to the lack of structure and accountability. The physician is often required to send a letter to support accommodations that these individuals require. (See Chapter 6, support document 6A for a template).

**Workplace issues:** In adulthood, announcing an ADHD diagnosis at work may limit one’s chances of promotion, but the diagnosis can be helpful to get accommodations rather than risk the alternative of being fired. Employers have a duty to provide accommodations for this condition. Some examples of accommodations include the use of headphones to limit external noise, increased frequency of meetings with their immediate supervisor to evaluate progress and voice dictation software.

**Monitoring Strategies**

There are many simple ways to monitor response to medication and treatment, including questionnaires, agendas, charts, daily report cards\(^{43, 96}\), exam results, workplace reviews, parental and spousal updates. These methods provide excellent feedback regarding progress, behaviours, social skills, and medication successes or failures. Daily report cards designed to target specific goals for the student with ADHD can work well and promote compliance and communication with parents. Additionally, they offer parents the opportunity to give positive incentives at home. They are also excellent for monitoring medication responses during trials.

**Promote Advocacy and Self-Advocacy**

Human rights legislation requires that individuals with disabilities be accommodated in school and the workplace. Unfortunately, these accommodations are not typically offered without specific advocacy. Letters written by the physician for schools/colleges/workplaces outlining these impairments and prescribing special accommodations (such as taking tests in less distracting environments, having extra time for projects/tests, use of computers and electronic organizers) are invaluable and significantly contribute to the success of individuals with ADHD. Teach self-advocacy skills\(^{96}\).