

Autism

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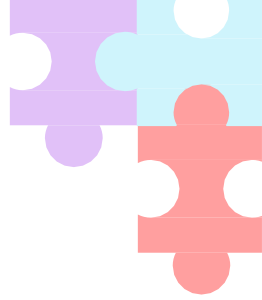
Mahmood Hamdan



The background features several colorful puzzle pieces in shades of yellow, red, blue, and purple. A purple awareness ribbon is positioned centrally above the title. The puzzle pieces are scattered around the edges of the page, with some overlapping.

Introduction

Autism spectrum disorder is a term used to describe a constellation of early-appearing social communication deficits and repetitive sensory-motor behaviors associated with a strong genetic component as well as other causes.



01

Epidemiology

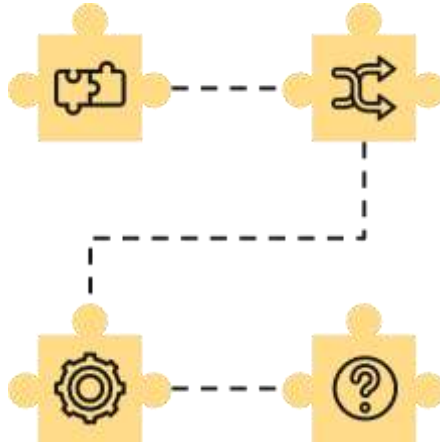




Epidemiology

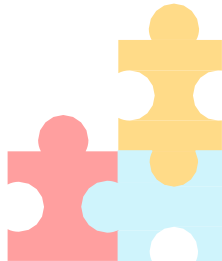
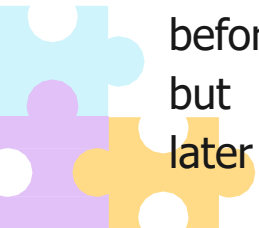
About 1 child every 100 has autism

Characteristics appear in early childhood before the age of 2 but usually diagnosed later



The prevalence of autism is over four times greater among boys than girls

The abilities and needs of autistic people vary and can evolve over time





02

Etiology



Etiology



Both genetics and environmental factors early in development play a vital role in the etiology of autism



Current research has not identified clear neuropathological markers of autism that can provide a basis for diagnostic criteria



Growing evidence suggests disturbances in the neurotransmitter system may be associated with ASD, mainly GABA





Autism spectrum disorder DSM-5 diagnostic criteria

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history:

1 Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.

2 Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.

3 Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.



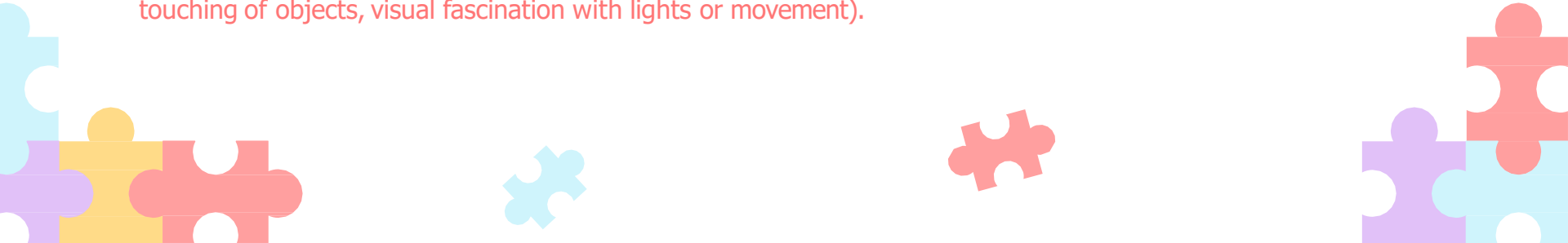
B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history

1 Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).

2 Insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat food every day).

3 Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interest).

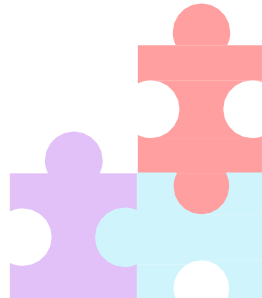
4 Hyper- or hyporeactivity to sensory input or unusual interests in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).



C. Abnormalities in functioning begin in the early developmental period

D. Not better accounted for by ID or global developmental delay. When ID and ASD co-occur, social communication is below expectation based on developmental level

E. Causes significant social or occupational impairment

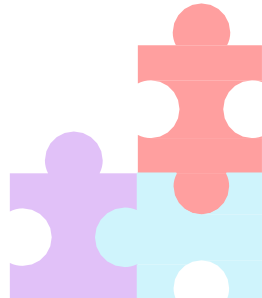




**ASSOCIATED
BEHAVIORAL
SYMPTOMS**

•Disturbances in Language Development and Usage : no longer considered a core feature of autism spectrum disorder , Language deviance, as much as language delay , difficulty putting meaningful sentences together, even when they have extensive vocabularies.

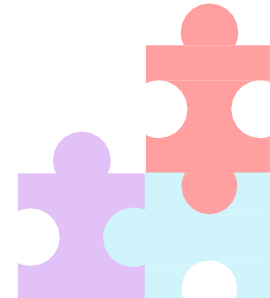
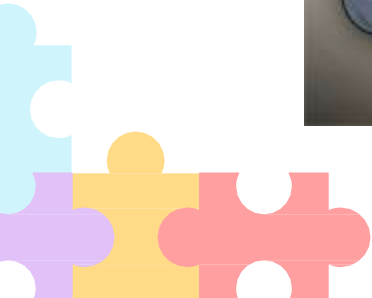
- intellectual Disability.**
- Irritability.**
- Instability of Mood and Affect.**
- Response to Sensory Stimuli.**
- Hyperactivity and Inattention.**
- Precocious Skills.**
- Insomnia.**
- Minor Infections and Gastrointestinal Symptoms.**



ASPERGER SYNDROME



**Mild
autism**



Also known : **schizoid disorder of childhood , autistic psychopathy , level 1 autism spectrum disorder .**

1-Usual onset : before two years old with long term duration

2-**Causes** : poorly understood .

3-considered **high functioning** form of autism .

4-Has high heritability , genetics has not determined conclusively , environmental factors play a role .

5-It is neurodevelopmental disorder characterized by significant difficulties in social interaction and non-verbal communication , along with restricted and repetitive patterns of behavior and interest .

6-**Differs from** other forms of ASD by relatively unimpaired language and intelligence .
.momotouns
speech (not speaking same as his peers)

ASPERGER'S CHARACTERISTICS



Intellectual or Artistic Interest



Speech Differences



Delayed Motor Development



Poor Social Skills



Development of Harmful Psychological Problems



Detail Oriented



Persistence



Not Socially Driven



High Integrity



Masters of Routine

RETT SYNDROME

What is Rett Syndrome?

Rett syndrome affects roughly 1 in 10,000 to 15,000 females born globally. In boys, the disease is considerably less common.



**Guess
what!!!!
not
included
anymore
In ASD
according
to DSM5**

* Rare , **non - inherited** , genetic , postnatal neurological disorder that occurs mainly in **girls** (in contrast with autism which primarily happens in males) .

* Slow onset of symptoms , starts around 1-2 years of age (similar to autism) .

* Hallmark : **regression of cognitive or motor skills** .

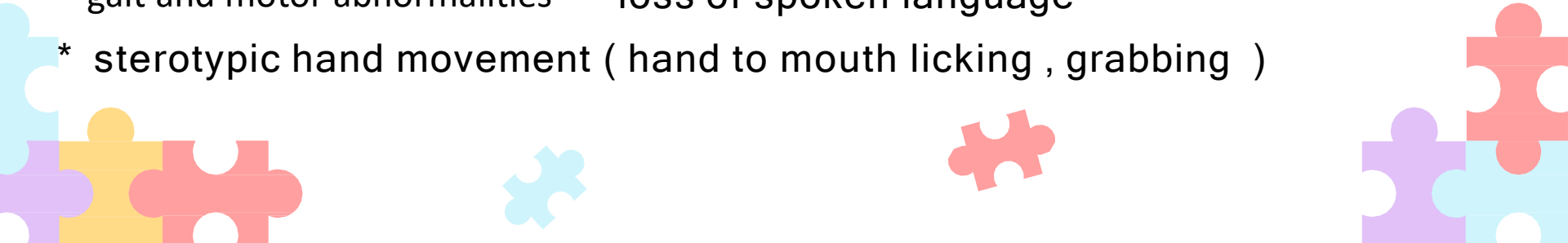
* Genetics : x-linked dominant (only in female -fatal in male) , mutation in MECP2 gene (significant expression in brain) .

- **Clinical manifestations** :

*deceleration of head growth * loss of purposeful hand skills

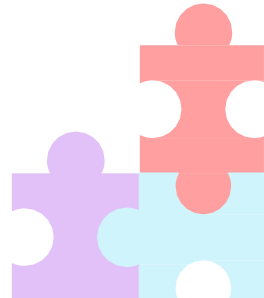
*gait and motor abnormalities * loss of spoken language

* stereotypic hand movement (hand to mouth licking , grabbing)



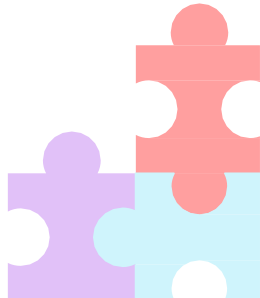
CHILDHOOD DISINTEGRATIVE DISORDER (CDD)

- Also known as **HELLERS SYNDROME** and **DISINTEGRATIVE PSYCHOSIS** .
- **Rare** condition characterized by late onset of developmental delays or sever and sudden reversals in language , social function and motor skills .
- Usual onset 3 – 4 years of age .
- Causes of CDD is **unknown** CDD has some similarity to autism and considered low functioning form of it
- S and S : between the ages of **two** and **ten skills acquired** are **lost** almost completely in at **least two** of the follwing **six functional** areas : * expressive language skills * social skills and self care skills * control over bowel and bladder * motor skills * plays skills
- lack of normal function also occurs in two of the folowing areas : * social Interaction * communication * repattive behavior and interest patterns
 - Treatment involves both behavior , environmental therapy and medication .



PDD – NOS

The term atypical autism denotes a residual category for pervasive developmental disorders that resemble ASD but do not meet the diagnostic criteria for any of the syndromes within this group



Differences of ASD

Table 28-1

IVE DEVELOPMENTAL DISORDERS AND AUTISM SPECTRUM DISORDERS

| AUTISM | ASPERGER'S SYNDROME | RETT'S SYNDROME | CHILDHOOD DISINTEGRATIVE DISORDER | PERVASIVE DEVELOPMENTAL DISORDER—NOT OTHERWISE SPECIFIED |
|---|--|---|--|--|
| <p>Delayed and disordered communication</p> <p>Atypical social interaction</p> <p>Restricted range of interests</p> <p>Onset before 3 yr of age</p> | <p>Similar to autism except language skills relatively intact</p> <p>Usually not cognitively delayed</p> | <p>Almost always affects girls</p> <p>Regression in skills between 6 and 18 mo of age</p> | <p>Clinically significant regression in skills (language, social skills, bowel and bladder control, play motor skills) before 10 yr of age</p> | <p>Features of 1 of the other autism spectrum disorders, but insufficient for a specific diagnosis</p> |



Prognosis and Management



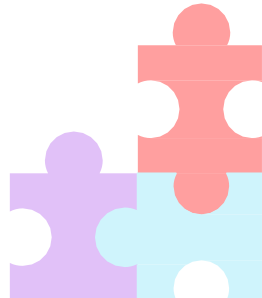
PROGNOSIS

$\frac{3}{4}$ ASD is a **chronic** condition . The prognosis is variable,

but the two most important predictors of adult outcome

are level of **intellectual functioning** and **language impairment**.

$\frac{3}{4}$ Only a minority of patients can live and work independently in adulthood.



treatment



TREATMENT

There is **no cure** for autism, but various treatments are used to help manage symptoms and improve basic social, communicative, and cognitive skills:

- 1) Early and Intensive Behavioral Intervention (EIBI)
- 2) Social Skills Training.
- 3) Behavioral therapy. Most important (applied behavioral analysis)
- 4) Cognitive-Behavioral Therapy
- 5) Low-dose atypical antipsychotic medications (e.g., risperidone, aripiprazole) may help reduce disruptive behavior, aggression, and irritability.



Thank You!

