

Pediatric Mental Health Care Access Grant

# Attention-Deficit/Hyperactivity Disorder

## History, Rise in Prevalence, and Presentation

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## OBJECTIVES

1. Discuss the historical perspectives of ADHD
2. Discuss the prevalence of ADHD
3. Outline the signs and symptoms of the three presentations of ADHD



## **SIMPLE DESCRIPTION**

- **Attention-Deficit/Hyperactivity Disorder (ADHD) is exhibited as persistent signs/symptoms of:**
  - **Inattention**
  - **Hyperactivity**
  - **Impulsivity**
    - **More significant than aged-peers**
    - **Sufficient enough to cause impairment in activities of daily living (ADLs) that spans settings**



## **MY (MORE) SIMPLE DESCRIPTION**

- **Impaired ability to**
  - **Delay**
  - **Instant**
  - **Gratification**



## HISTORICAL PERSPECTIVE

- **Origins of ADHD**
  - **Compulsory Education**
- **“Minimal Brain Damage”**
- **“Minimal Brain Dysfunction”**
- **“Hyperkinesis”**
- **“Hyperactivity”**
- **“Attention-Deficit Disorder”**



## PREVALENCE

- **According to the Centers for Disease Control and Prevention (CDC):**
- **The estimated number of children ever diagnosed with ADHD, according to a national 2016 parent survey, is 6.1 million (9.4%). This number includes:**
  - **388,000 children aged 2–5 years**
  - **4 million children aged 6–11 years**
  - **3 million children aged 12–17 years**



## GENDER

- Boys are more likely to be diagnosed with ADHD than girls (12.9% compared to 5.6%)
- Overall rates decrease in adolescence for both sexes
- Ratio in clinical samples is 6:1, with boys being referred more often than girls
  - Females with ADHD may go unrecognized and unreported (more likely Inattentive Presentation)



## SOCIOECONOMIC STATUS AND CULTURE

- ADHD affects children from all social classes
  - Slightly more prevalent among lower SES groups
- Findings are inconsistent regarding the relationship between ADHD, race, and ethnicity
- ADHD is found in all countries and cultures
  - Rates vary



## DSM-5 CRITERIA



## DSM-5 DIAGNOSTIC CRITERIA

**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 social, academic, and occupational activities:***
  - 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).**



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  - b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).



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  - c. Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).



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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).



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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).



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  - f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or home-work; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).



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  - g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).





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  - h. Is easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).



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  - i. Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).



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- 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:**
  - a. often fidgets with or taps hands or feet or squirms in seat**



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  - 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).**



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  - c. Often runs about or climbs in situations where it is inappropriate. Note: In adolescents or adults, may be limited to feeling restless.**



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  - d. Is often unable to play or engage in leisure activities quietly.**



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  - e. Is often "on-the-go and acting as if "driven by a motor" (e.g., is unable to be or is uncomfortable being still for extended time; may be seen by others as being restless or difficult to keep up with).**



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  - f. Often talks excessively**



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  - g. Often blurts out answers before a question has been completed (e.g., completes people's sentences; cannot wait for a turn in conversation).**



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- 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:**
  - h. Often has difficulty waiting his or her turn (e.g., while waiting in line).**



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- 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:**
  - i. Often interrupts or intrudes on others (e.g., invades conversations, games or activities; may use other people's things without asking; adolescents and adults, may intrude into or take over what others are doing).**



## DSM-5 DIAGNOSTIC CRITERIA

- B. Several inattentive or hyperactive-impulsive symptoms were present before age 12 years.**
- C. Several inattentive or hyperactive-impulse symptoms are present in two or more settings (e.g., at home, school, or work; with friends or relatives; in other activities).**
- D. There must be 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, sub-stance intoxication or withdrawal).**

## DSM-5 DIAGNOSTIC CRITERIA

### 1. Combined Presentation

If both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past 6 months.

### 2. Predominantly Inattentive Presentation

If Criterion A1 (inattention) is met but Criterion A2 (hyperactivity-impulsivity) is not met for the past 6 months.

### 3. Predominantly Hyperactive-Impulsive Presentation

If Criterion A2 (hyperactivity-impulsivity) is met but Criterion A1 (inattention) is not met for the past 6 months.

## INATTENTION

- Inability to sustain attention, particularly for repetitive, structured, and less-enjoyable tasks

HOWEVER

- Deficits may be seen in one or more types of attention
  - Selective attention
  - Sustained attention/vigilance
  - Distractibility – even when working on preferred tasks



## HYPERACTIVITY/IMPULSIVITY

- Excessively energetic, intense, inappropriate, and not usually directly goal-related
- Examples:
  - Fidgeting/moving
  - Difficulty staying seated
  - Running around at unexpected times
  - Excessive touching
  - Excessive talking



## HYPERACTIVITY/IMPULSIVITY

- Impulsivity - Acting before thinking
  - Cognitive impulsivity:
    - Organization
    - Planning
  - Behavioral impulsivity:
    - Inhibiting responses when required
  - Emotional impulsivity:
    - Impatience
    - Low frustration tolerance
    - Irritability



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