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Psychiatry and Addictions Case Conference
UW Medicine | Psychiatry and Behavioral Sciences

SYMPTOM MANAGEMENT WITH PSYCHIATRIC MEDICATIONS IN ADULTS WITH AUTISM SPECTRUM DISORDER

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project ECHO

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OBJECTIVES

- Become familiar with common co-occuring psychiatric conditions in ASD/DD
- Understand unique features of psychiatric conditions and their treatment in ASD/DD
- Become familiar with pharmacological (and non-pharmacological) strategies to address co-occuring psychiatric conditions in ASD/DD

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CASE #1

- 18 yo female
- Hospitalized age 9 for suicidality – dx'ed with OCD, major depression
- Hyperfocused interest in horses
- Trouble reading/writing due to perfectionism
- Very few friends; difficulty sustaining friendships
- Struggled in school until moved to small alternative high school
- Dx'ed with ASD age 13
  - WAIS - full IQ - 100; verbal comp - 105; perc reasoning - 102; working memory - 125; processing speed - 65

CASE #1 (CONT.)

- Planning for GED
- Attending vocational school in Fall
  - Large animal vet tech degree
- Still cutting/suicidal ideation as recently as 6 months ago
  - Benefiting from DBT – “building her tool chest”
  - Current meds – aripiprazole, bupropion, duloxetine
- Exam
  - Blunted affect; flat prosody of speech; very quick response time in answering questions (strongly opinionated); eye contact reduced

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CASE #2

- 29 yo male
  - Diagnosed with ASD age 5
  - Minimally verbal
- Age 19
  - Resurgence of aggression and property destruction (symptoms from earlier years returning)
    - Living with mom, sibs off to college
    - Dog phobia
- Exam – minimally verbal, but better verbal comprehension; responded excitedly during discussion of possible new recreational activities

CASE #2 (CONT.)

- Age 19-29
  - Added aripiprazole and citalopram
  - Started attending classes at the Alyssa Burnett Adult Life Center
  - Started working with behavioral therapist
  - Behaviors have reduced significantly
  - Mom now looking at other living options

MENTAL HEALTH OVERVIEW IN ASD

- Inpatient hospitalization - tripled between 1999-2009 for adolescents with ASD (Nayfack, 2014)
- Risk factors for psychiatric hospitalization (Mandell, 2008)
  - Aggression, self-injury, depression, single-parent home, sleep disturbance
- 53% of total healthcare for a child with ASD is incurred by 10% of the ASD population (Croen et al, 2006)
  - Primarily driven by psychiatric hospitalization

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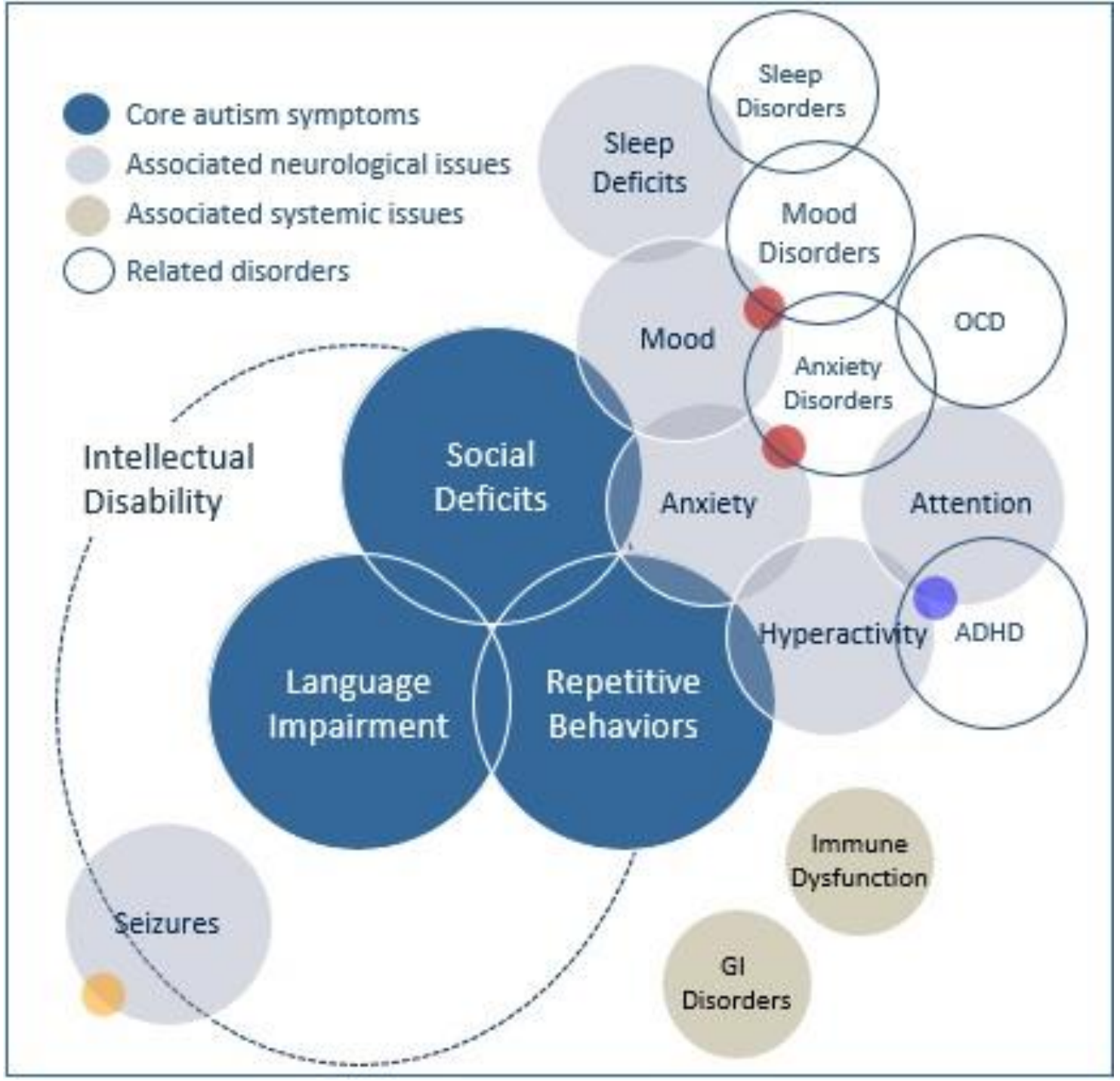
Co-Occuring Conditions in ASD

- *In some cases, the co-occuring conditions can cause a greater barrier to success than the core features of ASD*



Autism Speaks

COMMON PSYCHIATRIC COMORBIDITIES IN ASD

- Anxiety Disorders
- Depressive Disorder and Suicide
- ADHD (inattention and impulsivity)
- Psychosis (including catatonia)
- Others
  - Bipolar Disorder
  - Obsessive-Compulsive Disorder
  - Tic Disorders

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GENERAL CONSIDERATIONS

- ASD as a "**neurodevelopmental substrate**"
  - enhancing likelihood of co-occuring mental health conditions
- **Atypical symptom manifestation** in ASD
  - Self-injury, irritability, aggression, bizarre movements and behaviors
- **Overlap of ASD core features and symptoms of other mental health disorders**
  - Often delays recognition and treatment of mental health disorder (Bakken, 2010)
  - Or the reverse – psych dx can delay recognition of ASD
- Recognition and reporting of internal state may be difficult

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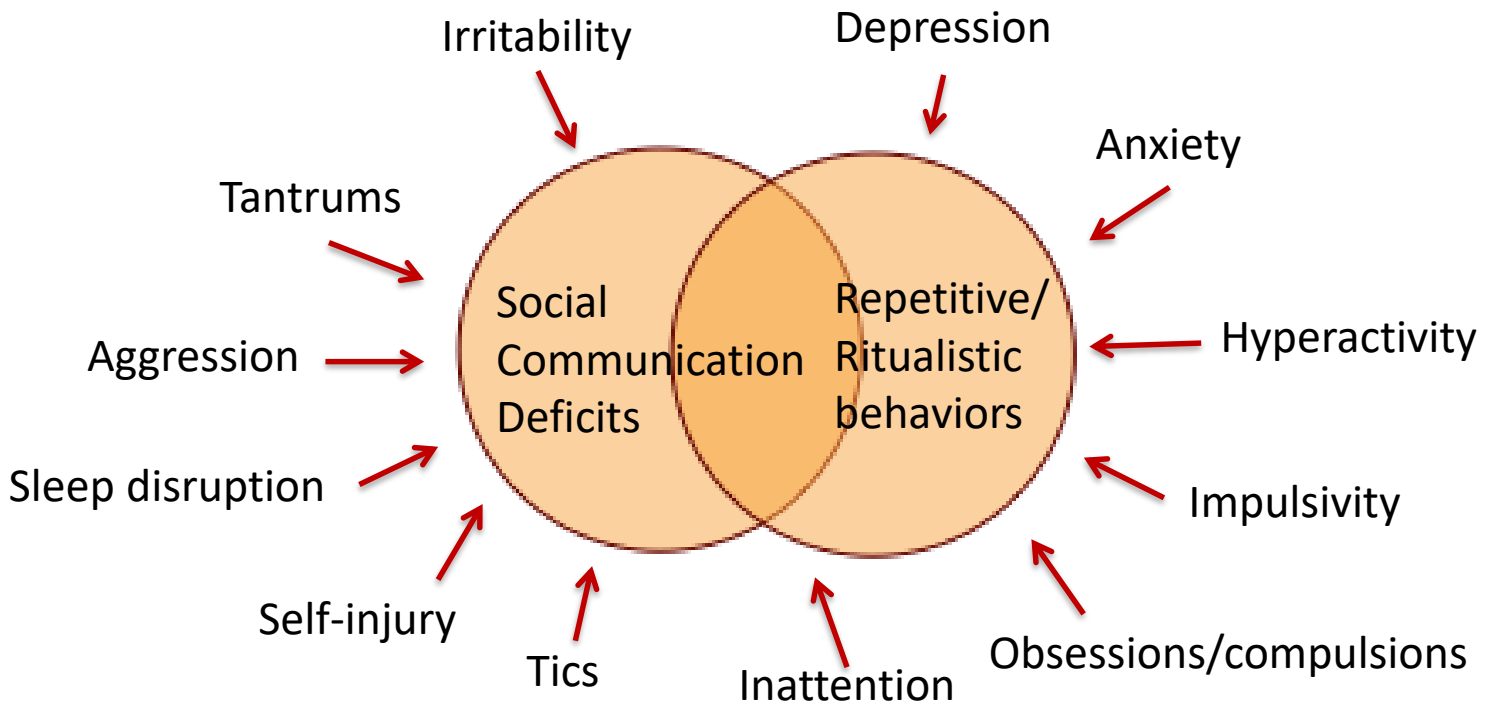
BEHAVIORAL SYMPTOMS CAN INCREASE CORE DEFICITS IN ASD



Treatment can be aimed at reducing associated symptoms that interfere with functioning and may be exacerbating core deficits.

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BUT, BEFORE REACHING FOR THE PRESCRIPTION PAD…

- Is the “disruptive” behavior functional (i.e. serving a purpose)?
- Are there environmental factors influencing the disruptive behavior, and, if so, can they be modified?

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OVERVIEW OF PSYCH MEDS IN ADULT ASD

- **Systematic evidence of benefit lacking** (Dove, 2012)
  - No FDA approved med for adults
    - **aripiprazole and risperidone** only meds approved in children
  - Lack of empirical evidence allows for "choosing your favorite"
  - Family history to medication response may influence choice
- Despite lack of evidence, **psych med use is common**
  - **Atypical antipsychotics, SSRIs, and stimulants** most commonly used (Esbensen, 2009)
  - 80% of all adults on psychotropics
  - Steady increase in use of psychopharm agents with age
  - Once on psychotropic, likely to stay on
- **Poly-pharmacy is common** (Tsiouris, 2013)
  - mean – 1.51 meds in adults with ID/autism

CHALLENGING ASPECTS OF PSYCH MED TREATMENT IN ASD

- **Identify the target symptom** before starting treatment.
  - Narrow target symptom(s) and expectations
- **Measuring response** is challenging.
  - Subjective (often from observer) assessment of benefit
- **Adverse events** are common.
  - Idiosyncratic responses are more common
  - Adverse events can be reported as increase in core symptoms or target symptom
- Beware of **regression to the mean.**
  - Sometimes inappropriately attribute improvement to the medication.

BASIC PRINCIPLES OF PSYCH MEDS IN ASD

- Maximum dose is often less than prescribed to typically developing individuals.
- Start LOW and go SLOW!
- Avoid polypharmacy if possible.
- Common pitfalls:
  - Misattribution of med effect due to other life changes
  - Positive response could be “regression to the mean”
  - Reporting by caregiver strongly influenced by placebo effect/belief system
  - Leaving medication on board when only minimal benefit is seen
  - Benefit/failure at young age not always predictive of response at later age

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COMMONLY USED PSYCH MED CLASSES IN ASD

- **Antidepressants**
  - SSRIs most common
- **ADHD Meds**
  - Stimulants – long acting preferred
  - Non-stimulants (alpha-agonists, atomoxetine, amantadine)
- **Antipsychotics**
  - Risperidone and aripiprazole most studied
- **Anxiolytics**
  - Benzodiazepines (more commonly “prn” use; lorazepam for catatonia)
  - Beta-blockers
- **Mood stabilizers**
  - AEDs (lamotrigine, valproic acid, carbamazepine) and lithium

ANXIETY AND ASD

- Incidence **increases with improving self-awareness**
  - Can emerge as developmental progress is occuring
- Often provoked by changes in routines, new social situations, difficult task demands, etc.
- **Presentation variable**
  - fearfulness, irritability, tantrums, self-injurious behaviors, aggression, obsessive questioning, repetitive behaviors, etc.

TARGETING ANXIETY IN ASD

- SSRIs most commonly used
- SNRIs also used
- Consider buspirone
- Avoid benzodiazepines if possible
  - Effective as “prophylactic prn” for blood draws, dental visits, etc.
  - Consider hydroxyzine as first line alternative
- Consider alpha-agonists or beta blockers as these might be therapeutic for “hyperarousal”
- Don’t forget importance of **physical exercise, physical health, and sleep!**

DEPRESSION AND ASD

- As with anxiety, **increased in ASD** vs. other DDs (especially ASD *without* ID)
  - Developmental progress in **self-awareness** can contribute
  - Increasing academic and social demands
- Again, **ASD can mask** and/or compound symptoms
  - social withdrawal, constricted affect, irritability, increased insistence on routines, disorganization, inattention.
- Suicide attempts 4-fold increase in ASD (Croen, 2015)
  - **10-fold increase in "high-functioning" ASD (without ID)**
  - LGBTQ+ identity may increase risk

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TARGETING HYPERACTIVITY, IMPULSIVITY AND INATTENTION IN ASD

- Co-occurring ADHD in ASD estimated at 30-85%
- Most common treatment is **medication**
  - Psychostimulants most common – long-acting preferred
  - Some evidence for alpha-2 agonists (guanfacine, clonidine).
  - Limited studies of atomoxetine
- Don’t forget interplay between inattention and anxiety/mood
- Also, don’t forget importance of **physical exercise, physical health, and sleep**

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ANTIPSYCHOTICS AND ASD

- Primary target in ASD is "**behavioral dysregulation**"
  - Irritability, aggression, self-injury, tantrum behaviors
- Secondary targets in ASD include
  - Mood, sleep, tic behaviors, compulsive behaviors
  - Hallucinations/psychotic features
- **Typically reserved as "2nd line"** due to side effect profile
  - Although can sometimes be highly therapeutic
  - Safety blood test monitoring may be challenging
- Evidence supports **benefit at low dose**
  - Safety blood test monitoring may be challenging

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OTHER CONDITIONS TO CONSIDER IN ASD

- **Bipolar**
  - Consider when cycling of behavior/mood is seen
  - Cycling can be very rapid
  - Consider with **unexplained new onset insomnia**
  - Treatment combining antidepressant with mood stabilizers
- **Obsessive Compulsive**
  - Gray line between repetitive behaviors/OCD
  - Consider with new onset repetitive behavior
  - Treatment combining SSRI and anti-psychotics
- **Catatonia**
  - Seen more commonly in “syndromic” forms of autism
  - Can present as “excitable” form (difficult to differentiate from “self-stim”)
  - Consider with **unexplained new onset weight loss**
  - Treatment with high dose benzodiazepine
- **Tic Disorder**
  - Can emerge at later onset in ASD
  - Difficult to differentiate from “self-stim” behavior
  - Treatment with alpha agonists and anti-psychotics

IMPORTANCE OF LIFESTYLE AND HEALTH

- People with ASD (like other brain conditions) can improve mental health by attending to physical health and wellness
  - Strategies to address sleep, diet, exercise
  - Stress management (mindfulness therapy)
  - Community participation

RESOURCES

- AACAP Practice Parameter for the Use of Atypical Antipsychotic Medications in Children and Adolescents

https://www.aacap.org/AACAP/Resources_for_Primary_Care/Practice_Parameters_and_Resource_Centers/Practice_Parameters.aspx

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