



ADHD occurs in one of twenty adults, according to the largest psychiatric survey conducted in the United States (Kessler R et al, 2006). In this study, seventy-five percent of the adults with ADHD were not diagnosed as children. Most children have been diagnosed because of problematic and disruptive behavior. However, children who are inattentive type (those without much impulsivity/hyperactivity) are often missed in childhood. They may be getting average grades and are thought to be average students or they get good grades and coast through school. Those students with poor academic performance will be evaluated in a school for learning disabilities and/or ADHD.

Although it is estimated that sixty-five percent of children with ADHD are treated for their ADHD in the past year, only approxi-

mately twenty percent of adults with ADHD have been treated in the past year. With a prevalence rate for adult ADHD at 4.4 percent, this means ten million adults in the United States are affected. It is difficult to estimate the number of U.S. adults over age fifty who have ADHD. A recent study in the Netherlands surveyed adults age fifty and older and found a prevalence rate of 2.8 percent (Michielsen M et al, 2012). So, although symptoms of ADHD may diminish over time, there are still people who fulfill diagnostic criteria.

Unfortunately, ADHD may not be a diagnostic consideration when older people complain of cognitive difficulties. A study looking at memory clinics in this country found that only one in five centers screen for ADHD. Therefore, it is possible that ADHD symptoms may

Over Age Fifty

be misdiagnosed as something else (Fischer BL 2012). Given that ADHD is a cognitive impairment, people wonder if ADHD is a risk factor for developing dementia. A recently published study looking at the question concluded that ADHD is not a risk factor for dementia (Ivanchak N, 2011). We'll await further research. With the DSM-5 now released, the diagnostic criteria for ADHD are about to change for adults.

Historically, one needed to have six or more symptoms out of nine in the inattention category and/or six or more symptoms out of nine in the hyperactive/impulsive category. The symptoms also had to be chronic and start before age seven. In addition, although ADHD was formally recognized in the DSM-IV as persisting into adulthood, the symptoms were described as they relate to children. Therefore, clinicians had to extrapolate the description of symptoms in adults. With the age criteria of seven, it was often difficult for adults to recall symptoms so early in life, thereby leaving this criterion unfulfilled.

The DSM-5 changes several criteria. The age threshold is raised to age twelve; adults are much better at recalling symptoms up to this age. Also, the symptom count criteria of six of nine, while remaining for children and adolescents, will now be five of nine in inattention and/or hyperactivity/impulsivity. The diagnostic working committee for the criteria discussed a symptom count four of nine, but it was thought that this might lead to overdiagnosis.

Diagnostic considerations in older adults

Let's get back to Joe, the sixty-four-year-old who was eventually referred to see me for an evaluation of cognitive complaints. Remember what his ex-wife said? "It's nothing new." So, it's long-standing? He tells me he was a "problem kid," referring to disruptive and oppositional behavior as a child and adolescent. He finished high school but had "terrible grades." He attended college and impulsively left six months before graduation. Married and divorced five times, he has six children by two marriages. He worked as an electrician for ten years until he opened a nightclub. For twenty-seven years, he developed the nightclub into a successful, premier location in a large city. In 2004, the business was forced to close. Since that time, he's had a few jobs, but

his finances have dwindled. Although he had a twenty-year history of binge drinking and drug use, he has been drug and alcohol free for twenty-six years. When he comes to see me he says, "I need help with getting things done."

Diagnosing ADHD in a person this age presents unique challenges, because there are specific medical and psychiatric considerations in someone over age fifty. If we just focus on the cognitive symptoms, the first issue is how much of the cognitive symptoms

they will affect our thinking ability.

are age-related. As we age we will notice some forgetfulness, difficulty in recalling information quickly, losing a train of thought, and getting distracted. What distinguishes this from ADHD is the fact that the symptoms started much later in life and not in childhood.

The second possibility is a new diagnostic category in the DSM-5, called Mild Cognitive Impairment. This is a degree of cognitive change accompanied by impairment but not rising to the level of Alzheimer's disease. A third possibility is the effects of medication on cognition. As we age, we will develop medical illnesses treated with medication that may have subtle effects on cognition (such as statins, antidepressants, or chemotherapy). The more medications we are on, the more likely

Fourth, medical illnesses themselves may affect our thinking ability (such as hypothyroidism, post-cardiac surgery). Fifth, women in peri- or post-menopause often notice clear changes in memory and cognition. Sixth, a long history of alcohol and/or substance abuse may cause lasting cognitive symptoms. Seventh, head trauma/concussion/neurological disorders may leave persistent changes on memory and processing speed for information (such as multiple concussions from sports injury).

What distinguishes all of the above diagnostic considerations is the age of onset of these symptoms. Except for the possibility of head trauma in childhood, all the other diagnostic considerations occur later in life. The hallmark of ADHD is the presence of symptoms in childhood.

Joe tells me that one son was diagnosed with ADHD by a specialist. He says that both his father and sister "are just like me," referring to poor education history, multiple marriages, sudden moods and rages, and substance and alcohol abuse. This family psychiatric history becomes important in supporting the ADHD diagnosis because ADHD is highly genetic with seventy-five percent of the cause related to genes.

With a comprehensive history, we have established long-standing ADHD symptoms since childhood that have been chronic and impairing into adulthood and a family history of likely ADHD in first-degree relatives.

MYTHS ABOUT ADHD OVER AGE FIFTY

- Can't diagnose ADHD in the presence of older age.
- Can't diagnose ADHD in the presence of medical disorders and medications.
- Why bother treating it, they lived their whole life this way.
- The ADHD medications aren't safe in older adults.

Coexisting disorders and treatment options

To be comprehensive, the psychiatric evaluation needs to include an inquiry of other possible coexisting psychiatric disorders. The goal is to list the disorders present and not present. This process allows the clinician to decide which disorder gets treated first, second, and third. The object of treatment is to treat one disorder without making the other disorders worse.

The Kessler study demonstrated that forty-seven percent of adults with ADHD had a coexisting anxiety disorder (the most common being social anxiety), and thirty-eight percent had a coexisting mood disorder. Frequently, an undiagnosed ADHD adult will go to a primary care provider and complain about anxiety ("I'm anxious about losing my job because of tardiness") or depression ("I think my spouse is going to leave me"). One study found that older adults with more severe ADHD symptoms were more likely to suffer with anxiety and depression (Michielsen et al, 2013) than those with less severe ADHD symptoms. The anxiety and depression symptoms may be treated, but ADHD remains unidentified because it was never assessed.

The treatment for anxiety and/or depression may be partially helpful, but the person is still left impaired from the ADHD, which continues to generate negative consequences in his or her life. Alcohol and/or substance use disorders, past and present, are also common. In the presence of chronic alcohol and/or substance use, it may be difficult to determine cognitive symptoms from substance use versus ADHD. However, remember that ADHD symptoms start in childhood.

Once all the coexisting psychiatric disorders are enumerated, a diagnostic prioritization should occur. Which disorder is treated first, second, and so forth? At present, the recommendation for adults with ADHD is this: Severe alcohol/substance use disorders first, severe and acute mood disorders next, followed by severe anxiety disorders, and finally ADHD (Goodman DW et al, 2011).

Why set it up this way? The cognitive symptoms of ADHD can be seen in the other untreated disorders. Therefore treatment of those severe disorders first will better allow us to evaluate the ADHD cognitive symptoms. Another reason for this prioritization is that the medications we use for ADHD run the risk of worsening the other untreated coexisting disorders. Remember, the goal is to treat one disorder without making the others worse.

Treatment options for older adults with ADHD are similar to younger people. Medication and/or behavioral and organizational techniques are the initial recommendations depending on the severity of symptoms and the environmental demands of the person's life.

Medications that are FDA-approved specifically for ADHD in adults are the stimulants Adderall XR, Concerta, Focalin XR, Vyvanse, and the nonstimulant Strattera. The approved maximum age for use of these medications varies from fifty-five to sixty-five. These ages are determined by the drug trial research that capped the inclusion of subjects at a certain age (for example, Vyvanse at age fifty-five while Adderall XR at age sixty-five). This is not to suggest that these medications are not effective or safe in people with ADHD older than sixty-five. Unfortunately, insurance coverage for medication may be denied payment when a person's age is older than the maximum age in the FDA drug description. The denial of coverage may be overridden with additional medical documentation from a physician.

When using these medications, there are three categories of medical issues to be reviewed:

- ADHD medication side effects exacerbated by age.
- ADHD medications interaction with existing medical illnesses.
- ADHD medication interaction with other prescribed medication and/ or over-the-counter medications.

In older adults, there may be several nontherapeutic effects of ADHD

medications. Appetite reduction is common but often diminishes as the person remains on the medication. However, I often advise patients to take advantage of this initial effect to modify food choices and lose a few pounds. Dry mouth may be an issue, especially with age-related oral gum recession. Chronic dry mouth will exacerbate gingival recession, increase the likelihood of cavities, and make swallowing food more difficult. Also, dry mouth with dentures may create problems.

If the ADHD medication is effective, there are medications that can be used to increase salivation if the usual recommendation of sugarless gum/hard candy or over-the-counter products proves inadequate. Tremor may be more likely to occur with age, and it is worsened with ADHD medication. When first starting on ADHD medications, I advise patients to reduce, if not eliminate, caffeine intake, which will worsen tremor. If tremor is persistent and bothersome, low-dose long-acting propranolol is helpful.

Complications from medical illnesses

Several illnesses may complicate the treatment of ADHD. Older adults with ADHD have significantly higher rates of cardiovascular disorders and chronic nonspecific lung disease than age-matched individuals (Semeijn E et al, 2013). These higher rates were not associated with lifestyle choices (such as smoking or alcohol use). Older adults with ADHD also rated their physical health as worse than the control group.

For those people with high blood pressure, stable control of hypertension is suggested before instituting ADHD medication, as these medications (including the nonstimulant Strattera) may cause elevations in blood pressure or pulse rate. If elevation in blood pressure or pulse occurs with ADHD medication, then medication adjustments can be made to bring these parameters into normal range. I often advise patients over age fifty with blood pressure and/or pulse changes to get an arm blood pressure cuff to monitor changes at home. It is not uncommon for patients to have a high blood pressure or pulse reading in my office ("white coat syndrome") but to have normal readings at home. Such monitoring prevents the premature prescription of unneeded medication.

People who have had heart attacks or stent placement may be able to use ADHD medications safely after consulting their cardiologist. These medications can be used in people with mitral value prolapse that does not cause palpitations. Neurological disorders such as previous head trauma, stroke, or seizure disorder are not necessarily an obstacle for ADHD medication use. Diabetes is not a limitation to the use of ADHD medication. However, if appetite suppression is significant, adjustment in diabetic medication may be necessary. Occasionally I'll have patients whose blood sugars are better controlled on ADHD medication because snacking is reduced and they are able to remember to take the diabetes medication consistently.

Prescription medication, over-the-counter medication, and herbal or other supplements may have interactions with ADHD medications. These interactions break out into two categories: interactions that affect metabolism of drugs or interactions of drugs at receptors. For an example of drug metabolism change, the use of Prozac or Wellbutrin (both antidepressants) will slow metabolism of Strattera, necessitating lower doses of Strattera. An example of drugs effecting receptors would be the use of Wellbutrin and a stimulant that will increase the likelihood of a tremor

With age, people are often prescribed multiple medications, so the complexity of drug interactions becomes a serious consideration in treatment. I have provided a few illustrative example of a subject that can be an article in itself. I recommend making a list of all medications and over-the-counter medications/herbs/supplements and reviewing it with your physician prescribing ADHD medication.



ADHD DIAGNOSTIC CONSIDERATIONS FOR OLDER ADULTS

- 1. Age-related cognitive decline
- 2. Mild Cognitive Disorder (new category in the DSM-5)
- 3. Medications
- 4. Medical illnesses
- 5. Peri- or post-menopause
- 6. Long history of alcohol/drug use
- 7. Neurological illness
- 8. History of head trauma/concussions

Pills and skills

Beyond medication for ADHD, psychotherapies are an important component of treatment. Therapists often say that "pills don't teach skills," and I heartily endorse this position. Another way to say this is that treatment consists of "pills and skills."

Since the primary impairing deficits for older adults are attentional and organizational, the immediate focus of therapy is behavioral skills for organization, time management, task prioritization, task shifting, and task-time allocation. Although there are some basic principles for organization, one-on-one therapy helps to individualize the skills to specific areas of impairment. For example, the person may have a specific problem tracking work tasks or mis-prioritizing what needs to get done. Another person may have a spouse who complains about inconsistent follow-through with task completion, while someone else can't seem to be punctual.

While an organizational coach may be helpful, the professional needs an understanding of and experience with individuals with ADHD in order to modify the approach for someone who is inherently forgetful and distractible. The basic premise of behavioral skills training is that the new behavior has to be done at the same time, in the same way, every day for a month to become a new behavioral routine. There is substantial research that supports a cognitive behavioral therapy approach (Weiss M et al, 2008).

There are two additional critical issues for patients with ADHD. After twenty-five years of patient care experience, older patients repeatedly tell me about their sense of lost opportunities and their negative self-image. Imagine that you spent your whole life with blurred vision. You could only read because you increased the letter size on your computer or read only large print. One day, someone gives you glasses and you realize how much more you can read. Then you realize how much you've missed in the past. The "what-ifs" of one's life becomes an important issue for many people who get these "glasses." This is the experience of newly diagnosed and effectively treated older adults.

The other issue is self-image. Those not treated have lived in a world that thought they were not capable ("dumb") and not motivated ("lazy"). After hearing that for years, it becomes one's self-image: "I'm not too smart, I screw up, I'm not dependable, and people are always annoyed with me." After treatment, people find that they can do much more. They begin to realize the difference between who they are and what they have: "I am not my disorder. Love me and hate my disorder." In my experience, this is the most important component to successful treatment. It incorporates acceptance of the disorder, a distinction in who I am as a capable person, and the fact that treatment is an effective way to improve the quality of my life and those around me.

Remember Joe? I know, it's been awhile since I mentioned him. Well, I started him on a long-acting stimulant and we discussed organizational skills. His blood pressure and pulse remained within normal while being treated for hypertension. Within two months of treatment, he had gathered investors and started renovations for a large nightclub. Seven months after treatment, with a staff of fifteen, his nightclub is now one of the most popular evening locations and is generating profits. He finds that he is more thoughtful and faster with decisions (much fewer careless oversights and forgetfulness) and more diplomatic when working with staff (much less verbally impulsive). Joe wouldn't endorse any of the myths of ADHD in older adults. Ask him about his ADHD treatment and he says, "It's like a new beginning. I'm so happy that I'm back in the game [of life]." ①

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