





# ECHO /DD

### Medical Co-Occurring Conditions in I/DD

Beth Malow, MD Mavara Agrawal, MD

#### Echo I/DD: Adult Healthcare Disclosures

- Target audience: those providing care for individuals with I/DD
- Objective: To improve the knowledge of primary care providers who care for adults with intellectual and developmental disabilities
- Speaker Disclosure: Beth Malow and Mavara Agrawal have no relationship with any commercial firm having products related to topics discussed at this conference. Actual disclosure forms are available upon request.

#### **Overview**

- Sleep and I/DD
- Seizures
- GI and I/DD

Highlight Resources
 (Autism Care Network
 and Vanderbilt Kennedy Center),
 CDC disease specific Growth
 curves

#### Commonly Overlooked:

- Dental caries, periodontal disease
- Visual or hearing impairment
- Musculoskeletal conditions
- Anxiety, Depression, ADD/ADHD

### **Sleep Problems**

- Sleep problems are a common comorbidity in I/DD
- 50-80% of children with I/DD have sleep difficulties
- Sleep problems persist into the adult years
- Challenging daytime behaviors can be a result of sleep problems
- Parental stress is related to poor sleep in individuals with I/DD

#### What is Insomnia?

- Trouble falling asleep (onset)
- Trouble staying asleep (maintenance)
- Early morning awakenings
- Causes are usually multifactorial
  - Factors intrinsic to diagnosis/disability (over-arousal)
  - Medical and Psychiatric Conditions or Meds
     (ADHD with stimulants, depression with antidepressants, obstructive sleep apnea)
  - Habits (cell phones, caffeine, limited exercise)
  - \*\* Habits can be more challenging for adults without a routine (not working, not in school)

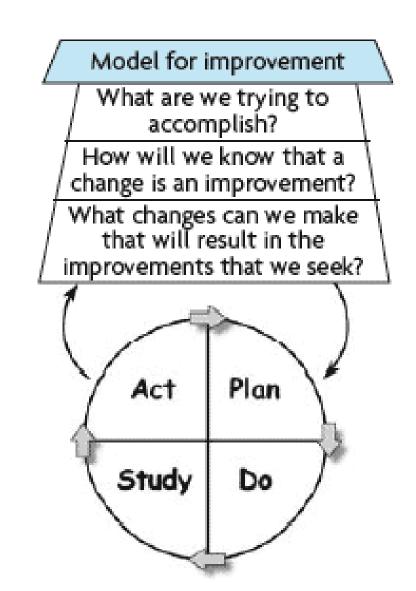
Every adult with I/DD should be screened for sleep problems routinely and especially if behaviors worsen

- Ask specific questions (let individual respond as able but also ask parent/caregiver)
  - How long does it take you to fall asleep?
  - When do you wake up in the morning?
  - What time does school/work start?
  - Do you wake up during the night? If so, how many times?
  - Does you snore?
  - Do your legs feel restless?

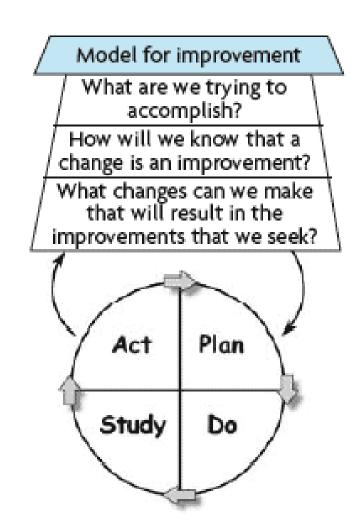
#### Gather Data

- Autism Care Network Sleep Log (see tool in Box)
- Family Inventory of Sleep Habits (see tool in Box)
- Activity Watch if available
- Assess for snoring, seizures, eczema, other medical conditions

- Where to intervene?
  - Address underlying medical issues, consider sleep study for apnea or ferritin level for leg movements
  - Pay attention to daytime habits
    - Exercise, caffeine, devices
  - Select small areas family/adult can handle
  - Consider melatonin or sleep medication



- Did the intervention work?
  - Gather data
  - Track improvement on sleep log or activity meter



### Seizures and I/DD

- Seizures are common in I/DD and persist into the adult years
- First seizure can occur in adult years
- Higher incidence of seizures in individuals with I/DD compared to typically developing peers
- Epilepsy is a cause of early premature death in I/DD

# Seizures and I/DD

- Seizures may affect sleep and daytime behavior and functioning
- Seizures take many forms ranging from full convulsions to staring spells with behavioral arrest
- Behavioral arrest and staring can be considered part of autism/I/DD so important to keep seizures in mind

Every adult with I/DD should be screened for seizures routinely and especially if behaviors worsen

- Ask specific questions (let adult respond as able but also ask parent/caregiver)
- Have you ever had
  - -Stiffening of muscles
  - -Jerking of face, arms, or legs that you couldn't control
- Staring spells where person can't respond to voice or touch and "losing time" can also be seizures

- Gather Data
  - Seizure diaries
  - EEG if suspect seizures
  - Review medical history for medications or other conditions that could contribute to seizures (head injury, etc.)

- Most PCPs will refer to neurologist for treatment
  - You still have an important role to play in monitoring adult with I/DD and seizures
  - Discuss safety precautions (driving, exercise)
  - Ensure adult is taking medication regularly
  - Monitor for medication side effects (aggressions, osteoporosis)
  - Ensure proper sleep

- Is the treatment working?
  - -Gather data (seizure diaries, apps, etc.)

#### Follow-up for All Conditions

- Follow-up to monitoring progress is essential
  - Ideally occurs 2 4 weeks after treatment begins
    - In person or by telephone
- Follow-up should include
  - Making appropriate adjustments to the intervention, if needed
  - Assess the support/ability for the family/adult to implement the intervention
  - Appropriate referrals to a specialist, if needed

# GI Conditions and I/DD

- GI conditions are common in I/DD and often persist into adulthood
- Higher incidence of constipation (30%), GER (40%), picky eating, diarrhea
- Discomfort from constipation or other GI symptoms may present as behavior or mood changes
- Contributors to GI symptoms in I/DD:
  - Anxiety
     -Limited food acceptance
  - Sensory Processing -Communication challenges

Every adult with I/DD should be screened for GI conditions routinely, especially if behaviors worsen

- Ask specific questions (let patient respond as able but also ask parent/caregiver)
  - How is your appetite?
  - How often do you have a bowel movement?
  - Do you have pain or trouble passing stools?
  - Do you have loose stools (diarrhea)?
  - Do you have belly pain, heartburn, chest discomfort?

- Gather Data
  - Follow weight with growth curves, esp. for specific medical condition
  - Dietary log (e.g., fiber and water intake)
  - KUB if suspect impaction
  - Consider CBC, calcium, glucose, thyroid studies, celiac panel, hypothyroidism, Crohn's disease

- Where to intervene?
  - Address underlying medical issues (anxiety)
  - Pay attention to diet and daytime habits
    - Diet: if constipated, caution with fried foods and cheeses
    - Increase Fiber: apples, pineapple, blueberries, pears, mangos, peaches,
       spinach, eggplant, beans
    - Select small areas to work on: Fluids and physical activity
  - Consider use of probiotics and laxatives (Bisacodyl, MiraLAX, Mg)
  - Nutritional counseling, possible referral to GI specialist for endoscopy

- Did the intervention work?
  - Gather data
  - Use of measured water bottle
  - Objective change in frequency of bowel movements, discomfort, improved sleep?

# **Dental Conditions in I/DD**

- Limited fine or gross motor skills, understanding, compliance,
- Hyper-sensitive, communication deficits, phobias
- Increased risk for caries, periodontal disease, bruxism, malocclusion
- Affects long term health and nutrition, esp. as they age

#### **Solutions:**

Toothbrush timers and reminders, visual schedules, social stories, rewards, ABA, desensitizing, 360 degree

# Vision and Hearing Impairment in I/DD

- Hard to assess objectively due to challenges with communication or equipment or specialists
- Parent input and exam room observations (distance for viewing iPad/phone, gaze, volume, distance from objects of interest)
- Referral to specialists

### Musculoskeletal Disorders in I/DD

- Increased risk for fractures and osteoporosis due to medications and limited nutrition may be missed
- Scoliosis, hip dysplasia, spasticity and contractures, joint instability, sprains and strains
- Limited information, communication, sensitivities

Parent Input and Exam room observations: inability to use limb, comparison to other limb, limited motions, decrease in favorite activities

Assessment: exam and studies, referral to PT/OT and specialists

#### Resources

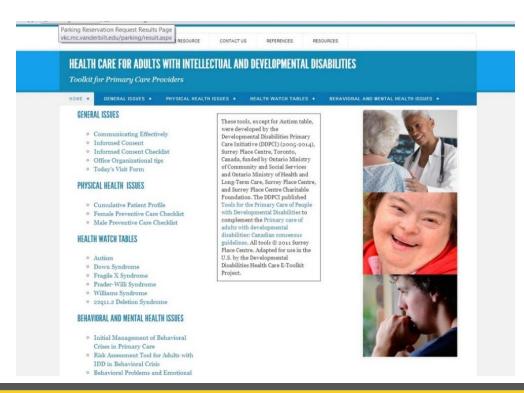


Growth charts: <a href="#">CDC Growth</a>

Charts for Genetic DO

#### Preparing adults with I/DD for a sleep study

https://vkc.vumc.org/assets/files/resources/sleepstudy-adults.pdf



www.iddtoolkit.org







# ECHO I/DD

Thank you!