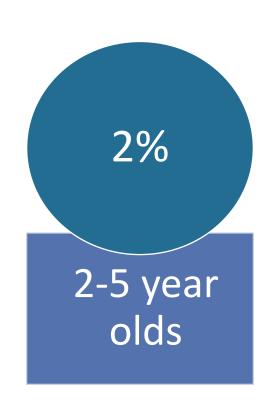
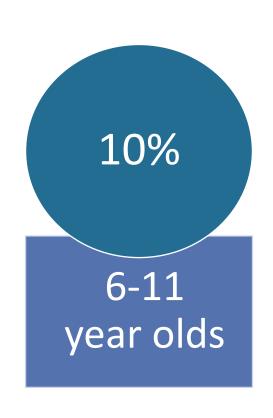
# ADHD, DMDD, and oppositional behaviors

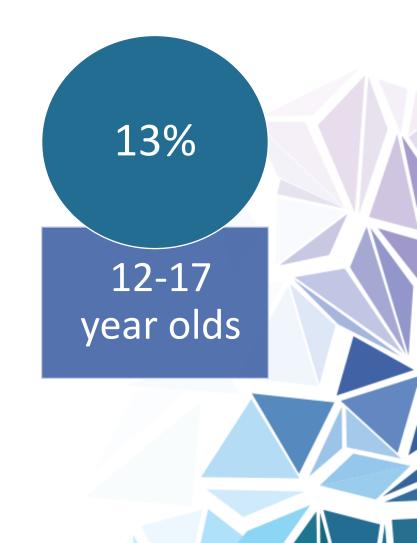
## Learning objectives

• Describe ADHD, DMDD, and oppositional behaviors, and their basic treatment options.

## Prevalence of ADHD in children<sup>1</sup>







## ADHD defined

- Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder in which patients display pervasive pattern of inattention and/or hyperactivityimpulsivity that interferes with functioning or development.
- Child's ability to attend to and control impulses is **significantly** less than that of a typically developing child.

## DSM requirements for diagnosis

- Symptoms present prior to age 12 years
- 6+ symptoms for children or 5+ for adolescents/adults in each of the two symptom types
- Symptoms not better accounted for by a different psychiatric disorder (e.g., mood disorder, anxiety disorder) and do not occur exclusively during a psychotic disorder (e.g., schizophrenia)
- Symptoms are not exclusively a manifestation of oppositional behavior

## DSM criteria: Hyperactive/Impulsive Type

#### **Hyperactive Symptoms**

- Squirms when seated or fidgets with feet or hands
- Marked restlessness that is difficult to control
- Appears to be driven by "a motor" or is often "on the go"
- Lacks ability to play and engage in leisure activities in a quiet manner
- Incapable of staying seated in class
- Overly talkative

#### **Impulsive Symptoms**

- Difficulty waiting turn
- Interrupts or intrudes into conversations and activities of others
- Impulsively blurts out answers before questions completed

## DSM criteria: Inattentive Type

- Displays poor listening skills
- Loses and/or misplaces items needed to complete activities or tasks
- Sidetracked by external or unimportant stimuli
- Forgets daily activities
- Diminished attention span
- Lacks ability to complete schoolwork and other assignments or to follow instructions
- Avoids or is disinclined to begin homework or activities requiring concentration
- Fails to focus on details and/or makes thoughtless mistakes in schoolwork or assignments

### ADHD classifications

#### **Combined Type**

 Patient meets both inattentive and hyperactive/impulsive criteria for the past 6 months

#### **Predominantly Inattentive Type**

 Patient meets inattentive criterion, but not hyperactive/impulse criterion, for the past 6 months

#### **Predominantly Hyperactive/Impulsive Type**

- Patient meets hyperactive/impulse criterion, but not inattentive criterion, for the past 6 months
- Symptoms may be classified as mild, moderate, or severe based on symptom severity

### Common ADHD comorbidities

- Nearly two thirds of children with ADHD have at least one other condition.<sup>2</sup>
  - 51.5% have behavioral or conduct problems
  - 32.7% have anxiety problems
  - 16.8% have depression
  - 13.7% have been diagnosed with autism spectrum disorder (ASD)
  - 1.2% have Tourette syndrome
  - About 45% have a learning disorder
  - Children with ADHD are 12 times more likely to have Loss of Control Eating Syndrome (LOC-ES)

## Recognizing PTSD

#### **Areas to explore**

- Onset and Duration
- Corelating events
- Family history of ADHD
- History of generational or acute trauma
- Unique symptoms of PTSD

#### **Unique PTSD symptoms**

- Feelings of fear, helplessness, uncertainty, vulnerability, and guilt or shame
- Increased arousal, edginess, agitation, irritability
- Unusual reckless, aggressive or selfdestructive behavior
- Trigger avoidance
- Dissociation
- Constant feeling of being on alert

## Be prepared: patients with ADHD display a wide range of symptoms



## What ADHD feels like



https://www.youtube.com/watch?v=NL483G4xKu0

## Functional consequences of ADHD<sup>3,4,5,6,7,8</sup>

- Reduced school or work performance
- Social rejection
- Elevated interpersonal conflict
- Maintain unhealthy peer groups
- Increased risk of:
  - Substance use
  - Conduct disorder in adolescence
  - Traffic accidents and violations
  - Incarceration
  - Injury
  - Obesity



## Assessment and monitoring of ADHD

#### **Vanderbilt ADHD Diagnostic Parent and Teacher Scales**

- Designed and validated for children 6-12 years but can be used in older patients
- Can be used to monitor treatment response

#### **ADHD Rating Scale-5**

Designed and validated for children 5-17 years

#### **Conners Rating Scale (CRS 4)**

Designed and validated for children 6-18 years

## Pharmacological interventions for ADHD

#### **Stimulants**

- Methylphenidate (Ritalin)
- Dexmethylphenidate (Focalin)
- Amphetamine and Dexamphetamine (Adderall)
- Lisdexamfetamine (Vyvanse)

#### **Non-stimulants**

- Alpha-2 agonists
  - Clonidine (Catapres, Kapvay)
  - Guanfacine (Tenex, Intuniv)
- Viloxazine (Qelbree)

#### **SNRIs**

Atomoxetine (Strattera)

## Non-pharmacological interventions for ADHD: psycho-emotional interventions

- Psychoeducation
- Behavioral therapy
- School supports
- Building relationship
- Appropriate expectations
- Environmental adjustments
- Behavior specific strategies

## Psychosocial interventions: adjusting expectations and environment

#### **Adjusting expectations**

- Tasks and transitions will take more time
- Reminders will be necessary
- Accept ADHD

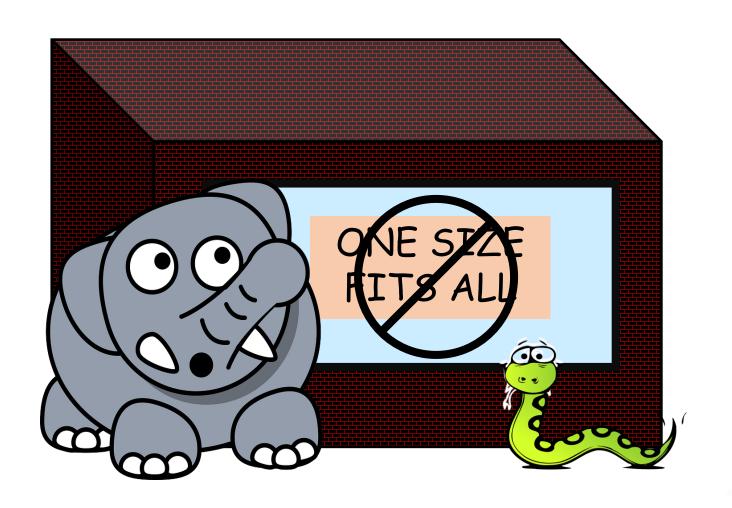
#### Adjusting the environment

Stimuli balanced space as defined by the patient

## Psychosocial interventions: strategies

- Change the nature of the task
- Make tasks short and specific
- Incorporate frequent breaks
- Build in rewards and choice
- Encourage patient created routines

## ADHD expression is unique



## When to refer out

- Challenges identifying comorbidities
- Significant comorbidities
- Functional impacts that outstrip interventions
- Significant aggressions present
- Multiple failed medication trials

## Oppositional behaviors

#### **Normal**

- Developmentally appropriate
- Periodic
- Situational response
- Does not consistently impact function or relationships

#### **Dysfunctional**

- Developmentally inappropriate
- Consistent pattern
- Not explained by other conditions or situations
- Significant negative impact on function and relationships

### Definitions

#### **Oppositional Defiant Disorder (ODD)**

 A condition in which a child displays a pattern of uncooperative, defiant and angry behavior toward people in authority

#### **Disruptive Mood Dysregulation Disorder (DMDD)**

 A condition in which children or adolescents experience severe, ongoing irritability, anger, and frequent, intense temper outbursts that significantly impair their function across environments

### Prevalence of ODD and DMDD

#### **Oppositional Defiant Disorder**<sup>9</sup>

- 1-16% of all school-age children and adolescents
- Slightly higher rate in boys than girls

## **Disruptive Mood Dysregulation Disorder**<sup>10,11,12</sup>

- 2-3% in preschool children
- 1-3% in 9-12-year-olds
- 5% in adolescents
- Somewhat more frequent in boys than girls
- Rarely exists independently of other mental health concerns

## Diagnostic criteria: ODD

- A. 6-month pattern with at least 4 symptoms from the following categories displayed in interactions with someone other than a sibling:
  - Angry/Irritable Mood
  - Argumentative/Defiant Behavior
  - Vindictiveness
- B. The behavior is associated with distress
- C. The behaviors are not exclusive to another mental health disorder nor meet criteria for DMDD

## Diagnostic criteria: DMDD

- Behaviors described below exist for at least 12 months with no more than 3 consecutive months without symptoms:
  - Severe temper outbursts (verbal or behavioral), on average 3 or more times/week out of proportion to the situation
  - Chronically irritable or angry mood most of the day, nearly every day
  - Symptoms are present in at least 2 settings, and severe in at least 1
  - Diagnosis must be made between 6 and 18 years of age with onset of symptoms before age 10
  - Symptoms cannot be better explained by another mental disorder and cannot co-exist with bipolar disorder, intermittent explosive disorder or ODD

### Tools to assist with ODD identification

• No tools specifically designed for diagnosing ODD<sup>13</sup>

- Questionnaires can aid in diagnosis
  - Swanson, Nolan, and Pelham-IV Rating Scale (SNAP-IV)
  - Conners' Parent Rating Scales Long Version (CPRD)
  - Child Behavior Checklist (CBCL)
  - Conduct and Oppositional Defiant Disorder Scales (CODDs)

## Screening tools for DMDD

 Disruptive Mood Dysregulation Disorder Questionnaire (DMDD Questionnaire)

- 10 questions
- Follows DSM criteria

## Pharmacological interventions for ODD/DMDD

#### **Oppositional behaviors**

Treatment of comorbid behavioral health conditions is advised

#### **ODD**

- Medications are not recommended as first-line treatment
- Treatment of comorbid mental health conditions with medications often improves ODD symptoms

#### **DMDD**

- We are still learning since this is a new diagnosis
- Focus on treating co-morbid disorders
- While stimulants, mood stabilizers, second generation antipsychotics, and antidepressants are used, there are no FDA-approved medications

## Non-pharmacological interventions for oppositional behaviors

#### Within Collaborative Care

- Psychoeducation and support
- Seattle Children's First Approach Skills Training (FAST) program
  - FAST- Child Behavioral Problems
  - FAST- Early Childhood

#### Referrals to specialty care for ODD/DMDD

- Cognitive behavioral therapy (CBT)
- Dialectical behavior therapy for children (DBT-C)
- Parent training

## Resources for professionals

- Vanderbilt ADHD Assessment Scales
- ADHD Rating Scale 5
- Conners Rating Scale (CRS 4)
- <u>Disruptive Mood Dysregulation Disorder Questionnaire (DMDD Questionnaire)</u>
- National Institute of Mental Health Disruptive Mood Dysregulation
  Disorder: The Basics
- Seattle Children's First Approach Skills Training (FAST) program

## Resources for patients and parents

#### **ADDitude Magazine**

 ADDitude's website offers articles, podcasts, and webinars to, for, by, and with those with ADHD covering issues, resources, and life hacks for everyone touched by ADHD

#### <u>Children and Adults with Attention Deficit/Hyperactivity</u> <u>Disorder (CHADD)</u>

• CHADD provides education, advocacy, and support for individuals with ADHD and their families and the professionals who assist and advocates for equity, inclusion, and universal rights

## Books for parents and caregivers

#### For parents of kids with ADHD

- 8 Keys to Parenting Children with ADHD, Cindy Goldrich
- What Your ADHD Child Wishes You Knew: Working Together to Empower Kids for Success in School and Life, Sharon Saline & Laura Markham
- Smart but Scattered Teens, Richard Guare, Peg Dawson & Colin Guare
- A New Understanding of ADHD in Children and Adults, Thomas Brown

#### **Common co-occurring issues**

- The Explosive Child: A New Approach for Understanding and Parenting Easily Frustrated, Chronically Inflexible Children, Ross Greene
- The Misunderstood Child: Understanding and Coping with Your Child's Learning Disabilities, Larry Silver
- The Out-of-Sync Child: Recognizing and Coping with Sensory Processing Disorder, Carol Stock Kranowitz
- The Dyslexia Empowerment Plan: A Blueprint for Renewing Your Child's Confidence and Love of Learning, Ben Foss

## References (1 of 4)

- 1. Centers for Disease Control and Prevention. (2023, October 16). Data and statistics about ADHD. Attention-Deficit / Hyperactivity Disorder (ADHD). https://www.cdc.gov/ncbddd/adhd/data.html
- 2. ADDitude. (2023, June 28). ADHD statistics: New add facts and research. ADHD Guide. https://www.additudemag.com/statistics-of-adhd/
- 3. Frazier, T. W., Youngstrom, E. A., Glutting, J. J., & Watkins, M. W. (2007). ADHD and Achievement: Meta-Analysis of the Child, Adolescent, and Adult Literatures and a Concomitant Study With College Students. Journal of Learning Disabilities, 40(1), 49-65. https://doi.org/10.1177/00222194070400010401
- 4. Kessler RC, Adler L, Barkley R, Biederman J, Conners CK, Demler O, Faraone SV, Greenhill LL, Howes MJ, Secnik K, Spencer T, Ustun TB, Walters EE, Zaslavsky AM. The prevalence and correlates of adult ADHD in the United States: results from the National Comorbidity Survey Replication. Am J Psychiatry. 2006 Apr;163(4):716-23. doi: 10.1176/ajp.2006.163.4.716. PMID: 16585449; PMCID: PMC2859678.

## References (2 of 4)

- 5. Mannuzza S, Klein RG, Bessler A, Malloy P, LaPadula M. Adult psychiatric status of hyperactive boys grown up. Am J Psychiatry. 1998 Apr;155(4):493-8. doi: 10.1176/ajp.155.4.493. PMID: 9545994
- 6. Pastor PN, Reuben CA. Identified attention-deficit/hyperactivity disorder and medically attended, nonfatal injuries: US school-age children, 1997-2002. Ambul Pediatr. 2006 Jan-Feb;6(1):38-44. doi: 10.1016/j.ambp.2005.07.002. PMID: 16443182.
- 7. Cortese S, Angriman M, Maffeis C, Isnard P, Konofal E, Lecendreux M, Purper-Ouakil D, Vincenzi B, Bernardina BD, Mouren MC. Attention-deficit/hyperactivity disorder (ADHD) and obesity: a systematic review of the literature. Crit Rev Food Sci Nutr. 2008 Jun;48(6):524-37. doi: 10.1080/10408390701540124. PMID: 18568858.Cortese et al. 2008;
- 8. Amanda L. Thompson, Brooke S.G. Molina, William Pelham, Elizabeth M. Gnagy, Risky Driving in Adolescents and Young Adults with Childhood ADHD, Journal of Pediatric Psychology, Volume 32, Issue 7, August 2007, Pages 745–759, https://doi.org/10.1093/jpepsy/jsm002

## References (3 of 4)

- 9. American Academy of Child & Adolescent Psychiatry. (2019, January). Oppositional Defiant Disorder. Facts For Families Guide. https://www.aacap.org/AACAP/Families\_and\_Youth/Facts\_for\_Families/FFF-Guide/Children-With-Oppositional-Defiant-Disorder-072.aspx#:~:text=One%20to%20sixteen%20percent%20of,factors%20may%20have%20a%20role.
- 10. Althoff RR, Crehan ET, He J-P, et al. Disruptive mood dysregulation disorder at ages 13–18: results from the National Comorbidity Survey—Adolescent Supplement. J Child Adolesc Psychopharmacol. 2016;26:107–113. doi: 10.1089/cap.2015.0038.
- 11. Copeland WE, Angold A, Costello EJ, Egger H. Prevalence, comorbidity, and correlates of DSM-5 proposed disruptive mood dysregulation disorder. Am J Psychiatry. 2013;170:173–179. doi: 10.1176/appi.ajp.2012.12010132.
- 12. Copeland WE, Shanahan L, Egger H, et al. Adult diagnostic and functional outcomes of DSM-5 disruptive mood dysregulation disorder. Am J Psychiatry. 2014;171:668–674. doi: 10.1176/appi.ajp.2014.13091213.

## References (4 of 4)

13. Riley M, Ahmed S, Locke A. Common Questions About Oppositional Defiant Disorder. Am Fam Physician. 2016;93(7):586-591.