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Using Infant Mental Health Principles to Deepen and Broaden Understanding of Commonly Presenting Parenting Challenges and Address Needs

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- Neither I nor my immediate family have any financial interests to disclose.
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Goals & Objectives

- 1. Analyze common parenting challenges using infant mental health principles
- **2.** Consider recommendations for potential resources and referrals using a relational health approach



Agenda

- I. Infant Mental Health & Early Relational Health
- II. Emotional Regulation Embedded in Healthy Relationships
- III. Infant Mental Health Approaches to Common Parenting Challenges
- **IV.** Case Presentation
 - V. Infant Mental Health-Informed Resources



Infant Mental Heath Endorsement Core Competency Family Relationships and Dynamics



How we care for our children is how, at last, we take charge of our destiny.

Laurence Frank, 1939

How we care for parents & caregivers is how, at last, we take charge of our destiny.

Infant Mental Health & Early Relational Health

Earliest Human Connections

- Infant is born seeking human connections
- Birth mother is primed to connect with her newborn baby



Perinatal Reward Circuit

Neural activation of reward circuit (dopaminergic, GABA, opiates) induces pleasurable effects

Normative biological changes supportive of adaptation to parenthood:

- reduced stress reactivity
- increased sensitivity to the infant

Increased neural activity in the reward circuit positively associated with maternal sensitivity

- positive emotion
- affective touch
- direct gaze
- positive perceptions of infant

Kim 2011

Internal Working Model

- Internalized mental representations of self & others
- Evolving by 6 mo; established by 12 mo
- Form foundations of behavior & expectations of social relationships
- Impact peer relationships, academic performance, work, social & intimate relationships, and future parenting attachment type



Zeanah 2009

Internal Working Model

- All children have core needs:
 - Nurturing adult love
 - Protection
 - Socialization
- Determines internalized sense of self



Internal Working Model

Loving adults are capable of raising me well. I deserve this care.



"

Infant Mental Health

A young child's capacity to experience, regulate, and express emotions, form close and secure relationships, and explore the environment and learn.

> Biology Relationships Culture

> > Zeanah 2009

"

Early Relational Health

The capacity for, and ongoing engagement in, growth-fostering, empathic and empowering interpersonal interactions

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FrameWorks Institute 2020



Infant mental health and early relational health begin prenatally.

Fetal Programming

DEFINITION

The result of the influences of environment on the developing brain's architecture during gestation that creates persistent consequences of health and disease risk

- Prepares the developing fetus for the environment they are going to be born in
 - Survival
 - For example, increased maternal stress
 high vigilant, hypersensitive infant

Barker 1998 Glover et al. 2014

Fetal Programming

The placenta

 An enzyme in the placenta breaks down maternal cortisol before it reaches the fetus

cortisol 11β -hydroxysteroid dehydrogenase (11 β -HSD2) Cortisone (inactive)

- Changes filtering capacity in response to maternal chemical signals
- Plays a role in regulating pregnancy
 - Maturing fetus
 - Determining timing of delivery

Davis & Thompson 2014 Glover et al. 2014



Placental Function



e.g., enzyme down-regulation

e.g., third trimester



Glover et al. 2009

Newborn Response to Pain



- N=116 women & their term infants
- Maternal plasma cortisol & report of stress, anxiety, and depression 5 times throughout pregnancy
- Baby's cortisol response to heel-stick at 24 hours after birth

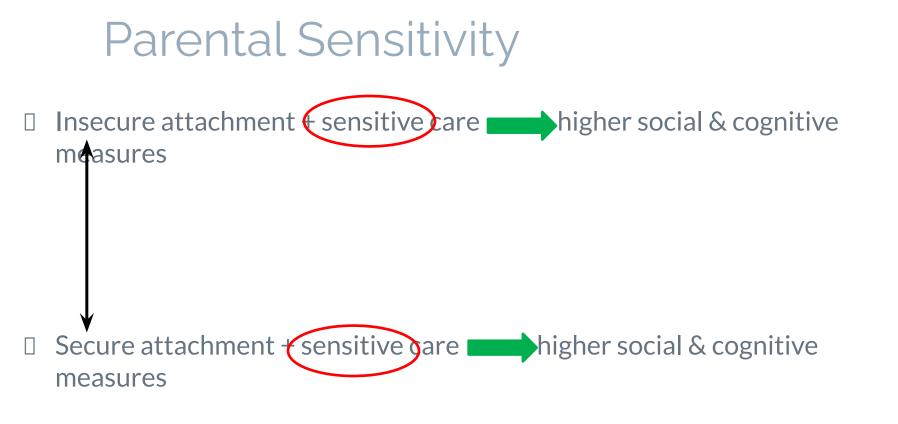
Association between elevated concentrations of maternal cortisol during last second and third trimesters and greater infant cortisol response to heel-stick & slower rate of behavioral recovery

Davis et al. 2011

Maternal Stress and Fetal/Infant Behavior

- Fetuses of women reporting high daily stress are
 more physically active (DiPietro 1999)
- Degree of increase in fetal heart rate in response to maternal stress predicts infant temperament (negativity and reaction to novelty) at 4 months (Werner 2007)
- Higher levels of disaster-related stress and illness during pregnancy correlated (dose-dependent) with infants who are fussy/difficult and needy of attention at 6 months (Laplante 2016)

	Condition	Outcome	Reference
A.	Pregnancy-specific anxiety associated with infant at 6 months of age (male & female)	Negative emotional reactivity	Nolvi, et al. 2016
B.	Elevated amniotic fluid cortisol at 17 wks gestation; children at 14-19 months of age	Higher pre-stress cortisol levels in novel situations	O'Connor, et al. 2013
C.	Prenatal partner relationship strain and 14-19 month old children	Delayed cognitive development and increased fearfulness	Bergman, et al. 2007
D.	Accelerated pCRH at 22-23 wks gestation; 5 year olds (male and female)	Higher internalizing symptoms	Howland, et al. 2016
E.	Higher maternal cortisol at 31 wks gestation; 6-9 year old girls	Internalizing problems and 'network cost'	Kim, et al. 2016



Attachment at 15m Sensitivity at 24m Testing at 36m

Belsky & Fearon 2002

Parental Sensitivity

Insecure attachment + sensitive care higher social & cognitive measures

			Maternal Report (at 24 m)
		1	Life stress
			Depression
Î			Social supports
	•		Family resources

Secure attachment + insensitive care lower social & cognitive measures
Belsky & Fearon 2002

Overloaded Parent

Maslow's Hierarchy of Needs: Self-Actualization

Realization of a peron's full potential



simplepsychology.org

Societal Programs Addressing Overloaded Parent Over Time

Factors for Building Resilience

- 1960's: Head Start, school readiness
- 1980's: Home visiting, parent-child relationships
- 1990's: Early Intervention, earlier intervention as prevention
- 2010's: Quality childcare, enriched environments



II. Emotional Regulation Embedded in Healthy Relationships

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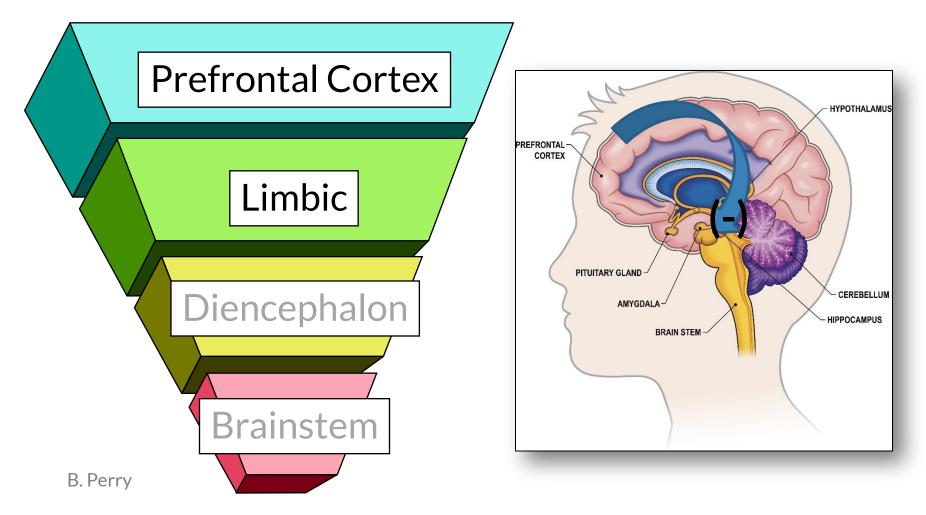
Self-Regulation

Integration of physiological, behavioral, and mental processes into a goal-directed action that is then internalized as mental representation

Fox & Calkins 2003

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Self-Regulation



Co-regulation

Self-regulation develops through repeated experiences of 'being held' emotionally during times of dysregulation by an emotionally regulated adult



Feldman 2007

Co-regulation

Infant Massage Effect

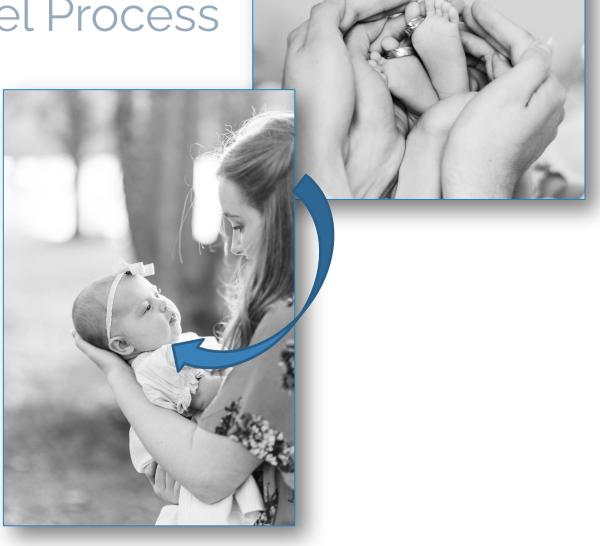
Weight gain (Field, et al. 1987)

Ease in feeding (Field 2003)

Reduced cortisol level (Field 2003)

Reduced adult anxiety & cortisol level (Field, et al. 1998)





Resilience

- □ The set of skills needed to respond to adversity and thrive
- □ Situation-specific
- Developmental process
- Results from the dynamic interaction between internal predispositions and external experiences



National Scientific Council on the Developing Child 2015

Resilience

Factors for building resilience

- □ Stable, caring, and supportive relationships
- □ A sense of mastery over one's own life circumstances
- **Strong executive function and self-regulation skills**
- □ Affirmed faith and cultural traditions



National Scientific Council on the Developing Child 2015

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III. Infant Mental Health Approaches to Common Parenting Challenges

Translating Presentation into Recommendations

Infant Mental Health Approach

(after r/o safety issues; can be concurrent with medical)

- Caution avoiding over-medicalizing
- □ Basic needs
- I Trauma-informed
- Consider <u>developmental</u> age and adult expectations
- □ Assess risk factors
- Motivational Interviewing strategies
- □ Consider relational health
- □ Who is 'holding' the parent/caregiver?
- □ How to nurture the relationship(s)

Nippling/Feeding

"Feeding Relationship"

- Rule out social determinants of health
- □ Consider emotional regulation (mother & baby)
- □ Breast feeding
 - Past experiences
 - Messaging
 - Culture
- □ Solid foods
 - Parenting style

Parenting Styles & Feeding

- Case-control
- Matched for age & education level
- Three measures (mother report)
 - Mealtime behavior
 - Child-behavior problem (types)
 - Child-behavior problem (frequency)
 - Parent-feelings/strategies (problems)
 - Parental Stress
 - Maternal problem solving (vignettes)

Martin, et al. 2013

Parenting Styles & Feeding Strategies (typical vs feeding d/o)

Direct

- □ High Power (1 vs 5.25)
 - Forcing
 - Punishment
 - Threat (none)

Indirect (total score 21)

- □ Planful (15.5 vs 6.6)
 - Provide opportunity
 - Restructure
 mealtimes
 - Information seeking (insignificant)

Parenting Styles & Feeding Stress

- Both child with feeding d/o & parent stress scores significantly higher than typically development group
- Difference in stress for both groups attributed to child-parent dynamic, <u>not</u> life events
- Mother in the typically developing group rated significantly more stress on parent subscale compared to their child subscale (feeding d/o group mothers' subscales were more similar)
- Parent stress subscale significantly positively correlated with all four subscales on mealtime behavior (parent, child, type, frequency)
- Negative correlation between maternal stress & problem-solving

Martin, et al. 2013

Sleep

What Sleeping Babies Hear

- Interparental conflict correlates with heightened brain activity in sleeping babies exposed to very angry tone of voice
- □ Rostral anterior cingulate cortex
- Subcortical regions (caudate, thalamus, hypothalamus)
- Rostral anterior cingulate cortex implicated in emotional processing & regulation

IV. Case Presentation

Holding the Caregiver: Health Belief Model

- Potential positive benefits of action
- Perceived barriers to action
- Exposure to factors that prompt action (cues to action)
- Perceived threat/susceptibility
- Belief of consequences/perceived severity
- Confidence in ability to succeed (self-efficacy)

- Congratulations on taking time out of your busy schedule to call today.
- What has happened recently that motivated you to call today?
- What do you hope will happen when you act? What is your goal?
- What is your worst fear?
- How confident are you that you will be able to take the next step?
- What will be your first next step?
- When will you act?
- What will get in your way of acting?
- How might you overcome what could get in your way?

Level of Supports/IMH Interventions

Primary Prevention:

- Parent education
- Universal home visiting
- Moms' groups
- Infant massage
- Music
- On-line resources
- Self-care

Secondary Prevention:

- Circle of Security®
- Home visiting

Tertiary Prevention:

Child Parent Psychotherapy

Case Presentation: Pediatrician asked her to call

- □ Sara is a 20 year old mother of a newborn baby boy, Eric
- □ She is not sure why she is calling
- □ Eric was born 7 days ago
- □ Healthy/uncomplicated pregnancy/no tob, alcohol, drug use
- Hospital birth, discharged at 24-hours
- Breastfed in the hospital
- Continues BF and now supplementing with bottle
- Sara wishes to continue to BF but concerned about feeding when she returns to work
- Eric lives with his mother and father in an apartment
- □ Sara plans to return to work at 6-weeks post-delivery
- □ Sara works as an aide in a nursing home
- □ Father works as a welder; work has continued during COVID-19
- □ Maternal grandparents live in town and are supportive Copyright © 2020 by Alderman Boreal Consulting®, LLC. All rights reserved

Case Presentation: HMG Call Line Staff

- 1. What might be reason(s) for PCP asking Sara to call?
- 2. What other questions do you have?
- 3. How might you frame the conversation using infant mental health principles?
- 4. What relational health questions do you have?
- 5. What are the strengths that you see?
- 6. What are potential risk factors?
- 7. Does this call prompt primary, secondary, or tertiary prevention?
- 8. How might you learn how confident Sara is as a new mother?
- 9. What do you have to offer Sara?
- 10. How might you ease into a conversation about available resources for her? What do you hope to gain? Avoid?



V. IMH-Informed Resources

IMH-Informed Resources

Professionals:

Parents:

Strengthening Families[™] is a research-informed approach to increase family strengths, enhance child development, and reduce the likelihood of child abuse and neglect. (source: Center for Study of Social Policy

 The First 1,000 Days: Bright Futures
 Examples for Promoting Early Brain and Child Development This grid crosswalks simple strategies for promoting social and emotional development at well-child visits from 4-36 months. (source: American Academy of Pediatrics)

• <u>Early Relational Health</u>, created by FrameWorks, provides guidelines on messaging the importance of healthy relationships in early childhood. (source: Center on Study of Social Policy)

Mental Health: Self-Care is a self-paced online training module that examines the different types of stress and provides strategies for reducing and

Siegel Brain Model is a video (2:31) where Dr. Siegel uses his hand model of the brain to briefly explain emotional and cognitive function in an easy to understand way for parents. (source: Dr. Dan Siegel)

Responding to Children's Emotional Needs & Good Enough Parenting video (4:23) focuses on the importance and challenges inherent in parenting using the Circle of Security® model and conveys a message of hope and empowerment for parents and caregivers in supporting their child's social and emotional development. (source: Circle of Security)

Child-friendly:

Time to Come in, Bear video (1:40)

gently narrates with animation a story for very young children set to rhyme about Bear's indoor coping activities while 'the world has a cold.' (source: National Child Traumatic Stress Network [NCTSN]), <u>English</u>, <u>Spanish</u>, <u>ASL</u>

Trinka & Sam is a free, downloadable children's book, created through a collaboration with the NCTSN, is a story to help young children and families talk about their experiences and feelings related to COVID-19. The storybook doubles as a coloring book and is accompanied by a parent guide and booklet of common questions children may ask. Available in 6 languages (source: Piplo Productions)

 Relaxed Breathing Train is a 1-minute animated video designed to help a child (2-5 years) pace their breathing with the blow fish's in and out breathing. Parent supervision is recommended. (source: YouTube Kids)

managing personal stress. (sourceydohn© 2020 by Alderman Boreal Consulting®, LLC. All rights reserved Hopkins Center for Public Health



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