

Baby Steps



Promoting activities of daily living of prenatally substance-exposed infants and toddlers

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Learning Objectives

- Participants will examine the relationship between sensory integration and self-regulation in prenatally substance exposed infants and toddlers and how they may impact participation in occupations.
- Participants will use sensory integration-based and family-centered solutions to address occupational challenges in feeding and sleeping in prenatally substance exposed infants and toddlers.

ETSU Pediatrics Baby Steps Clinic: A medical home for children (birth to 5 years) who were prenatally substance exposed



- Interprofessional Developmental Assessment and Referral
- MD, OT, PT, SLP, nurse, dietitian, audiologist, case manager, and early interventionist

Caregivers:

- More than 50% of caregivers are birth mothers
- Most birth mothers have +4 Adverse Childhood Experiences (ACES)
- Most birth mothers receiving MAT (medication assisted treatment)
- Other caregivers are foster parents or grandparents with custody
- Social determinants of health



Clients: Prenatally (In Utero) Substance Exposed

Includes:

- Infant known to be exposed to substance/s during prenatal period
- Neonatal abstinence syndrome (NAS)
- Neonatal opioid withdrawal syndrome (NOWS)
 - Infant demonstrating withdrawal symptoms to the substance/s the mother was using or being treated with during pregnancy (Patrick, Barfield, & Poindexter, 2020)

NAS Withdrawal Symptoms seen after birth

- Excessive high-pitched crying
- Less sleep than normal
- Taking more than 20min to feed
- Sweating
- Twitching
- Projectile vomiting
- Loose/watery stool
- Red and white patches on the skin
- Delayed Development

Clients: Prenatally Substance Exposed

- Not all infants who were prenatally substance exposed will have withdrawal symptoms
- We use the terms “Prenatally substance exposed” or “In-utero substance exposed” to better define the children seen in our region/state
- “Polysubstance exposed”- more than one substance
- Most of our clients have polysubstance exposure

Case Study: Bradie 4 months

- Polysubstance exposure in utero
- Mom in MAT during pregnancy
- Bradie lives with mom and MGM.
- MGM has custody.
- Feeding Concerns



Self-Regulation and Prenatal Substance Exposure

- Self-Regulatory problems observed in many young children prenatally substance exposed
- Arousal level
- Self soothing/calming
- Behavior



Self-Regulation problems impact on Occupations (ADLS):

- Self regulation contributes to a child's ability to learn how to manage his or her own:
 - Attention
 - Behavior
 - Social skills
- Starts developing in infancy



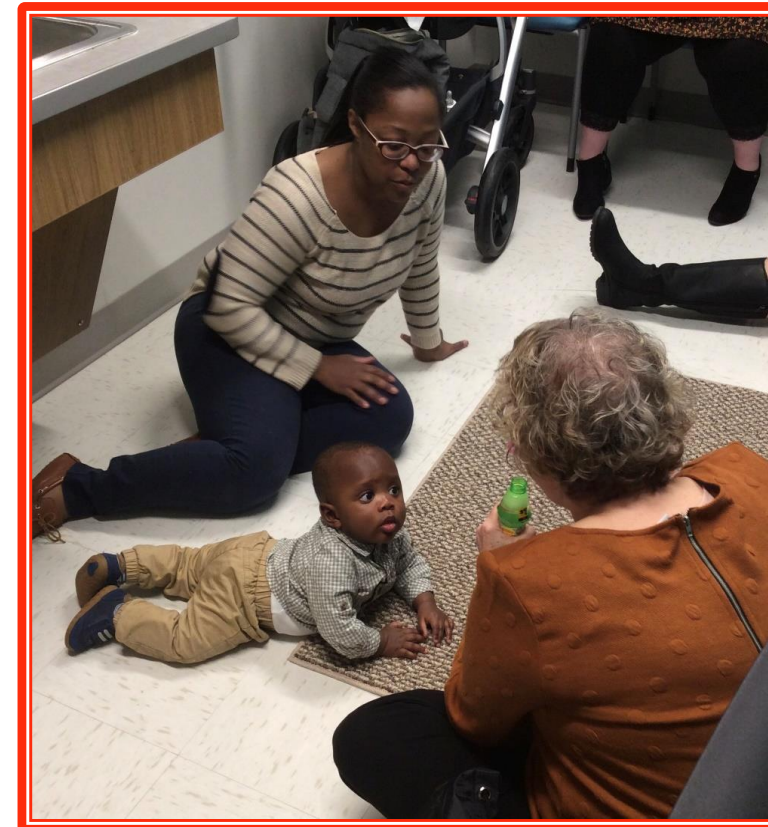
Prenatally substance exposed young children often have challenges in ADLS:



- Feeding
- Sleeping

Perspectives for Addressing Occupational Challenges

Sensory Integration (SI)
And
Family-Centered



Sensory Integration Interventions Help Infants/Toddlers Self Regulate and participate in Occupations

- Observe and respond to sensory integration signals
- Design an Environment that Provides external organization and structure

Family Centered Interventions Help Infants/Toddlers participate in Occupations

Trauma-
informed care

Use non-
judgmental and
supportive
methods

Teach
developmentally
appropriate
interactions

Provide a
comforting
physical
environment

(McGlothen-
Bell, et. al.,
2020; Cleveland
& Gill, 2013)

INFANT: Poor Feeding



- Fussing behaviors
- Spitting up
- Coughing
- Suck/swallow/breath deficit
- Increased arousal “Frantic feeding”
- Decreased arousal “Sleepy feeding”

Interventions for Infant Feeding



- Proper Positioning:
- Chin slightly tucked or Neutral
- Head erect
- Baby collected

- **Stop feeding at 30 minutes**

- (McGlothen-Bell, et. al., 2020)

Interventions for Infant Feeding

- **If drowsy or sleepy feeder (under-aroused):**

- Cold cloth
- Arrhythmical rocking or patting
- Tactile cues- Tickle toes or ears
- Unswaddle or unwrap blanket

- **If frantic feeder (over-aroused):**

- Limit talking or singing
- Caregiver may need to turn eyes away
- Rhythmical patting or rocking- 1 rock per suck/second
- Snuggle/swaddle

- (McGlothen-Bell, et. al., 2020)

Interventions for Infant/Toddler Feeding

- Decrease Environmental Stimuli
- Calm and Quiet
- Turn off TV, phone
- Turn down lights
- Limit talking and singing
- Limit touching and kissing



INFANT/TODDLER: Poor Sleeping



- Lack of schedule/routine
- Difficulty calming to sleep
- Under sleeping
- Frequent waking in night
- Over sleeping
- Unsafe sleeping practices

Interventions for Sleeping

- White Noise Machine
- Dark Area of Room
- Natural lighting
- Firm Pats on Back
- Rhythmical Rocking
- Swaddling/Sleep Sack
- Ssshing



Interventions for Sleeping



- Family-centered interventions
- Strengths-based
- Educate caregiver:
 - Routine/schedule
 - Safe Sleep
 - Back to sleep
 - Co-sleeping safety

Case Study: Bradie 4 months

- Full term
- Polysubstance exposure in utero
- Mom in MAT during pregnancy
- Bradie lives with mom and MGM.
- MGM has custody.



Caregiver Interview (Occupational Profile)

- Mom's primary concern is feeding
- He "spits up a lot" and "clutches fists after feeding" "seems like he is in pain."
- Takes 5-6 ounces of Similac soy formula every 3-4 hours with one feeding in the night.
- Mom just started "feeding Bradie oatmeal cereal," and she "is excited he is doing that."
- Adding cereal to the bottle for one feeding during the day.

Clinical Observations:

- Mom cradles Bradie in her arms with his body in horizontal position.
- He has a consistent and coordinated suck, swallow, breath.
- Bradie has good head control and brings hands to midline.
- Bottle/nipple is appropriate
- Mom seems anxious, but is good reporter
- Mom is using cell phone while feeding Bradie

Clinical Application

Small Group Learning

- Consider:
- What is Bradie/Mom successful in doing (strengths)?
- What is challenging for Bradie/Mom (limitations)?
- What is one goal for Bradie/Mom?
- What interventions would you provide to promote these occupations?
- Are there any referrals you want to make?

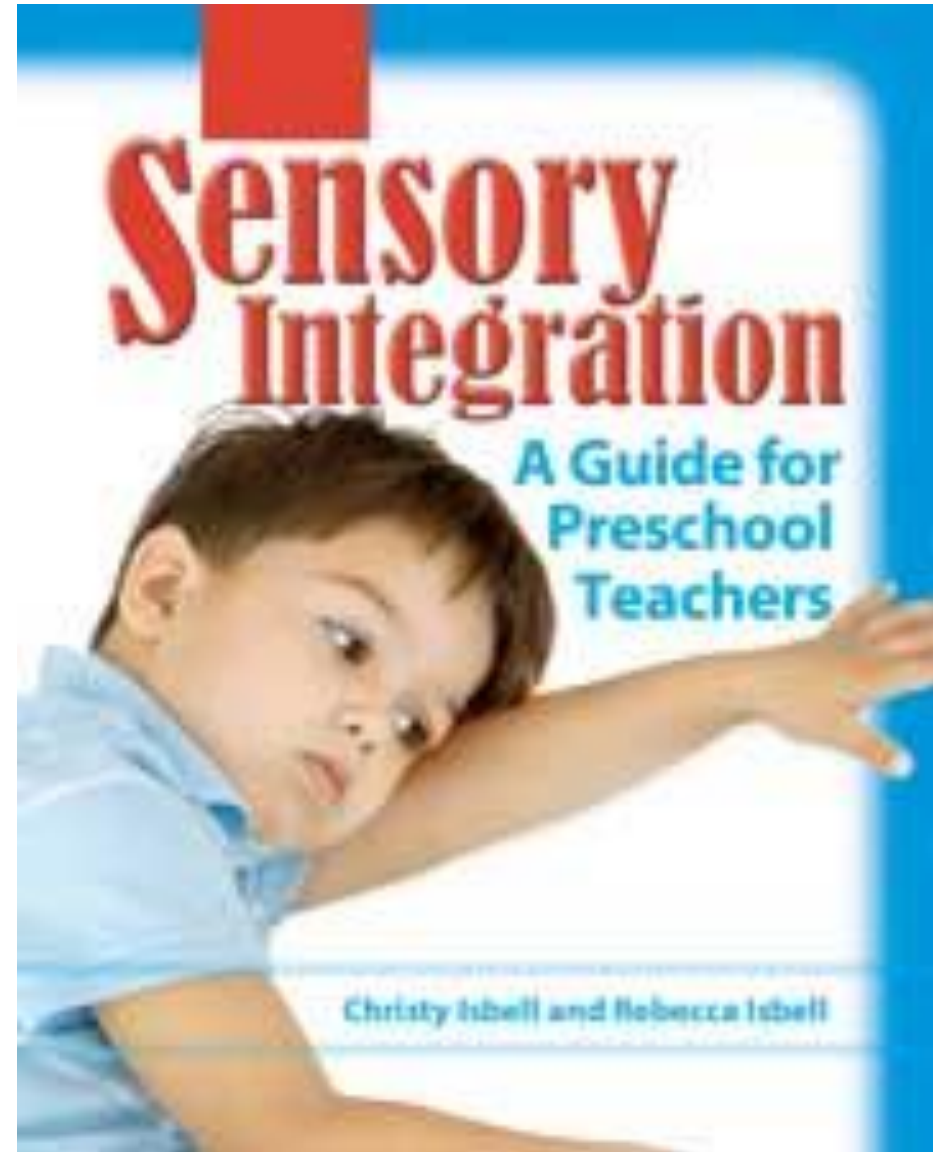
Share and Review

Interventions for Bradie and his Mom

- Share Strengths: adequate intake (32 ounces) and age appropriate sleep-only waking once in night for feeding
- Feeding interventions: Proper positioning during feeding- more erect with neutral chin- can use car seat for feeding
- Limit distractions during feeding
- Keep Bradie upright for 20-30 minutes after feeding
- Offer cereal from a spoon-as practice-not for nutrition- and not putting cereal in bottle

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