The Impact of Physical Health Conditions on Mental Health in Individuals with IDD: Why a Visit to the Doctor is Essential Before Psychiatric Intervention

The Arc of New Jersey
Webinar on Dual Diagnosis – Part 3
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Disclosure

The authors of this presentation have no actual or perceived conflicts of interest to report in relation to this presentation.

You will learn:

- About health disparities in people with IDD
- About the importance of multidisciplinary evaluation
- Common medical conditions for people with IDD that are often associated with mental health or behavioral challenges

Health Disparities

- Preventable health inequities or avoidable differences in healthcare between different groups of people
- Experienced by vulnerable populations as a result of poorer access to quality healthcare services

People with ID remain one of the most medically underserved groups in the world and still face significant health disparities, not directly caused by their disability.

Health Disparities

People with ID experience dramatically higher rates of preventable health issues than peers without ID

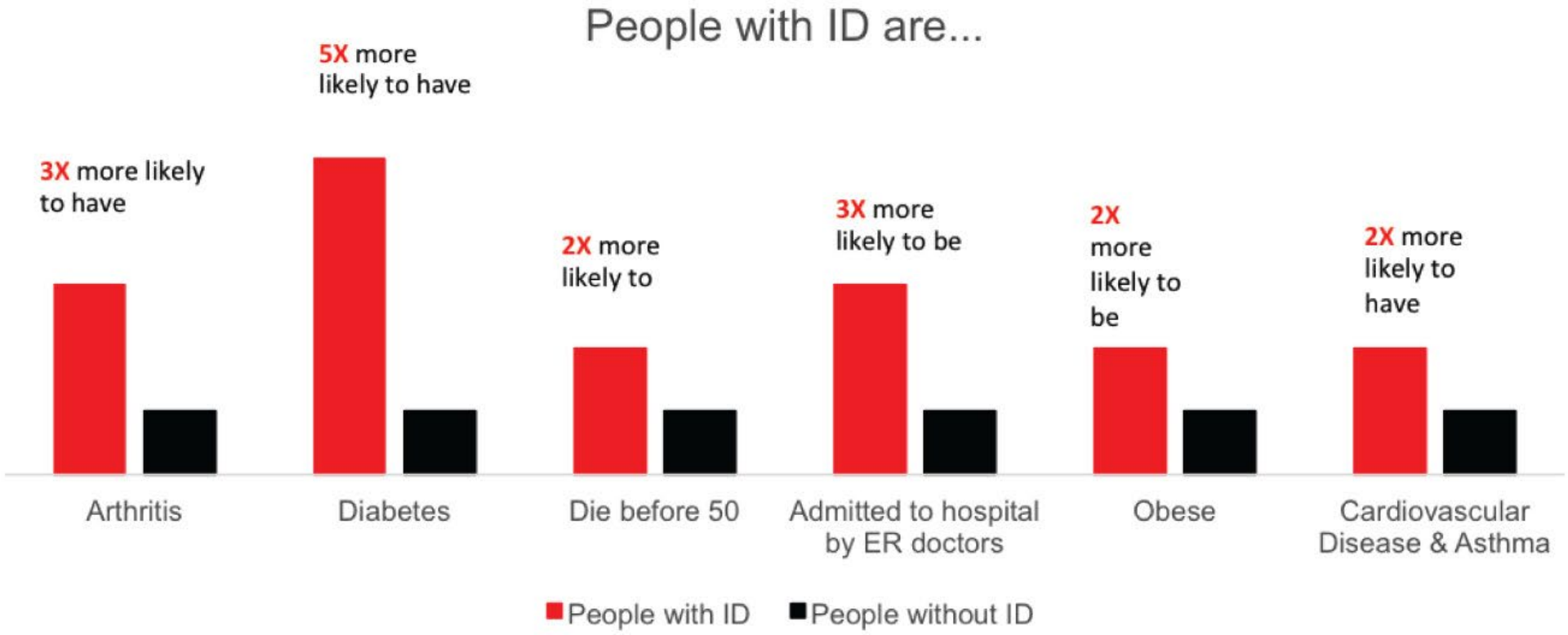
- 4x higher preventable mortality rates
- higher rates chronic conditions
- 3X higher rates of hospitalization
- difficulty accessing care

ID does **NOT** equal poor health!

Beware of **diagnostic overshadowing** – health and mental health symptoms attributed to disability

Health Disparities in People with IDD

- More likely to report being in poor health
- Less likely to receive preventative screenings and vaccinations
- Higher rates of undiagnosed hearing and vision impairments
- Higher rates of obesity
- Higher rates of poor dental health
- Higher rates of diabetes, arthritis and cardiovascular diseases
- Shorter average life expectancy than the general population
- More likely to have poorly managed chronic health conditions
- Higher rates of prescribed psychotropic medication (83%)
- People needing higher levels of behavior support show higher rates of many disparities than others in the IDD population.



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Why are health problems missed?

Diagnostic Overshadowing

“High tolerance” to pain

Need longer appointment

Poor historian

Communication challenges

Need for corroboration

Limited medical screenings

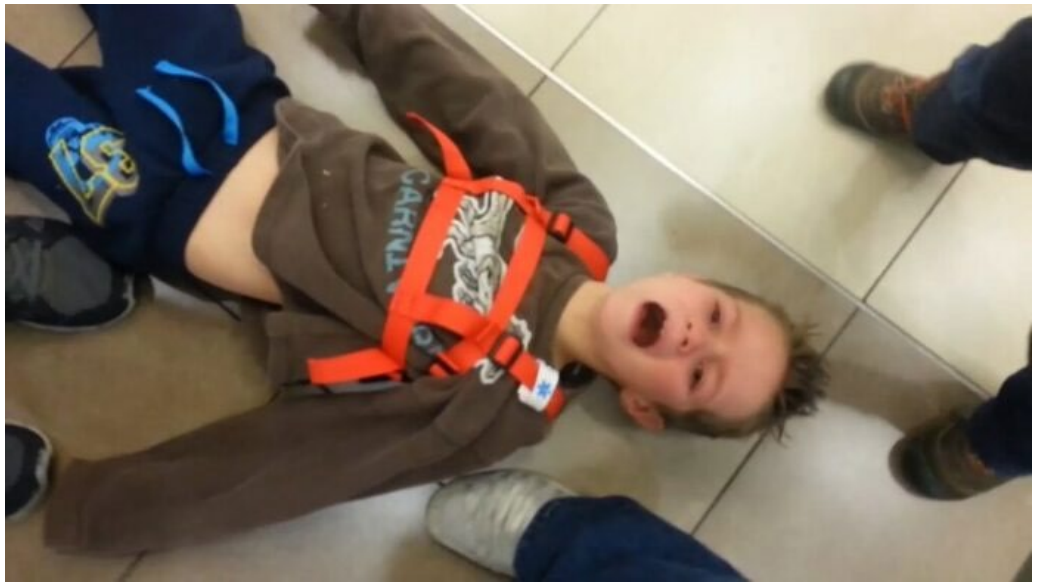
Multidisciplinary approach to assessing behavioral concerns

- **a medical doctor** (family physician or internist), to rule out medical problems and to prescribe medications, if needed;
- a **psychologist, social worker, or other professional** qualified to assess social skill and support issues, as well as emotional/behavioral disturbances;
- a **teacher, job coach, DSP, or counselor at a job site,** who can provide valuable information about the work or school environment, the person's behavior before the problem arose, and the problems the person may be experiencing outside the home

Recognizing Behavior

For individuals with Autism or IDD, fear response may look like:

- Non-compliance
- Aggression
- Withdrawal/escape/shut down
- Meltdown



Remember - behavior is communication and coping

Why is seeing a medical provider the first step?

- One study found that for 41% of individuals with ID, a ***MEDICAL*** issue was the cause of behavioral problems that led to admission.

- Most people with ID who are referred to psychiatric treatment is for disruptive or aggressive behavior.

- For many, identifying a medical problem is noticed through change in behavior.

Remember*: Behavior is communication.*

Medical Disorders That Can Present as a Psychiatric Disorder or Behavioral Problems

Respiratory

- Hypoxia
- Hypercarbia/hypercapnia
- Respiratory failure

Medications

- *Drug withdrawal:* alcohol, amphetamines, barbiturates, benzodiazepines, cocaine, psychiatric medications
- *Drug overdose:*
- *Drugs of abuse:* phencyclidine, heroin, cocaine, marijuana, MDMA (3,4-methylenedioxy-methamphetamine), LSD (lysergic acid diethylamide), alcohol, amphetamines, "bath salts"
- *Prescription drugs:* steroids, birth control, antihypertensives, statins, anticonvulsants, barbiturates, benzodiazepines, opioids, anticholinergics, antibiotics, antifungal agents, antiviral agents, asthmatic medications, muscle relaxants, gastrointestinal tract drugs, anesthetics, anticholinergics, cardiac medications (such as digoxin), decongestants, antiarrhythmics, immunosuppressives
- *Drugs for psychiatric patients:* antidepressants, antipsychotics, lithium

Hematologic/Oncologic

- Malignancies
- Tumors
- Paraneoplastic syndromes

Inflammatory/Rheumatologic

- Sarcoidosis
- Systemic lupus erythematosus

Toxins

- Carbon monoxide
- Lead poisoning
- Organophosphates
- Volatile substances

Other

- Fever
- Child maltreatment

Medical Disorders That Can Present as a Psychiatric Disorder or Behavioral Problems

Neurologic (CNS) Diseases

- Stroke/transient ischemic attacks
- Hemorrhage: intracerebral, subdural, subarachnoid, epidural
- CNS vascular: aneurysms, venous thrombosis, ischemia, vertebrobasilar insufficiency
- CNS malignancy/tumors
- CNS trauma: primary injury, secondary injury or sequelae of head trauma
- CNS infections: meningitis, encephalitis, abscess (brain, epidural, spinal), HIV, syphilis
- Congenital malformations
- Hydrocephalus
- Seizures
- Headaches including migraines
- Neurodegenerative disorders: multiple sclerosis, Huntington chorea
- Tuberous sclerosis
- Delirium (“ICU psychosis”)
- Pituitary: hypopituitarism
- Parathyroid disease: hypoparathyroidism, hyperparathyroidism
- Pheochromocytoma

Metabolic, Endocrine, and Electrolyte Disturbances

- Hyponatremia
- Hypocalcemia
- Hypoglycemia
- Hyperglycemia
- Ketoacidosis
- Uremia
- Hyperammonemia
- Inborn errors of metabolism: lipid storage diseases, Gaucher disease, Niemann-Pick disease
- Thyroid disease: hyperthyroidism, thyroid storm, hypothyroidism
- Adrenal disease: Addison disease, Cushing disease

Thomas H. Chun, Sharon E. Mace, Emily R. Katz,

Part I: Common Clinical Challenges of Patients With Mental Health and/or Behavioral Emergencies. Pediatrics September 2016; 138 (3): e20161570. 10.1542/peds.2016-1570

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This is not an exhaustive inclusive list but one that provides examples of the many diseases/conditions and drugs/medications that can masquerade as a psychiatric/behavioral disorder.

It Takes Detective Work

- Biting Fist – reflux, nausea, wisdom teeth eruption, dental pain, ear infection, anger, frustration?

- Rocking – visceral pain, headache, anxiety or depression?

- Head banging – trauma, dental pain, seizure, headache, anxiety?

Medical Conditions occurring when admitted for Psychiatric Crisis

- Constipation (60%, though 75% have on a routine basis)
- GERD/GI issues (38%)
- Epilepsy/seizure disorder (25%)
- Thyroid (19%)

ALSO

- Sleep Disruptions (found in between 35-90%)
- Dental Conditions
- Medication side effects
- Infections & Pain

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Gastrointestinal Problems

- **Constipation**
  - Most common medical comorbidity for psychiatric inpatients
  - Causes distress, irritability, aggression
  - Higher risk due to sedentary lifestyle; diet choices
  - More common spina bifida and cerebral palsy
  - Ingestion of non-food items
- **GERD** (reflux/heartburn)
  - 50% in those with IQ lower than 50
  - Increased agitation after meals, coughing, belly pain, sore throat

Gastrointestinal Problems - CASE

A 25-year-old man with a past medical history of autism spectrum disorder and schizophrenia presented with 1–2 months of vomiting and diarrhea, with weight loss of 14–18 kg over 12 months. Five months prior to admission, however, he had reported having mild abdominal pain and severe behavioral disorders, which were a departure from his baseline.

His guardian described aggressive behaviors and fights with family, which worsened before the diarrhea was prominent. The patient's guardian also noted that his abdomen had started to protrude, and his legs were swollen. The patient was eating constantly due to unremitting hunger, which was a change from his normal baseline. In fact, his parents had to place locks on the cabinets and refrigerator to mitigate his eating.

The patient became significantly weaker, and his extreme hunger led to him breaking into his neighbor's house for food, which prompted his mother to bring him to the Emergency Department.

Gastrointestinal Problems

Case Continued

In the 2 months prior to admission, the patient was evaluated by Gastroenterology, Nephrology, his primary care provider (PCP), and another facility's Emergency Department, without a definitive diagnosis.

Tissue transglutaminase IgA antibody (TTG) and gliadin IgA were highly suggestive of celiac disease, which was confirmed by biopsy. He was started on a lactose-free and gluten-free diet, and required a short course of total parenteral nutrition (TPN) for nutritional resuscitation. He improved rapidly with this intervention, and returned to nutritional and behavioral baseline.

Gastrointestinal Problems

In adults, it classically presents with both gastrointestinal and extra-intestinal symptoms. Gastrointestinal symptoms commonly include diarrhea, constipation, foul steatorrhea, flatulence, and bloating, but these may vary, with approximately 4% of patients presenting with constipation or dyspepsia instead of the classic diarrhea. Extra-intestinal symptoms are often anemia, vitamin D deficiency, bone mineral deficiencies, dermatitis herpetiformis, or, rarely, neuropsychiatric symptoms such as headache or depression.

The presentation of celiac disease in children can vary dramatically from that of adults. Notably, it can present primarily as behavioral disturbance, such as increased aggression or anxiety, with milder or absent gastrointestinal symptoms.

Andrew K. Murphy, Joseph A. Norton, and Benjamin R. Pflederer.

Celiac Disease in an Adult Presenting as Behavioral Disturbances.

Am J Case Rep. 2020; 21: e928337-1–e928337-5.

Published online 2020 Dec 24. doi: 10.12659/AJCR.928337

Central Nervous System

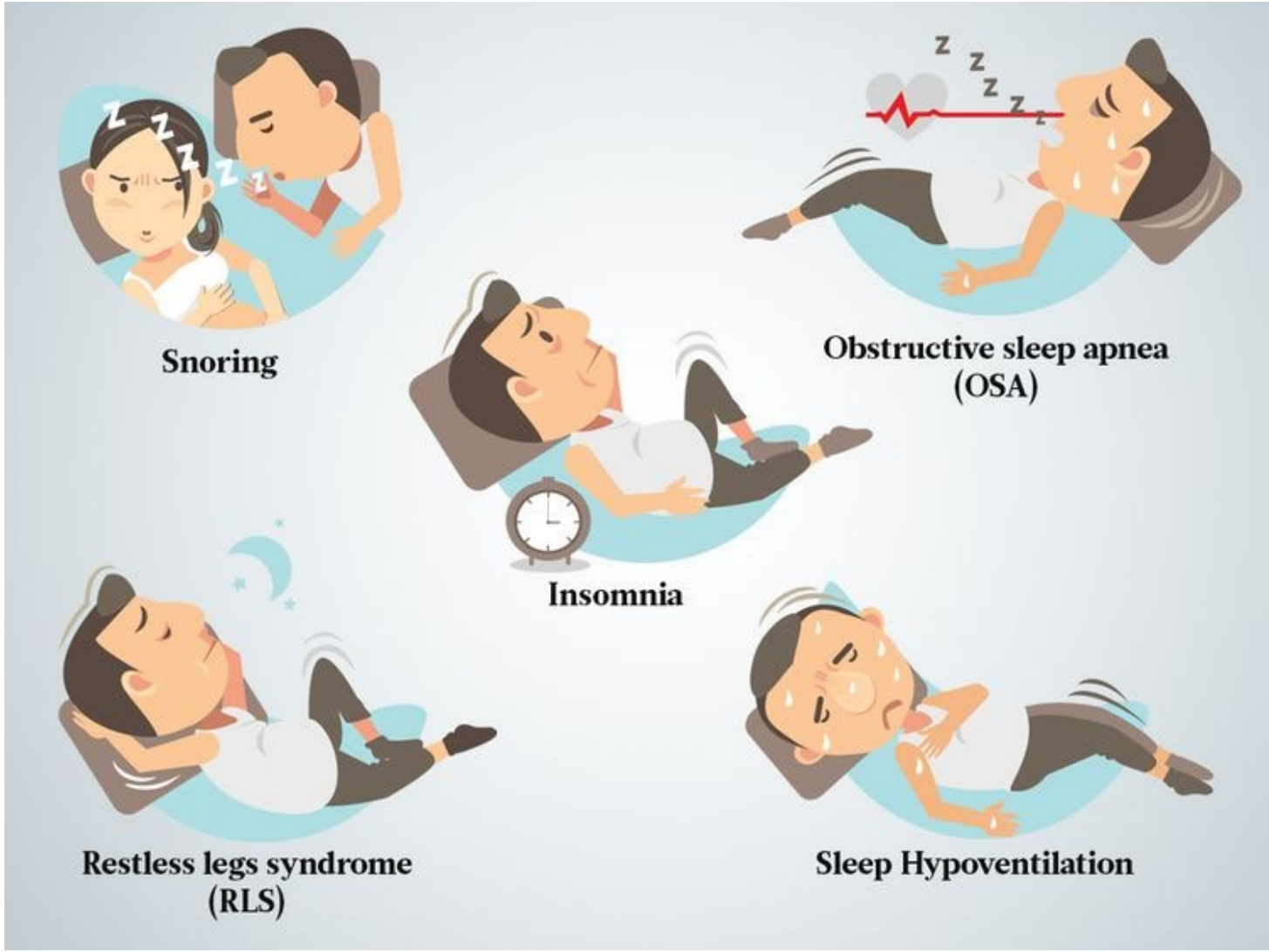
- Headaches/Migraines (11-43%)
- Seizure Disorders - Various presentations
  - tonic clonic
  - Shaking
  - Staring
  - Rapid change in consciousness
  - Aggressive behavior/impulsivity (frontal lobe)
  - Memory Problems (temporal lobe)

All types of epilepsy can make people prone to behavior problems:

- Complex partial seizures, especially of early onset—hyperactivity, problems in paying attention or controlling temper
- Seizures from the left side—anxiety and frustration due to problems in understanding and expressing ideas
- Seizures from the right side—social difficulties and impulsive behavior from problems in recognizing social signals
- Seizures from the front of the brain—disorganization, acting without regard to the consequences.

Sleep difficulties

- Inadequate sleep
- Sleep apnea
- Hypopnea
- Sleep problems related to change in routine or environment
- Fragmented and restless sleep
- Case Example – apnea & anxiety



Dental Concerns

- Poor dental care more common in people with IDD
  - Greater incidence of dental caries, infections, abscess
  - Since 2020 All dental schools required to train students to treat the disabled
  - Access remains a problem
- Behavioral signs – head banging, applying pressure, self injurious behavior, appetite and weight loss, refusal to eat

Thyroid

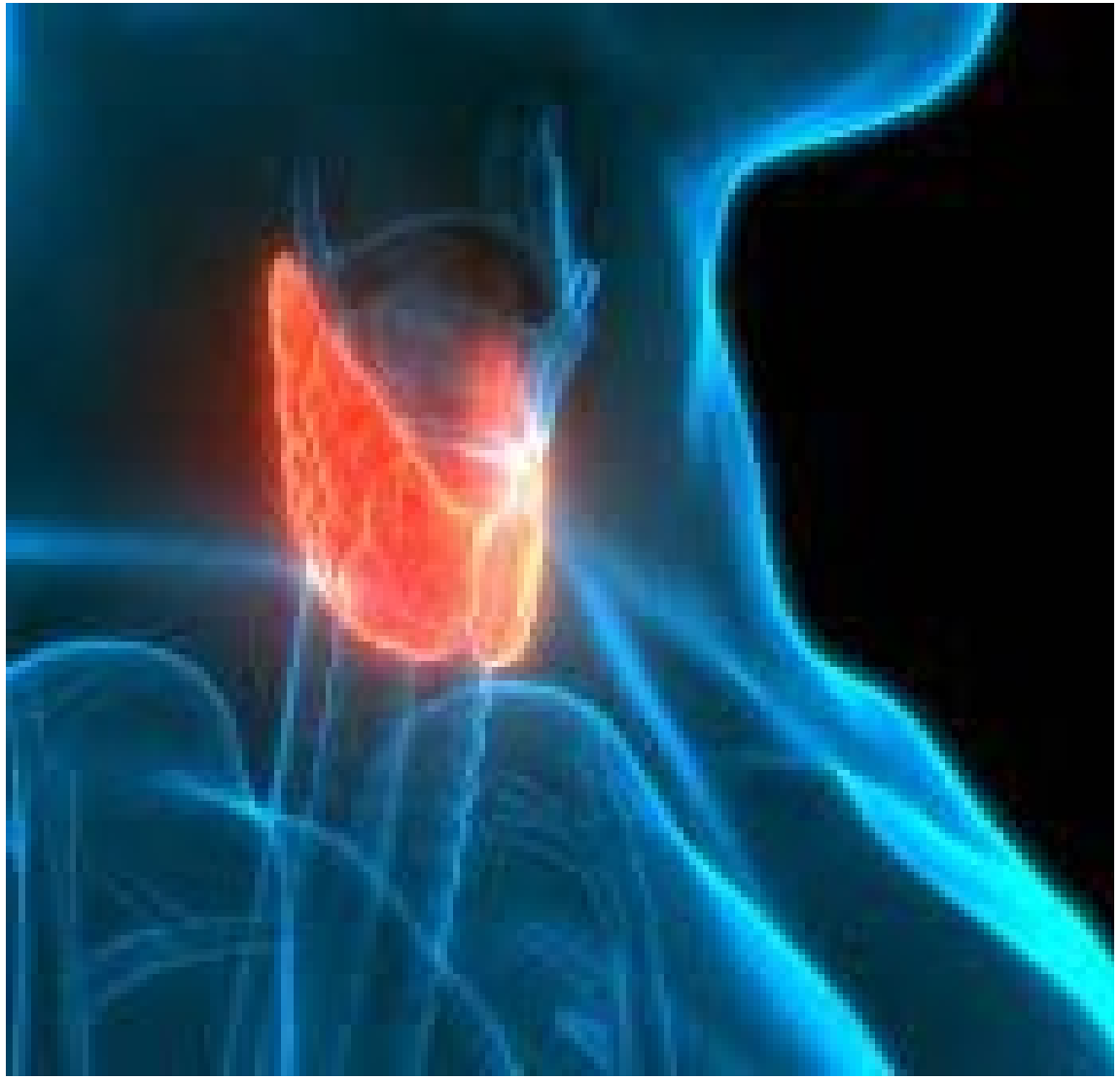
Hypothyroidism

- symptoms of lethargy, forgetfulness, inattention, mental slowness, low mood, emotional lability, depression, tearfulness, disturbed sleep

Hyperthyroid

- anxiety, restlessness, irritability, emotional lability, sleeplessness, easily angered

CASE DISCUSSION – med change & anxiety/delerium



Medication side effects

- 83% of people with IDD on psychotropic medication
- Often used for reduction of agitation (sedatives, anti-psychotics)
- Polypharmacy common → higher rates of side effects

Side Effects

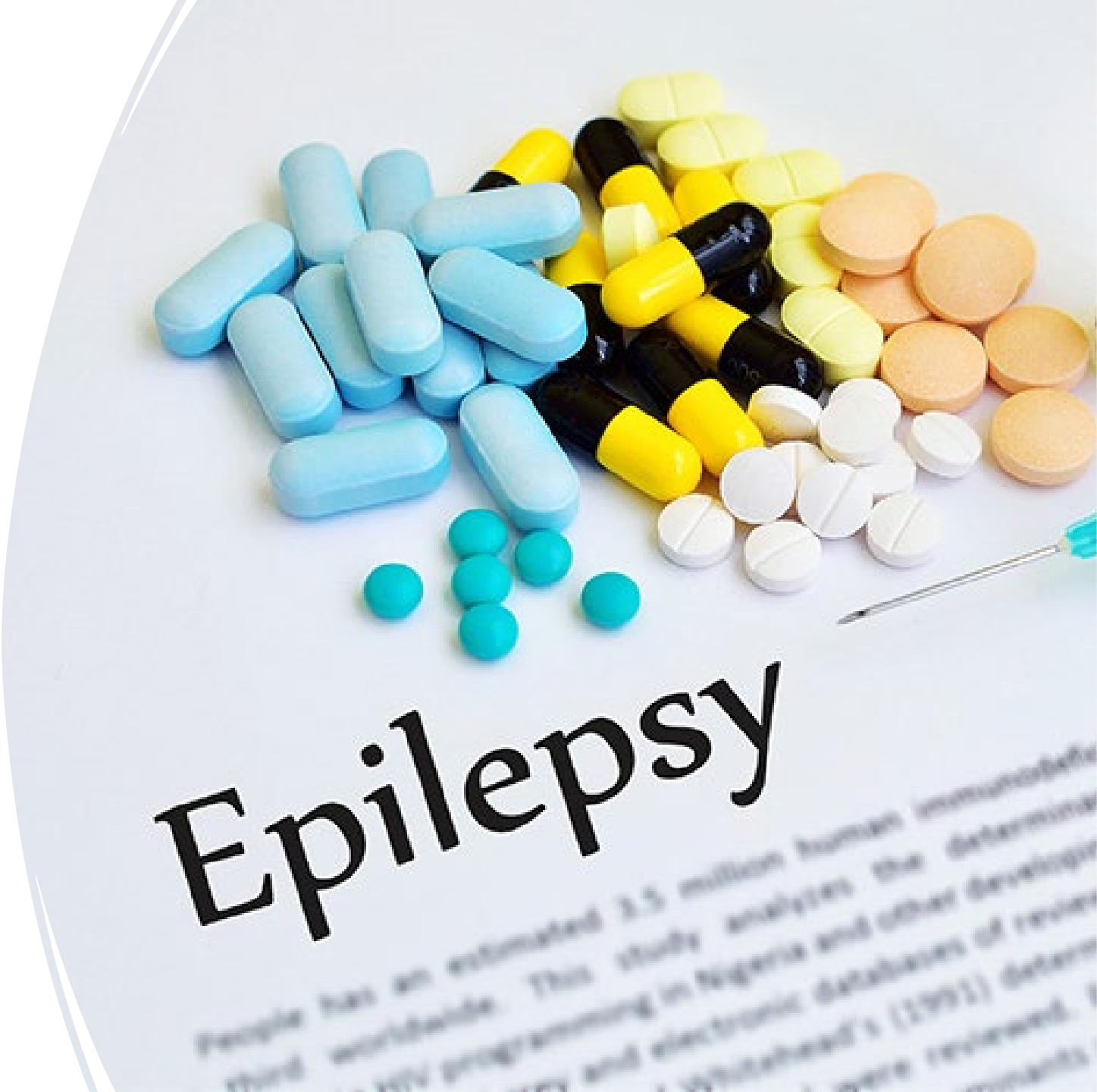
- **Sedation/lethargy**
  - Fatigue
  - Increased sleep
  - Poor food and fluid intake/overeating and weight gain
- **Cognitive changes**
  - Confusion
  - Disinhibition/impulsivity
- **Start up and Discontinuation Effects**
- **Metabolic changes - 2nd generation antipsychotics**
  - Increased glucose
  - Changes in cholesterol
  - Increased appetite
  - GI distress

Side Effects – movement

- Akathisia
  - Feeling like shaking in your skin; inner restlessness
  - Inability to sit still
  - Misdiagnosed as mania, psychosis, anxiety
- Extrapyramidal Symptoms
  - Tremor, coordination problems, unusual movements
  - Dystonia – muscle spasms

Side Effects- seizure medications

- Sedation and sleepiness
- Anxiety
- Vision changes
- Headaches
- Poor concentration
- Dizziness and nausea
- Cognitive slowing



Other medical issues

- Allergies
  - Fidgeting, difficulty concentrating
- Vitamin Deficiencies
  - Vitamin B-12 (depression, anxiety, psychosis), Vitamin D (low depression)
- Infections
  - UTI, Otitis Media
  - Recurrent infections common
- Menstrual problems
  - PMS/PMDD
  - dysmenorrhea (2x higher in women with ID (50-65%)

Anna

Anna is a 26 year old woman with cerebral palsy who presents to establish care at your clinic. Her only complaint is back pain.

HPI

- She is accompanied by her mother. She has mild dysarthria and is quiet. Mom answers a lot of questions for her.
- Back pain: No dysuria, fevers. Back pain worse after long periods of sitting.
- She uses a walker for short distances at home but is mostly wheelchair dependent.

PMH - Cerebral palsy
PSxH -Tendon lengthening surgeries
Social

- She completed a B.A. in journalism at a local college
- Has sporadic writing work and is looking for a full time job

Medications: None

Physical Exam:

- Height: 5 feet 6 inches. Weight: 130 pounds. BP 110/67
- Sitting comfortably in her wheelchair
- Weakness and Atrophy of legs. No CVA tenderness

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Case Anna

- No previous provider had talked to Anna directly about whether Anna was sexually active. They also did not ask mom to leave when interviewing Anna.

- Common in the disabled population is the assumption that they are not sexually active.

- Anna has had several relationships in the past and wants STD testing and a pap smear to start a new relationship

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Case: Anna

General Care for Anna

- rule out UTI
- referral to Physical therapy
- referral to Physiatrist (PMNR) and wheelchair clinic to assess seating and positioning
- Replace Vitamin D level was <7

Pelvic exam for pap smear and STI screening

- Providers are more likely assume that women with disabilities are not sexually active and may not screen for STIs
- **STIs may be harder to detect**, symptoms may be different;

  e.g. *fatigue or increased spasticity*

- Women with disabilities need pelvic exams for both reasons; pap smears and STI screenings

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Take Aways for Families

- **What is behavior trying to communicate?**
- **Advocate in appointment**
  - Make access to routine screenings a priority
  - Logs (sleep, food, behavior)
  - Identify changes in medication or supplements from other providers

Thank you!
Questions?

https://centers.rowanmedicine.com/risn/index.html

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