

# Prenatal Drug Exposure & the Developing Child

**Ryan Tolleson Knee, PhD**

Director, Center for Children, Families,  
and Workforce Development

March 2021



CENTER FOR CHILDREN, FAMILIES  
AND WORKFORCE DEVELOPMENT

# Introduction

- Case Study (1984)
- Brief History
  - Fetal **Alcohol** Syndrome (FAS/FASDs)
  - Cocaine, Marijuana, Nicotine, Prescription Medications, **Heroin, Methamphetamines**

# Research/Messaging

- **US studies** - short and long-term impacts of infants-adults with long term disabilities (chronic poly-drug users)
- **European studies** – no long term impact among middle class women with mild ETOH consumption
- "100 % preventable; no safe time, no safe type, no known safe amount" (CDC)

# Care Systems

**Drug TX** – inpatient/outpatient women at risk, court-ordered

**Legal** – jails, rights of fetus vs unborn child

**Social** – parent/caregiver education, out of home placement, behavior problems

**Schools** – cognitive, sensory, and behavioral

# Cognition – CNS conditions

- ◉ Mild to moderate intellectual disabilities
- ◉ Delayed cognitive and auditory processing, perception
- ◉ Poor attention span, hyperactive
- ◉ Lower concentration and short-term memory

# Sensory – CNS Conditions

- Overstimulated by smells, textures, noises, transitions
- Mood swings, withdrawn
- Social cues, perception

# Behavioral – CNS Conditions

- More aggressive and impulsive, uncontrollable tempers
- Conduct & self-regulation problems
- Easily frustrated, delayed social skills
- Poor peer relationships

# Memory - example

Parent frustrated that a 14 year y/o can't do homework independently.

- Parent yells, becomes frustrated, grounds him, & gives consequences. Thought he was doing it on purpose, parent took it personally.
- Parent came to understand the child's brain-based disability results in **can't, not won't**.
- Developed empathy for the child and more patience in teaching it 30 times. Build on his strength as an experiential learner.



# Distractable - example

Child unlikely to say *"hey my processing speed is terribly slow so can you slow your pace so I can learn from you?"*

- Child becomes inattentive, can't keep pace and behavioral problems occur.
- "ten second child in a one second world."

# Generalizability - example

- Teach a child to stop at a street corner before crossing on the way to school. Child is able to stop at that street corner but no other street corners.
- Can repeat directions/rules. Check for comprehension and ability to generalize by asking the child to **show me** rather than tell me.

# Prevent Behavioral Problems - Environmental Mismatch

## **Academic/home environments**

1. Rapid response
2. Grouped by age
3. Remember first time
4. Abstract learning
5. Multi-stimuli
6. Multiple transitions
7. Reading, math

## **Challenges strengths**

1. Delayed cognition
2. Age-delayed
3. Memory problems
4. Learning – doing
5. Easily overstimulated
6. Difficulty transitioning
7. Art, music hands on

# Shifting Perceptions

## Seeing the child as

- Annoying, irritating
- Lazy
- Babied
- Attention seeking

## To understanding as

- Frustrated, challenged
- Oversensitive
- Being younger
- Needs support

# Team Approach

*Understand limits/strengths to adapt environments and prevent secondary problems*

- Family, caregivers
- Schools
- Health care providers (SW, SP, OT)
- Church, sports programs

# Behaviors

- Clear and concise expectations. Avoid blame.
- Use of non-traditional discipline, not all-or-nothing.
- Reframe failures as opportunities.
- Model how to deal with change.
- Verbally communicate when behavior is a challenge and do not rely on youth to read non-verbal cues. Please explain back to me...
- Model and discuss appropriate social behaviors between friends.
- Create a culture that responds to self-isolation.

# Cognitive Support

- Clear and concise communication.
- For youth with good language skills, take away privileges and give full explanation as to why they lost privileges. Explain over and over.
- Track learning and memory challenges. Create a system for them to record to do's.
- Routines, predictable scheduling, consistent expectations.
- Repetition – Teach, tell, reteach, retell, model, demonstrate, and have child demonstrate and repeat.

# Sensory support

- Be aware of how stimuli impact children and adapt environment (loud noises, smells, limit choices)
- Keep routine schedule that the child knows.
- Help identify, manage, and express feelings.
- Prepare for transitions from active to quiet activities, from class to dismissal, from home to anywhere.



# Future

Provide no fear care, treatment, education

Harm Reduction – determine safe amounts based on caloric intake, trimester (similar to medications)

Identify and address underlying factors (social, economic, social) that increase risks (unprotected sex, drug use)

Strengthen support systems, hold them accountable – boyfriends, husbands

Intensive case management, home-based tx. for high-risk pregnant women