## Autism Spectrum Disorder: Developing a Deeper Understanding

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#### **Learning Objectives**

- Recall the DSM-5 diagnostic criteria as it relates to Autism Spectrum Disorder
- 2. Assess how characteristics of ASD present in early childhood and manifest across the lifespan.
- 3. List common medical and psychiatric co-occurring conditions in Autism Spectrum Disorder

### What is Autism Spectrum Disorder?

- Neurodevelopmental Disorder
  - Affect brain function
  - Occur early in life
- Symptoms manifest in core areas
  - Social Communication
  - Restrictive and Repetitive Behaviors

#### **History of Autism**

- First Recognized by Dr. Leo Kanner (1943) and Dr. Hans Asperger (1944)
- Both recognized autism was different than schizophrenia or psychosis
- Both used term "autistic"



- Kanner (1943)
  - Case Study of 11 children
    - "extreme autistic aloneness"
    - Atypical language and communication
    - Repetitive "noises and motions"
    - "obsessive desire for sameness



#### Diagnostic and Statistical Manual

- DSM III (1980): autism first appears in DSM as infantile autism
- DSM III-R (1987): Infantile autism changed to autistic disorder
- DSM IV (1994): Pervasive Developmental Disorder category added and includes five distinct conditions:

Autistic Disorder, Asperger's Disorder, PDD-

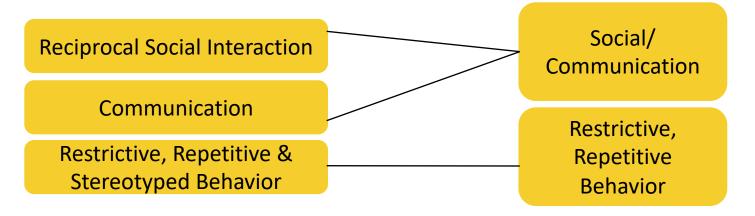
NOS, Rett's Syndrome and Childhood

Disintegrative Disorder

• DSM 5 (2013) Single diagnosis – Autism Spectrum Disorder

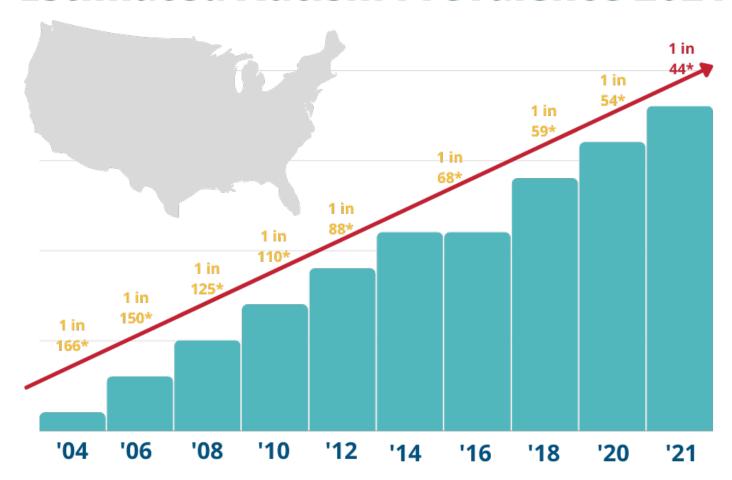
#### Changes with DSM-5

- Single diagnostic category (Autistic Disorder, Asperger's, PDD NOS → ASD)
- 3 symptom domains to 2



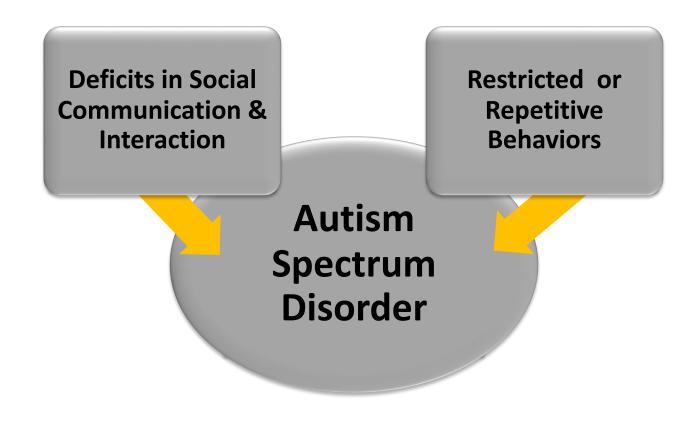
 Addition of severity criteria (Levels 1 through 3) to capture heterogeneity of disorder

#### **Estimated Autism Prevalence 2021**



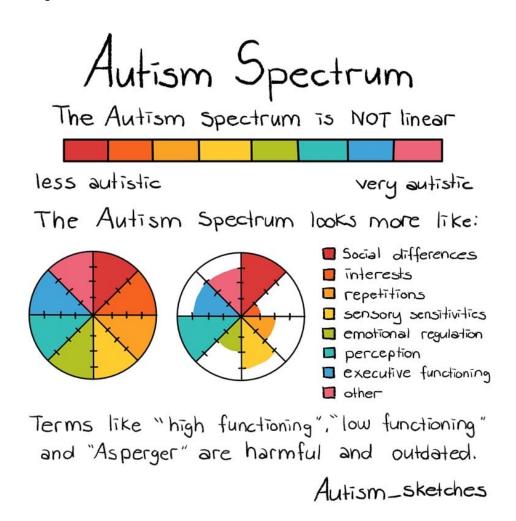
\*Centers for Disease Control and Prevention (CDC) prevalence estimates are for 4 years prior to the report date (e.g. 2020 figures are from 2016)

### Autism Spectrum Disorder (ASD)



### The Autism Spectrum

- A spectrum of symptoms
- Symptoms vary
  - In severity
  - In number
  - Across time
  - Between individuals







# Young people explain autism

https://youtu.be/xTLUYda-0O8

#### **DSM-5** Criteria

- Deficits in social communication and social interaction (3 of 3)
- Restricted, repetitive and stereotyped patterns of behavior, interests or activities (2 of 4)
- Symptoms present in early childhood
- Symptoms cause clinically significant impairment in functioning
- Symptoms can't be better explained by intellectual disability (ID)

#### **Social Communication**

#### A1: Deficits in social-emotional reciprocity:

- Abnormal social approach
- Failure of normal back and forth conversation
- Reduced sharing of interests, emotions, or affect
- Failure to initiate or respond to social interactions





### **Toddlers**

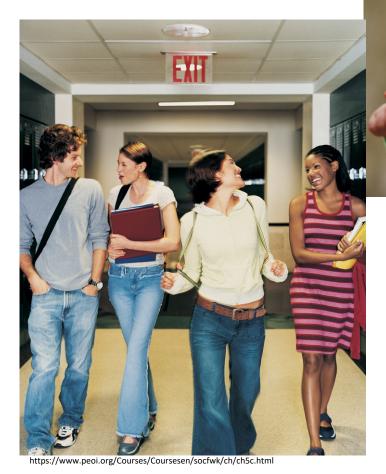


http://www.youtube.com/watch?v=\_JmA2ClUvUY

**Social Communication** 

## A2: Deficits in nonverbal communicative behaviors used for social interaction:

- Poorly integrated verbal & nonverbal communication
- Abnormal eye contact and body language
- Deficits in <u>understanding & using</u> nonverbal communication
- Lack of facial expression or gestures



#### **Social Communication**

## A3: Deficits in developing, maintaining, and understanding relationships ranging from:

- •Difficulties adjusting behavior to suit different social contexts
- Difficulties sharing imaginative play or making friends





## What do you see?



https://www.youtube.com/watch?v=3mXJKh4xZ2Q

## B1. Stereotyped or repetitive motor movements, use of objects, or speech, such as:

- Simple motor stereotypies
- Lining up toys or flipping objects
- Echolalia
- Idiosyncratic phrases





## Insistence on sameness, inflexible routines, or ritualized behavior:

- Need to take same route or eat same food every day
- Extreme distress at small changes
- Difficulties with transitions
- Rigid thinking patterns
- Greeting rituals



Highly restricted, fixated interests that are abnormal in intensity or focus:

- Strong attachment to/preoccupation with unusual objects
- Excessively circumscribed or perseverative interests



## Hyper- or hypo-reactivity to sensory input or unusual sensory interests:

- Indifference to pain/temperature
- Adverse response to specific sounds or textures
- Excessive smelling/touching objects
- Visual fascination with lights or movement



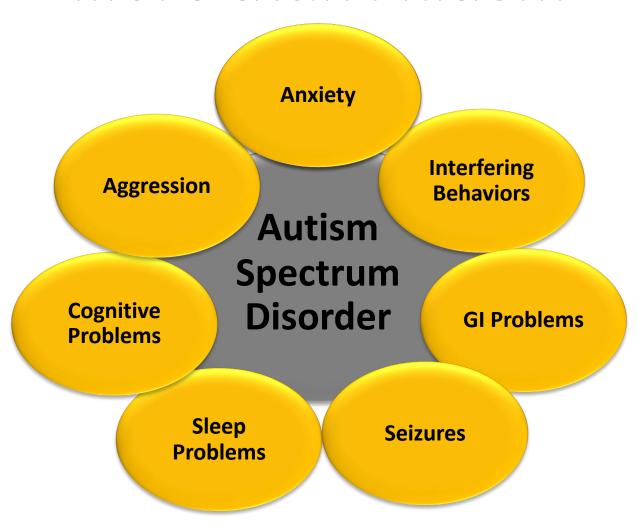




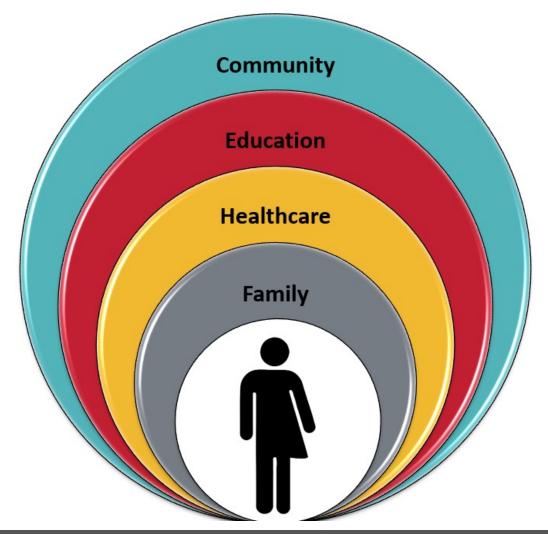


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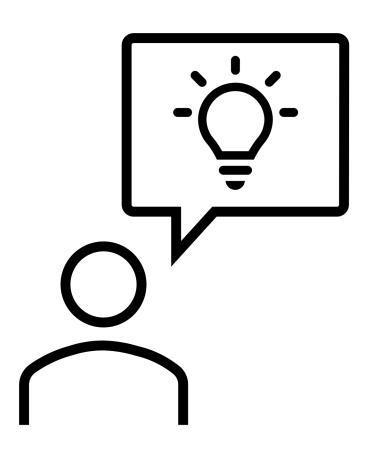
#### More than Autism



### Whole Care for the Whole Family



#### Things to Consider



- Screen for underlying medical issues
  - Sleep (50-80%)
  - Constipation (40-60%)
  - Seizures (10-20%)
  - Hearing
  - Feeding
  - Pica
- Refer for evaluation

#### Things to consider

- Dental caries
- Eczema
- Staring spells
- Abuse/neglect
- Trauma

Medical Concern



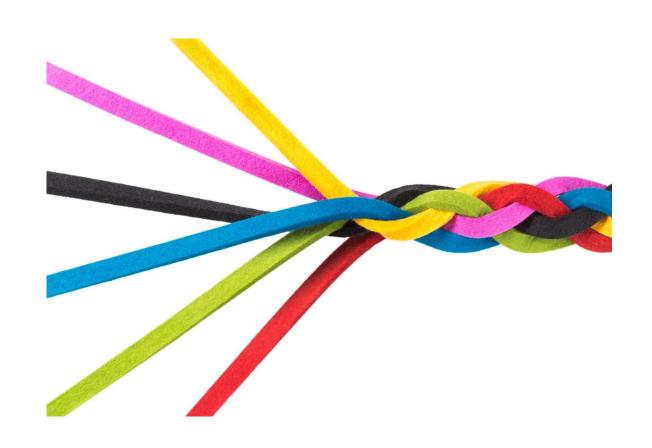
Development



**Behavior** 

#### **Common Psychiatric Comorbidities**

- Anxiety (up to 80%)
- ADHD (40-60%)
  - Inattentive presentation
  - Hyperactive Presentation
  - Combined presentation
- Irritability (~30%)
  - With and without aggression

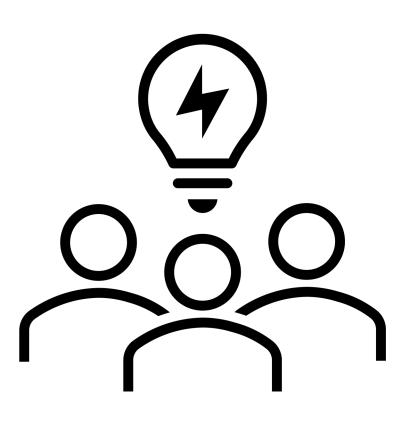


#### Multidisciplinary Care



- Primary Care
- Longitudinal autism medical monitoring
- Educational team
- Other medical specialists
- Autistic person
- Caregiver/parent

#### **Practice Tips**



- Detailed history with collateral from more than one setting
  - Changes
  - Transitions
  - Frequency, duration, intensity
- Ask the autistic person/child
- Ask the parent/caregiver
- Physical exam + observations
- Behavior as communication, Communication as behavior

#### **Anticipatory Guidance**

- Be proactive and anticipate what may happen next
  - ➤ Kindergarten visit the school, meet the teachers, experience the noises, social story
  - ➤ Puberty mood and body changes
  - ➤ Middle school bullying, signs of anxiety/depression
  - ➤ Transition to adulthood discuss life skills development at every visit starting at age 12, guardianship, living/work opportunities post high school

#### **Every Visit, Every Time**

- Sleep concerns onset, night wakings, snoring, daytime drowsiness
- Constipation hard, painful or infrequent stools
- Diet variety
- Seizures staring spells
- Medication monitoring
  - Atypical antipsychotics BMI and abnormal movements at every visit.
     Fasting lipids, fasting glucose at baseline, at 6 months and then annually
  - Stimulants height and weight velocity, heart rate
  - Alpha-2 Agonists heart rate, blood pressure

#### Take Action - Your Role



#### Take Action – Your Role





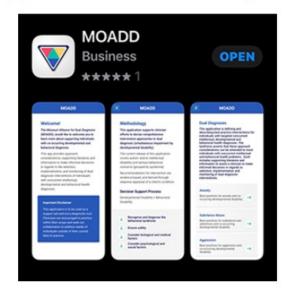


- MOADD ECHO (Dual Diagnosis)
- ECHO Autism: Behavior Solutions in Hospitals
- ECHO Autism: Behavior Solutions in Schools
- ECHO Autism: Primary Care
- ECHO Autism: Mental Health
- ECHO Autism: Advanced Diagnosis
- ECHO Autism: Advocates

### Dual Diagnosis (BH/DD) Resources

#### **MOADD Mobile Application**

The MOADD mobile application is now available. This app provides clinicians with best practice guidelines and approaches in supporting individuals with co-occurring intellectual, developmental and behavioral health diagnoses. The app can be downloaded from Google Play or iTunes.



Android: Download Google Play Store



Apple: Download iTunes Store



#### What Questions Can I Answer?

