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

ADHD in Adults

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Attention-Deficit/Hyperactivity Disorder in Adults

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Advances in Psychotherapy – Evidence-Based Practice

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Attention-Deficit/ Hyperactivity Disorder in Adults

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Library of Congress Cataloging in Publication information for the print version of this book is available via the Library of Congress Marc Database under the LC Control Number 2015950766

Library and Archives Canada Cataloguing in Publication

Daly, Brian P., author

Attention-deficit/hyperactivity disorder in adults / Brian P. Daly, Elizabeth Nicholls, Ronald T. Brown. -- 1st edition.

Includes bibliographical references.

Issued in print and electronic formats.

ISBN 978-0-88937-413-3 (paperback).--ISBN 978-1-61334-413-2 (html).--
ISBN 978-1-61676-413-5 (pdf)

1. Attention-deficit disorder in adults--Textbooks. I. Nicholls, Elizabeth, 1980-, author II. Brown, Ronald T., author III. Title.

RC394.A85D35 2015 616.85'89 C2015-906159-8
C2015-906160-1

Cover image © iStock.com/Yuri_Arcurs

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http://www.hogrefe.com

PUBLISHING OFFICES

USA: Hogrefe Publishing Corporation, 38 Chauncy Street, Suite 1002, Boston, MA 02111
Phone (866) 823-4726, Fax (617) 354-6875; E-mail customerservice@hogrefe.com

EUROPE: Hogrefe Publishing GmbH, Merkelstr. 3, 37085 Göttingen, Germany
Phone +49 551 99950-0, Fax +49 551 99950-111; E-mail publishing@hogrefe.com

SALES & DISTRIBUTION

USA: Hogrefe Publishing, Customer Services Department, 30 Amberwood Parkway, Ashland, OH 44805
Phone (800) 228-3749, Fax (419) 281-6883; E-mail customerservice@hogrefe.com

UK: Hogrefe Publishing, c/o Marston Book Services Ltd., 160 Eastern Ave.,
Milton Park, Abingdon, OX14 4SB, UK
Phone +44 1235 465577, Fax +44 1235 465556; E-mail direct.orders@marston.co.uk

EUROPE: Hogrefe Publishing, Merkelstr. 3, 37085 Göttingen, Germany
Phone +49 551 99950-0, Fax +49 551 99950-111; E-mail publishing@hogrefe.com

OTHER OFFICES

CANADA: Hogrefe Publishing, 660 Eglinton Ave. East, Suite 119-514, Toronto, Ontario, M4G 2K2

SWITZERLAND: Hogrefe Publishing, Länggass-Strasse 76, CH-3000 Bern 9

Format: PDF

ISBN 978-0-88937-413-3 (print) • ISBN 978-1-61676-413-5 (PDF) • ISBN 978-1-61334-413-2 (EPUB)
http://doi.org/10.1027/00413-000

Acknowledgements

Dr. Daly wishes to thank his wife, Kristin, a wonderful spouse, friend, and parent, whose enthusiasm and spirit are things of beauty. He thanks his siblings for their support, friendship, and guidance over the years. Dr. Daly also is grateful to his current and past lab members for all of their hard work and many contributions.

Elizabeth Nicholls wishes to express her sincere gratitude toward her husband, Billy, sister, Rebecca, mentors Drs. Daly and Arango-Lasprilla, and colleagues for their support and encouragement.

Dr. Brown acknowledges the lessons taught to him by many of the children and adults with ADHD with whom he has worked over the years, as well his mentors in the field who have provided unwavering support in his scholarly endeavors.

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Description

1.1 Terminology

Attention-deficit/hyperactivity disorder (ADHD) is a neurodevelopmental disorder marked by persistent patterns of inattention and/or hyperactivity-impulsivity symptoms that emerge during childhood and are functionally impairing across settings. This particular book recognizes that the disorder can persist over the lifespan and well into adulthood. *The Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5; American Psychiatric Association [APA], 2013) assigns the following codes for this disorder:

314.01 Attention-Deficit/Hyperactivity Disorder, Combined Presentation
314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Presentation
314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive/Impulsive Presentation
314.01 Other Specified Attention-Deficit/Hyperactivity Disorder
314.01 Unspecified Attention-Deficit/Hyperactivity Disorder

The *International Classification of Diseases*, 10th Edition, Clinical Modification (ICD-10-CM; World Health Organization [WHO], 2014) lists ADHD under codes F90.9 Attention-Deficit Hyperactivity and F90.0 Attention-Deficit Without Hyperactivity. First described in the medical literature in the late 1700s (Barkley & Peters, 2012), ADHD-related symptoms were previously referred to by labels including "minimal brain damage," "minimal brain dysfunction," "hyperkinetic impulse disorder," "hyperactive child syndrome," "hyperkinetic reaction of childhood," and "attention deficit disorder," among others (Taylor, 2011). Changes in terminology generally reflect evolving theoretical conceptions based on etiology, symptoms of the disorder, and its management.

1.2 Definition

1.2.1 Diagnostic Criteria

According to the DSM-5, ADHD represents "a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development" (APA, 2013, p. 61) as defined by the following diagnostic criteria listed in Table 1.

Table 1
DSM-5 Diagnostic Criteria for ADHD

A. A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development as characterized by (1) and/or (2):

1. **Inattention:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities. **Note:** The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. *For older adolescents and adults (ages 17 and older), at least five symptoms are required.* [Emphasis added.]
   a. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).
   b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).
   c. Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
   d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).
   e. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
   f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).
   g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
   h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).
   i. Often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).
2. **Hyperactivity and impulsivity:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities. **Note:** The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or a failure to understand tasks or instructions. For older adolescents and adults (ages 17 and older), at least five symptoms are required.
   a. Often fidgets with or taps hands or feet or squirms in seat.
   b. Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
   c. Often runs about or climbs in situations where it is inappropriate. (**Note:** In adolescents or adults, may be limited to feeling restless).
   d. Often unable to play or engage in leisure activities quietly.
   e. Is often "on the go," acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants,

Table 1 (continued)

meetings; may be experienced by others as being restless or difficult to keep up with).
f. Often talks excessively.
g. Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for turn in conversation).
a. Often has difficulty waiting his or her turn (e.g., while waiting in line).
b. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

B. Several inattentive or hyperactive-impulsive symptoms were present prior to age 12 years.

C. Several inattentive or hyperactive-impulsive symptoms are present in two or more settings (e.g., at home, school, or work; with friends or relatives; in other activities).

D. There is clear evidence that the symptoms interfere with, or reduce the quality of, social, academic, or occupational functioning.

E. The symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better explained by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, personality disorder, substance intoxication or withdrawal).

Specify whether:
314.01 (F90.2) Combined presentation: If both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past 6 months.
314.00 (F90.0) Predominantly inattentive presentation: If Criterion A1 (inattention) is met but Criterion A2 (hyperactivity-impulsivity) is not met for the past 6 months.
314.01 (F90.1) Predominantly hyperactive/impulsive presentation: If Criterion A2 (hyperactivity-impulsivity) is met and Criterion A1 (inattention) is not met for the past 6 months.

Specify if:
In partial remission: When full criteria were previously met, fewer than the full criteria have been met for the past 6 months, and the symptoms still result in impairment in social, academic, or occupational functioning.

Specify current severity:
Mild: Few, if any, symptoms in excess of those required to make the diagnosis are present, and symptoms result in no more than minor impairments in social or occupational functioning.
Moderate: Symptoms or functional impairment between "mild" and "severe" are present.
Severe: Many symptoms in excess of those required to make the diagnosis, or several symptoms that are particularly severe, are present, or the symptoms result in marked impairment in social or occupational functioning.

According to ICD-10-CM (WHO, 2014), the diagnostic criteria for ADHD are as listed in Table 2.

Table 2
ICD-10 Diagnostic Criteria for ADHD

Behavioral and emotional disorders with onset usually occurring in childhood and adolescence (F90–F98)

F90 Hyperkinetic Disorders: A group of disorders characterized by an early onset (usually in the first 5 years of life), lack of persistence in activities that require cognitive involvement, and a tendency to move from one activity to another without completing any one, together with disorganized, ill-regulated, and excessive activity. Several other abnormalities may be associated. Hyperkinetic children are often reckless and impulsive, prone to accidents, and find themselves in disciplinary trouble because of unthinking breaches of rules rather than deliberate defiance. Their relationships with adults are often socially disinhibited, with a lack of normal caution and reserve. They are unpopular with other children and may become isolated. Impairment of cognitive functions is common, and specific delays in motor and language development are disproportionately frequent. Secondary complications include dissocial behavior and low self-esteem.

Excludes:

Anxiety disorders
Mood [affective] disorders
Pervasive developmental disorders
Schizophrenia

F90.0 Disturbance of activity and attention

Attention deficit:
Disorder with hyperactivity
Hyperactivity disorder
Syndrome with hyperactivity

Excludes:

Hyperkinetic disorder associated with conduct disorder

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1.2.2 Applicability of Criteria for Adults

For a diagnosis of ADHD, the DSM-5 and ICD-10 require that symptoms are present during childhood

It is important to note that ADHD criteria in previous editions of the DSM and ICD were initially designed for children, and controversy exists regarding the appropriateness of the nomenclature for adults (Barkley, Murphy, & Fischer, 2008; Kessler et al., 2010; Simon et al., 2009). Most prominently, the diagnostic requirement of childhood onset of symptoms in the DSM-5 (i.e., some symptoms present before the age of 12 years) and ICD-10 (i.e., symptoms usually in the first 5 years of life) can be very difficult for a clinician to assess retrospectively when conducting a diagnostic assessment with an adult (Barkley et al., 2008). In addition, the presentation of ADHD symptoms may differ considerably between adults and children. For instance, ADHD among

adults appears to be characterized more by deficits in executive functioning and attention than by hyperactivity or impulsivity as is frequently characteristic among children and adolescents. Moreover, some research suggests fewer symptoms are needed to reliably identify adults with ADHD (Barkley et al., 2008; Kessler et al., 2010). In light of these concerns, the DSM committee reduced the symptom threshold from six in the *Diagnostic and Statistical Manual of Mental Disorders,* 4th Edition, Text Revision (DSM-IV-TR; APA, 2000) to five in the DSM-5 for adults over the age of 17 years (APA, 2013). Despite the importance of executive function among adults with ADHD, the ADHD symptom list itself was not expanded in DSM-5 to include more features of executive dysfunction.

1.3 Epidemiology

1.3.1 Prevalence and Incidence

Although ADHD was once believed to primarily be a childhood condition (Hill & Schoener, 1996), the disorder is now increasingly recognized as one of the most common mental health conditions in adults (Kessler et al., 2010). In a large investigation, Kessler and colleagues (2006) reported that 4.4% of 3,199 adults participating in the 2004 National Comorbidity Survey met criteria for ADHD. Findings from several other studies suggest that symptoms not meeting the diagnostic threshold for ADHD may be even more widespread. For example, Faraone and Biederman (2005) assessed 966 adults for "narrow ADHD" (in which respondents reported six or more current ADHD symptoms as occurring often) or "broad ADHD" (in which respondents reported six or more current ADHD symptoms as occurring at least sometimes). Results revealed that while only 2.9% of adults met narrow ADHD criteria, 16.4% of the study participants met criteria for broad ADHD (Faraone & Biederman, 2005). Higher rates of adult ADHD have also been reported in community samples: for instance, it is estimated that 20% of parents of children with ADHD actually meet criteria for ADHD themselves (Kooij et al., 2010). In terms of the global prevalence of adult ADHD, Fayyad and colleagues (2007) found that 3.4% of 11,422 adults interviewed across the Americas, Europe, and the Middle East met criteria for ADHD, with higher prevalence rates obtained among adults living in higher-income countries.

The global prevalence of ADHD among adults is 3.4%

1.3.2 Sex

ADHD is diagnosed more frequently in men than in women (Fayyad et al., 2007; Kessler et al., 2006), but sex differences are less prominent in adults as compared with children (Simon et al., 2009). More specifically, adult men in community samples are 1.5 times more likely (odds ratio = 1.1–1.9) than women to meet ADHD criteria (Fayyad et al., 2007), compared with male to female ratios of 2:1 (or higher) reported in a pediatric cohort (Polanczyk & Rohde, 2007). Notably, in the narrow-versus-broad ADHD study discussed

ADHD is more frequent in males than females

above, Faraone and Biederman (2005) identified no significant sex effects for a strict definition of ADHD in adults, but significantly more men (19.4%) than women (13.4%) met criteria for broad ADHD. In terms of diagnostic subtypes, while boys do tend to display more hyperactivity and impulsivity and girls more inattention during childhood, sex differences in ADHD symptom phenotype are less marked in adults (Biederman, Faraone, Monuteaux, Bober, & Cadogen, 2004).

1.3.3 Age

ADHD is typically first identified during the preschool or elementary years, when functionally impairing symptoms become evident to parents and teachers (APA, 2013; Kooij et al., 2010). Many adults who were diagnosed with ADHD as children report their symptoms have diminished with age; however, it is estimated that 32% to 45% of adults diagnosed with ADHD during childhood will continue to meet full criteria for the disorder (Faraone & Biederman, 2005; Kessler et al., 2010). Although ADHD research has historically focused on adults who were first diagnosed as children, a growing number of individuals are seeking initial treatment for ADHD in adulthood (Robison, Sclar, & Skaer, 2005). Notably, many of these individuals self-refer for evaluation because attentional difficulties, which tend to be more persistent throughout the lifespan as compared with the symptoms of hyperactivity or impulsivity, interfere with work, relationships, and higher-education pursuits (Kessler et al., 2010; Kooij et al., 2010). Some experts maintain that the disorder remains underrecognized in adults secondary to more subtle symptom presentations, stigma, and the frequency of comorbid psychiatric conditions (Kooij et al., 2010).

1.3.4 Ethnicity

ADHD occurs across all nationalities and cultures

ADHD has been reported in adults across cultures and nationalities. For example, an international study that screened for ADHD in selected countries in the Americas, Europe, and the Middle East reported prevalence rates of 1.2% (Spain) to 7.3% (France) (Fayyad et al., 2007). As mentioned previously, higher prevalence rates were identified in higher-income countries (Fayyad et al., 2007). Relationships between race, ethnicity, and adult ADHD within the United States are not well-established. One epidemiological study suggested that within the United States, ADHD is slightly more prevalent in non-Hispanic White as compared with non-Hispanic Black or Hispanic/Latino populations, but the authors also note that these findings may reflect differences between ethnic groups in persistence of symptoms or cultural factors associated with self-report (Kessler et al., 2006).

1.4 Course and Prognosis

ADHD is considered a chronic disorder in which symptoms typically present during early childhood (APA, 2013). Approximately 50% of adults diagnosed with ADHD during childhood continue to experience some level of clinically significant symptom impairment through adulthood (Faraone, Biederman, & Mick, 2006). Notably, the extant literature suggests that symptom presentation has a distinct course as individuals age. More specifically, symptoms of hyperactivity and impulsivity are prominent in preschool, whereas inattention becomes increasingly problematic in elementary school (APA, 2013; Kooij et al., 2010). In adulthood, hyperactivity tends to decrease in severity as inattention, restlessness, and impulsivity become more prominent with age (APA, 2013). In fact, of those adults diagnosed with ADHD during childhood, the majority (95%) experience inattention, whereas only a third (35%) report problems with hyperactivity and/or impulsivity (Faraone & Biederman, 2005; Kessler et al., 2010). More persistent symptoms are associated with higher familial rates of ADHD (Kooij et al., 2010).

ADHD frequently persists into adulthood

Without appropriate symptom management, ADHD during adulthood can negatively impact academic, social, and work functioning (Biederman, 2004; Kessler et al., 2005; Kooij et al., 2010). For example, adult ADHD each year results in the loss of 120 million days of work in the United States (Kessler et al., 2005), and adults with ADHD also report significantly lower educational attainment (Faraone & Biederman, 2005) relative to their typically developing peers. These individuals may present in school and work settings as distractible, disorganized, and sensitive to stress – all factors that can compromise advancement and achievement (Kooij et al., 2010). Another factor closely related to the prognosis of ADHD in adulthood is the prevalence of comorbid mental health disorders. An estimated 38.3% of adults with ADHD meet criteria for a mood disorder, 47.1% meet criteria for an anxiety disorder, and 15.2% have comorbid substance abuse (Kessler et al., 2006). Prognosis may also be impacted by family functioning in childhood, in terms of the environmental impact on development of comorbid conduct issues and other mental health concerns (APA, 2013).

Relatively poor outcomes reported for adults with ADHD must be interpreted in light of experts' suspicions that underrecognition of the disorder has led to underdiagnosis and inadequate treatment (Kooij et al., 2010). Indeed, Kessler and colleagues (2006) reported that of 3,199 American adults with ADHD, only 10.9% had received treatment for ADHD within the previous year. However, outcomes in adults with ADHD who receive appropriate treatment (to be discussed in later chapters of this volume) are encouraging. For example, psychosocial and pharmacological interventions for adult ADHD can produce improvement in cognitive performance, attention, inhibition, psychological functioning, family and relationship functioning, self-confidence, and comorbid substance abuse (Faraone, Spencer, Aleardi, Pagano, & Biederman, 2004; Kooij et al., 2010; Rostain, 2008; Solanto, Marks, Mitchell, Wasserstein, & Kofman, 2008; Wender, Wolf, & Wasserstein, 2001). Unfortunately, these interventions are not curative; effective management of adult ADHD is likely to require long-term psychological and psychopharmacological management (Kooij et al., 2010).

Table 3
Overlapping Symptoms Between ADHD and Other Psychiatric Disorders

ADHD	ODD	CD	Depression	Anxiety	OCD	Adjustment disorder	Bipolar disorder	PTSD	Substance use/abuse
Inattention symptoms									
Fails to give close attention to details or makes careless mistakes in work			X	X					X
Difficulty sustaining attention in tasks			X	X	X	X	X	X	X
Does not seem to listen when spoken to directly			X						X
Does not follow through on instructions and fails to finish duties in the workplace			X				X		X
Difficulty organizing tasks and activities			X				X		
Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort				X					X
Loses things necessary for tasks or activities			X						X
Easily distracted by extraneous stimuli							X		X
Forgetful in daily activities			X						X
Hyperactivity and impulsivity symptoms									
Fidgets with or taps hands or feet, or squirms in seat				X			X		X
Leaves seat in situations when remaining seated is expected				X			X		

Table 3 (continued)

ADHD	ODD	CD	Depression	Anxiety	OCD	Adjustment disorder	Bipolar disorder	PTSD	Substance use/abuse
Runs about or climbs in situations where it is inappropriate	X						X		X
Unable to play or engage in leisure activities quietly							X		X
Often "on the go" acting as if "driven by a motor"				X			X		X
Talks excessively							X		X
Blurts out an answer before a question has been completed							X		
Has difficulty waiting his/her turn	X	X					X		
Interrupts or intrudes on others	X	X					X		
Nondiagnostic associated characteristics									
Mood lability						X	X		X
Low self-esteem			X			X		X	X
Temper outbursts	X	X					X	X	X
Demoralization			X					X	X
Dysphoria			X						X (during withdrawal)

Note. CD = conduct disorder; ODD = oppositional defiant disorder; OCD = obsessive-compulsive disorder; PTSD = posttraumatic stress disorder.

1.5 Differential Diagnosis

Even for skilled practitioners, differential diagnosis in adults with ADHD is challenging. Many adults first suspect they may have ADHD when their children are diagnosed with the disorder, or when they seek medical advice for problems related to depression, anxiety, or addiction. Making a precise diagnosis is complicated by the fact that several neuropsychiatric, substance use, and medical and physical disorders share some of the signs and symptoms of ADHD and therefore need to be distinguished by the practitioner (see Table 3). The categories in which symptomatic overlap may occur most frequently include anxiety and mood disorders (e.g., anxiety, depression, posttraumatic stress disorder, bipolar disorder), personality disorders (e.g., borderline and antisocial personality disorder), substance use disorders (SUDs; e.g., alcohol, cocaine), neurological disorders (e.g., seizure disorder), physical or medical conditions (e.g., traumatic brain injury, endocrine and metabolic disorders, sleep apnea), and psychosocial or environmental factors (e.g., trauma, stress, sudden life change). Because these conditions may mimic or co-occur with ADHD, the clinician should consider alternative explanations, and if appropriate, diagnose each condition separately, because each diagnosis may require a specific mode of treatment. It also is important that any particular medical symptoms or conditions continue to be ruled out or excluded.

Weiss, Trokenberg-Hechtman, and Weiss (1999) describe features of ADHD in adults that are often central to their patients' experience, but do not currently appear among the criteria listed in the DSM-5 (see Table 4). They identify procrastination, a persistent sense of failure, poor time management, and a tendency to take on more tasks than can be completed, as core presenting symptoms of adults with ADHD.

Table 4
Adult Presentations of ADHD Symptoms

DSM-5 Criteria for Inattentive Subtype	Adult Presentation
Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or other activities.	Adults with ADHD may experience trouble remembering where they have put things. This may lead to problems at work. They may struggle with tasks that require attention to detail or that are tedious, such as income tax preparation.
Often has difficulty sustaining attention in tasks or play activities.	Adults with ADHD may fail to complete tasks, such as cleaning a room, without interrupting the task to begin a new one. They may be unable to sustain their attention long enough to read a book, write letters, pay bills, or keep accounts.
Often does not seem to listen when spoken to directly.	Adults with ADHD may be told that they are inadequate listeners, that they do not seem to understand what was said, or that it is hard to obtain their attention. They may often appear "tuned out."

Table 4 (continued)

DSM-5 Criteria for Inattentive Subtype	Adult Presentation
Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace.	Adults with ADHD can experience challenges in following others' instructions, and may struggle to read or follow directions in manuals. They also may fail to follow through on the commitments they have made.
Often has difficulty organizing tasks or activities.	Adults with ADHD may exhibit chronic lateness, and often miss deadlines and appointments. They may delegate some tasks to others, such as a spouse or secretary, who are more capable in this domain.
Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (for older adolescents and adults: preparing reports, completing forms, reviewing lengthy papers).	Adults with ADHD often put off responding to mail, answering letters, organizing papers, paying taxes or bills, or establishing appropriate insurance or a will. They often report difficulties with procrastination.
Often loses things necessary for tasks or activities.	Adults with ADHD may lose their keys or wallets easily. They may forget where they parked their car. Parents may have difficulty remembering their children's schedules and their obligations for transportation or appointments.
Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).	Adults with ADHD can feel distracted or overwhelmed by stimuli in their environment. Sometimes parents may respond to the normal behavior of their children by feeling overwhelmed.
Often forgetful in daily activities.	Adults with ADHD may report problems with memory and planning.
Often fidgets with or taps hands or feet or squirms in seat.	Adults with ADHD can exhibit observable fidgeting, including shaking their knees, tapping their hands or feet, changing their positions, or picking their fingers.
Often leaves seat in situations in which remaining seated is expected.	Adults with ADHD may have trouble sitting still during conversations, or have difficulties with restlessness in situations where they must wait.
Often runs about or climbs in situations where it is inappropriate (Note: In adolescents or adults, this may be limited to feeling restless).	Adults with ADHD sometimes report feelings of needing to be constantly "on the go" or requiring stimulating activities. Patients may pace or fidget during interviews.

Table 4 (continued)

DSM-5 Criteria for Inattentive Subtype	Adult Presentation
Often unable to play or engage in leisure activities quietly.	Adults with ADHD are often reluctant to stay at home or to partake in quiet activities. Many individuals report being "workaholics." In this case, an assessment should evaluate the details of the patient's need for constant work.
Is often "on the go," acting as if "driven by a motor."	Family members, friends, and intimate partners may report that they experience fatigue after being around adults with ADHD. They may have trouble meeting the pace and expectations of adults with ADHD.
Often talks excessively.	For adults with ADHD, constant verbiage may make conversational exchanges difficult, and can prevent others around them from feeling heard or understood.
Often blurts out answers before a question has been completed.	Health professionals may observe this feature in adults with ADHD. Some individuals may experience this symptom as related to their perceptions that other people are talking too slowly and that it is difficult to wait for them to finish speaking.
Often has difficulty waiting his or her turn.	Adults with ADHD can experience difficulties waiting for children to finish tasks at a developmentally appropriate pace, and can have trouble waiting in line.
Often interrupts or intrudes on others (for adolescents and adults, may intrude into or take over what others are doing).	Adults with ADHD may interrupt frequently in social or work situations, which can result in feelings of social ineptness.

Note. Adapted from Weiss et al. (1999).

1.5.1 Disruptive, Impulse-Control, and Conduct Disorders

ADHD combined presentation and ADHD predominantly hyperactive/impulsive presentation share some common core characteristics and symptom patterns such as impulsive behavior, interrupting or intruding on others, and difficulty awaiting one's turn with disruptive behavioral disorders such as *oppositional defiant disorder* (ODD), *conduct disorder* (CD), or *intermittent explosive disorder* (IED). Although these disorders are frequently identified in children and adolescents, diagnostic criteria in the DSM-5 indicate that these disorders may be diagnosed in adults if criteria are not met for antisocial