Overlapping Symptoms With Attention-Deficit/Hyperactivity Disorder (ADHD)

Much of the symptomatology of Attention-Deficit/Hyperactivity Disorder (ADHD) is suggestive of executive dysfunction and loss of inhibitory control. Similar symptoms can be present across a host of psychiatric and neurologic conditions and, unfortunately, no single ADHD symptom is diagnostic. As there is no singular definitive symptom or test for ADHD, clinicians should consider ADHD a diagnosis of exclusion. In this way, the clinician evaluating for ADHD must at least consider and rule-out common conditions that would alternatively explain their patient's presentation. Further complicating the diagnostic picture is the fact that many of the conditions described below commonly co-occur with ADHD, sometimes referred to as "complex ADHD" (APA, 2022). Cases of diagnostic uncertainty should be referred to a pediatric or mental health subspecialist for more comprehensive assessment (Barbaresi et al., 2022).

When evaluating a child for suspected ADHD and considering the differential diagnosis, it is helpful to remember the following guidelines (Wolraich et al., 2019):

- At least some of the symptoms of ADHD must be present prior to the age of 12 years. For many children, onset of symptoms will be much younger. Onset of symptoms after the age of 12 cannot be diagnosed as ADHD.
- ADHD symptoms occur in more than one setting (e.g., school, home, church, recreation). Symptoms that only occur at home, for example, are not consistent with an ADHD diagnosis. It is therefore often necessary to obtain collateral information from other sources (after obtaining and documenting consent), such as teachers or other caregivers.
- ADHD symptoms are inconsistent with developmental level and therefore symptoms are noticeably more pronounced than their peers. This is another reason collateral information, particularly from school, is usually necessary.
- Symptoms that occur exclusively during periods of substance use/misuse/withdrawal cannot be diagnosed as ADHD.

The following symptom overlap chart is provided as a quick reference to aid clinicians in the differential diagnosis of ADHD. Note that the chart is not comprehensive but includes many of the conditions whose presentation can be confused with ADHD. Also note that it is possible for ADHD to co-occur with any of the diagnoses listed on the following page.

Overlapping Inattentive Symptoms with ADHD

Inattentive Symptoms	ADHD	GAD	MDD	BP	ASD	TSD	LD	ODD	ID
Frequently overlooks details or making careless mistakes	X	X	X	X	X	X	X		X
Often has difficulty maintaining focus on one task or play activity	X	X		X		X	X		X
Often appears not to be listening when spoken to, including when there is no obvious distraction	X	X	X	X	X	X		X	X
Frequently does not finish following instructions, failing to complete tasks	X		X	X	X	X	X	X	X
Often struggles to organize tasks and activities, to meet deadlines, and to keep belongings in order	X		X	X	X	X			X
Is frequently reluctant to engage in tasks that require sustained attention	X								
Frequently loses items, including those required for tasks	X			X					X
Is frequently easily distracted by irrelevant things, including thoughts in adults and teenagers	X			X	X	X			
Often forgets daily activities, or is forgetful while completing them	X		X	X					X

KEY

ABBREVIATION	DISORDER
ADHD	Attention-Deficit/Hyperactivity Disorder
GAD	Anxiety Disorders
MDD	Depressive Disorders (Unipolar or Bipolar)
BP	Bipolar Disorder (Mania or Hypomania)
ASD	Autism Spectrum Disorder
TSD	Trauma-and-Stressor-Related Disorders
LD	Learning Disorders
ODD	Oppositional Defiant Disorder
ID	Intellectual Disability
SUD	Substance Use Disorders
SD	Sleep Disorders

Overlapping Hyperactive-Impulsive Symptoms With ADHD

Hyperactive-Impulsive Symptoms	Diagnosis								
	ADHD	GAD	MDD	BP	ASD	TSD	LD	ODD	ID
Is often fidgeting or squirming in seat	X	X		X		X			
Frequently has trouble sitting still during dinner, homework, at work, etc.	X	X		X					
Frequently runs around in inappropriate situations: In adults and teenagers, this may be present as restlessness.	X	X		X					
Often cannot quietly engage in leisure activities or play	X			X					
Frequently seems to be in constant motion, or uncomfortable when not in motion	X	X		X					
Often talks too much	X			X		X			
Often answers a question before it is finished, or finishes people's sentences	X				X				
Often struggles to wait his or her turn, including waiting in lines	X			X	X			X	
Frequently interrupts or intrudes, including into others' conversations or activities, or by using people's things without asking.	X			X	X			X	

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Differentiating ADHD From Other Diagnoses	
Diagnosis	**Distinguishing Factors**
Anxiety	One of the core symptoms of many anxiety disorders is difficulty concentrating or maintaining attention. Individuals with anxiety are inattentive because their focus is turned inward by worry or rumination. In contrast, those with ADHD struggle with inattention and distractibility because their attention is drawn outward by novel stimuli or excessively held by pleasurable activities. Additionally, individuals with anxiety often engage in restless behaviors that can mimic hyperactivity.
Depressive Disorders (Unipolar or Bipolar)	Individuals with depressed mood frequently experience poor concentration. However, the symptoms of depression are episodic rather than continuous and diminished concentration will occur alongside other depressive symptomatology such as changes in sleep patterns, appetite, feelings of guilt, and anhedonia. The symptoms of ADHD, on the other hand, are not episodic and are present at some level most or all the time.
Bipolar Disorders (Mania or Hypomania)	Increased energy, poor concentration, distractibility, and impulsivity are core symptoms of manic or hypomanic mood states. However, elevated mood states occur as discrete episodes that are a change from the patient's baseline behavior. In contrast, those with ADHD display symptoms on a more continuous basis. Further, those with mania or hypomania will display other symptoms consistent with their mood disorder such as grandiosity, decreased need for sleep, racing thoughts, or risk-taking behavior out of the norm from their baseline.
Autism Spectrum Disorder	Those with Autism Spectrum Disorder (ASD) display symptomatology that involves impairment in social skills, communication, restricted interests, and repetitive behaviors. There can be broad differences in symptom severity within this group. In addition, some children with ASD have intellectual and/or language impairments as well. Many of their symptoms can look like those seen in ADHD. Communication or social skill deficits can be mistaken for inattentiveness to conversation or instructions. A strong desire to preferentially engage with restricted interests can be misinterpreted as lack of attention or distractibility. Stereotyped behaviors can be misunderstood as hyperactive behavior.
Trauma- and Stressor-related Disorders	Individuals with trauma-related disorders often struggle with attentiveness and sustained concentration. This can be due to recurrent and intrusive memories, dissociative states that negatively impact awareness of situations or surroundings, or diminished interest in activities. Trauma-related symptoms, by definition, have an onset following a traumatic event and are often triggered or worsen following exposure to reminders of the event. In contrast, ADHD symptoms may worsen under certain situations but are mostly non-contextual.
Learning Disorders	Children with specific learning disorders are often inattentive when engaged in learning activities related to their area of disability. However, they do not show attention deficits with other tasks, and they are not more hyperactive or impulsive than their peers. In contrast, by definition, children with ADHD struggle with symptoms across more than one setting. ADHD is commonly comorbid with learning disorders.
Oppositional Defiant Disorder	Those with Oppositional Defiant Disorder (ODD) display argumentativeness and defiance toward adult authority figures solely out of a desire to resist conforming to rules or demands. The child with ADHD, on the other hand, is more likely to resist requests related to academic or mentally demanding tasks. Alternatively, failure to follow through with tasks in ADHD can be secondary to forgetfulness, distractibility, or impulsivity. Annoying others is common to both conditions, but for those with ODD, this behavior is typically deliberate, while for those with ADHD, the annoyance may be more of an unintended consequence of their symptoms. ADHD and ODD commonly co-occur.
Intellectual Disability	Individuals with intellectual disability can struggle with attention if placed in academic settings that are not commensurate with their intellectual level. Outside of these settings, however, their ability to focus will be on par with their mental age. Those with ADHD will struggle with attentional tasks across multiple settings to include non-academic situations.

Differentiating ADHD From Other Diagnoses	
Diagnosis	**Distinguishing Factors**
Other Conditions	
Substance Use Disorders	Many substances, either prescription or illegal, can cause similar symptoms to ADHD either during intoxication or withdrawal states. For example, alcohol intoxication can cause inattentive and impulsive behavior while intoxication with stimulants, such as cocaine or methamphetamine, can lead to hyperactivity and impulsivity. A comprehensive list of substances and their effects is well beyond the scope of this document. If substance use is infrequent then hyperactive, impulsive, and inattentive symptoms should mostly be confined to periods of use or withdrawal. However, differentiating ADHD from substance use can be challenging if use is very frequent. A clear history of onset of ADHD symptoms prior to the onset of drug use or during sustained periods of sobriety is key.
Sleep Disorders	Sleep disorders such as insomnia, sleep-disordered breathing, circadian rhythm sleep disorders, narcolepsy, and others can lead to insufficient sleep or sleep fragmentation. This can result in disturbances of mood, behavior, and attention that can resemble many of the symptoms of ADHD. Attentional and behavioral symptoms that chronologically begin after onset of the sleep disorder are unlikely related to ADHD. ADHD and sleep disorders often co-occur, sometimes as a consequence of stimulant therapy or due to poor bedtime routines seen with many children who have ADHD.

References for Appendix 1.5: Overlapping Symptoms With ADHD

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