## Improving Outcomes by Modifying Approaches for Those with Fetal Alcohol Spectrum Disorders (FASD)

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### Objectives

- By the end of this presentation, participants will be able to:
- Identify brain structures that are damaged by prenatal alcohol exposure
- Discuss how damage in the dorsolateral prefrontal cortex impacts those with an FASD
- List 3 strategies to improve outcomes for individuals with an FASD

### Brain Damage in FASD

- Prenatal alcohol exposure leading to an FASD causes brain damage
- Behaviors are often due to brain damage
- Behaviors often appear to be purposeful and willful when they are not
- Understanding the brain damage helps us understand the behaviors and develop appropriate interventions
  - Typical approaches such as evidence based practices will not be effective due to brain functioning

#### Brain Structures Affected by Prenatal Alcohol Exposure

- Basal ganglia, especially the caudate nucleus
  - Cognition
  - Emotion
  - Motor activity

#### Corpus callosum

- Connects the two halves of the brain
- May play a role in communication within the brain



### Brain Structures Affected by Prenatal Alcohol Exposure

#### Frontal lobes

- Control emotional responses and processing of humor
- Control expressive language
- Responsible for abstract thinking
- Assign meanings to words
- Control aggression
- Are involved in processing information
- Are involved in deciding how to act in a specific situation

### Brain Structures Affected by Prenatal Alcohol Exposure

#### Hippocampus

- Memory
- Learning
- Emotion
- Aggression

#### Amygdala

- Fear
- Stress and anxiety
- Anger
- Aggression



#### MRI, MRS, and fMRI Study Findings Susan Astley (2009)

- Those with prenatal alcohol exposure scored significantly poorer on the twoback test
  - The level of activation in the Dorsolateral Prefrontal Cortex was significantly less in those with an FASD
  - This is a measure of working memory
- Implications for working with those with an FASD

#### Recent Animal Studies on Anxiety Joanne Weinberg (2008)

- The body deals with stress and anxiety through the amygdala and the hypothalamus-pituitary-adrenal (HPA) axis
- Prenatal alcohol exposure affects the body's response to stress and anxiety
   The HPA axis over-responds to minor stressors with an over-release of cortisol
   Implications for working with those with an FASD

## Living with FASD

- Individuals with an FASD and their families often experience:
  - Constant anxiety
  - Frequent frustration
  - Depression from repeated "failures"
  - Isolation
  - Lack of predictability
  - Living in the moment
  - Ongoing loss and grief
  - Not feeling in control
  - Difficulty understanding the world
  - Difficulties in every day life

Adapted from Alaska's FASD 201 curriculum

# What to Expect from a Person with an FASD

- Friendly
- Talkative
- Strong desire to be liked
- Desire to be helpful
- Naïve and gullible
- May "get it" one day and not the next
- Older than their age in some ways and childlike in others

# What to Expect from a Person with an FASD

- Difficulty identifying dangerous people or situations
- Difficulty following multiple directions/rules
- Model the behavior of those around them
- Literal thinking

## **Difficulties with Literal Thinking**

- Do "exactly" as told
- Difficulty with predicting consequences
- Difficulty with the sense of time
- Difficulty with a sense of space
- Difficulty in reward/consequence systems
  Difficulty managing monoy
- Difficulty managing money
- Difficulty with sarcasm, joking, similes, metaphors, proverbs, idiomatic

expressions

## Language Issues in FASD

- Early language development often delayed
- Often very verbal as adults
- Verbal receptive language is more impaired than verbal expressive language
- Verbal receptive language is the basis of most of our interactions with people

#### Situations That Rely on Verbal Receptive Language Processing

- Parenting techniques
- Elementary and secondary education
- Child welfare
- Judicial system
- Treatment
  - Motivational interviewing
  - Cognitive behavioral therapy
  - Group therapy
  - AA/NA groups

#### Types of Sleep Disturbance Reported in FASD

- Difficulty falling asleep
- Fragmented sleep
  - Shortened sleep duration
  - Night wakings
- Sleep anxiety
- Parasomnias
  - E.g., bedwetting, talking in sleep, night terrors
- Increased levels of arousal from sleep
- Sleep disordered breathing
- Melatonin secretion abnormalities

Goril et al (2016), Kheirandish et al (2006), and Wengel et al (2011)

#### **Issues in Addressing Behaviors**

- We are a problem based society
- Professionals get paid for dealing with problems
- Meetings focus on problems
- We find what the person likes and use it to try to get the person to do what we want him or her to do
- We don't pay enough attention to positives

### **Issues in Addressing Behaviors**

- We need to change our approach
- We need to incorporate a true strengths-based approach to everyone
- Identifying strengths and abilities needs to be foremost
- We need to move towards a positive focused system

### A Positive Focused System

- Utilize a true strengths based approach
  - Identify strengths and abilities
  - Focus on building strengths and abilities
- Consistently tell the person what she or he does well and is good at
  - This is an ongoing process
- Point out small accomplishments
- This does not mean ignoring challenging behaviors

## Strengths

- The first step in helping someone to succeed is to identify strengths and abilities
- Everyone has strengths
- Sometimes, they cause problems
- There are times when the individual and those around cannot identify any strengths
- We need to identify strengths in the individual, family, providers, and community

## Strengths of Persons With an FASD

- Friendly
- Likeable
- Verbal
- Helpful
- Caring
- Hard worker
- Determined
- Have points of insight
  - Good with younger children\*
  - Not malicious
  - Every day is a new day

Creative

D. Dubovsky, Drexel University College of Medicine (1999)











- Reduce stimuli in the environment
- Use softer lighting, colors, and sounds
  - Avoid fluorescent lights
- For children birth-3, refer for an evaluation for Early Intervention Services
  - Occupational Therapy, Speech and Language, and Physical Therapy are very useful
- The earlier interventions occur, the better the long-term outcomes

- Be consistent in days and times for activities and routines
  - For meals and bedtimes
  - For daily activities
  - For appointments with families
  - Limit staff changes whenever possible
  - Prepare the person for any changes in personnel or times often

- If you need to have a conversation with an individual or caregiver with an FASD, keep it short and review it
- Review routines, schedules, rules frequently
  - Check for true understanding
- Do not rely on solely verbal approaches

- Identify a mentor/role model
- Use role playing to model appropriate behaviors
- Much repetition due to damage to working memory
- Keep consequences immediate, short term, and related to what occurred
- Use time ins rather than time outs
- If you tell a person "you can't..." you need to say "but you can..."

#### Strategies for Youth With an FASD

- Find something that the youth likes to do and does well (that is safe and legal) and work to have the child do that regardless of behavior
- Do not ignore negative attempts for attention
- Be fair rather than equal
- Use sign language
- Create "chill out" spaces in each setting
- Use literal language
- Use person first language

#### Person First Language

- "He's a child with FAS" not "he's an FAS kid"
- "She is a woman with a substance use disorder" not "she's a substance abusing woman"
- "He is a child who has been adopted" not "he is an adopted child"
- "She has Autism" not "She is an Autistic child"
- "He has been in jail" not "He's an ex-con"
- "He has an addiction" not "He is an addict"
  "Ms. Smith" not "mom"

#### Working with Families

- If a youth has an FASD, it is essential to help families understand FASD and how best to approach the youth
  - Consistency is very important
  - Understanding what is causing the behaviors is essential before responding
  - Recognizing FASD as a brain based disorder
  - Focus on strengths and abilities
  - Reduce the use of reward and consequence approaches

#### Working with Families

- Support families in the difficulty in raising these children at times
- Teach in vivo parenting skills
- Provide respite with people who understand FASD
- Increase social supports for the family
- Identify family members who may have an FASD

#### References

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- Goril S, Zalai D, et al. (2016). "Sleep and melatonin secretion abnormalities in children and adolescents with fetal alcohol spectrum disorders." Sleep Medicine 23: 59–64.

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- Iber C, Ancoli-Israel S, et al. (2007). :The AASM manual for the scoring of sleep and associated events: rules, terminology and technical specifications. First edition, Westchester Illinois: American Academy of Sleep Medicine.
- Kheirandish L and Gozal D (2006). "Neurocognitive dysfunction in children with sleep disorders." Dev Sci 9(4): 388– 399.

#### **U.S. Resources**

- Centers for Disease Control and Prevention FAS Prevention Team: <u>www.cdc.gov/ncbddd/fas</u>
- National Institute on Alcohol Abuse and Alcoholism (NIAAA): <u>www.niaaa.nih.gov/</u>
- National Organization on Fetal Alcohol Syndrome (NOFAS): <u>www.nofas.org</u>
- Minnesota Organization on FAS: <u>www.mofas.org</u>
- These sites link to many other Web sites