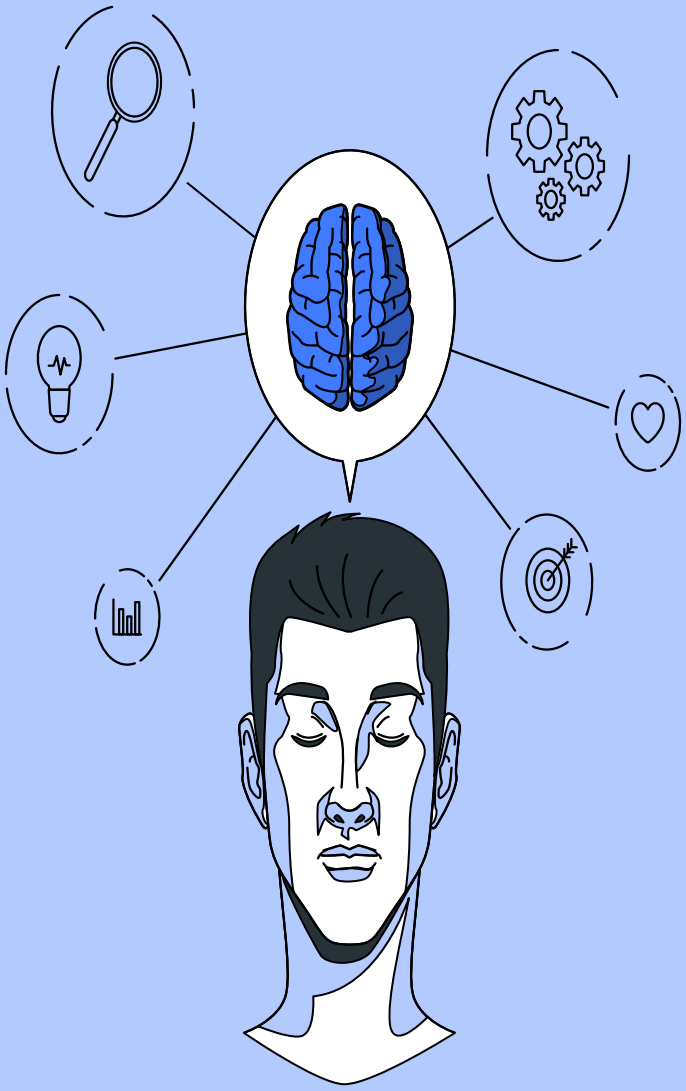


Child Psychiatry

Objectives:

1. To review normal psychosocial development, e.g. development of normal attachment and basic therapeutic strategies to repair attachment problems
2. To review major mental illnesses of childhood. e.g., Attention-Deficit Hyperactivity Disorder, and Autism Spectrum Disorder
3. To review other psychiatric disorders and how they present in child and adolescent patient population.

Done by:
Aseel Badukhon, Sara Alenezy and Norah Alkadi

Color index: Golden notes - Dr. notes - extra

01.

Infancy and Early Childhood:

Psychosocial Development and Attachment

Attachment Theory

Why is attachment so important?
Many species have young that can survive on their own but a human child must attach to parents (or caregivers) to survive! Protection, survival learning and emotional need.

Attachment Definition

- A biologically rooted [innate] attachment behavioural system or motivational-control system
- Strong emotional bond that matures during the first several years of life, and motivates the young child to:

1. Seek comfort, support & nurturance (affection, food, hygiene.. etc.) from Preferred Attachment Figures

2. Balance between:
   - Approach **vs.** Autonomy: Need for safety in proximity to a set of preferred attachment figures

المقاربة السيطرة

A boy in a playground would be reluctant to leave his attachment figure(s) at first, e.g. keep looking back, try to pull them.

Types of Attachment	Secure attachments	Insecure attachment
	-Child with repeated experiences with caregivers who are responsive to their needs and thus expect their caregivers to be available and comforting when called upon -Leads to resilience المرونة النفسية Bouncing back to normal after hardships -Look at any example of a youth/adult who overcame challenges in life, and it inevitably leads to at least secure attachment	-Child with experiences in which requests are discouraged, rejected, or responded to inconsistently -Leads to vulnerability to problems including mood, behavioural

Attachment Behaviours

These include:
- Visual searching
- Active following
- Vocal signaling
- Intense protest (crying, yelling, screaming, etc.)
- Clinging
- 'Worn down': despair, helplessness, detachment

Attachment Theory

Ainsworth's Strange Situation Procedure

> A 20 minute lab. procedure to test the infant's response to the reunion with mother and an unfamiliar adult after two brief separations.

Recommended Video

Procedure

1. Mother & infant introduced to the lab. playroom
2. Unfamiliar woman (stranger) joins them
3. Stranger plays with the infant
4. Mother leaves briefly
5. Mother returns
6. Both Mother and Stranger leave, briefly
7. Stranger returns
8. Mother returns

Major categories of Attachment (Strange Sit. Procedure)

An infant could be one of the following 4 categories **based on:**

- Amount of exploration (reaction)
- Reactions to the departure and return of caregiver

For One Year Olds	Attachment Styles (One Year Olds)
1. **Secure infants:** (want proximity, seek it out actively) **2. Avoidant infants:** (avoid proximity) **3.Resistant/Ambivalent:** (active resistance) **4.Disorganized: [Main & Solomon, 1990]:** (no strategy, act confused)	1.Secure attachment – 55% 2 (most children). 2.Anxious-avoidant insecure attachment – 23% 3. 3.Anxious-ambivalent insecure attachment – 18% 4.Disorganized attachment – 15% [van Ijzendoorn, 1995)

Attachment Theory

What happens when you consistently meet a child's needs? And what happens when are not met?

In the first year of age where attachment is most prominent, childhood experiences form the child's perception of themselves and the world (core belief), as well as their working model (scheme). This is affected by attachment style.

View of world: The world is a safe place... I can trust others..."

View of self: I feel better thus I am competent...

Meeting the needs

View of the world: "The world is NOT a safe place.. I can not trust others"

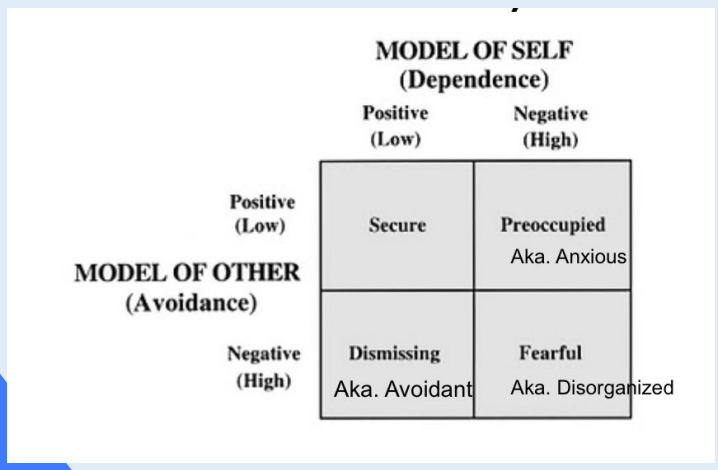
View of self: "I am a bad person" not good enough

Not Meeting the needs Abused or discouraged

When attachment needs are not met

- Infants who are abandoned and separated from their mothers become unhappy and depressed, sometimes to the point of panic
- After long periods of separation and isolation, they show symptoms of either apathy and withdrawal or restlessness, hyperactivity, inability to concentrate, and craving for affection

Views of self/others in different attachment styles



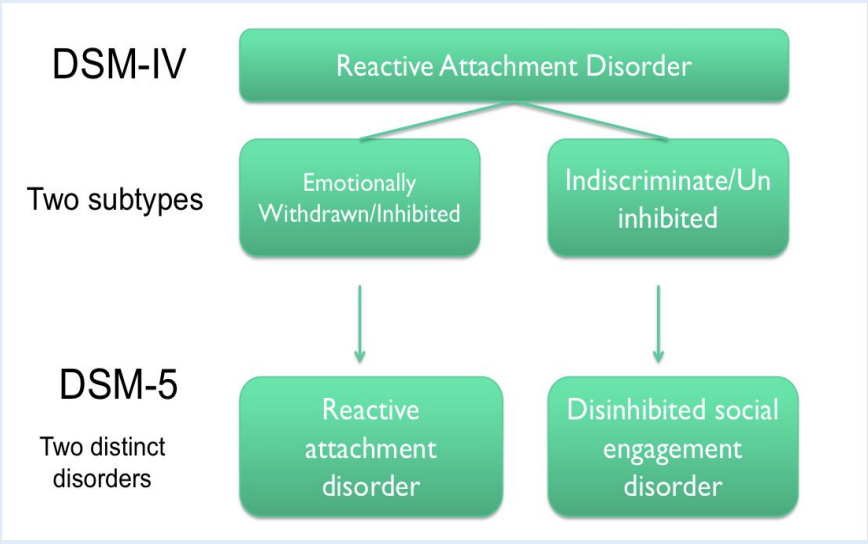
How would a surgeon's interaction vary dealing with patients? In a pt that needs lap chole.

People reenact their attachments to their caregiver.

- Secure patient are most likely trusting. They would commit to their appointments, and adhere to instructions.
- Avoidant patients might refuse procedures, until they show with an emergency to the ER with complications.
- Preoccupied patients would ask a lot of questions, taking longer time than expected, postpone appointments.
- Fearful patients might be unpredictable, one time they show up, one time they don't.

Attachment Theory

DSM-IV to DSM-5



In DSM-4 there was 1 attachment disorder (Reactive Attachment Disorder). In DSM-5, there is two distinct disorders (Reactive Attachment Disorder and Disinhibited Social Engagement Disorder).

What is the difference between these two disorders?
We see 'Disinhibited Social Engagement Disorder' patients in orphanages. The most common symptom is unusual interaction with strangers. A child with DSED shows no sign of fear or discomfort when talking to, touching, or accompanying an adult stranger. A child may sit on another person's lap or leave with a stranger. DSED is a result of inconsistent or absent primary caregivers, or having many caregivers. ما يقدر الأمور
However, 'Reactive Attachment Disorder' results from a lost (ruptured) attachment, where the child has a 'reaction' toward a new attachment. E.g. child's mother dies suddenly and his older sister acts as a new caregiver but he can't accept her.

Treatment

- Establish an attachment relationship for the child when none exists
- Improve disturbed attachment relationships with caregivers when they are evident. E,g in DSED.
- Coercive treatments with children with attachment disorders are potentially dangerous and not recommended (we notify caregivers not to rebuke the child)

02.

Attention-Deficit Hyperactivity Disorder

(ADHD)

ADHD

Prevalence of ADHD

- School age children: 6-9%
- Gender differences: 9.0% in boys (4-16 yrs old) and 3.3% in girls (OCHS, 1989)
- More common in males (DSM 5) Children = 2:1 vs Adults = 1.6:1
- ADHD accounts for 30-50 % of mental health referrals to child psychiatrists, (MTA Cooperative Group, 1999)
- **ADHD presentation in children:** (Polanczyk et al., 2007) these tend to change with time

Combined (50%-75%) | Inattentive (20%-40%) | Hyperactive-impulsive (<5-15%)

Which level of education (grade) would ADHD boys and girls present?
Hyperactivity is more noticeable than inattention. Most ADHD boys present with 'combined' prominent in early grades (grade 1 or 2) teachers usually notice it. Most ADHD girls present with 'inattentive' prominent in higher grades (grade 3 or 4) with more academic challenge e.g. Maths.

Note: females more likely to present with Inattentive presentation

ADHD Diagnostic Criteria (DSM-5)

Persistent pattern of inattention and/or hyperactivity or impulsivity that interferes with functioning or development:

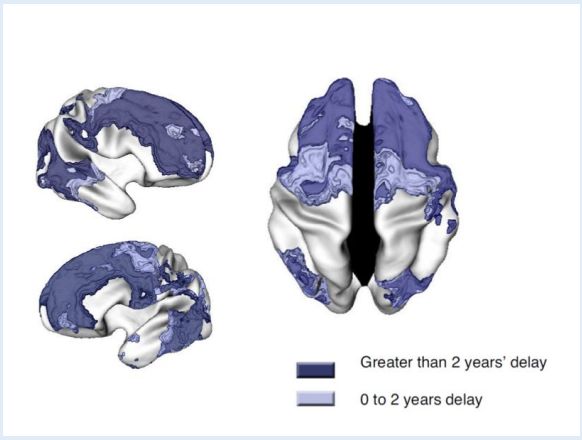
1. Inattentive symptoms (≥6/9), AND/OR hyperactive-impulsive symptoms (≥6/9) (for age 17 and older at least 5 symptoms are required) **How many symptoms do you need to diagnose a child with combined presentation?** 12/18.
2. Several symptoms must have been present <12 y.o.
3. Several symptoms must be present ≥2 settings (home, school, work, friends, other activities)
4. Clear interference in functioning (school, social, family, work)
5. Symptoms not better explained by another mental health disorder or medical condition

Environmental Factors

In Utero	Early Postnatal Exposure
Maternal stress	Neonatal anoxia or brain injury
Exposure to tobacco, alcohol, drugs **(especially cocaine)** or toxins	Exposure to lead and other toxins
Low birth weight & prematurity	

ADHD

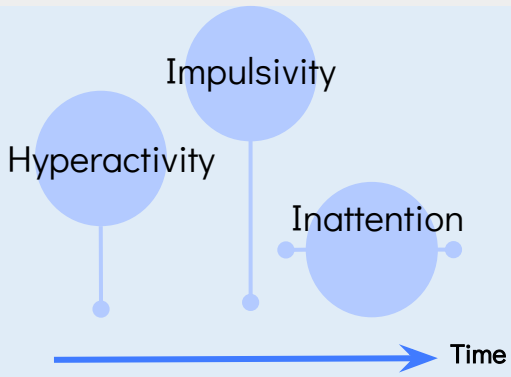
Delayed Cortical Maturation in ADHD



What type of imaging is this? Functional MRI.
They give the patient certain tasks to perform while imaging. Here, the compared normal children (controls) to ADHD patients, then combined the images into one image. White areas are common (similar) areas between both controls and ADHD patients, while the spectrum of blue areas represent deficits in ADHD patients. The darker the color the more distinctive the deficit is. Many areas of the brain are affected, most prominently the frontal lobe (executive functioning like planning, organizing, and execution). This is why we use stimulants, to increase the activity of frontal lobe.
In this image, there is more than 2 years delay.

ADHD Course of the Disorder

- Hyperactive-impulsive symptoms are more likely to improve or become internalized (e.g. changed into nervous tension).
- Inattentive symptoms are more likely to persist.

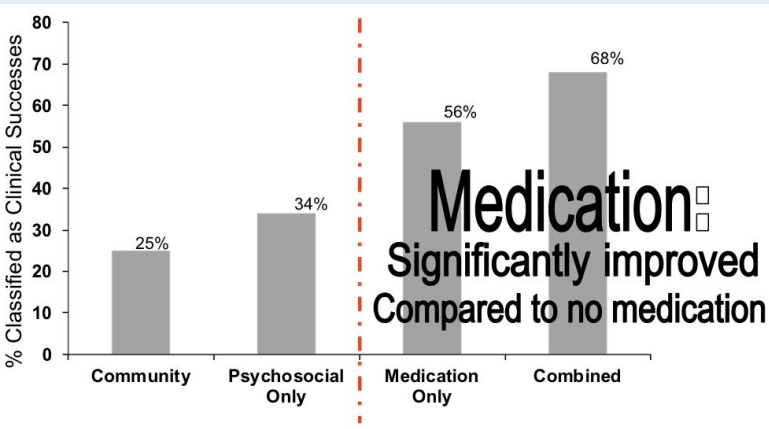


Diagnosis

- The diagnosis is clinical, based on history.
- Need information about the individual in more than one setting.
- ADHD is a diagnosis of exclusion.
- Standardized rating scales (teacher's and parent's scale) and psychological tests can assist but aren't diagnostic.

Treatment

Percentage of children responding to various treatments (MTA results):



Combined therapy gives the best outcome.

As per the MRI image above. We correct delay with stimulants. A parent may ask, **how come you're giving them stimulants if they have ADHD (already hyperactive)?**
We rather improve areas with deficits (hypofunctioning) by stimulating them. Plus, hyperactivity and impulsivity improve over time, while inattention persists.

ADHD

Treatment Cont. Psychosocial interventions + Medication

A-Educational / Vocational Accommodations:

Developmental neuropsychiatric disorder warranting access to educational accommodations:

- Academic remediation
- Specialized educational placements
- Academic / workplace interventions

B-Stimulants:

Methylphenidate (MPH)	Amphetamines	Vyvanse
Ritalin, Ritalin SR Biphentin Concerta	Dexedrine (d-amphetamine) Dexedrine spansule (d-amphetamine) Adderall XR(mixed salts amphetamine [d-amphetamine and amphetamine salts in a ratio of 3:1])	Lisdexamfetamine > d-amphetamine It is a prodrug (activated by the liver) **Why did we need it?** All groups **except Vyvanse** can predispose the patient to abuse (e.g. exams or weight loss).

Side effects of stimulants medication:

Possible Consequences of Untreated ADHD

- Impairments in: academic, occupational, financial & social
- Problems with self esteem/mood/anxiety
- Smoking & Substance Use Disorder
- Accidents : physical & MVA
- Sexual behavior (earlier, ++ partners, STDs, teen pregnancies,)
- Criminality

03.

Autism Spectrum Disorders

Autism Spectrum Disorder

Epidemiology

- Prevalence ~ 1% (CDC 1/88) (Can. J. Psych. 55(11), 2010, 715-20; Arch Gen Psyc 2011, 68(5), 459-65)
- Male to female ratio: 4: 1
- < 25% have Intellectual Disability (it is a misconception that ASD patients are very smart)
- Affects social interactions +/- communication, play, interests and behaviour

Natural History and Impairment

- Most people with ASD improve over time; language increases, symptoms decrease but adaptive functioning remains poor
- 10% free of dx as adults
- Severely affects many aspects of a child's life; emotional, behavioural, medical
- Impact on family; causes more stress on the family than any other disorder of childhood; 1000 extra hours of care per year

Natural History and Impairment Dx: A+B (5/7)

Criterion (A) Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following (must be 3/3):

1. Deficits in social-emotional reciprocity (exchange)	
2. Deficits in nonverbal communicative behaviors used for social interaction.	Facial expressions, eye contact, and tone of voice.
3. Deficits in developing, maintaining, and understanding relationships	Playing alone, not interested in peers.

Criterion (B) Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following (must be ≥ 2/4):

1. Stereotyped or repetitive motor movements, use of objects, or speech.	
2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal nonverbal behavior	Eating only white food.
3. Highly restricted, fixated interests that are abnormal in intensity or focus	
4. Hyper- or hypo reactivity to sensory input or unusual interests in sensory aspects of the environment	Can't tolerate loud noises or very high pain tolerance.

Autism Spectrum Disorder

Early Red Flags

Social Communication Red Flags	Non-Verbal Communication Red Flags
-Little social smiling. -Limited social eye contact. -Little comfort seeking. -Little separation anxiety. -Limited greeting. -Impaired joint attention. Only playing alone.	-Speech delay cut-off: spontaneous 2 word phrases with a verb by 24 months. If not> needs ASD assessment. -No pointing -No change in facial expression -No gestures -Can't guess what he/she wants -Drag by the hand, used as a tool

Evaluation

- Psychiatric History
  - Pregnancy, neonatal and developmental hx, medical hx, family and psychosocial factors, intervention hx
- Observation of child including play
- Collateral of observations of child in social settings

- Physical evaluation
  - Identify dysmorphic features, including neurological exam, head circumference,
  - Vision and hearing
- Psychological evaluation
  - Cognitive testing, adaptive skills
- Speech/language/communication assessment
- OT evaluation (sensory/motor)

Treatment Plan

- Multimodal
- Establish goals for educational interventions
- Establish target symptoms for intervention (Prioritize target symptoms and/or co-morbid conditions)
- Monitor multiple domains of functioning (behavioural adjustment, adaptive skills, academic skills, social/communicative skills, social interactions)
- Monitor pharmacological interventions for efficacy and side-effects.

1. ABC's of ABA (Applied Behavioral Analysis):

ABA uses the following 3 steps process to understand behaviour and teach new skills:
E.g. Child told his mother he wants something, she was on a phone call and asked him to wait, he took an expensive vase and broke it, after that the mother gave him what he wanted.

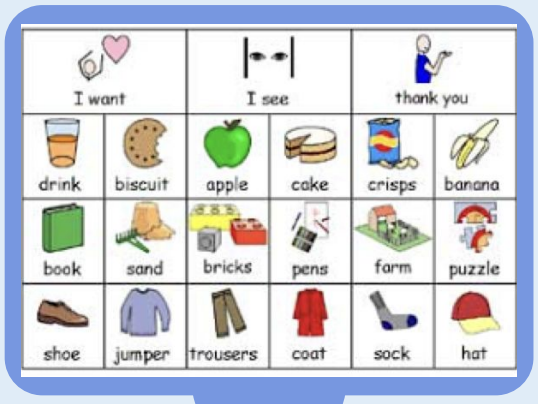
A	Antecedent/instructions	B	Behaviour/the child's response	C	Consequence/teacher feedback
What happens right BEFORE the behaviour?		What the child deos		What happens right AFTER the behaviour?	
Child wanted something and he was asked to wait		Breaking		Given what he wanted Do not reward bad behaviour.	

Autism Spectrum Disorder

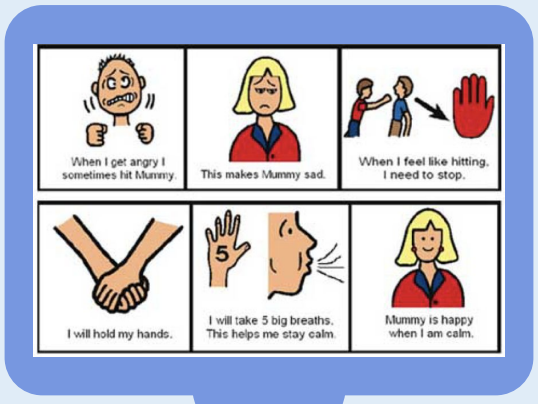
Treatment Plan Cont.

2. **Pharmacotherapy:**
   - No treatment for core symptoms of social and relationship problems in Autism
   - Risperidone1 (5-16 y) and aripiprazole2,3 (6-17 y) are FDA-approved for irritability in children and adolescents with autism
   - Periodic attempts to decrease or discontinue medication is prudent since most require long-term treatment.

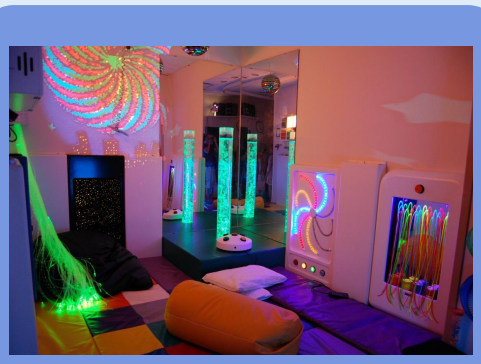
3. **Visual supports to facilitate communication:**
   - Picture Exchange Communication Systems (PECS). Children are taught to select pictures of desired objects or activities as a way of requesting access to the object/activity
   - Social Stories, to increase appropriate behavior by explaining social situation
   - Snoezelen room to stimulate their sensory input (little evidence)



Picture Exchange Communication Systems (PECS)



Social Stories



Snoezelen Room

Case

10 year old boy, parents separated
He refusing to complete school work
He has no friends, feels lonely at recess, he is not interested in extracurricular activities, significant conflict with parents include verbal abuse and destruction of property difficulties, with transitions, seen as being "rigid", enjoys playing on his X-Box

-Ddx?

-What questions can you ask to parents/child to clarify the diagnosis?

04.

Mood Disorders in Children & Youth

Mood Disorders

Epidemiology of Depressive Disorders (AACAP; NIMH data)

Age	Prevalence All cases	Incidence New cases
Preschool	0.3%	
Childhood (age < 12)	2% M 2% F	1%
Adolescence (age 12-18)	4% M 8% F	3%
Adult (age 18+)	2.5-5% M 5-10% F	7%

Cumulative incidence by age 18 = 20%

1- Prevalence increases with age.
2- Incidence increases with age.
3- Peak: adolescence.
4- Before 12, M & F are equal.

Etiology of Depression Same as adults

- Biological
- Psychological
- Social
- Environmental

Predisposing and Protective (Resiliency) Factors

Same as adults

Predisposing factors	Protective (AKA Resiliency)
-Family history of mental health problems, i.e. genetics -Medical problems -Adverse early childhood experiences -Parental separation/divorce -Losses -Abuse/neglect -Extremes in parenting, e.g. overly authoritarian, or indulgent -Poverty	-Family history of mental health -Lack of medical problems -Positive early childhood experiences, i.e. positive attachment -Intact family -Emotionally healthy parents -“Ideal parenting”, e.g. Authoritative parenting, or attachment-based parenting -Adequate finances and resources

Mood Disorders

Diagnosis

1- Disruptive Mood Dysregulation Disorder (DMDD) Very rare

A- DSM-5 Criteria:

- Severe, recurrent temper outbursts that are grossly out of proportion in intensity or duration to the situation.
- Occur 3 or more times each week for one year or more.
- Between outbursts, mood persistently negative (irritable, angry or sad), most of the day and nearly every day.
- Symptoms must be severe and present in at least two settings (home, school or with peers) for 12 or more months.
- Onset must be before age 10, in a child at least aged 6.

B- Rationale for DMDD:

- To reduce overdiagnosis of bipolar by providing another diagnostic category (was diagnosed and treated as bipolar in the past)
- Longitudinal follow-up of DMDD shows they do not change into bipolar as they age. Some get MDD
- Intent of DMDD diagnosis is to capture children with frequent temper tantrums that previously were misdiagnosed with bipolar disorders

2- DSM-5 Major Depressive Disorder in Children / Youth

Low mood (or **irritable mood** or reduced interest) plus ≥ 4/8 over ≥ 2- wks of **SIGECAPS**:

Sleep	Interset	Concentration	Appetite
Guilt	Energy	Psychomotor Agitation	Suicidal ideation

Same criteria as adults, with **2 exceptions**:

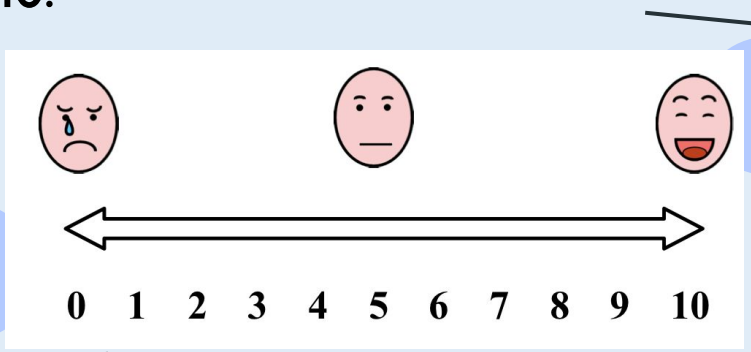
- Mood state includes irritability
- Weight loss not absolute; failure to make expected gains recognized. Based on grow chart, so if stable weight> abnormal)

Mood Disorders

Depression in Children / Youth vs Adults

Children / Youth	Adults
-Pt: Nothing's wrong; its my parents who are the problem" -May externalize symptoms (e.g. irritability, behavior problems, defiance) -May have somatization (e.g. abdominal pains, headaches) -Child / youth brought by others to the appointment -Problems with school, home - Self-cutting is common and indicative of depression in children	-Pt: "I'm sad all the time and I don't want to feel this way" -More classical internalizing symptoms -Adults patient asks for help -Problems with work, school - Self-cutting is indicative of personality disorder

Mood between 0 and 10:



Because children can't express their feelings like adults, we use such scales

Treatment

A-Psychoeducation:

- Discuss key concerns such as self-cutting or suicidal ideation
- Negative behaviors (such as self-injury attempts) are common in children/youth
- Explain that such behaviors are usually an attempt to deal with a stress
- Identify the underlying stress/problem, and find healthier ways to cope

B-Biological approaches: Medications

Mild to moderate depression	Moderate to severe depression
1st line is psychotherapy	1st line is Medications plus psychotherapy OR just psychotherapy Especially with psychotic depression

Monitoring:

Once weekly (unlike in adults) for first few weeks when first starting medications as suicidal risk greatest during first 2 weeks (close monitoring, frequent visits)

Mood Disorders

Treatment Cont.

Placebo has a 35% response rate

- First-line: SSRI
  What is your first drug of choice?
  - Fluoxetine (FDA approved) Preferred bc it's liquid so very specific dose can be given,

- Second-line: Switch to another SSRI
  Tried Fluoxetine, did not work. What is your second drug of choice? 4 Drugs
  - Escitalopram (FDA approved for youth aged 12-17)
  - Sertraline (RCT by Wagner)
  - Citalopram (RCT by Wagner)
  - Fluvoxamine
  -
- Compared to adult psychiatry, there are much less studies in child/youth psychiatry

General Pharmacotherapy Principles

- Start low and go slow up to adult dosages
- Only make one change at a time
- Target symptom clusters, not just the diagnosis (e.g. patient with sleeping problems)
- Think Alliance rather than Compliance

Summary

- Mood disorders common in children/youth Early intervention is key to prevent children/youth problems from becoming adult problems
- Treatments include:
  - Mild to moderate depression
1. 1st line: Counseling/psychotherapy, non-medication strategies
2. Monitor and re-evaluate CBT. If needed, move to 2nd line: Add antidepressants
- High placebo response rates support the importance of having a good therapeutic alliance

05.

Oppositional Defiant Disorder and Conduct Disorder

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Oppositional Defiant Disorder

DSM-5 Key Feature:

- Pattern of angry/irritable mood. Less severe than DMDD.
- Argumentative/defiant behaviour, or vindictiveness انتقام lasting at least 6 months as evidenced by at least 4 symptoms from any category exhibited during interaction with at least one individual who is not a sibling

Diagnosis:

- Important not to confuse ODD with normal development
- Toddlers and adolescents go through oppositional phases
- Behaviors occur in patient more frequently than with peers at same developmental level

Associated Features:

- Symptoms are almost invariably present in the home setting
- May or may not be evident at school or in the community
- Symptoms are typically more evident in interactions with those they know well (e.g. mother)
- Justify behaviour as a response to unreasonable demands

Epidemiology:

- Prevalence rates (lots of different data!) 1 - 16 %, most surveys 6 – 10 %
- More common in males 2:1 males: females
- Onset usually by 8 years of age

Course:

- 5-10% of preschoolers with ODD will end up with ADHD, not ODD
- 25% with ODD at the end of grade 6 will have comorbid significant mood or anxiety problems
- Most with ODD don't develop CD or ASPD. antisocial personality disorder.

Oppositional Defiant Disorder

Prevention:

Parent management strategies are the most empirically supported programs:

- Social skills training
- Conflict resolution
- Anger management

Treatment:

- Forming therapeutic alliance:
  - With child
  - With parents

- Consider cultural influences خلك رجال
  - Different standards of obedience and parenting
- Gather collateral information
- Assess for comorbidities

2 **Types of evidence based treatments:**

- Problem solving skills training
- Parent management training:
  - Effective discipline
  - Age appropriate supervision

- Medications:

To treat comorbidities (ADHD stimulants improve ODD as well, mood, anxiety)

- Social skills training for child.

06.

Anxiety Disorders in Children and Adolescents

Anxiety Disorders

Epidemiology

- Specific phobias, SAD, GAD most common
- Multiple anxiety disorders common in children

Risk Factors for Anxiety Disorders in Children

Family history	Inhibited temperament (esp social A)
Insecure / resistant attachment (preoccupied)	Overprotectiveness in parents (world is not safe, you're weak)
Stressful life events	

4 Most Common Anxieties in Children & Adolescents

- Separation anxiety
- Generalized anxiety
- Social phobia (Social Anxiety Disorder)
- Specific Phobia

Separation Anxiety	-Earliest onset anxiety disorder of childhood (8-10% of all children) -Age-inappropriate ,excessive and disabling anxiety about being separated from parents or home > 4 weeks duration -Often comorbid with another disorder -May appear suddenly or follow stressful event -Often resolves but likely to develop another disorder later;eg Social phobia and depression -3/8 symptoms required -Unable to tolerate parents on different floor of house -Nightmares with separation/kidnapping themes (fear of anticipated separations when awake) -Often parental history of early separation anxiety
Selective Mutism	-Usually shows up in Kindergarten or first grade onset 5-6 years of age -Restricted or lack of speech in one or more social situations with normal speech at home -Not due to developmental delay or delay limited to second language acquisition -Worse prognosis if not resolved by age 10 -**Selective Mutism:** may be a precursor to social phobia ; failure to speak in specific social situations, usually school not due to language disorder -Children likely highly emotional, fearful, inhibited, and lonely -Usually resolves in months -1/3 go on to other psychiatric disorders (usually social phobia or depression) When they go back home they talk more than normal بالع راديو

Anxiety Disorders

Classroom Sequelae to Anxiety

Just for your understanding

1. Poor school Attendance, higher dropout rates
2. Refusing to enter class unaccompanied
3. Teasing by other children due to above
4. Leaving class to call home, missing school with related somatic complaints eg headache and stomach ache
5. Mondays and return from holidays the worst
6. Refusal to go on school trips sleepovers with friends and even birthday parties

With Anxiety and School Avoidance Be Sure To Assess For:

Learning disabilities

Bullying

Student / Teacher mismatch

Comorbid undiagnosed ADHD

Child psychiatry is concerned with the assessment and treatment of children's emotional, behavioral and relationship problems.

Children are not small adults, but immature and developing individuals. Childhood is a period of life characterized by change and the necessity for adaptation. During childhood the child undergoes a remarkable transformation from a helpless dependent infant to an independent self-sufficient individual with his own views and outlook capable of living separately from his family. In order to judge whether any observed emotional, social or intellectual functioning is abnormal, it has to be compared with the corresponding normal range for the age group.

The practice of child psychiatry differs from that of adult psychiatry in several important aspects:

1.Children are generally less able to express themselves in words. Therefore, evidence of disturbance is based more on observations of behavior made by parents, teachers and others.

2.Greater attention must be paid to the stage of development of the patient and the duration of the disorder in order to decide what is normal and what is abnormal.

3.The treatment of children makes less use of medication or other methods of individual treatment. Instead the main emphasis is on changing the attitudes of parents, reassuring and retraining children, working with the family and coordinating the efforts of others who can help children, especially at school. The family is a most powerful force for the promotion of health as well as for the production of disturbance in the child's life. Assessment of parenting qualities, the marital relationship and the quality of the family interaction are essential components of child psychiatric practice. It is a frequent observation that it is the parents who are disturbed and not the child.

Children development has many aspects: intellectual, emotional, social, and psychodynamic.

Assessment:

Child assessment follows the usual steps in the adult assessment with the following important considerations:

- Flexibility is essential.
- Both parents should be asked to attend the assessment interview, and it is often helpful to have other siblings present.
- The interview room should be large enough to seat the family comfortably and also allow the children to use play material in a relaxed manner.
- Detailed personal history is required.
- Obtaining detailed family interaction is essential:
  - Quality of parenting.
  - Parent - child relationship.
  - Pattern of family relationships.
  - Separation from caretaker for more than a week.
- General health: eating, elimination, sleeping and physical complaints.
- School: attendance, achievement, and relationship with schoolmates and teachers.
- Attention span, concentration and activity.

Observation of the child should include:
Degree of attachment to parents and ease of separation.
Abnormal movements e.g. tics.
Nutritional status.
Evidence of neglect or physical abuse

Childhood Psychiatric Disorders:

Neurodevelopmental Disorders
- Intellectual Disabilities
- Autism Spectrum Disorder
- Attention-Deficit/Hyperactivity Disorder
- Communication Disorders
- Specific Learning Disorder
- Motor Disorders
- Other Neurodevelopmental Disorders

Feeding and Eating Disorders
- Pica
- Rumination Disorder
- Avoidant/Restrictive Food Intake Disorder

Elimination Disorders
- Enuresis
- Encopresis

Children are also susceptible to most of previously mentioned adult psychiatric disorders: phobia, anxiety disorders , depression …etc.

Intellectual Disabilities (Mental Retardation)

Intellectual impairment starting early in life, associated with educational and social disabilities.

Sami is an 8-year-old boy brought by his mother to child psychiatry clinic because of delyed intellectual development; he does not understand what is said to him, cannot serve himself in feeding, dressing, and always needs an assistant in toilet.

Diagnostic Criteria

A. Significantly subaverage intellectual functioning: an IQ of approximately 70 or below on an individually administered IQ test.
B.Concurrent deficits or impairments in present adaptive functioning (i.e., the person's effectiveness in meeting the standards expected for his or her age by his or her cultural group) in at least two of the following areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety.
C.The onset is before age 18 years.

Causes:

Congenital defects.
Intrauterine infections.
Perinatal: anoxia, cerebral hemorrhage
Postnatal: encephalitis, meningitis…
Psychosocial causes; chronic lack of intellectual stimulation.

Comorbidity:

Psychiatric disorders are common in intellectually disabled individuals due to:possible common genetic etiology, organic brain disease, reaction to the stigma of subnormality, family reactions e.g. overprotection, punishment, and
consequences of abnormalities associated with handicap e.g. lack of social skills. Diagnosis of psychiatric disorders is sometimes difficult because symptoms may be modified by low intelligence and poor verbal fluency.
Depression is common but less likely to be expressed verbally.
Adjustment disorders are frequently encountered in mildly retarded people.
Hyperactivity occurs commonly.
Schizophrenia may occur. The main features include further deterioration of mental functions with disturbed behavior and social adjustment. Delusions and hallucinations are less likely to be expressed clearly.

Types:

Mild (IQ:50–70) about75% of cases;educable.

Moderate (IQ:35– 49) about 15% of cases;trainable.

Severe (IQ: 20-34)about 8% of cases.

Profound (IQ: below 20)about 2% of cases.

Degree of Mental Retardation	Preschool Age (0 to 5 yrs) Maturation and Development	School Age (6 to 20 yrs) Training and Education
Mild	Can develop social and communication skills; minimal retardation in sensorimotor areas; often not distinguished from normal until later age	Can learn academic skills up to approximately 6th grade level by late teens; can be guided toward social conformity
Moderate	Can talk or learn to communicate; poor social awareness; fair motor development; profits from training in self-help; can be managed with moderate supervision	Can profit from training in social and occupational skills; unlikely to progress beyond second-grade level in academic subjects; may learn to travel alone in familiar places
Severe	Poor motor development; speech minimal; generally unable to profit from training in self-help; little or no communication skills	Can talk or learn to communicate; can be trained in elemental health habits; profits from systematic habit training; unable to profit from vocational training
Profound	Gross retardation; minimal capacity for functioning in sensorimotor areas; needs nursing care; constant aid and supervision required	Some motor development present; may respond to minimal or limited training in self-help

Source: Mental Retarded Activities of the US Department of Health, Education and Welfare. Washington, DC: US Government Printing Office;

Assessment:

Detailed history including: family history of inherited diseases. Prenatal, perinatal and neonatal history. Development and milestones.
Physical examination.
Behavioral assessment.
IQ test.

Management:

- Special education and training.
- Family support and education.
- Residential care for severe cases.
- Regular reassessmen and follow up.

Pervasive developmental disorders (PDD);

PDDs: affect multiple areas of development (social, language, emotional, & behavioral).They emerge before the age of 3 years and cause persistent dysfunction. PDDs includes five disorders: 1.autistic disorder, 2.Asperger's disorder 3.Rett's disorder, 4.childhood disintegrative disorder, , and 5.pervasive developmental disorder not otherwise specified.

Autistic Disorder (AD)

Riyadh is a 6-year-old boy, does not interact well with his relatives, has marked gaze avoidance, and language impairement. His motor development is normal.

AD is a severe pervasive disorder of emotions, speech and behavior starting in early childhood after a brief period of normal development (before 30 months of age). It occurs at a rate of 4 – 8 / 10,000 , affecting boys more than girls.

Features:

- Impaired reciprocal **social** interactions (even with parents). Gaze avoidance is a characteristics feature.
- Impaired **emotional** responses (emotions toward parents, strangers and inanimate objects are almost the same).
- Impaired **language** development (interpersonal verbal communication is markedly affected).
- Restricted **behavioral** repertoire.

Other features:

Resistant to change the routine and transition (e.g. having breakfast before a bath when the reverse was, may evoke temper tantrums).

Preoccupation with certain objects and rituals with resistance to change (e.g. the same dress, food,).

Labile mood and non-specific anger and fear.

Stereotypies, mannerisms, and grimacing.

Disturbed sleep.

Varying degrees of mental retardation are present in 75 % of cases. Epilepsy may develop in adolescence in 20 – 25 % of severe cases. Enuresis and encopresis may occur.

Video

Causes: unknown organic brain insult is suggested.

Treatment: no specific medication, special school: programs to promote behavioral skills and to reduce undesirable behavior. Family education and support. **Prognosis:** varies depending on several factors such as IQ, language development, and early treatment. About 15 % can lead independent life. About 50 % can acquire some useful speech but continue to have disturbed behavior and cold emotions.

Childhood Disintegrative Disorder(CDD)- Heller's syndrome-: marked regression in several areas of functioning after at least 2 years of normal development. Deterioration over several months of intellectual, social, and language function occurring in 3- and 4-year-olds with previously normal functions. After the deterioration, the children closely resembled children with autistic disorder.

Asperger's Disorder although it is a PDD, no significant delays in language, cognitive development, or self-help skills. **Features:** impairment in social or emotional reciprocity interaction (eye contact, facial expression). **Rett's disorder** is a progressive PDD. Prevalence of 6 / 100,000 girls. It has its onset after some months of normal development. Features:impaired speech, communicative and social skills. The head circumference growth decelerates and produces microcephaly. Poor muscle coordination and gait disturbances.

Attention-Deficit Hyperactivity Disorder (ADHD)

Waleed is a 9-year-old boy, has impulsive behavior , excessive movement in the class and inability to settle in one place:

The prevalence is about 4 %. M > F (4:1).

Features:

- Diminished attention and concentration.
- Overactivity in more than one situation; constant movement with inability to settle.
- Interfering and intruding on others.
- Impulsivity.
- Recklessness, prone to accidents.
- Disobedience and aggression.
- Learning difficulties.

Etiology: The causes are unknown. Several factors have been suggested to play some role :

- Prenatal toxic exposures & prematurity.
- Perinatal trauma and early malnutrition.
- Non specific subtle CNS disease.
- Specific learning disabilities.

Treatment:

Medications: stimulant medications have been found to reduce hyperactivity and improve attention span in 75 % of cases, the exact mechanism of action is not yet known, however, stimulation of cortical inhibition is suggested. Dextroamphetamine(Dexedrine);for children > 3years and methylphenidate (Ritalin,Concerta); for children > 6 years in the morning and afternoon, doses are adjusted according to the response. Possible side effects include restlessness, tremor, sleep disturbances, growth inhibition (growth chart is needed) and dependence.

Psychological treatment: individual and family therapy. Special education.

Prognosis: hyperactivity improves with age in most cases. Some cases may continue in adult life; mainly those with low intelligence and major learning problems.

Video

Oppositional Defiant Disorder (ODD):

Negativistic, hostile behavior; refusal to comply with adults, argument and annoyance of others, loss of temper, anger outburst,; spiteful / vindictive behavior. ODD may coexist with ADHD, conduct and many other disorders. It's occurrence increases in families with rigid parents, and intense moody children. **Treatment**: psychological (individual / family).Behavior modification.

Carbamazepine or lithium.

Conduct Disorder (CD)

Fatures: severe and prolonged antisocial behavior in older children and teenagers; aggressive or destructive behavior, rebellion against parents, lying, stealing, vandalism, fire setting, & truancy

Etiology: Adverse psychosocial situations play major roles e.g. broken family, unstable relationships, and poverty.

Treatment: Explore the environmental settings, social & family situations. Family and individual therapies.Haloperidol, lithium and carbamazepine have been found effective in controlling aggression and impulsivity.

Prognosis:Some teenagers continue to have antisocial behavior after the age of 18 years (antisocial personality disorder).

Elimination Disorders

A. Functional Enuresis:

- Repeated involuntary voiding of urine after the age at which continence is usual (5 years) in the absence of any identified physical disorder.
- Nocturnal = bed wetting (at night).
- Diurnal = during waking hours.

– Primary enuresis:

If there has been no preceding period of urinary continence for at least 12 months.

– Secondary enuresis:

If there has been period of urinary continence for 12 months.

- It is likely to coexist with other psychological distress (e.g. sibling birth, parental discord…).

– **No specific etiology:**? delay in maturation of some brain centers.

* **Psychological sequel of enuresis:** conflicts with parents, low self-esteem, social ostracism

Treatment:

– Search for and treat any possible physical disease e.g. repeated urinary tract infections (UTIs), diabetes, epilepsy…..
– Treat any associated emotional problem.
– Advice to parents (to avoid criticism…).
– Fluid restrictions before bedtime.
– Going to toilet before sleep.

– Behavior therapy:

- Record dry nights on a calendar and reward dry nights with a star and 7 consecutive dry nights with a gift (star chart technique).
- A bell and pad apparatus is helpful.
- Bladder training.

– Medications:

Imipramine (a tricyclic antidepressant) 10 – 50 mg at night can reduce bed wetting significantly, but relapse rate after discontinuing treatment is high.

Desmopressin (an analogue of vasopressin) can be helpful but there is a risk of fluid overload.

B.Functional Encopresis:

- Repeated passing of feces into inappropriate places after the age at which bowel control is usual (4 years).
- Physical causes should be ruled out:
  e.g. chronic constipation with overflow incontinence.
- Stressful events at home may precipitate the condition.
- Assessment should include parental attitudes, emotional factors in the child, and the child's concern about the problem.
- Behavior therapy (rewarding success and ignoring failure) often is helpful.
- Parental guidance and family therapy is required.

Depression in Children

Depressive disorder in children is not uncommon. Child may not express his low mood verbally. Therefore, thorough assessment is required. Depression may be distinguished from normal lowered mood by associated features:

- Significant loss of pleasure (anhedonia) in all areas of interest.
- Withdrawal from social activities.
- Deterioration in school performance (poor concentration and motivation).
- Irritability

Childhood depression is usually self-limiting, but may become chronic or recurrent. Masked depression may present as a behavior disorder. Depression in children may present mainly with somatic symptoms (depressive equivalents). Treatment may include a variety of measures discussed earlier in chapter 9. Antidepressants may be started with low doses. Psychosocial treatment approaches are important.

Separation Anxiety Disorder

Excessive anxiety concerning separation from home or from major attachment figure for at least 4 weeks.

Features:

- Excessive distress when separation is anticipated.
- Excessive worry about possible harm befalling or losing attachment figures.
- Reluctance to go to school because of fear of separation.
- Excessive fear when left alone
- Reluctance to sleep away from attachment figure.

The disorder may be initiated by a frightening experience or insecurity in the family, and is often maintained by overprotective attitude of the parents.

Treatment: Psychological (individual / family) therapy. Behavior therapy. Tricyclic antidepressants (e.g. imipramine 25mg/day).

Phobias in Children

Phobias are common, and usually normal in children. Common feared objects and situations include: animals, strangers, darkness, loud noisy voices. Most childhood phobias improve without specific treatment measures. However, parents should adopt a reasonable reassuring approach. Behavior treatment is required if phobia persists.

School Phobia:

- Irrational fear of going to school associated with unexplained physical complaints such as headache, diarrhea, abdominal pain or feeling sick. Boys and girls are equally affected.
- Complaints occur on school days not in weekends.
- It occurs most commonly at the commencement of schooling, change of school or beginning of intermediate or secondary school.
- Academic achievement is good or superior.
- Possible precipitating factors:

* Separation anxiety (mainly in younger children) child wants to stay with a major attachment figure. Mothers are frequently overprotective.
* Minor physical illness.
* Upsetting event either at home (e.g. parental discord), or at school (e.g. criticism).
* General psychiatric problems e.g. low self - esteem and depression (in older children).

Treatment:

– Identify and treat possible causes.
– Early graded return to school (most helpful).
– Both parents should participate.
– School and teachers should be involved.
– Drugs have some role in reducing anxiety / or depressive features.

School Refusal: a pattern of behavior that can have many psychosocial causes and may not be a disorder (e.g. a form of rebellion).

Questions:

1-The family physician attend to you, want to know about ADHD, which of the following you will tell him about the presentation:

A. Hyperactive-impulsive is the most common presentation B. Least common type is mixed

C. Majority of female present with inattentive presentation D. The prevalence is about 40-50% of the psychiatric referral

Ans: C

2- A 9 years old boy came with his father who mentioned that his son is in third grade primary school with good school achievement and verbal communication but he has problems with eye contact, facial expression and emotion. What is the most likely diagnosis?

A. Asperger's syndrome B. Autistic disorder C. Retts syndrome D. Childhood disintegrative disorder

Answer: A

3- Child who wants to yell at his dad but he can't, so he goes and yell at his mom. What do we call this defense mechanism?

A. Displacement B. Identification C. Projection D. Intellectualization

Answer: A

4- A 4-year-old boy was brought by his parents because he doesn't interact with them, doesn't talk or play with the other children. When asked about his milestones they said it's normal compared to his siblings. What's the most likely diagnosis?

A. Autistic disorder. B. Disintegrative disorder. C. Antisocial personality. D. Rett's disorder

Answer: A

5- A 17 years old illiterate female noticed to have no emotions to others in her school. She had speech delays and had poor social skills. She always has a down gaze even to her parents. What is ts the most likely diagnosis?

A. Classical autism B. Aspergers C. Retts D. ADHD

Answer: A

6- Scenario about child has delay language development and delay in taking , wetting his clothe his IQ is 30. regarding IQ which category?

A. Severe B. Moderate C. Normal D. Mild

Answer: A

7- What IQ score indicates moderate mental retardation?

A. 50-70 B. 35-49 C. 20-34 D. less than 20

Answer: B

Questions:

8- Parents of a teenager came to your clinic complaining of antisocial behavior from their child like lying and stealing, what is the dx?

A. Oppositional defiant disorder B. Childhood disintegrative disorder C. Conduct disorder D. ADHD

Answer: C

9-: What is the age can we say that the child has functional enuresis?

A. 3 years B. 4 years C. 5 years D. 6 years

Answer: C

10- A 7.year.old boy with history of Repeated passing of feces into inappropriate places. His mother asks you: "At which age my child should become able to control his bowel habits?

A. 3 years B. 4 years C. 5 years D. 6 years

Answer: B

11- 9 years old boy with poor achievement at school, speech difficulty and functional enuresis. Which of the following is the best immediate step?

A. Ask parents about milestones B. Request an IQ test C. Assess his judgment D. Ask parents about sphincter control

Answer: A

12-: A 34.year.old man has adjustment disorder following a family conflict. Which of the following describes the course and prognosis of adjustment disorder?

A. Adolescents recover earlier than adults B. Majority of patients recover within 6 months.

C. Most patients maintain chronic course D. The gender influences the prognosis

Answer: B

٤- طفل في الصالة قاعد يلعب بنشاط زائد و يضرب اخوانه ويطب من فوق الكنب، طلب منك ابوه أنك تجي و تقييم حالته؟

A. Mention two signs you see

High level of activity (Hyperactive) and Decrease attention

B. Write two questions you want to ask his father and why.

1- Loss of attention or concentration. (For the dx ADHD) 2- Any hostile behavior? (For the DDX of ODD)

3- Just in home or other places? (if fit the criteria of ADHD) 4- Any neonatal complication? (Increase risk of ADHD)