MOTHER-INFANT DYAD AND BREASTFEEDING

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Mother-Infant Dyad

- What soothes baby (and Mom): **Attachment**
  - Skin-to-skin contact
  - Breastfeeding
  - Contact with parents
  - Rooming-In

Infants with NAS:

Rooming-in decreases morphine by 50% 

Rooming-in decreases length of stay by 50% 

Skin-to-skin contact is of primary importance!
HOW DOES THIS HAPPEN?
Neurodevelopment

- Cortisol
- Oxytocin
Oxytocin: The Attachment Hormone

- **Oxytocin:**
  - Decreases cortisol
  - Decreases neurotoxicity to developing brain regions
  - Eases sympathetic nervous system
  - Regulates immune system
  - Allows parent to soothe infant
  - Decreases drug use and cravings in mammals
Oxytocin Receptors and Addiction
Addiction in Pregnancy: An intergenerational story

- Attachment Insecurity (ages 0-2)
- Adverse Childhood Experiences (ages 0-18)
Adverse Childhood Experiences:

Approximately 45% of women with SUD have a history of sexual abuse.
Adverse Childhood Experiences

- History of verbal, physical, and sexual abuse increase likelihood of:
  - Smoking
  - EtOH use
  - Illicit drug use

- Increasing number of ACE events:
  - Substance use begins at an earlier age
  - Consequences are worse (psychosis, homelessness, etc.)
Oxytocin

Lower in women with a history of child abuse

Lower in mothers with insecure attachment

Lower in chronic opioid use
When to Intervene:

Maternity:
- Pregnancy
- Postpartum

Maternal neurobiology: oxytocin surge
Impacts the new baby
Mom’s attachment issues
“It is difficult to show love when you were never shown love as a child.”

-Postpartum Mother with Opioid Use Disorder
Treatment of mother and baby: Integration is key!

- Attachment therapy:
  - Enhance mother-infant attachment
  - Enhance attachment of mother to therapist
  - Enhance neurodevelopment of infant
  - Redirect reward system toward attachment (rather than drug)
Circle of Security: Attachment Therapy
BREASTFEEDING
Positive Impacts on Breastfeeding

4 significant factors that positively impacted breastfeeding:

1) a mother’s intent to breastfeed prenatally
2) a mother’s history of childhood maltreatment
3) mother’s attendance at breastfeeding education class prenatally
4) mother having a partner
Breastfeeding Success

- Other factors that improved mother’s breastfeeding success:
  - mother’s attachment history
  - mother’s psychosocial factors such as:
    - self-efficacy
    - psychological adjustment
    - body image
    - motivation
    - confidence
4 significant factors that negatively impact breastfeeding:

1) a mother’s history of Post-Traumatic Stress Disorder (PTSD)
2) a mother’s history of Major Depressive Disorder (MDD)
3) a mother’s education status (less than high school education)
4) mothers who are African American.
Breastfeeding recommendations

- Be sensitive to high possibility of trauma
- Respect her decisions and support them
- Engage mom in discussions about breastfeeding: fears, hopes, concerns, feelings
- Encourage attachment (skin-to-skin) behaviors and engage mom if she is not breastfeeding
Mothers with substance use disorders are more likely to have a history of child abuse and insecure attachment.

Her history will play a role in her ability to help care for her infant.

Attaching to her infant is the best treatment for NAS and may be protective against relapse.

Breastfeeding is good, but attachment is more important.
References

- Caspers, K et al. Substance Abuse Treatment, Prevention, and Policy. 2006; 1:32.