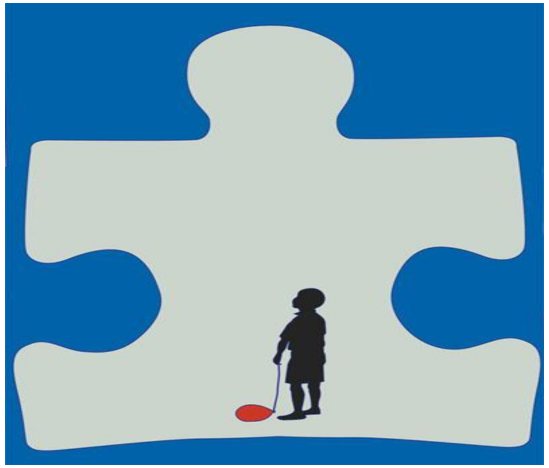
Child Psychiatry



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Objectives:

Definition, Causes and Diagnosis of:

- Intellectual disability (ID).
- Autism spectrum disorders (ASD).
- Attention deficit hyperactivity disorder (ADHD).
- Oppositional Defiant Disorder (ODD) .
- Enuresis.

Introduction:

- Development :Prenatal, Infant, Childhood, Adulthood
- Genetic Disorders
- Maternal Drug Use
- Maternal Stress

All these factors during human development play role in developing psychiatric disorders

Intellectual disability:

- **Formerly** known as **mental retardation**.
- **Defined** as a disability characterized by significant limitations in both intellectual functioning (reasoning, learning, and problem solving) and in adaptive behavior (conceptual, social, and practical skills) that emerges before the age of 18 years.
- Historically defined as an **IQ <70.**
- 1% of general population; **M:F = 1.5:1**

Causes:

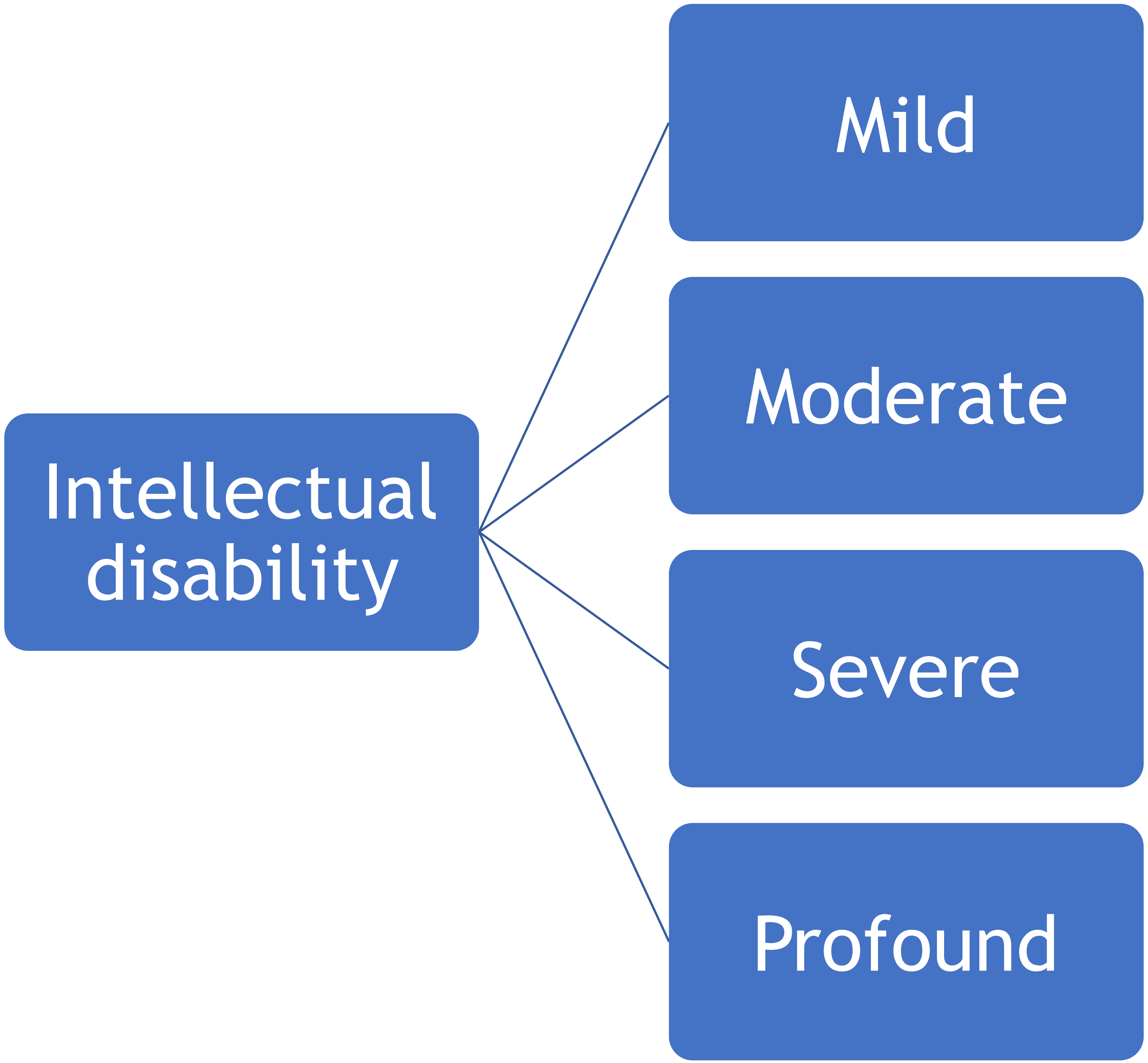
- The most common causes of ID are Down syndrome and fragile X syndrome.
- Other causes include metabolic factors affecting the mother or fetus, prenatal and postnatal infection (e.g., rubella), and maternal substance abuse.
- Many cases of ID are of unknown etiology.

DSM V diagnostic criteria:

The following <u>three</u> criteria must be met:

- A. Deficits in intellectual functions, such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience, confirmed by both clinical assessment and individualized, standardized intelligence testing.
- B. Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work, and community.
- C. Onset of intellectual and adaptive deficits during the developmental period.

Classification:



Severity Category	Approximate Percent Distribution of Cases by Severity	DSM-IV Criteria (severity levels were based only on IQ categories)	DSM-5 Criteria (severity classified on the basis of daily skills)	AAIDD Criteria (severity classified on the basis of intensity of support needed)	SSI Listings Criteria (The SSI listings do not specify severity levels, but indicate different standards for meeting or equaling listing level severity.)
Mild	85%	Approximate IQ range 50–69	Can live independently with minimum levels of support.	Intermittent support needed during transitions or periods of uncertainty.	IQ of 60 through 70 *and* a physical or other mental impairment imposing an additional and significant limitation of function
Moderate	10%	Approximate IQ range 36–49	Independent living may be achieved with moderate levels of support, such as those available in group homes.	Limited support needed in daily situations.	A valid verbal, performance, or full-scale IQ of 59 or less
Severe	3.5%	Approximate IQ range 20–35	Requires daily assistance with self-care activities and safety supervision.	Extensive support needed for daily activities.	A valid verbal, performance, or full-scale IQ of 59 or less
Profound	1.5%	IQ <20	Requires 24-hour care.	Pervasive support needed for every aspect of daily routines.	A valid verbal, performance, or full-scale IQ of 59 or less

Clinical scenario question:

- An 8 year old boy is brought to a psychiatrist because he is a “ slow learner “ and has fallen behind his peers in class. He has a history of being aggressive to some degree in preschool, although he seems to have “ grown out” of this behavior. His parents do not report any significant current or past medical conditions. He has a younger sister who is doing well and suppresses him in academic and social skills. What is the most likely diagnosis?

(A) ADHD

(B) OCD

(C) ID

(D) ODD

Autism Spectrum Disorders:

- Phenotypically heterogeneous group of neurodevelopmental syndromes, with **polygenic** heritability.
- Autistic disorder was characterized by impairments in **three** domains: social communication, restricted and repetitive behaviors, and aberrant language development and usage.
- Approximately **one third** of children meeting the current DSM-5 diagnosis of autism spectrum disorder, exhibit **intellectual disability (ID).**
- Four times more often in **boys** than in girls.

DSM V diagnostic criteria:

- A. Persistent Deficits In Social Communication and Interaction.
- B. Restricted, Repetitive Patterns of Behavior, Interests, and Activities.
- C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).
- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.
- E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay.

Causes:

- Its **<u>Polygenic</u>** so there is no definitive cause of ASD.
- Genetic Factors: 15 percent of cases associated with genetic diseases
  - **Monozygotic** twins more than dizygotic twins
  - Fragile X syndrome.
- Immunological Factors: (i.e., maternal antibodies directed at the fetus).

Clinical scenario question:

- A 4-year-old child who has never spoken voluntarily shows no interest in or connection to his parents, other adults, or other children. Medical examination and ontological testing are unremarkable. The child’s mother tells the doctor that he persistently turns on the taps to watch the water running and that he screams and struggles fiercely when she tries to dress him. Which of the following disorders best fits this clinical picture?
- **(A) ASD**
- (B) Rett Syndrome
- (C) ADHD
- (D) Tourette syndrome

Attention Deficit Hyperactivity Disorder (ADHD)

- Prevalence: 5-12% of school-aged children
- M:F = 4:1
- **Girls** tend to have inattentive/distractible symptoms; **boys** have impulsive/hyperactive symptoms

Causes:

- Genetic factors are involved, Relatives of children with conduct disorder and ADHD have an increased incidence of these disorders and of antisocial personality disorder and substance abuse.
- Although evidence of serious structural problems in the brain is not present, children with conduct disorder and ADHD may have minor brain dysfunction.
- In addition, some non-genetic factors have been linked to ADHD including premature birth, maternal alcohol and tobacco use, high levels of exposure to lead, and prenatal neurological damage

- Substance abuse, serious parental discord, and mood disorders, are seen in some parents of children with these disorders; these children are also more likely to be abused by parents or caretakers.
- There is no scientific basis for claims of an association between ADHD and either improper diet (e.g., excessive sugar intake) or food allergy (e.g., artificial colors or flavors).

DSM V 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 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 (age 1 7 and older), at least five symptoms are required.

1. 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).

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

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

DSM V diagnostic criteria: (Cont’d)

4. 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).

5. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials
and belonging in order; messy, disorganized work; has poor time management; fails to meet deadlines).

6. 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).

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

8. often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts)

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

DSM V diagnostic criteria: (Cont'd)

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 (age 1 7 and older), at least five symptoms are required.

1. Often fidgets with or taps hands or feet or squirms in seat.

2. 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).
3. Often runs about or climbs in situations where it is inappropriate. (Note: In adolescents or adults, may be limited to feeling restless.)
4. Often unable to play or engage in leisure activities quietly.
5. 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, meetings; may be experienced by others as being restless or difficult to keep up with).

DSM V diagnostic criteria: (Cont’d)

6. Often talks excessively.

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

8. Often has difficulty waiting his or her turn (e.g., while waiting in line).

9.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).

DSM V diagnostic criteria: (Cont’d)

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).

Clinical scenario question:

- A 9-year-old boy with normal intelligence frequently gets into trouble at school because he blurts out answers, interrupts the teacher, disturbs the other students, and cannot seem to sit still in class. He also frequently injures himself during play and rarely sits through an entire meal at home. His siblings say that he is “a real pest.” However, the child does his schoolwork well and behaves well when he is alone with his tutor. The best explanation for this child’s behavior is:

(A) oppositional defiant disorder

(B) ADHD

(C) social difficulties in the family

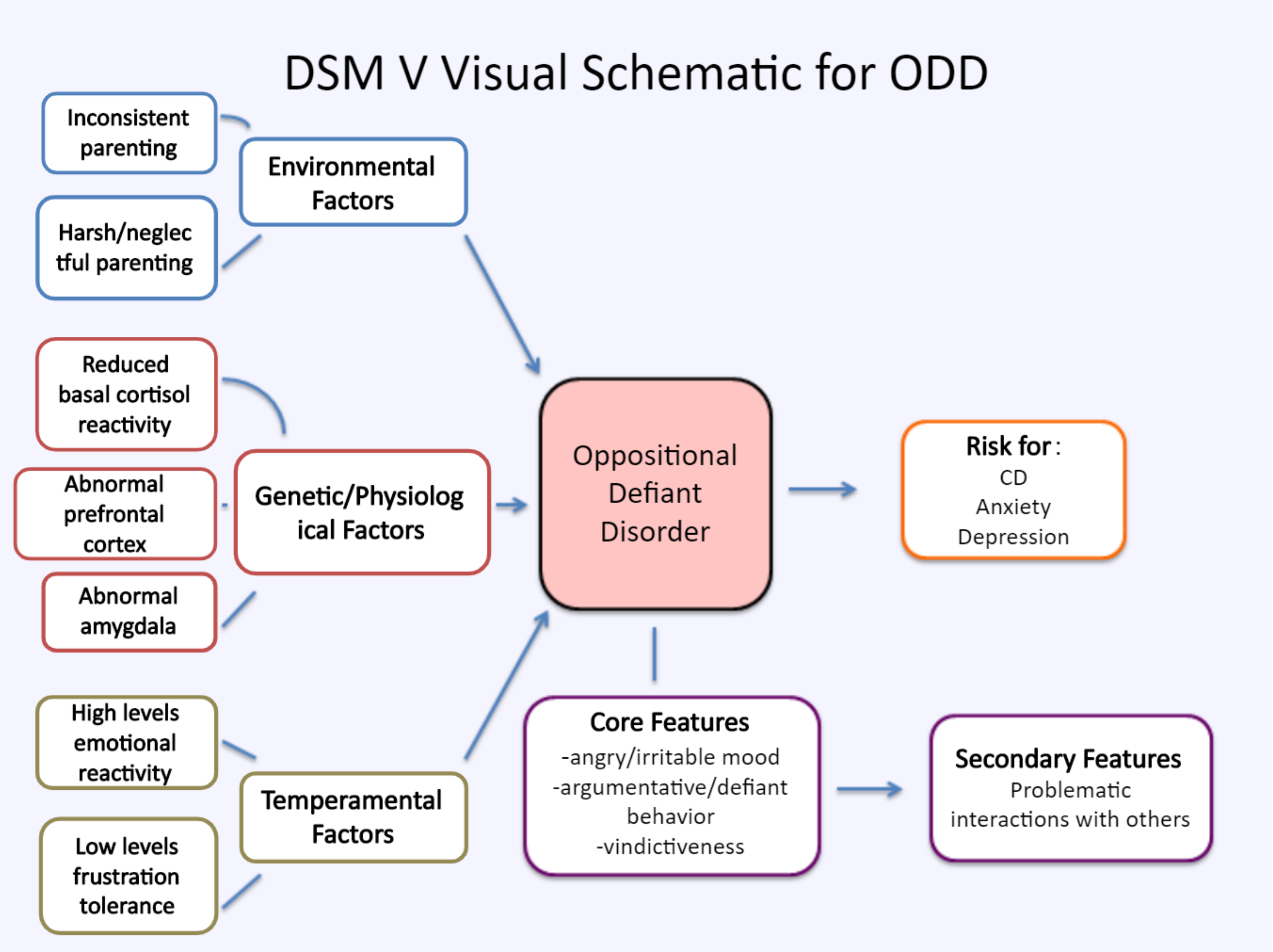
(D) conduct disorder

(E) typical, age-appropriate behavior

Oppositional Defiant Disorder (ODD):

- Behavior that, while defiant, negative, and noncompliant, does not grossly violate social norms (e.g., anger, argumentativeness, resentment toward authority figures).
- **Gradual** onset, **<u>usually before age 8.</u>**

Causes:


DSM V Visual Schematic for ODD
Inconsistent parenting
Harsh/neglectful parenting
Environmental Factors
Reduced basal cortisol reactivity
Abnormal prefrontal cortex
Abnormal amygdala
Genetic/Physiological Factors
High levels emotional reactivity
Low levels frustration tolerance
Temperamental Factors
Oppositional Defiant Disorder
Risk for:
CD
Anxiety
Depression
Core Features
-angry/irritable mood
-argumentative/defiant behavior
-vindictiveness
Secondary Features
Problematic interactions with others

DSM V diagnostic criteria:

- A. Pattern of negativistic/hostile c and defiant behavior for ≥6 mo. with ≥4 of:

- Angry/irritable mood: easily loses temper, touchy or easily annoyed, often angry and resentful.
- argumentative/defiant: argues with adults/authority figure, defies requests/rules, deliberately annoys, blames others for their own mistakes or misbehavior
- vindictiveness: spiteful or vindictive twice in past 6 mo.

- B. Behavior causes significant impairment in social, academic, or occupational functioning.
- Symptoms do not occur only during course of a psychotic, substance use, depressive, or bipolar disorder. Individual does not meet criteria for disruptive mood dysregulation disorders.

Clinical scenario:

- Lisa is a five-year-old girl whose parents asked their physician to see her because of their increasing concern about her temper tantrums in the home. The parents indicated that Lisa often becomes enraged and argumentative with them, refusing to follow rules or take direction. In particular, they report difficulty getting her to transition from playing with her toys to coming to the dinner table. After Lisa ignored her parents’ repeated prompts, her father became frustrated and told her that she had lost her dessert privilege. Lisa became aggressive and destructive, breaking her toys and smashing food and water from the dinner table into the carpet. Her parents described similar scenarios at bedtime, bath time, and when getting dressed in the morning. They described her as irritable in these situations and they felt she was deliberately ignoring or trying to annoy them.

Enuresis

- Enuresis is the repeated voiding of urine into a child's clothes or bed; the voiding may be involuntary or intentional.
- The prevalence of enuresis ranges from 5 to 10 percent in 5-year-olds, 1.5 to 5 percent in 9- to 10-year-olds, and about 1 percent in adolescents 15 years and older, So, **decreases with increasing age**.
- Although most children with enuresis **do not** have a comorbid psychiatric disorder, children with enuresis are at **higher risk** for the development of another psychiatric disorder.
- **Nocturnal enuresis** is about 50 percent more common in **boys** and accounts for about 80 percent of children with enuresis.
- **Diurnal enuresis** is also seen more often in **boys** who often delay voiding until it is too late.
- Nocturnal enuresis consists of a **normal volume of voided urine**, whereas when small volumes of urine are voided at night, other medical causes may be present.

Nocturnal

- 1ry: involuntary loss of urine at night, bladder control has never been attained
- 2ry: involuntary loss of urine at night, develops after child has sustained period of bladder control (>6 mo.)

Diurnal: unintended leakage of urine during waking hours

- 1ry: incontinence that persists beyond the age when a child otherwise would be expected to be toilet trained.
- 2ry: incontinence in a child who was toilet trained successfully and experienced at least 3 consecutive months of dry days.

Mix

- Combination of nocturnal and diurnal type

Diagnosis

- Child must exhibit a developmental or chronological **age of at least 5 years.**
- **DSM V:**

1- The behavior must occur twice weekly for a period of at least 3 months or must cause distress and impairment in functioning to meet the diagnostic criteria.

2-The behavior is not caused by a medical condition.

Clinical scenario question:

- A 9 year old boy present with bedwetting in the context of pschosocial stressors, after a period of successful toilet traning. There had been a chronic pattern of bedwetting, too infrequent to be deemed enuresis but indicative of persistent nighttime urinary incontinence. There are no other signs and symptoms indicative of an underlying medical condition. There are no signs of child abuse or neglect. There is a paternal history of enuresis.
- What is the type of enuresis?


Thank you