



ECHO IDAHO: PEDIATRIC AUTISM/AUTISM STAT

Differential Diagnosis – Part 2

May 23, 2024

Elena Harlan Drewel, PhD

Pediatric Neuropsychologist

None of the planners or presenters for this educational activity have relevant financial relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Learning Objectives

- Brief Review of DSM-5 Criteria for Autism Spectrum Disorder (ASD)
- Review mental health diagnoses that have overlapping symptoms with ASD
 - Anxiety Disorders (i.e., social anxiety, selective mutism, GAD)
 - Obsessive-Compulsive Disorder
 - Attention-Deficit/Hyperactivity Disorder and Disruptive Behavior
 - Trauma- and Stressor-Related Disorders (i.e., reactive attachment, disinhibited social engagement, posttraumatic stress)
 - Intellectual Disability

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 of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take the same route or eat same 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 interests).
- 4. Hyper-or hyporeactivity to sensory input or usual interest and 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).

Specify severity (Level 1, 2 or, 3) under <u>each</u> category (A and B)

- 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.
- C. The disturbances are not better explained by intellectual disability (intellectual development disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

Specify If:

- With or without accompanying intellectual impairment
- With or without accompanying language impairment
- Associated with a known medical or genetic condition or environmental factor
- Associated with another neurodevelopmental or behavior disorder

Even though strong consideration of differential diagnoses is important, realize that these differential diagnoses can also be comorbid with ASD.

Autism Spectrum Disorder

- Severity Levels: Social Communication = 1/2/3 (Requires /Very Substantial/Substantial/ Support); Restricted/Repetitive Behaviors = 1/2/3 (Requires /Very Substantial/Substantial/ Support)
- With/without accompanying intellectual impairment (Impaired/average intellectual/cognitive functioning on formal testing)
- With/without accompanying language impairment (Impaired/average language skills on formal testing)

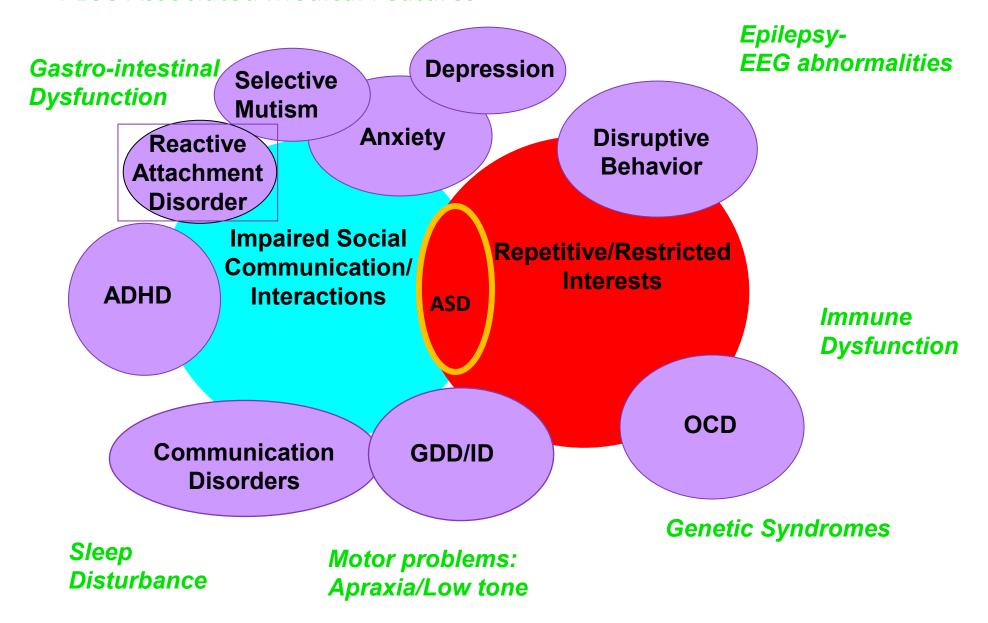
Associated with:

List comorbid diagnoses



ASD Core Symptom Domains

PLUS Associated Medical Features



- A fear of something about the world or environment that seems above and beyond what would be expected and impairs functioning.
- Several different anxiety disorders (i.e., separation anxiety, selective mutism, specific phobia, social anxiety, panic, agoraphobia, generalized anxiety).
- Common differentials are selective mutism, social anxiety, and generalized anxiety.
- Experiencing "sensory overload" is common, especially when in the feared or distressing situation.



Selective Mutism

- Consistent failure to speak in social situations where there is an expectation to do so <u>despite</u> <u>speaking in other situations</u>.
- Failure to speak is not due to a lack of knowledge of or comfort with the spoken language required.
- Present for at least one month (not including first month of school). Onset usually before 5 y.o.
- Can be associated with subtle language difficulties, social anxiety, compulsiveness/need for control.
- Child displays appropriate social communication skills in familiar settings where they feel more comfortable (asking parent to interact with child while you observe from another room can be helpful).
- Overlapping ASD sx: limited social-emotional reciprocity, deficits in nonverbal communication, difficulties engaging with other children, problems with transitions. Each have a more volitional/refusal quality to them and are more pronounced with unfamiliar individuals.

Social Anxiety Disorder

- Marked fear or anxiety about one or more social situations where individual is exposed to possible scrutiny by others (e.g., social interactions, being observed, performing).
- Afraid that they will act in away that will be negatively evaluated (humiliation, rejection, cause offense).
- The social situations almost always provoke fear.
- Fear is out of proportion of what would be expected. Occurs with peers and adults.
- Lasts for at least 6 months. Typical age at onset is mid to late childhood.
- May manifest at temperamental shyness in young children.
- Overlapping ASD sx: limited social-emotional reciprocity, deficits in nonverbal communication, difficulties engaging with other children. These behaviors are due to a fear of negative evaluation.

Generalized Anxiety Disorder

- Excessive anxiety and worry (apprehensive expectation) occurring more days than not for at least 6 months about a number of events or activities.
- The individual finds it difficult to control the worry.
- The anxiety and worry are associated with 1 or more of the following six symptoms (3 or more in adults): Restlessness or feeling keyed up, being easily fatigued, difficulty concentrating, irritability, muscle tension, sleep disturbance.
- Causes significant impairment in functioning.
- Fully manifests in adulthood but individuals describe feeling anxious their entire life.
- Typical themes of worry in children are performance-based, catastrophic events, separation, illness (other anxiety disorder/OCD diagnoses may be more appropriate).
- Overlapping ASD sx: repetitive questions related to the fear for the purpose of seeking reassurance, rigid
 routines/rituals due to the fear (e.g., fear of something bad happening may increase resistance to going new places,
 trying new foods, etc.), sensory overload when feeling distressed (e.g., things are too loud).

Obsessive-Compulsive Disorder

- Presence of obsessions, compulsions, or both:
- Obsessions are defined by:
- Recurrent and persistent thoughts, urges, or images that are experienced, at some time during the disturbance, as intrusive and unwanted, and that in most individuals cause marked anxiety or distress.
- The individual attempts to ignore or suppress or neutralize them through a thought or action (i.e., performing a compulsion).



Obsessive-Compulsive Disorder

- Compulsions are defined by:
- Repetitive behaviors (e.g., handwashing, checking, ordering) or mental acts (e.g., counting, repeating words silently) that are performed in response to the obsession and must be applied rigidly.
- The compulsions are meant to reduce anxiety or distress or preventing the feared situation from occurring. However, they are not a realistic way to prevent the situation (e.g., counting) or are done excessively (e.g., handwashing).



Obsessive-Compulsive Disorder

- The symptoms are time-consuming (take an hour or more each day) or cause great distress or impairment in functioning.
- Fears of death of loved ones or illness more common in children.
- Onset is usually gradual and does not usually occur prior to 4 years of age.
- Overlapping ASD sx: social withdrawal, sensory overload, rigid adherence to routines and rituals, all due to the need to reduce fear and anxiety related to an obsession.



Attention-Deficit/ Hyperactivity Disorder

 A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, as characterized by one or both of the following:

Six or more symptoms of inattention and/or hyperactivity/impulsivity for at least six months to a degree that is inconsistent with developmental level and negatively impacts directly on social and academic/occupational activities (see DSM-5 for complete list)

- Several sx are present prior to 12 years of age and occur in more than one setting.
- Sx interfere with or cause a reduced quality of social, academic, or occupational functioning.
- Specify combined, predominantly inattentive, or predominantly hyperactive/impulsive presentation.



Attention-Deficit/ Hyperactivity Disorder

- Associated features include low frustration tolerance, irritability, and mood lability.
- Disruptive and or oppositional behavior may co-occur due to task demands being too effortful and, therefore, the child devaluing their importance.
- Overlapping ASD sx: difficulties with social-emotional reciprocity, sustained eye contact and picking up on others' nonverbals, peer relationships, and transitions (all due to difficulty giving sustained attention and controlling impulses).



- Result from exposure to a traumatic or stressful life event.
- Can manifest in many ways including anxiety/fear, apathy, dysphoria, anger, aggression, dissociation.
- Examples include reactive attachment disorder, disinhibited social engagement disorder, and posttraumatic stress disorder.



Reactive Attachment Disorder

- Consistent pattern of inhibited, emotionally withdrawn behavior toward adult caregivers, manifested by rarely or minimally seeking comfort or responding to comfort when distressed.
- Must display at least two sx: Minimal social and emotional responsiveness to others, limited positive affect, episodes of unexplained irritability, sadness, fearfulness even during nonthreatening interactions with adult caregivers.
- Must have experienced at least one: persistent lack of having basic emotional needs for comfort, stimulation, and affection; repeated changes in primary care givers that limit opportunities to form attachments; rearing in unusual settings (e.g., institutions with high child-to-caregiver ratios) that limit the ability to form attachments.
- Symptoms present prior to 5 y.o.

Disinhibited Social Engagement Disorder

- Must display at least two sx: Reduced or absent reticence in approaching and interacting
 with unfamiliar adults; overly familiar verbal or physical behavior, diminished or absent
 checking back with adult caregiver after venturing away in an unfamiliar situation;
 willingness to go off with an unfamiliar adult with minimal or no hesitation.
- Child is not merely impulsive.
- Must have experienced at least one: persistent lack of having basic emotional needs for comfort, stimulation, and affection; repeated changes in primary care givers that limit opportunities to form attachments; rearing in unusual settings (e.g., institutions with high child-to-caregiver ratios) that limit the ability to form attachments.

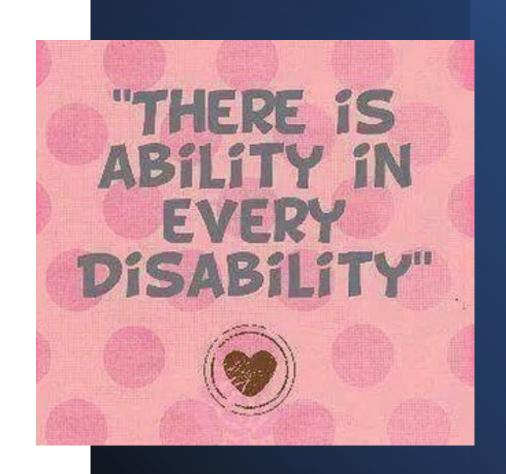
Posttraumatic Stress Disorder (criteria for children under 6 y.o.)

- Exposure to actual or threatened death, serious injury, or sexual violence (i.e., directly experiencing, witnessing, learning of it in parent or caregiver).
- Presence of intrusion symptoms (e.g., memories, dreams, flashbacks, cues, reminders).
- Persistent avoidance of or alterations of mood/cognitions associated with the traumatic event.
- Alterations in arousal and reactivity associated with the traumatic event.
- Duration is more than 1 month and causes significant distress or impairment in functioning.

- Overlapping ASD sx: difficulties with social-emotional reciprocity, limited nonverbal communication such as eye contact, language delay, repetitive play and motor mannerisms, sensory difficulties related to trauma experience.
- RAD and ASD technically cannot be diagnosed together.
- Symptoms of RAD may improve with a stable and nurturing home environment.

Intellectual Disability

- Impairment in intellectual functioning.
- Impairment in multiple areas of adaptive functioning.
- Present during the developmental period.
- Can be diagnosed at any point but given that intellectual functioning is not stable until mid-childhood, a diagnosis may be deferred until that time.
- Typically global developmental delay is used to describe children with cognitive and other delays prior to 5 years of age.
- Overlapping sx with ASD: social and emotional reciprocity and peer relationships may seem delayed but are commensurate with cognitive level. May exhibit repetitive mannerisms.



Take home points

- Understanding the underlying cause/function is important when considering ASD vs. a different diagnosis.
 - Lower social focused "volume" and higher object/topic focused "volume" in ASD.
 - Irrational fears, adverse childhood events in anxiety, OCD, trauma.
 - Difficulty regulating attention and inhibitory systems in ADHD.
 - Delayed development in ID rather than atypical/divergent development.
- Always stay curious and seek consultation when needed.

Questions?

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Earl, R. K., Peterson, J. L., Wallace, A. S., Fox, E., Ma, R., Pepper, M., & Haidar, G. (2017, June 1). Trauma and Autism Spectrum Disorder: A Reference Guide. Bernierlab.uw.edu. Retrieved May 6, 2023, from https://depts.washington.edu/uwhatc/wp-content/uploads/2022/07/Bernier-Lab-UW-Trauma-and-ASD-Reference-Guide-2017.pdf

National Collaborating Centre for Women's and Children's Health. (2011). *Autism: Recognition, Referral and Diagnosis of Children and Young People on the Autism Spectrum* (pp. 281-293). RCOG Press at the Royal College of Obstetricians and Gynaecologists.

Szarkwoski, A., Mood, D., Shield, A., Wiley, S., & Yoshinaga-Itano, C. (2014). A Summary of Current Understanding Regarding Children with Autism Spectrum Disorder Who Are Deaf or Hard of Hearing. *Seminars in Speech and Language*, 35(4), 241-259.

Session Resources & Claiming CE/CME

To access session resources, return to the course page and select today's session date.

Note: A link to the case recommendations will be added within 1 week of today's session.

If you wish to claim CE/CME credit, please return to the course page and click the **NEXT** button. Then advance to the survey section for this course, claim credit applicable to your profession and select **DOWNLOAD CERTIFICATE**. If you experience issues, please email us at echoidaho@uidaho.edu.

Note: You will have until the 8:00 a.m. MT the morning of the next session to claim your CE/CME.



