

**ECHO IDAHO**



# ECHO Idaho: Behavioral Health in Primary Care

Autism Spectrum Disorders

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# Disclosures

- I receive royalties from Cambridge University Press for a book I co-authored with Dr. George Grossberg. 2<sup>nd</sup> edition of our book titled *Psychiatric Consultation in Long-Term Care: A Guide for Healthcare Professionals*. 2017.
- I have no other financial relationships with commercial interests to disclose.

# Learning Objectives

- Describe clinical manifestations of Autism Spectrum Disorders (ASD)
- Discuss role of multi-disciplinary team and technology in comprehensive assessment and management of ASD
- Describe psychosocial-environmental-nutritional-sensory-behavioral interventions and pharmacologic interventions to treat behavioral disturbances and primary mental health disorders in individuals with ASD

# Spectrum of Autism

- ASD – Mild, Moderate, Severe. With and without Intellectual disability
- Replaces Pervasive Developmental Disorders
- Asperger's disorder is ASD without Intellectual Disability (aka High functioning Autism)
- Social Communication Disorder
- Autism traits

# Clinical Manifestations

- Symptoms typically visible between 12 and 24 months (e.g., delayed language patterns, unusual communication patterns, lack of social interest, atypical social interactions, odd patterns of play).
- Median age of diagnosis is after age 4 years.
- Four times more common in males compared to females.
- High variability in symptoms from one person to another.
- Many individuals show global improvement in adolescent.
  - Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
  - McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.

# Clinical Manifestations

- Social impairment is the hallmark symptom – social motivation/drive, social cognition, social communication
- Restricted and repetitive behaviors and interests
- Sensory sensitivities
- Behavioral disturbances (e.g., anxiety related to change, intense and prolonged outbursts/temper tantrums, self-injurious behaviors, aggression-irritability)
  - Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
  - McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.

# Neurobiology of ASD

- Deficient oxytocin function.
- Vasopressin dysfunction.
- Social reward system impaired.
- Impaired TOM (Theory of Mind neurocircuits), mirror neuron system, executive function, and weak central coherence.
  - Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
  - McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.

# Comprehensive Assessment

- Medical evaluation
- Functional behavior assessment (FBA)
- Psychiatric evaluation
- Use of technology (e.g., telemedicine)
  - Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
  - McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.
  - <https://www.autismspeaks.org/sites/default/files/2018-08/Challenging%20Behaviors%20Tool%20Kit.pdf>

# Medical Assessment

- Allergies (e.g., food) and food sensitivities
- Gastrointestinal problems (e.g., constipation, diarrhea, GERD, pancreatic enzyme deficiencies)
- Seizures
- Pain (e.g., headache, migraine)
- Eczema
- Ear and respiratory infections
- TBI-related
- Macro and Micro-nutrient deficiencies due to restricted diets
  - Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
  - McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.
  - <http://nationalautismassociation.org/pdf/MedicalComorbiditiesinASD2013.pdf>
  - Holingue et al 2018. Autism Research.

# Psychiatric Assessment

- Medical causes
  - Medication induced behavioral problems
  - ADHD
  - Sleep disorders
  - ASD related persistent aggression and or self-injurious behaviors
  - ASD with persistent anxiety
  - Major Depression
  - Psychotic disorders
  - Bipolar disorder
  - OCD
  - Personality disorder (e.g., Schizotypal personality disorder)
  - Trauma-related disorders
- 
- Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
  - McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.

# Psychiatric Medications

- ADHD medications (stimulants, atomoxetine, clonidine, guanfacine)
- Aripiprazole and risperidone approved by FDA for treatment of ASD related persistent aggression and or self-injurious behaviors
- Antidepressants for Major depression
  - Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
  - McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.

# Applied Behavior Analysis (ABA)

- Under the supervision of Board Certified Behavior Analysts
  - Behavior Analysis Certification Board. <https://www.bacb.com/bcba/>
  - Association of Behavior Analysis International <https://www.abainternational.org/welcome.aspx>

# Other Interventions

- Education and training of family (parents) and professional caregivers/care partners
  - Occupational therapy: Sensory integration strategies
  - Speech and language pathologists: Communication strategies
  - Dietician: Nutritional approaches
  - Nidotherapy (modifying environment to match the strengths of the person with ASD)
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- Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
  - McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.

# High-Tech Approaches

- Screen-based media (e.g., tablets and smartphones) to capitalize on visual perception and visual search strengths
- Telemedicine and EMR
- Behavior Imaging (<https://behaviorimaging.com> )
- Technology-based augmentative communication devices and strategies
- Monitoring technology (e.g., GPS, medical alert)
- Access to healthcare provider notes and their input
- Virtual reality based approaches
- Other

- Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing. 2018.
- McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.
- <https://www.healthychildren.org/English/health-issues/conditions/Autism/Pages/default.aspx>

# Key Points

- Early diagnosis
- Multidisciplinary team
- BCBA's and Psychiatrists working together with Primary Care Providers to minimize psychiatric medication use and improve mental health outcomes
- Support from local community, state and federal government

# References and Resources

- *Hollander, Hagerman and Fein. Editors. Autism Spectrum Disorder. American Psychiatric Association Publishing 2018.*
- *McDougle CJ. Editor. Autism Spectrum Disorder. Oxford University Press, 2016.*
- *Upcoming Autism Mental Health conference on November 2, 2019 hosted by University of Idaho and partners.*
- *American Academy of Pediatrics: Autism: Caring for Children With Autism Spectrum Disorders. A Resource Toolkit for Clinicians (\$80)*
- <https://www.healthychildren.org/English/health-issues/conditions/Autism/Pages/default.aspx>
- *Autism Research Institute <https://www.autism.com>*
- *Autism Speaks <https://www.autismspeaks.org> 100 Day Kit: A tool kit to assist families in getting the critical information they need in the first 100 days after an autism diagnosis*
- *Autism Society of America <http://www.autism-society.org>*
- *American Psychiatric Association*
- <https://www.psychiatry.org/patients-families/autism>