Brian P. Daly
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Advances in Psychotherapy –
Evidence-Based Practice

# ADHD in Adults

2nd edition

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## About the Authors

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# Attention-Deficit/ Hyperactivity Disorder in Adults

## 2nd edition

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# Contents

complex as symptoms for both disorders are most apt to have persisted over a long period of time.

### 1.5.3 Anxiety Disorders

It has been estimated that approximately 20% of individuals with ADHD also have been diagnosed with a comorbid anxiety disorder and that individuals with ADHD are more likely to experience anxiety than individuals without ADHD (Larson et al., 2011). Symptoms of anxiety include inattention and impaired concentration, which are core symptoms of ADHD. It also is noteworthy that individuals with generalized anxiety disorder may also appear restless, overactive, and fidgety, which are pervasive symptoms among individuals with ADHD. Thus, in attempting to clinically distinguish between the two disorders, the astute practitioner must evaluate whether such symptoms and behaviors are associated with persistent worries and fears that would be consistent with the core symptoms of an anxiety disorder. Identifying the causality and directionality of these symptoms is paramount in differentiating between ADHD and anxiety disorders. For example, among individuals with ADHD, challenges associated with inattention and completing work are likely to result in anxiety and stress. However, among individuals with anxiety disorders, stress and worry may result in an inability to concentrate and thus result in the inability to complete tasks.

### 1.5.4 Trauma- and Stress-Related Disorders

There is some evidence in the extant literature that children with ADHD are at greater risk for sexual abuse (for a review, see Wolfe & Kelly, 2021) and many adults seeking evaluation for ADHD may have experienced traumatic events during childhood thereby making it a challenge to distinguish symptoms due to ADHD from PTSD. Irritability, difficulty concentrating, and sleep disturbances, which are core characteristics of PTSD, also are experienced by many adults with ADHD. Given the remarkable symptom overlap between the two disorders, practitioners would be wise to be cognizant of the symptom presentation for both disorders and to ascertain a complete history as to the emergence of ADHD symptoms and traumatic events. The history is important since ADHD is a disorder with a prolonged course with symptoms that are present from childhood while PTSD typically has a more sudden onset and is typically associated with a specific event (for a review, see Wolfe & Kelly, 2021).

### 1.5.5 Bipolar and Related Disorders

Core symptoms of bipolar disorder may include a high level of energy, restless behavior, impatience, impulsive speech, trouble focusing, and a reduced

**Table 1**
**Adult ADHD Rating Scales**

| Rating scale | Description |
|---|---|
| **Clinician-rated scale** | |
| Adult ADHD Clinical Diagnostic Scale (ACDS) | Semistructured interview to evaluate current adult symptoms of ADHD. |
| Brown Attention-Deficit Disorder Scale (BADDS) | Four-point symptom frequency rating scale. Focuses mostly on symptoms of inattention. |
| Conners' Adult ADHD Diagnostic Interview (CAA-DID) | Eighteen-item scale that contains separate queries for childhood (retrospective) and adult ADHD symptoms. |
| **Self-report behavior rating scale** | |
| Barkley Adult ADHD Rating Scale-IV | Assesses age of onset of symptoms and associated impairment across settings. |
| Brown Adult ADHD Rating Scale | Four-point frequency rating scale that assesses cognitive symptoms associated with difficulty initiating and maintaining optimal concentration and arousal. |
| Copeland Symptom Checklist for Adult ADHD | Sixty-three questions that measure a broad range of cognitive, emotional, and social symptoms on a three-point severity scale. |
| Adult ADHD Self-Report Scale (ASRS) | Frequency-based scale that matches the 18 items in the *DSM-IV*. Includes situational "context" for describing symptoms. |
| Wender Utah Rating Scale | Retrospective five-point severity scale of childhood ADHD symptoms. |
| **Informant symptom inventories** | |
| Barkley Adult ADHD Rating Scale-IV | Assesses age of onset of symptoms and associated impairment across settings. |

**It is important that practitioners evaluate for symptoms and their level of impairment**

It is recommended that clinicians not simply assess for symptoms, but also evaluate the level of functional impairment related to such symptoms. Important domains of impairment that should be assessed include family interactions, peer relationships, and vocational performance. One way to evaluate these domains is through direct observation or functional behavioral assessments. However, these observations or assessments are typically more difficult to complete with adult patients. Therefore, rating scales such as the BAARS-IV: Other-Report can be used to assess the degree of ADHD impairment across different settings such as home and work. Again, it must be underscored that to qualify for a diagnosis of ADHD, the adult must evidence some degree of functional impairment in at least one setting as well as a sufficient number of symptoms for the disorder.

smoke may be a risk factor for ADHD in children (Huang et al., 2021). Notably, findings from these research studies did not identify mechanisms to explain this association.

### 2.2.2 Environmental Toxins

The results from several studies indicated that some toxins and organic pollutants are associated with symptoms of ADHD, including prenatal exposure to polychlorinated biphenyls (i.e., manufactured compounds that are highly resistant to extreme temperature and pressure) and postnatal exposure to organophosphate pesticides and lead (Thapar et al., 2013; Yolton et al., 2014).

### 2.2.3 Food Additives/Dietary Factors

Systematic studies that examined food additives and dietary factors have only found associations, and not causal relationships, with ADHD. Specific nutritional deficiencies (e.g., iron, zinc, iodine, polyunsaturated fatty acids) and additives (e.g., sugar, artificial food colorings) have all been linked to ADHD (Del-Ponte et al., 2019; Thapar et al., 2013). Although some study findings suggest there may be dietary interventions that could reduce ADHD symptoms, research to date has not included randomized control trials to support any specific dietary intervention (Breda et al., 2022).

## 2.3 Psychosocial Adversity Factors

Psychosocial adversity factors have been demonstrated to increase the risk of ADHD or even exacerbate the severity of symptoms of the disorder. In a seminal investigation on this issue, Rutter and colleagues (1975) demonstrated that the aggregate of six risk factors within a family, rather than the presence of any single factor, contributed to psychopathology. Factors included marital discord, low social class, large family size, paternal criminality, maternal mental disorder, and foster care placement. In particular, SES and ethnic minority status have been associated with lower rates of treatment adherence (Fernandez & Eyberg, 2009). Moreover, in the MTA study, a significant association between economic difficulties and barriers to treatment adherence have been clearly demonstrated (Rieppi et al., 2002). Thus, in their work with disadvantaged clients, the practitioner must be acutely aware of the impact of SES on parent engagement with treatment and must take active initiatives to assist families in overcoming such treatment barriers.

Regarding racial and ethnic minority status, while no differences in prevalence rates have been demonstrated, there is some compelling evidence to suggest that African Americans and Latino individuals are identified as ADHD at lower rates and less likely to receive services relative to

## 3.1 Assessment Procedures

**Obtaining collateral information is important for the assessment process**

When conducting a comprehensive evaluation to determine whether an adult meets criteria for a diagnosis of ADHD, it is recommended that practitioners obtain as much collateral information as available from other people who know the client well, such as a partner, spouse, or caregiver. According to the *DSM-5*, to qualify for an ADHD diagnosis during adulthood, there must be a history of several hyperactive-impulsive or inattentive symptoms (prior to 12 years of age) during childhood. These criteria allow for the possibility of an individual reporting several symptoms of ADHD but no associated impairment during childhood to then meet diagnostic criteria for ADHD later in life.

Multimethod assessment of ADHD in an adult should include the following components: (1) a thorough developmental history that includes a focus on social, behavioral, and medical history; (2) clinical interviews with the client and if possible the client's partner or parents; (3) rating scales or checklists completed by multiple informants for the purpose of capturing a broad perspective with regard to behaviors that may be associated with ADHD across settings (home, work, other activities); and (4) an evaluation of comorbid psychiatric diagnoses or learning disabilities.

Other assessment procedures that are more time intensive but may prove helpful in the diagnostic process include home or community observations and psychoeducational or neuropsychological testing for the purpose of assessing learning disabilities. Direct observations of the client's behavior in the home or recreational settings can be useful because they provide a way for the clinician to gain information about symptom expression in naturalistic contexts. Moreover, they capture an array of behaviors that a single office visit may not reveal. Although this information clearly can be informative to the diagnostic process, many mental health professionals who work with adult clients do not find this activity to be feasible because of the significant time requirement and lack of reimbursement. While psychoeducational or neuropsychological testing does not identify ADHD, these assessments can be useful for identifying other cognitive comorbidities such as specific learning disorders. The tools discussed in the following sections do not represent an exhaustive list of all available ADHD assessment techniques: Instead, these sections examine critical components of an ADHD evaluation and highlight corresponding evidence-based assessment strategies. For a more thorough discussion of the assessment of adult ADHD, see Lovett and Harrison (2021).

### 3.1.1 General Considerations

**Spouses, family members, or close friends may have different viewpoints regarding ADHD symptoms**

The diagnostic process ultimately must include assessing whether or not the adult meets criteria according to *DSM-5-TR* or *ICD-10* diagnostic criteria. There are several important issues for clinicians to consider prior to conducting an evaluation of an adult suspected of having ADHD. First, some adults with ADHD, like their younger counterparts, may have limited awareness of their difficulties and the resulting impairment and therefore may even

**Table 2**
**FDA-Approved Medications for the Management of ADHD Symptoms**

| Type | Class | Brand name | Form | | Common side effects |
|---|---|---|---|---|---|
| | | | Short-acting | Long-acting | |
| **Stimulant medications** | Amphetamine | Adderall | ✓ | | Loss of appetite, weight loss, sleep difficulties, irritability, tics |
| | | Adderall XR | | ✓ | |
| | | Adzenys ER | | ✓ | |
| | | Adzenys XR-ODT | | ✓ | |
| | | Desoxyn | | ✓ | |
| | | Dexedrine | Intermediate | | |
| | | Dyanavel XR | | ✓ | |
| | | Evekeo | ✓ | | |
| | | Evekeo ODT | ✓ | | |
| | | Mydayis | | ✓ | |
| | | ProCentra | ✓ | | |
| | | Vyvanse chewable | | ✓ | |
| | | Vyvanse capsule | | ✓ | |
| | | Zenzedi | ✓ | | |
| | Methylphenidate | Adhansia XR | | ✓ | |
| | | Azstarys | | ✓ | |
| | | Aptensio XR | Intermediate | | |
| | | Concerta | | ✓ | |
| | | Cotempla XR-ODT | | ✓ | |
| | | Daytrana patch | | ✓ | |
| | | Focalin | ✓ | | |
| | | Focalin XR | | ✓ | |
| | | Jornay PM | | ✓ | |
| | | Metadate CD | Intermediate | | |
| | | Metadate ER | | ✓ | |
| | | Methylin chewable | ✓ | | |
| | | Methylin ER | Intermediate | | |

### 4.1.4 Psychosocial and Psychological Therapies

**Psychosocial and psychological treatments may be useful for adults with ADHD**

The research related to psychosocial and psychological treatments for adults with ADHD is more limited than research related to pharmacological approaches for treating adult ADHD. Findings from a recent meta-analysis of the long-term efficacy of psychosocial treatments for adults with ADHD revealed that treatment groups evidenced greater improvement than control groups in self-reported total ADHD symptoms, inattention, and hyperactivity/impulsivity, and on a measure of global functioning, and these gains were generally maintained for at least 12 months (López-Pinar et al., 2018). The most employed and studied psychosocial and psychological therapies for adults with ADHD include coaching and CBT, metacognitive therapy (e.g., time-management and organizational-skills training), and supportive and family therapy. Also reviewed below are neurofeedback and cognitive-enhancement therapies (see Section 4.1.8) given their increasing use for treating ADHD among young people and adults. Finally, aspects of psychoeducation (Section 4.1.9), which should always be a component of ADHD treatment, are described.

### 4.1.5 Coaching and CBT

Coaching and CBT, which can be delivered in individual and group formats, share many components in that both modalities seek to provide structure for the adult suffering with ADHD and focus on teaching coping and problem-solving skills for identified problems. When working with an adult with ADHD, the following coaching and CBT strategies may be used as part of a treatment plan: (1) helping the client to gain acceptance of the disorder; (2) strengthening their time-management skills; (3) setting realistic goals; (4) improving their organizational skills across settings; (5) addressing difficulties in interpersonal relationships; (6) develop behavioral goals for starting and completing tasks; and (7) helping clients to better understand the association between their emotional reactions and ADHD (Kooji et al., 2010). Strategies more directly associated with CBT include helping clients identify and modify negative cognitions associated with avoidance of tasks ("As usual, this is too hard to do"), lack of motivation (e.g., "I am too lazy"), and negative affect (e.g., "I am no good") (Safren et al., 2005). Therapists then assist the client in challenging these dysfunctional cognitions with the goal of diminishing hopelessness as well as improving motivation. A systematic review of psychosocial treatments of ADHD in adults concluded that CBT was the most effective treatment modality for reducing symptoms of ADHD as well as comorbid symptoms of anxiety and depression (Vidal-Estrada et al., 2012). A recent systematic review and meta-analysis indicated that the available evidence supports a recommendation for CBT for adults (Tourjman et al., 2022). For an in-depth review of CBTs for adults with ADHD, see Knouse (2015).

# 5

# Case Vignettes

## Julie (college student)

Julie is a 19-year-old Caucasian student in the second term of her first year at college. Although she reported expending a great deal of effort in her coursework, Julie had received failing grades on her midterms in two history courses. She made an appointment at the counseling center on campus to discuss her academic difficulties. Julie had always been interested in history and had been considering a career in academia but, after her struggles with her history classes, she wondered whether she needed to change her major and professional plans. Julie described an active social life and has felt the strain of competing academic and social pressures.

During elementary school, junior high, and high school, Julie consistently struggled in class with inattention, distractibility, and disorganization of materials. She would often daydream during class and her teachers needed to frequently redirect her attention back to the course material. Fortunately, Julie attended a small private school with a low student–teacher ratio, so her teachers were able to provide her with a significant amount of support for staying focused and engaged during class. Julie was always seated next to a peer that could help her stay on task and repeat instructions that she missed.

Julie reports having ongoing difficulties with organization. She noted trouble keeping track of important papers, and often losing clothing or other items. Julie's mother was very involved in her life during the elementary and secondary school years. Julie reports that her mom helped her maintain a daily assignment book, organize her class materials, clean her room, and complete homework. Without her mom's daily support, Julie found the first term of college to be much more challenging than high school, and her academic performance in college has been a disappointment to her. However, during her initial term, she attended the college's freshman seminar program, and received quite a bit of individual attention, which she says was quite helpful. During the current term, she is enrolled in two large lecture classes and two smaller seminar classes. Although some of the material from lectures is accessible in the textbooks, Julie feels she has a difficulty time maintaining her attention during the lectures and it is difficult taking adequate notes. She feels competent during small interactive classes and has received high grades for her assignments in these classes but has failed the multiple-choice tests that comprise a major portion of her grade in both courses. Julie is especially