

CHAPTER 5: SPECIFIC ISSUES IN THE MANAGEMENT OF ADHD IN ADULTS

1. The Clinical Presentation¹³²

General Information and Referral Patterns

Prevalence Rates: It is well established that ADHD is a neurodevelopmental disorder that can persist into adulthood²⁷. Genetic studies, imaging studies, clinical treatment trials and prospective follow-up studies have all established that for about 60% of children with ADHD, there will be continued impairment in adulthood¹³³. The National Co-morbidity Survey¹³⁴ established the prevalence of ADHD in adults as 4.4%. It is likely that the demand for service will continue to rise. However, at this point, less than 12% of patients have been able to obtain services even at the primary care level¹³⁴.

A long-term follow-up study²⁶¹ showed that comorbidities tend to appear early in the life course (adolescence to early adulthood). Treatment of ADHD in adults therefore represents a significant healthcare need requiring physician education, establishment of services within the healthcare system, and appropriate research on treatment and service delivery. In the United Kingdom, the recent recognition of ADHD in adults by the National Institute for Health and Clinical Excellence (NICE) Guideline on ADHD⁸ has resulted in the National Health Service beginning this process. DSM-5²⁴⁶ provides better guidance for clinicians with new descriptions of ADHD symptoms in adulthood.

Recognition and Referral: People with this condition have always lived with their symptoms, which they may or may not have insight into, and which they may or may not identify as outside the norm. In clinical settings, it is the experience of the authors that the most common occurrence that causes adults to seek out a referral is the diagnosis of their own child or someone they know well. With the proliferation of popular texts on the subject, media attention on the disorder, and online information, many patients now come to their doctors requesting a diagnostic assessment for ADHD. Patients may come to their doctors with a chief complaint that is *not* one of the symptoms in the DSM-5 or with a symptom that is common to many disorders. Adults with ADHD may present with a primary complaint that is an associated symptom, such as procrastination; disorganization; lack of motivation; sleep-related problems; rage attacks; an overwhelmed sensation, associated with fatigue; and/or labile mood. In this case, it is important to remember that while the clinician's focus is on assessment of ADHD as the primary disorder, the patient's focus is on the associated complaint. A complication in assessing adults with ADHD is the frequency of comorbidities and the need to conduct effective monitoring within a reasonable period of time and without extraordinary costs. The current recommendations attempt to meet this goal but we anticipate that this is a work in progress that will undergo revision with time. The latest version of the CADDRA Canadian ADHD Guidelines will always be online at www.caddra.ca.

Practice Point – Patients you might see in your practice

The Reluctant Patient: Some patients may not be at the assessment voluntarily. If the patient is there for forensic reasons or at the insistence of a family member, the first objective of the clinician has to be to establish a therapeutic alliance that addresses the patient's concerns and level of insight.

The Impatient Patient: Some patients have come looking for the “stamp of approval” from the clinician and want to get on with the medical treatment. In their mind, the history gathering is a waste of time since the diagnosis is confirmed either from their own reading or from a previous assessment. They may use a lot of medical terminology. It is still necessary for the clinician to go through the protocol and reiterate the need to consider lifestyle changes, not just medication. It is not unusual for a previous diagnosis to have missed comorbid illnesses.

The Agenda Patient: This is the patient who has a secondary gain from the diagnosis (e.g., looking for a defence avenue in a legal suit, school accommodations or work-related advantage). The diagnosis could still be correct but it is important to flush out any secondary agenda the patient may have directly and without judgement. The patient sometimes withholds the whole truth because of the fear of being scrutinized

The Excessively Thankful Patient: This is a tricky one but be careful. The patient that puts you on a pedestal from the outset may be setting you up for failure. “Dr. X, I heard about you and I am so grateful to be in your mere presence because I know you are the only one who will help me.” They may be transferring their anger onto you from prior experiences with authority figures and your impotence is their way of relieving anxiety, also known as primary gain.

Practice Point – Dispelling the Common Myths¹⁵

Aren't ADHD symptoms just indications of poor coping? When ADHD screening is used, one quickly realizes that the patient is not simply coping poorly but is significantly impaired and has a high risk of developing secondary comorbid disorders such as anxiety and depression.

My patient is a professional. How could he/she have made it through a rigorous training program while living with ADHD? ADHD does NOT preclude successful educational or professional attainment. It is necessary to assess the impairment relative to potential, the possible use of excessive coping strategies, and to look at all aspects of functioning to determine whether ADHD has an impact. For some adults, even when they appear functional in their jobs, a closer inspection reveals that they are using strategies that compensate for their weaknesses. Take into account the impacts of those compensatory strategies in the assessment and treatment process. These strategies may be hazardous and result in the person becoming a workaholic, having poor employee-employer relations and lacking career progression. It can also cause great frustration and emotional distress in family members, business partners and others.

My patient has come to my office with a self-made diagnosis after reading about the symptoms. How can I separate out what is real from what they want to believe? Many popular publications and TV shows about ADHD use questionnaires that may be too vague and may be applicable to too many people in the population. That is not to say that the patient's self-assessment is wrong. But sometimes the self-diagnosis represents an underlying belief that there is a “miracle pill” that will make lifelong problems or more serious disorders go away. Spending the time to carefully evaluate and educate is necessary to ensure an appropriate diagnosis and treatment.

ADHD patients are demanding, always late, and difficult to deal with so I don't want to treat them! The clinician will miss an opportunity to treat a person who is very treatable and who may be presenting as above due to a lifelong history of disappointments with authority figures. Don't take it personally. They need empathic understanding.

Case Presentations

Physicians should have a high index of suspicion of possible ADHD in patients who have a lifelong history of problems with attention, disruptiveness or impulsive behaviour. These difficulties may become apparent during routine care in patients who demonstrate typical forms of impairment. Notable flags might include:

- organizational skill problems (e.g. missed appointments, poor time management, a desk that has a mountain of paper, unfinished projects, inability to comply with medication or follow instructions)
- an erratic work history (e.g. changed jobs frequently, fired due to lateness, forgetting appointments and/or being unprepared for meetings, difficulty delegating tasks, describing employers, employees, or clients as frustrated with them)
- anger control problems (e.g. argumentative behaviour with authority figures, being overly controlling as parents, fighting with their child's teachers, "wild-man" rage episodes)
- patients who are over-talkative, interrupt frequently or inappropriately (for example, talking loudly on a cell phone in the waiting room), run out to re-park the car, answer their phone during an exam)
- marital problems (e.g. spouse complains he/she doesn't listen, makes impulsive remarks during arguments, forgets important events like birthdays and anniversaries, past relationship breakdowns)
- parenting problems (e.g. forgets to give child medication routinely, difficulty establishing and maintaining household routines such as bedtime and meals, difficulty getting child to school)
- money management problems (e.g. fails to do taxes, makes frequent overdrafts, runs out of money, buys things "on a whim" they can't afford)
- substance use or abuse (e.g. especially alcohol and marijuana), excessive caffeine or energy drink consumption)
- addictions such as collecting/hoarding, compulsive shopping, sexual avoidance or addiction, overeating, compulsive exercising, gambling)
- frequent accidents, involvement in risk-taking or extreme sports)
- problems with driving (e.g. speeding tickets, serious accidents, license revoked or, alternatively, choosing not to drive or driving too slowly in an attempt to compensate for attention problems).

Other common presentations that should be followed by screening include:

- a parent whose child(ren) has ADHD and who notes they have similar problems
- a college student who requires a diminished course load, is frustrated that it is taking a long time to get through school, or is returning to school and re-experiencing earlier problems
- an individual who was diagnosed in childhood and is still having problems
- a patient whose parent or spouse identifies them as being "just like" information they have been exposed to on ADHD.

2. Screening

Current Symptom Screen

Administer and Score the World Health Organization's Adult Self Report Scale (ASRS-V1.1, 18 item)

If the patient screens negative on this scale they are not likely to have ADHD. The threshold score is $\geq 4/6$ on Part A. If they screen positive, the clinician should screen for the other major DSM-5 criteria and

exclude other diagnoses that may appear similar to ADHD. Refer to Chapter 2 on Differential Diagnosis and Comorbid Disorders. *The ADHD Checklist can then be used for current symptoms.*

Developmental Screen

Did you have difficulty with these problems before you entered into puberty?

The patient must fulfill the diagnostic criterion that states the symptoms must be evident in childhood before the age of 12²⁴⁶. Collateral information from a reliable source is often necessary. *The ADHD Checklist can then be used to retrospectively assess symptoms in childhood.*

Impairment Screen

Are these symptoms causing difficulty in your life right now?

Patients who have screened positive on the ASRS and describe the problems as long-standing and impairing should receive a full psychiatric assessment for ADHD. *Functional impairment can then be explored with the WFIRS-S.*

3. History and Physical Exam (Expansion of the Current Symptom Screen)

Practice Point: ADHD is often associated with a particular cognitive style that is a variation of concreteness, over-inclusiveness and distractibility. This includes: talking excessively, getting stuck on relatively minor events (over-inclusive speech), inappropriately intense emotions, going on and on in response to open-ended questions (circumstantial speech), getting distracted by things in the office which interrupt their thought processes (tangential speech), and talking as if they are being understood without reading social cues that indicate otherwise¹³⁵⁻¹³⁷. If they seem to have pressured speech (talking so fast that the words sometimes seem intelligible) make sure it is not due to anxiety. If they seem to be jumping from idea to idea, it could be that anxiety is forcing them to try to get all the information in so their ideas are disjointed. Slow them down to see if this is really “loosening of associations” or a thought disorder.

It is useful to speculate on what the childhood diagnosis would have been if you had seen them then, though the current diagnosis by the current clinical presentation may be different. For example, they may have been ADHD combined presentation as a child but now meet the criteria for ADHD inattentive presentation. This suggests that their core hyperactivity-impulsivity may have improved, been compensated for, or have changed in quality so that it is less obvious.

Collecting the Relevant Information

Combining symptom-based questionnaires with a thorough clinical history is the first step in evaluation of the diagnosis . The questionnaires should be administered first, but seen last, and *only* after the clinical opinion from the interview is made. It is important to be trained to see adults with ADHD and clinicians should be directed to the www.caddra.ca website for updates on training programs and to the CADDRA eLearning portal www.adhdlearning.caddra.ca for online presentations and training modules.

The CADDRA ADHD Assessment Form is available in the CADDRA ADHD Assessment Toolkit (CAAT) section of the Guidelines or can be downloaded and printed from the CADDRA website. It is a simpler and more user-friendly form than those in previous CADDRA Guideline editions. The clinician’s office stamp and patient reference details can be inserted at the top of the page. The form mimics the natural progression of the clinical interview in order to make information gathering and recording relatively easy. It can also be used to remind the clinician of important facts for dictation and communication.

Symptom-based Rating Scales The Toolkit scales include the ASRS, ADHD Checklist, Weiss Symptom

Record (WSR) and the Weiss Functional Impairment Rating Scale (WFIRS). Other scales not in the Toolkit include the CAARS, BADDS and Adult BRIEF. These tools should *never* be used to establish the diagnosis as they have an inherent observer bias. If you want to have a particular diagnosis, you will score high and if you don't, you will score low, consciously or unconsciously. Scales assist in the clinician's history-taking and screen for relevant cases. They are also valid instruments in follow-up. When used serially and recorded by the same person, they reflect true symptom change. Rating scales other than those in the Toolkit also have the additional disadvantage that they are licensed or commercial products and expensive. Clinicians should try to get rating scales completed by additional informants, e.g. spouses, parents, adult siblings.

Physical Exam

Medical issues change in adulthood so a careful screen for hypertension, cardiovascular problems, early dementia, arthritis from previous injuries, obesity, poor dental hygiene, glaucoma, traumatic brain injuries and past injuries for accidents is crucial¹³⁸⁻¹⁴¹. ADHD patients have double the medical morbidity in comparison to the rest of the population¹⁴².

Practice Point: *The physical examination, if not done by the treating physician, must still be documented. This is important from practical, clinical and medico-legal points of view. The attending physician should still do a functional enquiry.*

4. Childhood History of ADHD – (Expansion of the Developmental Screen)

Adult ADHD Developmental History

One of the diagnostic criteria for ADHD in DSM-5 is that onset is prior to the age of twelve, compared to onset prior to the age of seven as in DSM-IV-TR. This is an issue because an adult patient may not be able to reliably recollect whether or not he or she had symptoms as a young child. The DSM-IV-TR criterion was criticized for other reasons as well¹⁴³. Adults may not have access to collateral sources that can verify their symptoms before the age of seven. The primary school curriculum is largely focused on skill development so that an individual of very high intelligence who is not disruptive may not show impairment until he/she is older. Clinicians with a long experience of evaluating adults have often commented on the unique stamp that ADHD puts on the developmental history of a patient from childhood through to the time of assessment with regard to the singular quality of the impairments. DSM-5 gives a better description of the adult ADHD presentation²⁴⁶ and takes into account the fact that the total number of symptoms may diminish with age.

However, a good clinical history should demonstrate that the patient had evidence of similar problems throughout the lifecycle and that these were most prominent in situations that required attention. ADHD is a developmental disorder which does not have an acute onset. The ADHD Checklist can be used to retrospectively assess symptoms in childhood. It can be completed by the adult and whenever possible by someone who knew him/her well in childhood, for example the parents of the adult.

Many adults have developed compensatory strategies to better cope with the impact of ADHD in their life. Look for those coping strategies, but also how they manage to function in particular situations, not just with academics. ADHD may have been a burden, especially during transition phases, from the teenage period to adulthood. Look how they juggle implementing daily routines, taking care of themselves and balancing the act between work and parenting. Explore time, but also money, management; driving; sleeping; and eating habits. Measure the costs of ADHD relative to impairment and add the cost of all the coping strategies they need to put in place when you assess and decide what kind of treatment should be implemented (compensatory burden).

5. Impairment – (Expansion of the Impairment Screen)

Weiss Functional Impairment Rating Scale Self-Report (WFIRS-S)

The clinician can obtain a sense of the areas in which the patient has functional impairment by reviewing the WFIRS-S. Items that are circled within the “most of the time” and “all of the time” sections can be discussed in more detail when later completing the assessment form to determine the nature of the impairment and how it relates to ADHD symptoms. Identifying aspects of a patient's life that are impaired will help guide discussions about therapeutic interventions.

6. History of Past Psychiatric Health and Medications

While the current symptoms, the developmental history, and the history of impairment are the critical findings for screening, they are not sufficient to make a diagnosis.

Past Psychiatric History

A careful history of the problem(s), intervention and response is needed.

- Misinformed therapists in the past may have interpreted ADHD behaviours dynamically, further complicating the problem. This is not unusual in couple therapy where a patient's undiagnosed ADHD symptoms may be misinterpreted as unconscious hostility or passive-aggressive behaviour.
- A careful past psychiatric history helps to sort out the sequence of onset of symptoms, which may be helpful in differentiating between primary and secondary disorders.
- Review of past problems permits the clinician to assess the patient's capacity for psychological mindedness and the interpretive framework they use to explain past illness. Depending on which intervention they have received, it is also possible to obtain insight into whether they are likely to respond to problem-solving approaches, interpersonal interventions, cognitive behavioural techniques, behaviour therapy or restructuring of the demands of their environment.

Medication History

While many patients are treatment-naive, more often than not a patient has already tried various antidepressants and other psychotropic medications. It is not unusual that a patient may have tried his/her child's medication to determine whether it will work for him/her.

Practice Point: *Get the telephone number(s) of the patient's pharmacist(s) and get a printout of his/her medication history. Ask the patient to bring pill bottles in or have the family physician that does the medical exam document the medications. Consider a urine drug test for patients where there is any reason to suspect drug abuse or drug-seeking behaviour.*

Document what medication the patient has taken, the duration of treatment, their response and any side effects, particularly ones that were unexpected or reflective of toxicity. Assess the patient's level of insight by comparing his/her report to that of the collateral informant. Assess for tolerance to medication by observing dose response over time and impact of drug holidays.

7. Family History

Background

Evaluation of family background provides the clinician with a sense of the person's upbringing. Families do not cause ADHD, but ADHD combined with family dysfunction is more disabling and increases impairment and risk.

Practice Point: Be sure the interview is both sensitive to the patient's culture and non-judgemental.

Family Psychiatric History

This history is significant in a disorder where heredity is related in about 80% of cases¹⁴⁴. Ask if either parent, a sibling, or any of their children have a confirmed history of ADHD; learning problems; tics or Tourette's syndrome; depression; anxiety; anger problems; difficulty with the law; drug or alcohol problems; psychotic illness; personality problems; suicide; or needed to take medication for emotional illness. The patient may speculate on a relative's illness and the reliability of these speculations needs to be evaluated clinically . If there is not a family history, it seriously undermines the strength of the diagnosis.

8. Screening For Comorbid Disorders

ADHD in adults is often comorbid with another disorder. A long-term follow-up study has shown that the critical period to develop co-occurring problems is early in the lifetime course, from teenage to young adulthood²⁶¹. Refer to Chapter 2 on *Differential Diagnosis and Comorbid Disorders* for clinical information. The Weiss Symptom Record can be used as a means to clarify comorbid symptoms. While not diagnostic, it is helpful to the clinician to differentiate associated disorders. Additional rating scales can be used to proceed from the screener (e.g. The Hamilton Rating Scale for Depression (HAM-D)¹⁴⁵, The Hamilton Anxiety Rating Scale (HAM-A)¹⁴⁶, Yale-Brown Obsessive Compulsive Scale (Y-BOCS)¹⁴⁷ – these scales are not provided in this document).

9. Feedback

Diagnosis

The patient who meets all of the criteria below has ADHD:

1. **meets symptom criteria** on the DSM-5 rating scales on self-report and/or collateral report and clinician interview. Some patients lack insight and do not self-report symptoms but have clear evidence of symptoms on clinical interview. Other patients have excellent insight but their collateral informant does not know them well enough to identify a problem
2. has a developmental history consistent with ADHD and **childhood symptoms of ADHD**
3. shows a past and current pattern of **functional impairment** consistent with ADHD
4. has **no other disorder that can explain** the symptoms.

The following should NOT be used to dismiss a diagnosis of ADHD:

1. the clinician does not observe hyperactivity in the office
2. the patient reports a great deal of problems with organization, time management and executive function but is reliable in keeping appointments, filling out forms and paying for treatment
3. the patient comes in saying they have read about ADHD and thinks they have this problem
4. there is no family history
5. the spouse or parent suggests symptoms of ADHD which the patient dismisses
6. the patient is well educated or employed in a high level position
7. the patient is very bright, and early school report cards do not describe problems with attention or behaviour. For some, increased autonomy and challenge lead to evidence of impairment in later years. Other patients may, on further exploration, give a very convincing account of unusual coping strategies such as excess time on homework or increased need for assistance

8. the patient was clearly hyperactive, impulsive and inattentive when younger but currently only has difficulty with a few residual symptoms. In some, limited impairment is still clinically significant
9. the patient does not remember or denies symptoms in childhood, and school report cards are not available. Usually a careful developmental history will reveal evidence of the impact of the disorder, even if the patient did not have insight, either at the time or now, into the symptoms that provoked these consequences.

Some associated features may contribute to confidence in the diagnosis:

1. typical associated symptoms include procrastination, oppositional attitudes, difficulty with time, insomnia, reactivity, underachievement relative to potential, variable performance, temper outbursts
2. pattern of impairment is consistent with the sorts of impairments known to characterize the disorder such as problems with listening in class, working efficiently, paying bills, completing taxes, driving, smoking, etc.
3. positive family psychiatric history
4. typical comorbidities: these patients may have poor auditory processing, poor written output, poor reading comprehension, abuse of substances (e.g., marijuana, cocaine, nicotine or caffeine) and mood lability. Typical comorbid problems in childhood include ear infections, enuresis, learning disabilities, oppositional defiant disorder, tourette's syndrome or tics
5. the pattern of developmental challenges matches the typical course of ADHD. For example, someone may have problems with circle time as a toddler, difficulty with homework in grade three, poor choice of friends in middle school, skipping and acting out in high school, car accidents, impulsive financial decisions in adulthood, be attractive to others but have trouble keeping friends, be self-employed in a high energy job, and be accident-prone as a child and adult.

10. Treatment Considerations – Uncomplicated Adult ADHD

ADHD is not unlike other chronic developmental disorders in that treatment needs to be multimodal and the patient will require support and follow-up over time. Ongoing education regarding strategies for coping, in addition to medication, permits the patient to obtain developmental and functional gains that would not otherwise have been possible.

A typical sequence of interventions would be:

Psychoeducation¹⁴⁸⁻¹⁵⁰

The symptoms of ADHD relevant to this patient and the way in which these contribute to functional impairment are reviewed, with discussion of examples of how similar symptoms in the past impacted on the patient's capacity to cope with developmental challenges.

Behavioural Intervention and Goal Setting

The patient's original goals are reviewed and additional treatment planning is initiated. This might include short-term counselling. It might include problem-solving around residual deficits with executive function or activities of daily living. Improved insight into the relationship between ADHD and actual functioning often leads patients to make significant life changes to decrease their stress. For example, a student realized he was not yet ready to cope with college and decided to get a job as a mechanic (something he loved) and to take night courses for a year. A bank teller changed jobs and became a waitress and hairdresser, two positions that she could function in easily. A father realized he found watching his son's baseball games very boring, which was leading to friction between them. Since they both loved to ski, he became his son's ski instructor instead.

Assistive and Organizational Technologies

Various hardware and software are available to diminish a patient's reliance on working memory, to compensate for poor handwriting, and improve time management. These include, but are not exclusively limited to:

- Dragon Naturally Speaking® (voice-recognition software) www.nuance.com/dragon/index.htm
- Kidspiration® & Inspiration® (learning, communication & organization skills) www.inspiration.com
- Kurzweil 3000® (scanning and reading software) www.kurzweiledu.com
- Word Q® (writing software and word prediction) www.goqsoftware.com
- Write Out Loud® (talking word processor) www.writersblocks.com

For adults who have not learned to type, any common typing program, like Mavis Beacon Teaches Typing®, should be utilized to increase typing proficiency. Programmable watches, electronic PDA organizers and smart phones (iPhone®, BlackBerry®, android phones) are also very useful in integrating many of the organization tasks and often have the advantage that they can be synchronized with desktop computers. These devices can also be used as electronic reminders or cuing devices to help with remembering medications and appointments.

Medication Trial Efficacy/Safety

When appropriate, trial of any of the first line medications listed in Chapter 7 is initiated followed by a review of symptoms, management of adherence, observation for any negative psychiatric side effects such as anger or dysphoria, and the use of symptom ratings by the patient and collateral informant looking for improvement. Choice of medication is determined by issues such as:

- cost of medications
- the time of day of impairment (of most concern)
- tolerance of adverse events (such as insomnia)
- risk of substance abuse
- comorbid disorders
- capacity for adherence
- urgency of response
- and the patient's choice upon reviewing the risks and benefits of each medication option.

Optimization of Treatment

CB Some symptom reduction will occur with medication intervention but true optimal treatment must include lifestyle changes. Optimal treatment is reached when the patient's level of impairment is brought within the normal range and remission of symptoms occurs.

Follow-up

Most patients should receive regular follow-up by their community physician who will: a) adjust and maintain optimal medication effect; b) maintain the patient's motivation and refer for additional treatments when needed.