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

PSYCHOPHARMACOLOGICAL MANAGEMENT OF CHALLENGING BEHAVIORS IN ASD AND IDD

GARY STOBBE, MD

UNIVERSITY OF WASHINGTON

UW Medicine
UW SCHOOL OF MEDICINE

Integrated Care Training Program
UW Psychiatry & Behavioral Sciences

project ECHO

SPEAKER DISCLOSURES

Dr. Stobbe has no conflicts of interest related to this topic.

Planner disclosures

The following series planners have no relevant conflicts of interest to disclose; other disclosures have been mitigated.

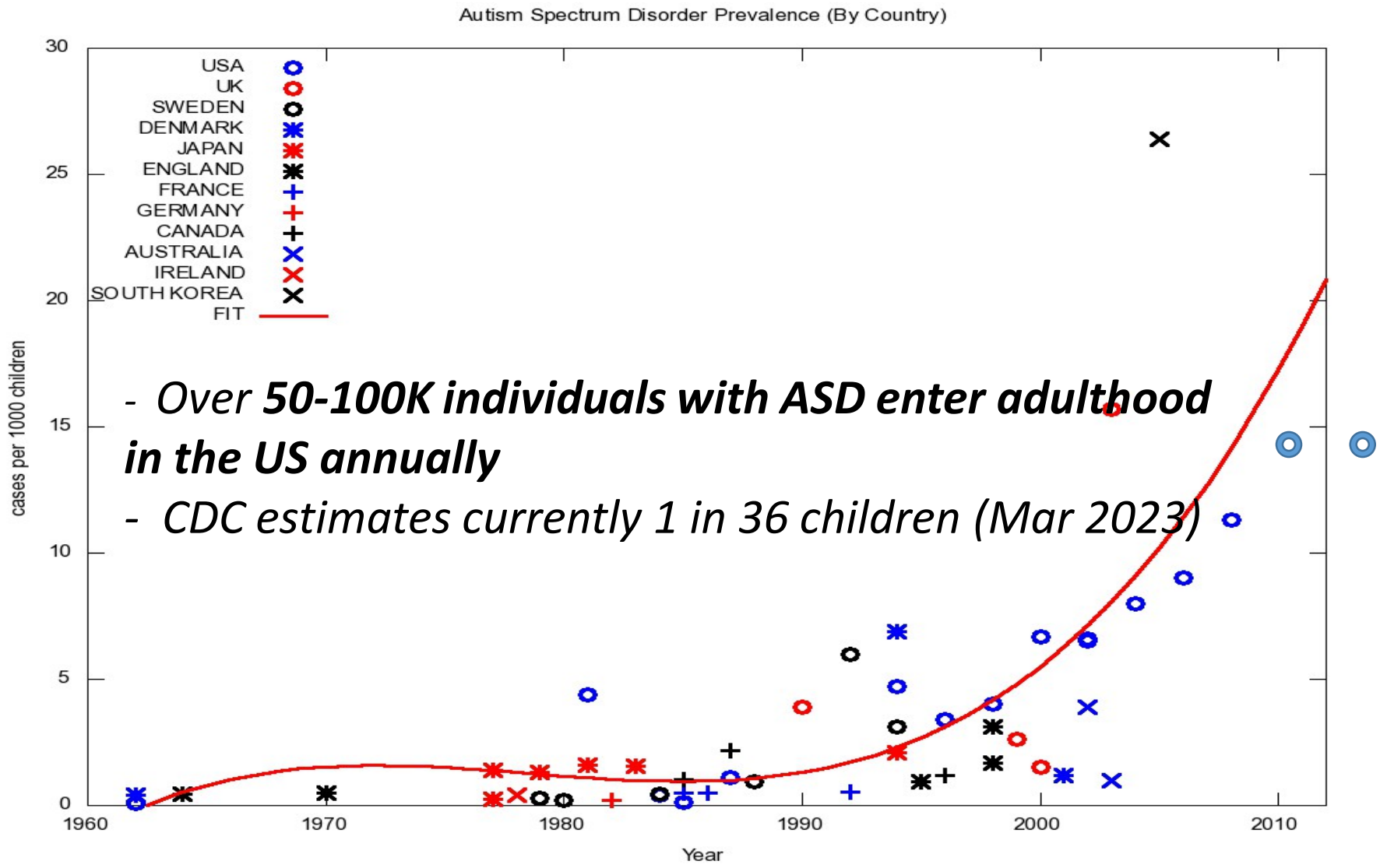
Mark Duncan MD
Rick Ries MD
Kari Stephens PhD
Barb McCann PhD
Anna Ratzliff MD PhD
Betsy Payn MA PMP
Esther Solano
Cara Towle MSN RN

UW PACC

OBJECTIVES

1. Become familiar with common psychopharmacological approaches to managing challenging behaviors in autism spectrum disorders (ASD) and intellectual and/or developmental disabilities (IDD)
2. Become able to recognize potential medical, behavioral, and mental health factors that may contribute to challenging behaviors
3. Be aware of non-pharmacological strategies to address challenging behaviors in ASD/IDD

UW PACC



- *Over **50-100K individuals with ASD enter adulthood in the US annually***
- *CDC estimates currently 1 in 36 children (Mar 2023)*

Person first vs identity first language

- **Autism as a medical diagnosis**
  - Puts the person before the diagnosis
  - Medical model
  - “person with autism”
- **Autism as an identity**
  - Disability pride
  - Social justice model
  - “autistic person”

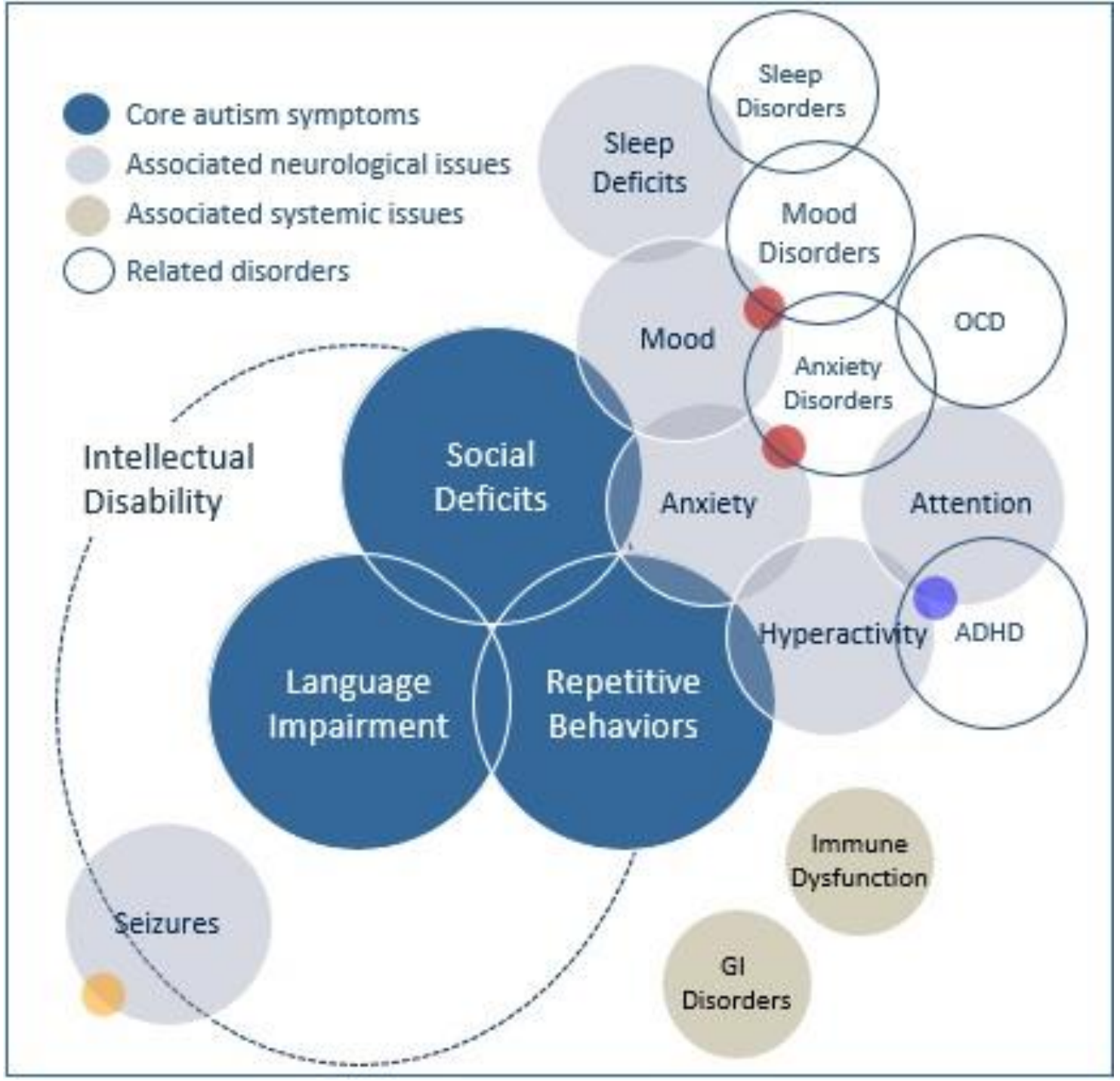
Today I will be approaching primarily from perspective of the medical model

CHALLENGES TO PROVIDING CARE WITH ASD/IDD POPULATION

- Communication challenges
- Mis-diagnosis
- Accessing testing including basic safety labs
- Sensitivity to meds and monitoring side effects
- Availability of information
- Implementing plan across all stakeholders

Co-Occurring Conditions in ASD/IDD

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



Autism Speaks

INCREASED HEALTH CARE UTILIZATION IN ASD/IDD

- 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

UW PACC

CASE EXAMPLE

- 24 yo male, lives with mom (non-English speaking only), sister, and brother/wife/baby
- CNS insult (infection/trauma) age 9
  - Intractable epilepsy (multiple AEDs, vagal nerve stimulator)
  - Global cognitive impairment, functionally minimal/non-verbal
- Age 21- regression – increased self-talk, screaming, aggression, etc.
- 40 day hospitalization – acute neuro/medical ruled out – discharged back to family with very few supports outside immediate family
- Continues to struggle
  - ABA therapy recommended, but unable to obtain

CASE EXAMPLE (CONT.)

- Regression – corresponded with loss of community access (school ending, COVID)
- Regression included spending more time in room yelling at imaginary people
- Other times aggression and property destruction both seen
- Med hx – intractable epilepsy persists (some variability in behaviors with seizures)
- Meds – risperidone, clonazepam, topiramate, phenytoin, oxcarbazepine

What other questions? What are next steps?

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

UW PACC

CHALLENGING BEHAVIORS IN ASD/IDD

- DSM-5 – defined as disruptive behaviors (Disruptive Behavior Disorder)
- Failure to control aggressive impulses manifested by
  - Verbal aggression like temper tantrums, tirades, arguments, or fights
  - physical aggression towards people, animals, property
  - Self-injury
  - Inclusion of elopement
- Behaviors constitute a safety threat to self and/or others
- More common in ASD *with* language impairment and/or ID

UW PACC

Managing challenging behaviors in ASD/IDD

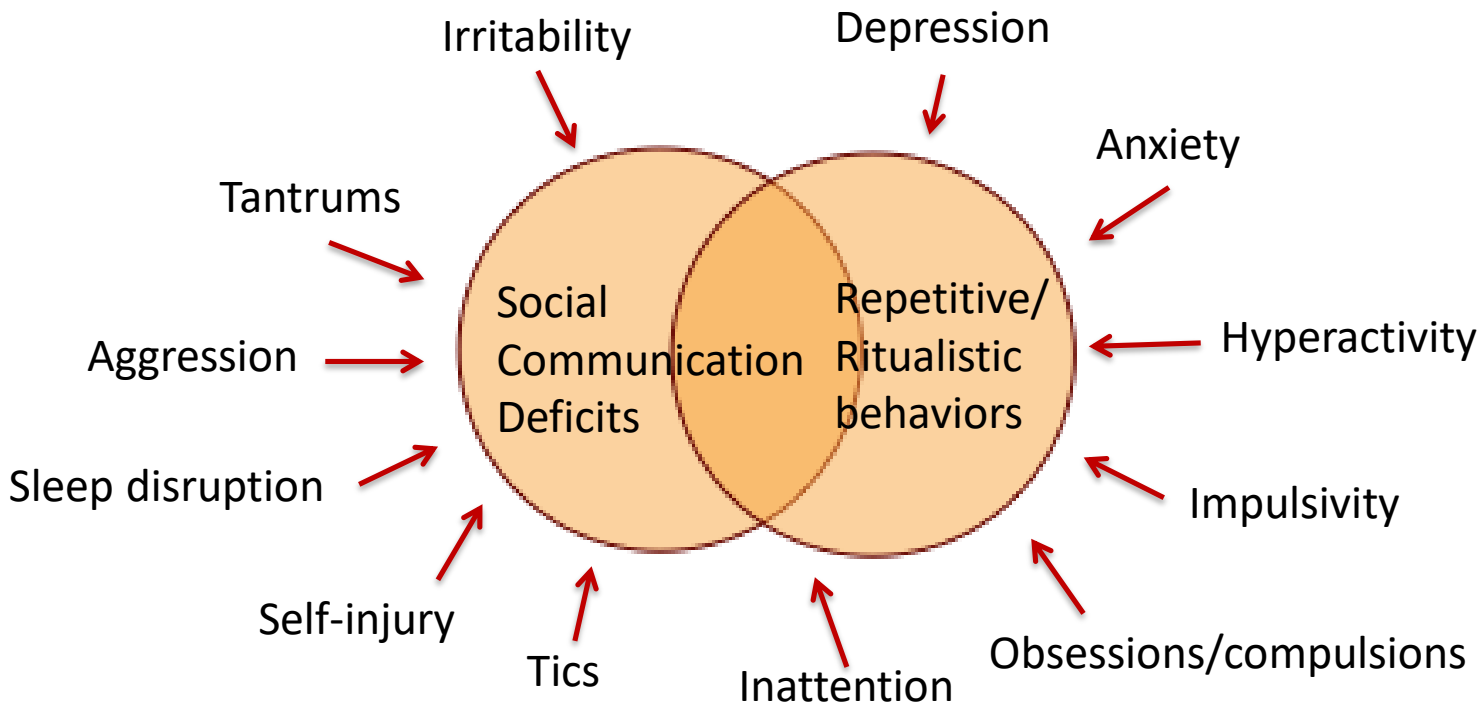
"Metal Sky"
by Forrest Sargent

PRACTICAL STRATEGIES TO MANAGEMENT OF CHALLENGING BEHAVIORS

- **r/o underlying medical condition** for new onset symptoms
- Current best treatment practices: **Follow the research-supported paradigms for typically developing individuals with the same dx**
- **Multiple disorders** as the rule of thumb (Mosner, 2019)
- **Polypharmacy** common (approx. 30%) – JAMA, 2021)
- Divergent care patterns driven by therapeutic uncertainty – **"Physician prescribing fingerprints"**
- Be aware of **"diagnostic overshadowing"**
- Often **symptom driven, not dx-driven**
  - Impacts expectations, targets
  - Start low, go slow

UW PACC

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.

UW PACC

Person-Centered, Strength-Based
(stop focusing on the negative!)

Autism: the positives

Understanding, embracing and celebrating different ways of thinking and doing can release the true power of the autistic mind. Here we look at the positive features of autism.

Attention to detail
- Thoroughness
- Accuracy

Deep focus
- Concentration
- Freedom from distraction

Observational skills
- Listen, look, learn approach
- Fact finding

Absorb and retain facts
- Excellent long term memory
- Superior recall

Visual skills
- Visual learning and recall
- Detail-focussed

Expertise
- In-depth knowledge
- High level of skills

Methodical approach
- Analytical
- Spotting patterns, repetition

Novel approaches
- Unique thought processes
- Innovative solutions

Creativity
- Distinctive imagination
- Expression of ideas

Tenacity and resilience
- Determination
- Challenge opinions

Accepting of difference
- Less likely to judge others
- May question norms

Integrity
- Honesty, loyalty
- Commitment

DISRUPTIVE/CHALLENGING BEHAVIOR

Key questions –

- functional vs. physiologic
- pleasing vs. dysphoric
- new or chronic
- associated with functional decline
- associated with change in sleep, eating, or hygiene

UW PACC

BE AWARE OF CO-OCCURRING MEDICAL CAUSES

- Epilepsy – 20-30%
  - Ictal activity can manifest in behavioral change
  - Anti-seizure meds can have positive or negative effects on behavior
- GI – constipation, IBS, reflux/GERD more common
- Sleep – can be genetic (present lifelong) or acquired (anxiety, sleep apnea)

BEFORE REACHING FOR THE RX PAD…

- Applied Behavior Analysis (ABA) therapy
- Speech therapy
  - Pragmatic language, social skills, augmentative and alternative communication (AAC)
- Occupational therapy
  - Sensory processing, adaptive skills
- Individual CBT/counseling
  - Executive functioning
  - Emotional regulation
  - Trauma-informed CBT
- Group counseling
  - Social skills
- Vocational counseling
- Recreation therapy/art therapy/music therapy

Interdisciplinary; community participation

UW PACC

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 FDA approved for children with irritability in ASD
- **Anxiolytics**
  - Benzodiazepines (more commonly “prn” use; lorazepam for catatonia)
  - Beta-blockers
- **Mood stabilizers**
  - AEDs (lamotrigine, valproic acid, carbamazepine) and lithium

OVERVIEW OF PSYCH MEDS IN ADULT ASD

- **Systematic evidence of benefit lacking** (Henneberry, 2021)
  - No FDA approved med for adults
    - **aripiprazole and risperidone** only meds approved in children
  - Lack of empirical evidence allows for "choosing your favorite"
- Despite lack of evidence, **psych med use is common**
  - 60-80% of adults with IDD
  - **Atypical antipsychotics, SSRIs, and stimulants** most commonly used (Esbensen, 2009)
  - 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

BASIC PRINCIPLES OF PSYCH MEDS IN ASD/IDD

- 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

CHALLENGING ASPECTS OF PSYCH MED TREATMENT IN ASD/IDD

- **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.

ADHD

- 14-70% co-occurring with ASD
- Highly variable medication response
- Executive functioning can impact success in home and community
- Consider stimulants, non-stimulants (alpha-agonists, amantadine, atomoxetine)
- Consider accommodations/positive behavior supports
  - Self-pace, areas of interest

ANXIETY

- Approx 30-50% autistic adults
- Generalized and social anxiety most common
- Presentation variable
  - fearfulness, irritability, tantrums, self-injurious behaviors, aggression, obsessive questioning, repetitive behaviors, etc.
- Consider SSRIs, beta-blockers, buspirone, benzos, SNRIs
  - Fluvoxamine - ? Reduce obsessive thoughts

UW PACC

DEPRESSION/SUICIDALITY/OCD/BIPOLAR

- 5-10% affective disorders
- Increased risk in ASD without ID (increased self-awareness)
- Diagnostic overshadowing in both directions
- Emerging strategies for screening of suicidality
- Bullying and prior trauma risk factors
- Suicide leading cause of early death in autistic people
- Consider SSRIs, SNRIs, atypical anti-psychotics, mood stabilizers
  - Consider mirtazapine if SSRI ineffective

PSYCHOSIS

- 4-11% - more stemming from affective disorders?
- Shared genetic risk and symptom overlap with schizophrenia
- Hallucinations/magical thinking more common in ASD?
- Risperidone and aripiprazole FDA approved for irritability in children with ASD
  - Quetiapine, olanzapine, ziprasidone, lurasidone, paliperidone
  - First generation if refractory (haloperidol, chlorpromazine)
  - Clozapine (be aware of challenge in blood draws for some individuals)
  - Low dose range typically effective
  - Consider long-acting injectables if compliance concern
  - If weight gain – consider ziprasidone

CATATONIA

- 12-20%
- Higher risk in “syndromic” forms of autism
- Can present as “excitable” form (difficult to differentiate from “self-stim”)
  - Bush-Francis Catatonia Scale – risk for false positives (helps to know baseline)
- Consider with **unexplained new onset weight loss**
- Treatment with high dose benzodiazepine, ECT, memantine

AS NEEDED (PRN) MEDS

- Work well when able to give prior to a triggering/anxiety-provoking event (dental apt, airport, etc.)
- Does NOT work well when given in response to a challenging behavior
  - Challenging behaviors most commonly are brief (1-30 minutes) and resolve before med can get in bloodstream when administered orally

PRN MED CHOICES

- Antihistamines
- Benzodiazapines
- Antipsychotics (1st and 2nd gen.)
- Beta blockers
- Others

Tips

- Pros and cons of using same med as a prn and a standing order

- Suggest trial at home prior to actual anxiety-provoking event to help estimate dose and effectiveness

UW PACC

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**
  - Slow reintroduction to the community after a crisis (or post-COVID)
    - Model after “return to play” protocol in used in concussion management

UW PACC

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

REFERENCES

- Bakken TL, Helverschou SB, Eilertsen DE, et al. Psychiatric disorders in adolescents and adults with autism and intellectual disability; a representative study in one county in Norway. *Res Dev Disabil*, 2010, 31(6):1669-77.
- Croen LA, Najjar DV, Ray GT, et al. A comparison of health care utilization and costs of children with and without autism spectrum disorders in a large group-model health plan. *Pediatrics,* 2006 Oct; 118(4):e1203-11.
- Croen LA, Zerbo O, Qian Y, Massolo ML, Rich S, Sidney S, et al. The health status of adults on the autism spectrum. Autism. 2015;19(7):814–23.
- Dove D, Warren Z, McPheeters ML, et al. Medications for adolescents and young adults with autism spectrum disorders: a systematic review. *Pediatrics*, 2012, 130: 717-26.
- Esbensen AJ, Greenberg JS, Seltzer MM, et al. A longitudinal investigation of psychoactive and physical medicaltion use among adolescents and adults with autism spectrum disorders. *J Autism Dev Disord*, 2009, 39:1339-49.
- **Henneberry E, Lamy M, Dominick KC, & Erickson CA. Decades of progress in the psychopharmacology of autism spectrum disorder. *J Autism Dev Disord,* 2021, 51:4370-4394.**
- Mandell DS. Psychiatric hospitalization among children with autism spectrum disorders.*J Autism Dev Disord,* 2008; 38:1059-65.
- Nayfack AM, Huffman LC, Feldman HM, et al. Hospitalizations of children with autism increased from 1999 to 2009. *J Autism Dev Disord,* 2014 May; 44(5):1087-94.
- Tsioris JA, Kim SY, Brown WT, et al. Association of aggressive behaviours with psychiatric disorders, age, sex, and degree of intellectual disability: a large-scale survey. *J Intellect Disabil Res*, 2011, 55(7): 636-49.

UW PACC