Empathic Care for Newborns and Young Children with Prenatal Substance Exposure and their mothers

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Objectives
1. Explore the potential role of the postnatal caregiving environment in ameliorating or aggravating risks of prenatal substance exposure
2. Identify the first 3 months as opportunity for engagement of high risk mothers
3. Explore ways to incorporate relationship and attachment-based intervention into primary care.

My Journey

- In S Africa:
  - Strong interest in prevention/epidemiology
  - Focus - rheumatic heart disease in Soweto children - highest prevalence in the world
- In USA – charged with developing a pediatric nursery service at Hartford Hospital in 1990
  - Focus? → 2 major areas
    - Breastfeeding
    - The substance exposed infant

The Problem
1990+
Cocaine epidemic, heroin endemic

2000+:
- Prescription opioids - Hydrocodone, oxycodone
  - Epidemic in Western Virginia, Maine and Kentucky
  - Most states affected
  - Rural areas and small towns > cities
  - Changing profile
- Heroin addiction – on the rise
  - Purer, cheaper, more potent even via oral route
Opioid Use in Pregnancy?
True prevalence is unknown

> False negatives on toxicology screens → RED FLAGS
> Opioid prescriptions filled in pregnancy
  USA: 21.6% of Medicaid recipients in 2007
  2.5% with chronic use (>30 days)
  NY State: non-medical use in 1 in 10 women on Medicaid
  1% pregnant women in past 3 days
> Women of child bearing age
  CDC: (’08–’12) 39.4% Medicaid, 27.7% private

Frequency of NAS
Quadrupled between 1999 and 2013 (CDC):
  – 1.5/1000 → 6 per 1,000
  – Maine, Vermont, W. Virginia - > 30/1000

Epidemiology of NAS in CT

Infants of Substance Using Mothers: Double Jeopardy
Biological vulnerability +
  • Direct effects - prenatal substances
  • Indirect effects:
    – Comorbidity - HIV, hepatitis and C
    – Depression/ Anxiety
    – Domestic violence
    – Epigenetics
    – Poor nutrition
    – Perinatal complications
    – Poor prenatal care

Environmental risks
  • Effects of substance use and/or antecedents on parenting & attachment
    – Toxic Stress/ ACE
    – Exposure to violence
    – Child maltreatment
    – Poverty
    – Caregiver disruption
Concerns

- Increased risk of
  - NAS
  - Birth Defects (Alcohol, 1st trimester opioids?)
  - Developmental/behavioral problems
  - Repetitive trauma
  - Intergenerational cycles

Learning on my Journey

1990s+

- Women’s treatment – limited & inadequate
- DCF response – often punitive and inconsistent
- Removal of a newborn at birth – traumatic, decreases potential for recovery
- Alternative placement still fraught with risk - labeling, resentment

Sources

- Addiction
- Trauma
- Infant brain development & mental health
- Attachment & resilience
- Motivation

PLUS

- 25 year EXPERIENCE - Nursery and PROkids

Infant Brain Development

★ First 1000 days - conception to 2 years

- Plasticity --> may ameliorate/overcome/worsen prenatal effects
- Emotional development
  - By 1 year: EMPATHY (Schore)
  - By 18 months: ATTACHMENT security (Ainsworth, Srouffe, Main)

- BUT can continue throughout life span although more difficult.
Development occurs in the context of relationships

The pre-frontal cortex

Attachment

The development of attachment relationships between children and their caregivers constitutes one of the most important aspects of human/primate social and emotional development. (Bowlby Ainsworth, Sroufe, Main)

Secure Attachment

Protective factor for resilience

Promoter: A care giver - able & willing to:
• Provide warm, sensitive & responsive caregiving enough of the time.
• Engage in the intimate dance which occurs between a mother and her infant.

Attachment 101 - Patterns
(Strange Situation - Ainsworth, Main)

• Organized attachment - strategy achieved
  – Secure (60-65%)
  – Insecure avoidant (20-25%)
  – Insecure resistant (10-15%)

• Disorganized – no strategy achieved (10-15%):
  – Risk factors:
    • Unresolved maternal loss/ trauma
    • Maternal substance abuse
    • Maltreatment
Attachment in Infants With Prenatal Drug Exposure

High rates of attachment insecurity & disorganization

**BUT:**
- Substance using mothers can provide care which facilitates secure attachment.
- Highest rates of secure attachment (50%) in infants of mothers who achieved abstinence compared to infants in foster/kinship care

Motivation and Substance Use

- The addicted brain causes a strong motivation to seek and use substances
  - Reward system in the limbic system (dopamine): euphoria, confidence, energy, freedom from pain
  - Avoid negative physical/psychological effects
- This motivation can be triggered well into recovery.

A Challenge: Relationship of Mothers with their Substance(s)

- Substances may become the primary object over all other relationships.

There is a need for a more powerful force to assume this position.

The Mother-child Relationship?

- Mothering is the most important aspect of getting life back together for many women with chemical dependency – the glue that holds everything else in place
The Birth of a Baby  
“The Window of Opportunity”

• Openness to transformation  
• Shift to the baby  
• Preoccupied with love and fear for infant’s safety  
• Motivation is highest

Evidence

• Most mothers initially try to protect their children from consequences of their use  
• Maintaining the relationship increases retention in residential treatment.  
• Separation or removal of their children often leads to depression, relapse, or intensified use

The Attachment Relationship As the Motivating Force

• Holds potential for mothers to:  
  – Make positive changes in their lives,  
  – Enter/ maintain treatment & recovery  
  – Heal from past trauma/ deprivation

• Holds potential to promote the positive development of children.

Experience

Nursery

• Identification  
• Informed consent for toxscreen  
• Management protocols  
• High Risk newborn meetings including DCF  
• Multidisciplinary approach

After discharge?

• Hope and challenge - role of the care giving environment  
• Intervention around the primary care visit?
PROkids: A Primary Care Intervention (1991+)

- **GOAL:** Promote Resilience and Optimal development in kids 0-3 years with prenatal substance exposure through strengthening the postnatal caregiving environment

- Initially a pediatric component of a maternal day treatment program but → legitimate intervention on its own

PROkids

- **Expanded Primary Care:**
  - increased frequency and duration of visits → touch-points for intervention and keep the child visible
    - Every week 1st mo., every 2 weeks 2nd mo.
    - Every month 3-6 mo., every 6 weeks 12 mo - 2y
  - Continuity of care providers - MD, APRN, RN
  - Care coordination, community collaboration & advocacy

- Developmental follow-up

PROkids

- **Stay with the child irrespective of placement**
- **Work with biological and/or alternative caregivers**
- **Positive outcomes:**
  - Achieved primary care goals for EPSDT visits
  - Increased timeliness and completeness of vaccinations at 1 and 2 years.
  - Decreased maltreatment incidents
  - Decreased ED visits

PROkids Plus

- In 2000, in collaboration with DCF, awarded an AIA grant → PROkids Plus
- **PLUS:**
  - a home visiting component,
  - training in motivation and trauma informed care
  - weekly mother-infant group with transportation
  - community partnerships
Development of Empathic Care

• Relationship and attachment-based
• Trauma informed
• Takes into account competing needs of addiction and recovery
• Facilitating non-hierarchical model
• Strength-based & promotes efficacy

Risk Factors in Substance Exposed Dyads

Anxiety
Guilt
Childhood abuse
Trauma / Loss
Use/relapse/recovery
Depression/PTSD
HIV / hepatitis

Intrusiveness
Representations
Expectations
Irritability
State instability
Gaze aversion

Inconsistent responses
Un availability / Separations
Competing demands of drug use / treatment

Staff attitudes
DCF / Legal
Minimal supports
Poverty
Unsafe environments / housing
Lack of treatment

Empathic Care* Model

Enhance:
Inner working model
Representation of infant
Ability to be present

Empathic support
Affirm strengths
Respect
Presence
Basic needs

Promote sensitive responses, consistency

Help caregiver be available
Limit separation

Promote:
Well-being
Affect regulation

“The more parents experience positive supportive relationships, the more opportunities they have to enhance their internal working models of themselves, their infants and their relationships with their infants.”

Gowen, Nebrig, 1997
Essential Principles of EMPATHIC CARE

Parallel processing
*Do unto others what you would them do to others.*
- Staff to staff
- Staff to caregiver
- Caregiver to child

Pivoting
*Holding in mind the needs of the child & parent-child relationship while addressing multiple needs of family/crisis.*

Every encounter is an opportunity for a therapeutic dyadic intervention.

The pediatrician and staff have many opportunities e.g. immunizations, reminder calls, missed visits

Intervention Principles EMPATHIC CARE

Empathy
Maintaining contact
Presence
Authoritative developmental guidance
Tuning into cues/affect
Holding in mind/Pivoting
Inner reflection
Communication

Consistency
Affirm strengths
Respect
Efficacy

*PROkids Plus

EMPATHIC CARE - EMPATHY

*Essential Ingredient:*
The ability to feel for another and SHOW compassion while maintaining healthy psychological boundaries
Empathy — The Parallel Process

**Staff to Mother**
- Transition to mothering
- Struggle to achieve / maintain recovery
- Competing demands
- Her story
- Prior or current losses
- Mistakes e.g. prenatal use

**Mother to Child**
- Basic needs for nurturance, protection, physical care
- Dependency
- Developmental frustrations
- Temperamental differences
- Withdrawal symptoms
- Comfort / soothing

EMPATHIC CARE

Maintaining Contact

- **Connection** — not only through physical presence, but also through touch, voice, sight, or other senses
- Foundation for building a trusting relationship — through the consistent presence of another.

Maintaining Contact - in Separated Dyads

**GOALS:**
- The infant should not become a stranger.
- The mother should feel that she
  — remains important in her child’s life
  — participates in her rearing.
- Value the foster mother’s role as a guide to the biological mother and her child.

Maintaining Contact: The Parallel Process

**Staff to Mother**
- Positive and consistent contact
  — Accessibility
  — Home/clinic visits
  — Proximity
  — Creative outreach
- Persistence !!!
- Addressing competing needs

**Mother to Child**
- Help maintain contact in ways to promote attachment
  — Physical proximity
  — Touch
  — Closeness after separation / distress
  — Holding / carrying
  — Breastfeeding if appropriate
Infant Carrying

 Presence

• Ability to be truly present with another
• As a provider with the mother
• As the mother with her child

EMPATHIC CARE – Presence

The Parallel Process

 Staff to Mother
• Being truly present during interactions
• Helping mothers function in the NOW.
• Ways to reduce stressors.
• Helping to prioritize.
• Strategies for trauma

 Mother to Child
• Being present mentally and physically
• Play / floor time – “Wait, Watch and Wonder”
• Interaction during daily activities

EMPATHIC CARE – Communication

Listening, reflecting, and responding with ears, eyes, heart, & voice
• Childhood deprivation and trauma can impede the development of emotional areas of the brain.
• Non verbal empathic lexicon can reach into those areas and enhance development and healing of the adult brain.
Communication – The Parallel Process

Staff to Mother
• Listen & respond with ears, eyes, & heart
• Reflect on her feelings and words
• Conveying meaning through one’s body language
• Eye contact & touch

Mother to Child
• Child communicates with voice, states, behavior - reflect on child’s behavior/feelings – “I wonder …
• Gentle words, facial & body expressions,
• Awareness of own frightening behavior

Affirmation - The Parallel Process

Staff to Mother
• Opportunities to highlight and build on strengths of mother
• Avoid acting as expert
• Celebrate small steps

Mother to Child
• Help identify child’s strengths
• Positive feedback to child
• Catch the child being good (Time-in)
• Celebrate small steps

EMPATHIC CARE — Affirming Strengths

• In every substance using mother there is a good mother and in every substance exposed infant there is a good baby.

Barry Zuckerman

EMPATHIC CARE — Respect

• To feel and show value for another:
  – Cultural beliefs and attitudes
  – Time and personal space
  – Right to make decisions, disagree, or discard advice
Respect – The Parallel Process

Staff to Mother
- Respect parental role
- Model respect of self & others
- Label behaviors & not mother
- Avoid negative labels e.g. “manipulative”
- Help mother have self respect - boundaries, limits

Mother to Child
- Respect for child as unique and separate being
- Respect feelings (talking through baby)
- Label behaviors, not child
- Avoid negative labels

Respect for Relapse

“Relapse is part of recovery. Don’t take my baby!”

- A PROkids mother as her baby was removed from her care.

Empathic Care
Across Developmental Time-lines

0 to 3 months: Window of opportunity
3 to 9 months: Dancing with Joy
9 to 15 months: Secure base for exploration
15 to 24 months: Towards mastery

0 to 3 Months:
“Window of Opportunity”

Caregiver
Identifies as mother > addict
Guilt, fear
Child welfare intrusion
Relapse risk - fatigue
Promote stability if on MAT

Infant
Gaze
Sensitivity to cues/state
Cry/ Soothing
Closeness, safe skin to skin
Breastfeeding
Engaging the Caregiver

KEY to her baby’s recovery
e.g. Decreases hospital LOS and need for MAT for NAS
Create a nurturing environment, NOT a goldfish bowl!
Pediatrician has an important role.

Babies with NAS-
A difficult first 3 months!

- Sleep Disturbances
- Exaggerated crying curve and difficulty soothing
- Feeding difficulties, dysregulation
- Maternal fatigue – major trigger for relapse

Essential to prepare, provide tools, and support e.g. visiting nurse, frequent primary care visits
AND the light at the end of the tunnel!

The light at the end of the tunnel!

- Exaggerated crying curve in first 2 to 3 months
- By 4 months: most infants have no s/s of withdrawal
- Severity of NAS does not affect prognosis.

4 to 9 Months:
“Dancing Together With Joy”

Goals:
- Help mothers maintain their child as the primary relationship
- Prevent substances assuming the primary position
- Reciprocal positive interactions
Dancing Together With Joy

**Caregiver**
- Availability to dance
- Learning the steps & how to lead and follow
- Coping with the highs and lows
- Identity begins to shift to "addict" – recovery plan
- Triggers e.g. shots

**Infant**
- Enhancing positive & soothing negative affect
- Readiness to interact
- Following lead
- Avoiding over-stimulation
- Routines & quiet time

9 to 15 Months:
**Securing a Base for Exploration**

**Caregiver**
- Secure base for recovery & safety
- Ambivalence
- Barriers – trauma, cultural attitudes
- Relapse risk in 2nd year
- Building supports
- Safe place to talk about recovery/relapse

**Infant**
- Need for dependency & autonomy
- Increase in positive emotions (increases dopamine) - share positive affect
- Play
- Reunions / repair
- Interaction guidance

15 to 24 months:
**Towards Mastery**

**Caregiver**
- Sustaining recovery
- Pillars of support
- Self efficacy
- Learning together
- Celebrating accomplishments
- Dealing with relapses

**Toddler**
- Safe environment
- Shared wonderment
- Routines
- Positive affirmation
- Shared moments and activities

A Useful Analogy.....

- **For toddler**, learning to walk – frequent falls before mastery.
- **For mother**, learning to stay in recovery – relapses may occur on the way, but it is possible to get up again and again, each time a little stronger until eventually mastery is achieved.
Intervention Timeline
Parallels for Mother and Infant

Outcomes
- 78% of infants - still with their biological mothers at 18 months
- Increased maternal responsiveness in formal assessments of play interaction (Parent/Caregiver Involvement Scale – PCIS by Dale & Farran)

How Does this Approach Differ from Others?
- “Facilitating” non-hierarchical model
- Focuses on
  - Relationships at all levels
  - Emotional development of both mother & child
- Strength-based & promotes efficacy

Power of an EMPATHIC CARE Approach
- Motivation for treatment and recovery
- Healing potential for trauma/loss
- Promotes adaptive internal working models.
- Potential to interrupt intergenerational cycles
- Fosters mindfulness in staff and provides a grounding framework.
Lessons Learned

1. Importance of maternal wellbeing - #1
2. Focus on the maternal-child relationship
3. A therapeutic relationship is essential
4. Addiction and recovery remain important
5. Recognize when intervention is not working
6. A rondavel of support is essential

Change in the paradigm of the pediatric visit

“My baby is my butterfly – he saved my life.”

-A PROkids mom

U.N. Declaration of the Rights of the Child (Principle 6)

The child, for the full and harmonious development of his personality, needs love and understanding. He shall, wherever possible, grow up in the care and under the responsibility of his parents, and, in any case, in an atmosphere of affection and of moral and material security; a child of tender years shall not, save in exceptional circumstances, be separated from his mother.

Society and the public authorities shall have the duty to extend particular care to children without a family and to those without adequate means of support …..