Brain-based Disorders

**BRAIN-BASED DISORDERS**

### Basic Facts
- People with brain-based conditions are 7 times more likely to attract attention of police and others.
- **Why?**
  - People are frightened by or disturbed by their: Unique communication and Social characteristics
  - They can become frightened/overstimulated and have challenging or seemingly offensive behavior

### Topics – Conditions that may have crisis
- Brain-based disorders
- Neurodevelopmental disorders
- Other medical disorders
- Acquired brain injury
- Common features to be aware of
- Resources

### Brain-based Disorders: Neurodevelopmental Disorders
- Attention-Deficit/Hyperactivity Disorder (ADHD)
- Intellectual Developmental Disorder
- Communication Disorders
- Developmental Motor Disorders (Tic disorders, Tourettes)
- Specific Learning Disorders
- Autism Spectrum Disorder

* AKA Neurodevelopmental Disorders

### Attention-Deficit Hyperactivity Disorder (ADHD)

### Other Neurodevelopmental Disorders
- Intellectual Developmental Disorder
  - AKA Developmental or Cognitive Disability
- Communication Disorders
- Developmental Motor Disorders (Tic disorders, Tourettes)
- Specific Learning Disorders

- What they have in common that impacts interactions
- Altered ability to communicate – increase chance of being misunderstood and/or misunderstand words, gestures
- Some have unusual mannerisms (e.g. tics, vocalizations)
Autism Spectrum Disorder

Key Features
- Social communication
  - Doesn’t understand what is going on
  - Not familiar with social customs/rules
  - Conversation, sharing emotions/interests
- Doesn’t respond to social interactions
- Literal/Black and White - struggles with nuances
- Struggles with Friendship
- Doesn’t understand nonverbal communication
  - Eye contact, body language, gestures, facial expression
- Insist on sameness, inflexible about routine rituals
- Fixed interests - preoccupation with objects
  - Organizing behaviors*
  - Lining things up, stacking/handling/arranging objects

*Video – Carly - on The Doctors - https://www.youtube.com/watch?v=sIzskJPy74E

Autism Spectrum: Behavior

- Sensory stimulation
  - Increased or decreased reaction to sounds, textures
    - Pain, hot/cold, smells, touch, visual (lights/movement)
- Acclimating behavior* becoming familiar with a setting
  - Wandering around unfamiliar spaces
  - Touching/Smelling/Licking (mouthing) things and people
- Self-stimulating / Repetitive / Self-soothing movements or Behaviors
  - Hand-flapping and spinning, rocking, twirling,
    - Audible/Verbal – off-key humming, clicking, repetitive speech (Echolalia)
  - Picking / chewing clothes
- Reasons for the behavior
  - It’s a way of calming themselves
  - A way to focus
  - It’s a form of expression
Tip~ DON’T interfere with it (unless there is a risk of injury to them or others)

Common Features with Brain-based Disorders

- Altered Sense of Danger
- Wandering
- Socialization Difficulties
- Thinking Process / Process Delay
- Communication
- Behavior
- Personal Space

Common Features

- Altered Sense of Danger – not afraid of common threats
  - Deep water
  - Strangers
  - Traffic
  - Heights
  - Tripping hazards
  - Broken glass
  - Poisons
  - Weapons
  - Firearms
  - Fire

- Wandering / Bolting
  - Goal directed
  - Life Pattern Habit
  - Place of comfort / safety

Socialization Difficulties

- Have trouble understanding what is appropriate or safe in a given situation
- Do not understand what others need or want from them
- May not understand that their actions or words may negatively impact others
- Have difficulty with natural social concepts/values (reason they get in trouble with police)
- Don’t recognize/understand authority of uniforms
Thinking Process

- **Slow cognitive response** – it takes more time to process & understand what is happening and then to respond
- **Allow 11 sec delay for response**
- **Don’t repeat or restate** – every time you do, they ‘reset’ and have to start over processing the new statement!!
- **Use < 5 words** in a sentence, short words.

Non-Verbal Communication

- **They don’t understand**
  - Changes in tone of voice
  - Facial expressions
  - Body language
- **Eye Contact**
  - They may not make direct eye contact:
    - Too much going on – on your face
    - Cultural – it is disrespectful to look authority figures in the eye.

Communication Difficulties

- They may not be able to speak or have trouble speaking
  - **Language /Cultural Barriers**
- If they can speak,
  - They may have trouble describing what is happening or why they are acting as they are.
  - They may say things that don’t seem to relate or make sense

Communication Challenges

- **Literal interpretation** of what’s said
  - e.g. “take a seat”, “jump into the car”, “wait outside”
- May not understand instructions that have more than 1 step
- **Do better with**
  - Picture (pecs)
  - 1 word directions – First/Then
  - ‘sit’, ‘quiet’
  - Whiteboard
  - Be specific
  - ‘sit’ (point at chair) ‘chair’
  - “Wait” – here – there and point

Personal Space

- They do not usually recognize ‘personal space’ of others
  - ‘Invade’ the normal 2 ft personal space and may not be aware it is inappropriate or uncomfortable
  - May inappropriately approach or run towards an officer or person (may be fascinated by the shiny badge etc.)
- Respect THEIR personal space
  - Ask their permission or Let them know before you touch them.

Physical Behavioral Responses

- **How we communicate what we need**
  - Facial and Body expression
  - Our words - “Could you move back?” “Get away!”
  - Physical respond – Push someone’s hand away, Take a step away
- **Physical Response in brain-based disorders**
  - It’s ‘reactive’ – an instinct as a way of protecting oneself
“Meltdowns”

Triggers and Melt Downs

- **Triggers**
  - Sensory overload
  - Not able to process what is going on /needed
  - Cannot communicate what they need
    - (or you’re not understanding their communication!)
  - Change in routine
  - Have to “finish” before they go to the “next” thing.
  - Frustration

Explosive loss of control of behavior: Grabbing, kicking, spitting, swearing, crying

**RUMBLING**
- Peak anxiety. NOT the time to talk, direct or problem solve.

**PRE-CRISIS**
- Early stress. Refocus attention away from stress.

**MELTDOWN**
- Peak anxiety. NOT the time to talk, direct or problem solve.

**RAGE**
- Model calming strategies. Keep verbal to a minimum. NOT the time to ask the person to make choice.

**RECOVERY**
- Leave the anxiety producing event, decrease stimulation.

**TRIGGER**
- Individual is happy & calm.

Use encouraging, supportive words. If possible, don’t discuss the incident.

Use calm redirection

They are calming their body and mind.

Debrief – Teachable moments

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Other Disorders

- Epilepsy - seizure
- Down Syndrome
- Cerebral palsy
- Visual impairment
- Hearing loss
- Traumatic Brain Injury (TBI)
- Dementia (already discussed)

Epilepsy – Seizure Disorders

- Most are familiar with 'tonic-clonic' seizures
- Other types of seizures (focal) can be mistaken for an emotional or behavioral problem
  - Person is able to walk around
  - Seems to be alert/awake during the seizure
  - May be able to speak
  - Usually cannot respond to questions, seems confused
  - May be making repetitive movements
  - Smacking lips, blinking eyes, tapping finger, walking in circles
  - May have had an ‘accident’ – involuntary loss of urine/stool
- Examples - The video of man in store
- Video – Video – man at job centre

Traumatic Brain Injury (TCI)

- Acquired injury to the brain
- How it affects the person
  - Unable to concentrate
  - Misunderstands instructions
  - Forgets instructions
  - Tires easily
  - Has difficulty learning new information or concepts
  - Has difficulty planning complex tasks
  - Has difficulty organizing ideas
  - Has difficulty getting started on tasks
  - Is easily distracted by surrounding activities

Points To Remember

- Specific pointers to remember about those with brain-based disorders
  - Each person is unique and different.
  - They may not
    - Understand what is happening internally and over-react; they feel threatened in a new/difficult situation
    - Have received skills training
    - Have the supports in place for coping
  - Address Sensory Overload
  - Only 1 person assigned to interact
  - Explain

Manage the Interaction

- Manage yourself
  - Interactions with youth and people with other conditions can trigger strong personal reactions
  - #1 priority – Take a deep breath. Calm yourself. Manage your own ‘fight or flight’ reaction.
- Take your time
  - Give them time to process – 11 sec
  - Have patience, don’t rush things or them, observe
Brain-based Disorders

Use Your Immediate Resources

- Is the person wearing a wrist band or medical alert necklace or anklet?
- Ask them their name, address, phone number?
- Ask if there is someone they’d like you to call?
- Gather information from parents/others in the area
  - What has worked in the past?
  - What doesn’t work?
  - What makes it worse?
  - Is there a crisis or school behavior plan on file?

Key Points for 911, EMS, CO

- Dispatchers – Info to obtain and relay to 1st responders
  - Wandering – past history, favorite places
  - Medical info – communication challenges, + tips
- EMS
  - Reassure, explain,
  - Call for someone familiar to be w/ them!
  - With autism – weak upper body muscles – risk of asphyxiation
  - Advise ER of diagnosis, request triage priority

Key Points for Fire and Corrections

- Fire
  - Be sure they are out – check hiding places carefully
  - Be aware of verbal and non-verbal
  - Remember – they may be afraid of the fire and your equipment/uniform
  - Re-assure, reduce sensory input
  - Prevent re-entry
  - Corrections Officers
    - Safety - consider separating for their safety

Resources

- Separate page plus Wood County Roadmap
- Handouts specific for autism for dispatch, EMS, parents/caregivers

Thank you!

NAMI Portage-Wood Counties
Portage County Health and Human Services Department
Wood County Health Department
Wood County Human Services Department
PIER WI
Central Wisconsin Autism Support
Epilepsy Foundation Heart of Wisconsin
Attention-Deficit Hyperactivity Disorder  (ADHD)
- Most common condition for children
  - Affects 5-10%
  - 2% will have a significant impairment in their daily functioning
- 30-40% of children with ADHD have a relative who has ADHD
- 4:1 Male to Female prevalence
- Symptoms – usually start between ages 3-6
- Key features
  - Inattention and/or
  - Hyperactivity/impulsivity

Intellectual Developmental Disorder
- Also known as: Developmental Disability
  - Cognitive Disability
- May have significant limitations in
  - Intellectual functioning
  - Understanding of verbal or nonverbal communication
  - Adaptive behavior
- Impacts major life activities:
  - Language
  - Mobility
  - Learning
  - Self-help
  - Reasoning
  - Independent living

Communication & Developmental Motor Disorders
- Communication Disorders
  - Related to speech, language and auditory processing
  - Simple sound repetitions such as stuttering
  - Occasional misarticulation of words
  - Inability to use speech and language for communications (aphasia).
- Developmental Motor Disorders  (Tic disorders, Tourette’s)
  - Chronic motor ~ Repetitive
    - Blinking, sniffing, facial movements
  - Vocal tics grunting, coughing, throat clearing, swallowing,
    - Words and/or complex phrases sometimes socially inappropriate

Specific Learning Disorders
- Definition: a disorder in one or more of the basic learning processes involved in understanding or in using language, spoken or written
- The individual has significant difficulties which affect their ability to listen, speak, read, write, spell, or do mathematics.
  - Difficulties are persistent
  - It affects the individual’s life: academic achievement, occupational performance, and/or activities of daily living.