

# ATTACHMENT ABC'S IN PEDIATRIC PRACTICE

Mary Margaret Gleason, MD FAAP  
[mgleason@tulane.edu](mailto:mgleason@tulane.edu)



# ACKNOWLEDGEMENTS

- ◎ Patients and families- please respect their confidentiality
- ◎ Tulane Institute of Infant and Early Childhood Mental Health

# DISCLOSURES

- ◎ External funding from
  - Baptist Community Ministries
  - Institute of Mental Hygiene
- ◎ No industry funding
- ◎ AAP Early Brain and Child Development Leadership Workgroup

# LEARNING OBJECTIVES

- ◎ Be familiar with the crucial components of the early attachment relationship
- ◎ Be able to recognize patterns of suboptimal parent-child interactions
- ◎ Be familiar with primary care approaches to promoting healthy early relationships

# OVERVIEW

- ◎ Stages of healthy parent-child relationship development
- ◎ Patterns of unhealthy attachment including reactive attachment disorder
- ◎ Promoting healthy relationships

# THE CAREGIVING RELATIONSHIP



Copyright Brad Mitchell/Mira.com

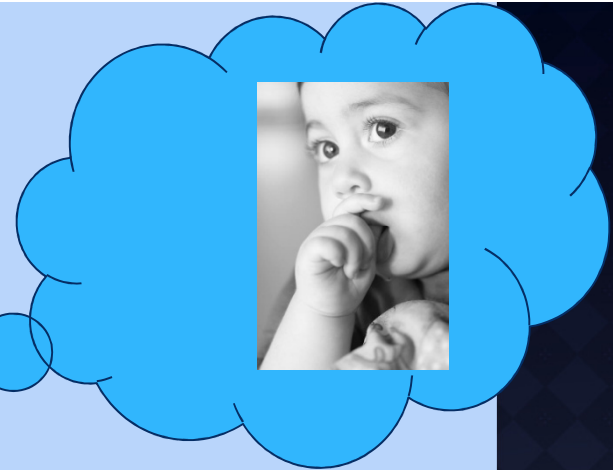
# RELATIONSHIP COMPONENTS

○Parent perceptions○Child

○Parent behaviors perceptions

○Child

behaviors





# CHILD CONTRIBUTIONS TO ATTACHMENT RELATIONSHIP

- ◉ Temperament
- ◉ Genetic predisposition
- ◉ Cognitive status
- ◉ Medical and developmental problems
- ◉ Ability to successfully cue a parent contributes to relationship

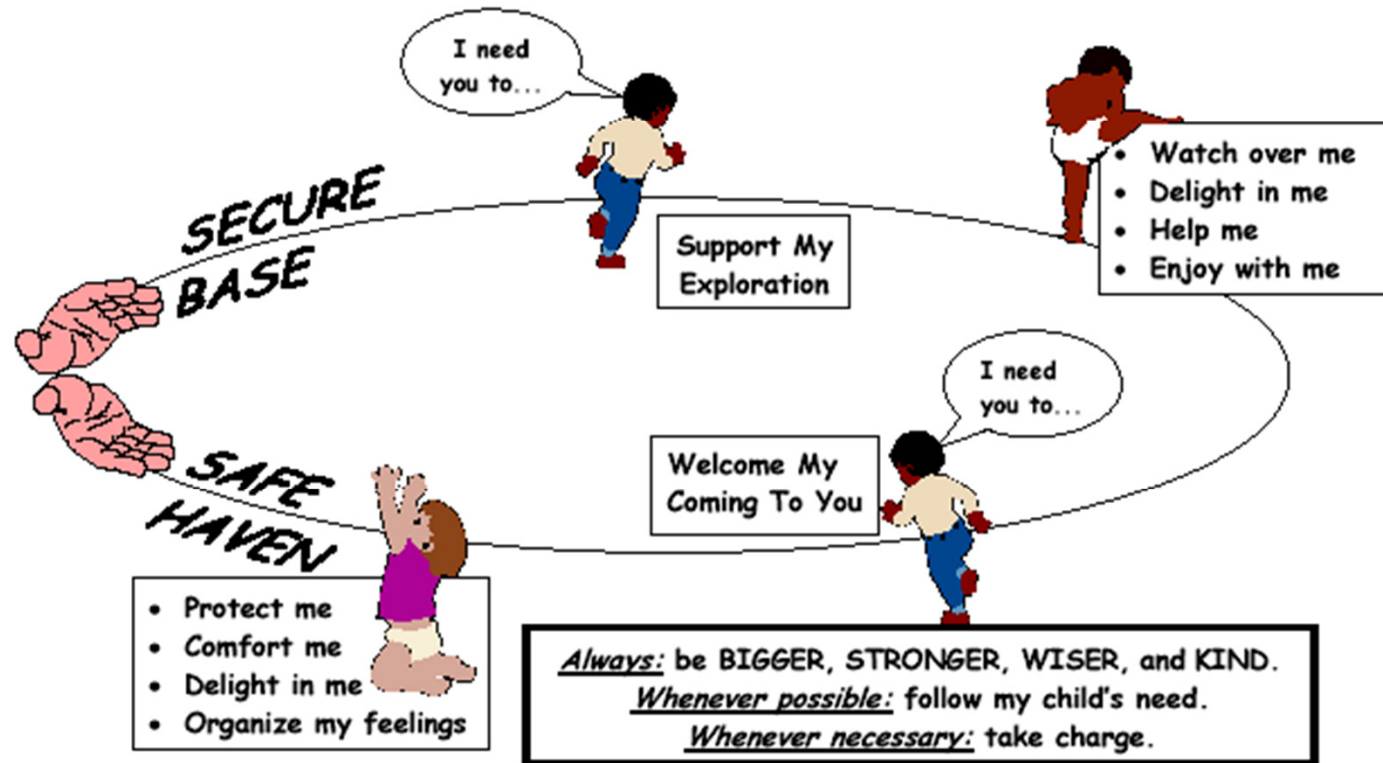
# STEPS TOWARDS BECOMING ATTACHED

- ◎ Prenatal: Parents develop stable perceptions about infant
- ◎ Perinatal: Infants are born with propensity to develop focused attachment relationship
- ◎ “Bonding”: parent’s early emotional connection to child
- ◎ Attachment: selective, focused proximity seeking in times of distress

Zeanah, Boris, Scheeringa, 1996

# CIRCLE OF SECURITY

PARENT ATTENDING TO THE CHILD'S NEEDS



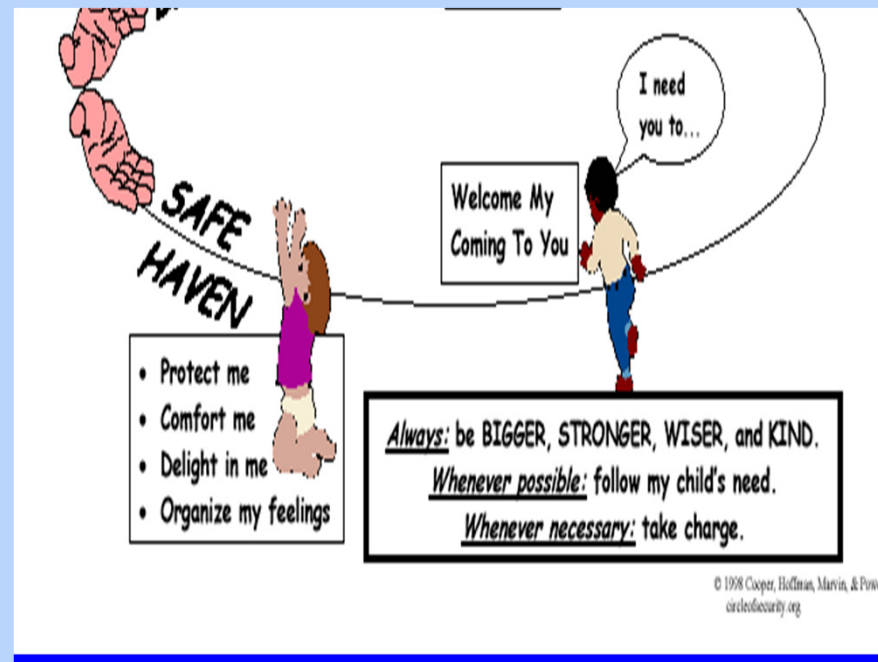
© 1998 Cooper, Hoffman, Marvin, & Powell  
circleofsecurity.org

# HIGH SAFETY/LOW STRESS SITUATION



Cooper, Hoffman, Marvin, Powell, 1998 [www.circleofsecurity.org](http://www.circleofsecurity.org)

# HIGH STRESS/LOW SAFETY SITUATION



Cooper, Hoffman, Marvin, Powell, 1998 [www.circleofsecurity.org](http://www.circleofsecurity.org)

Organized, balanced,  
coherent narrative about  
infant (even prenatally)  
Warmth



Infant  
tracks  
face  
briefly



Responding to  
infant cues of  
distress or joy  
and anticipating  
needs

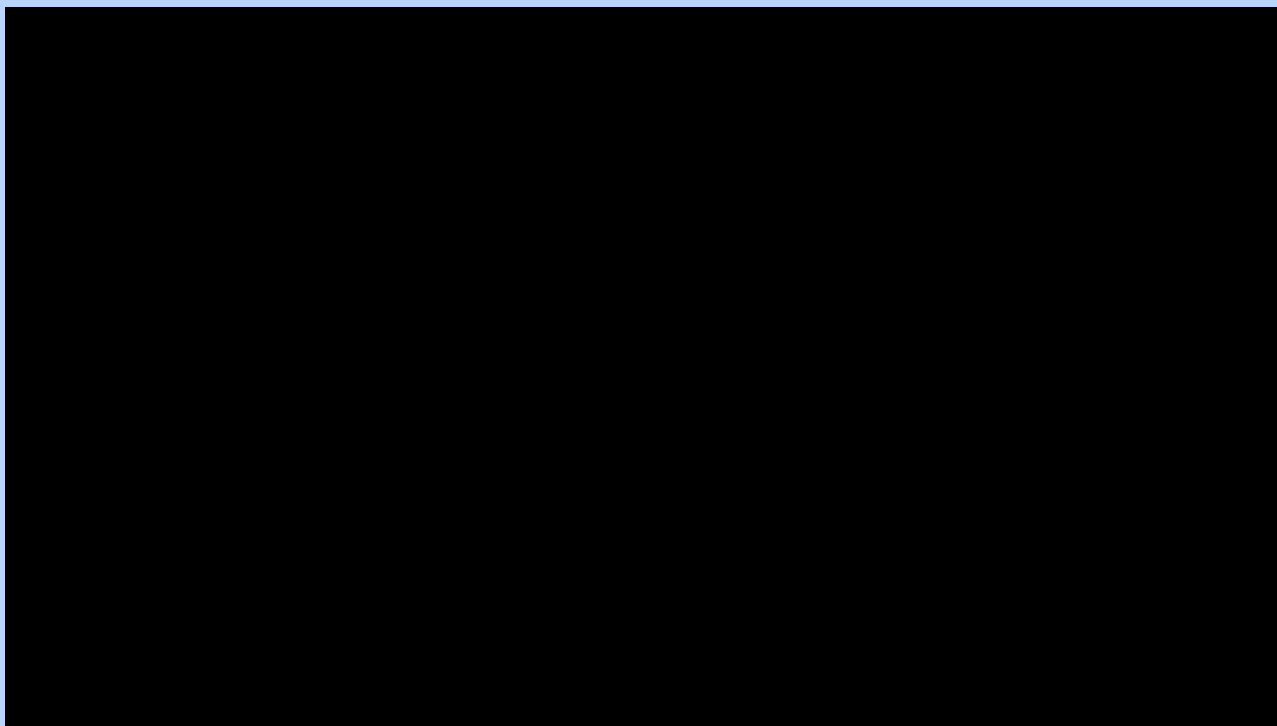
Looking at relationships in infancy

# RED FLAGS

- ⦿ Parent sounds detached, disinterested, disorganized, or overtly disdainful when talking about infant
- ⦿ Parent does not respond to infant cries or coos
- ⦿ Infant averts gaze



# STILL FACE





# FOCUSED ATTACHMENT

## DEVELOPMENT: 7-12 MONTHS

- ◉ Preferred attachment (“falling in love”)
- ◉ Stranger wariness develops
- ◉ Separation protest becomes evident

# WHAT DOES IT LOOK LIKE?

## ◎ Toddler

- Child shows distress around new people and seeks proximity to mother for comfort
- New distress when mother leaves the room
- Proximity to parent resolves infant distress

## ◎ Parent

- Parent acknowledges and tries to resolve infant's new anxiety

Organized, balanced,  
coherent narrative about  
child ; Warmth



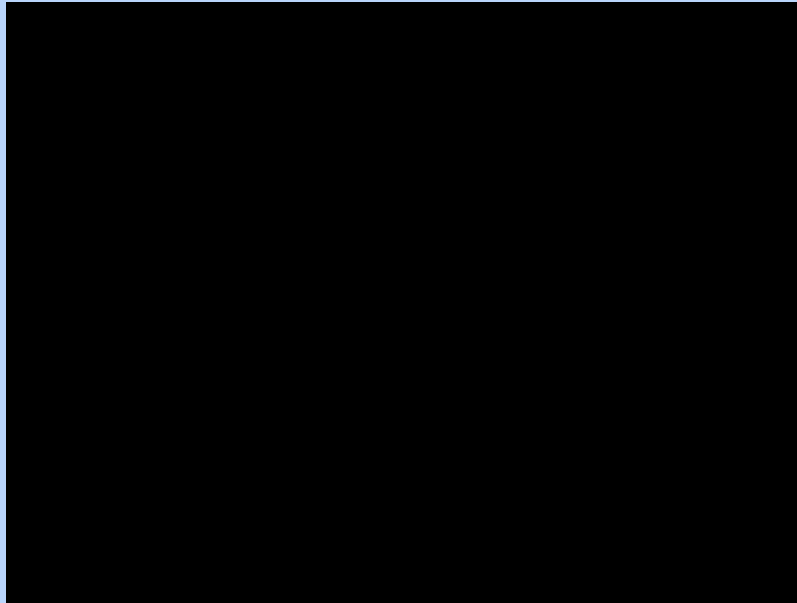
Responding to  
child cues of  
distress or joy  
and anticipating  
needs

Stranger distress  
Proximity seeking in  
times of distress  
Proximity resolves  
distress

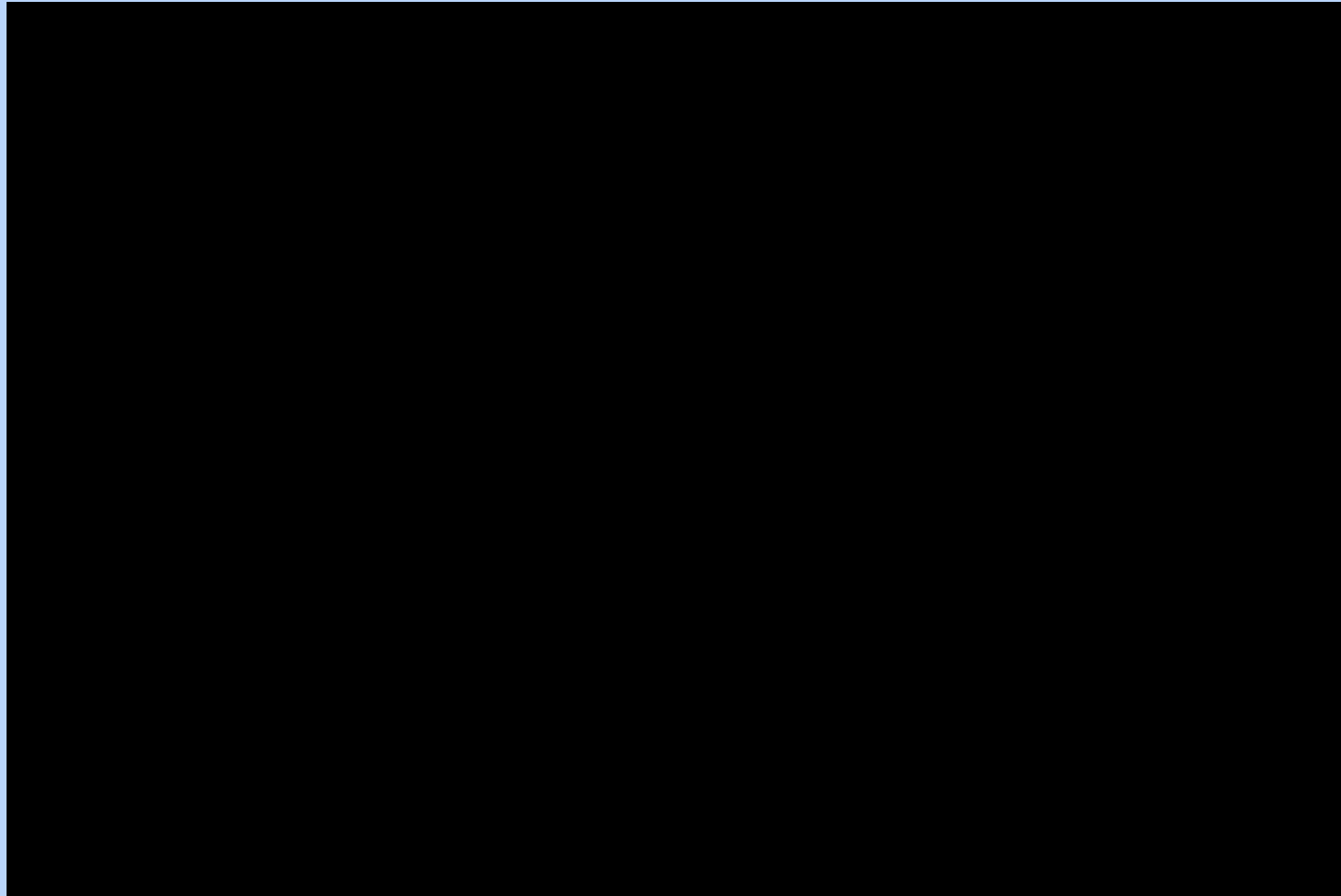


Looking at relationships in toddlerhood

# FOCUSED ATTACHMENT



# USING PARENT FOR COMFORT

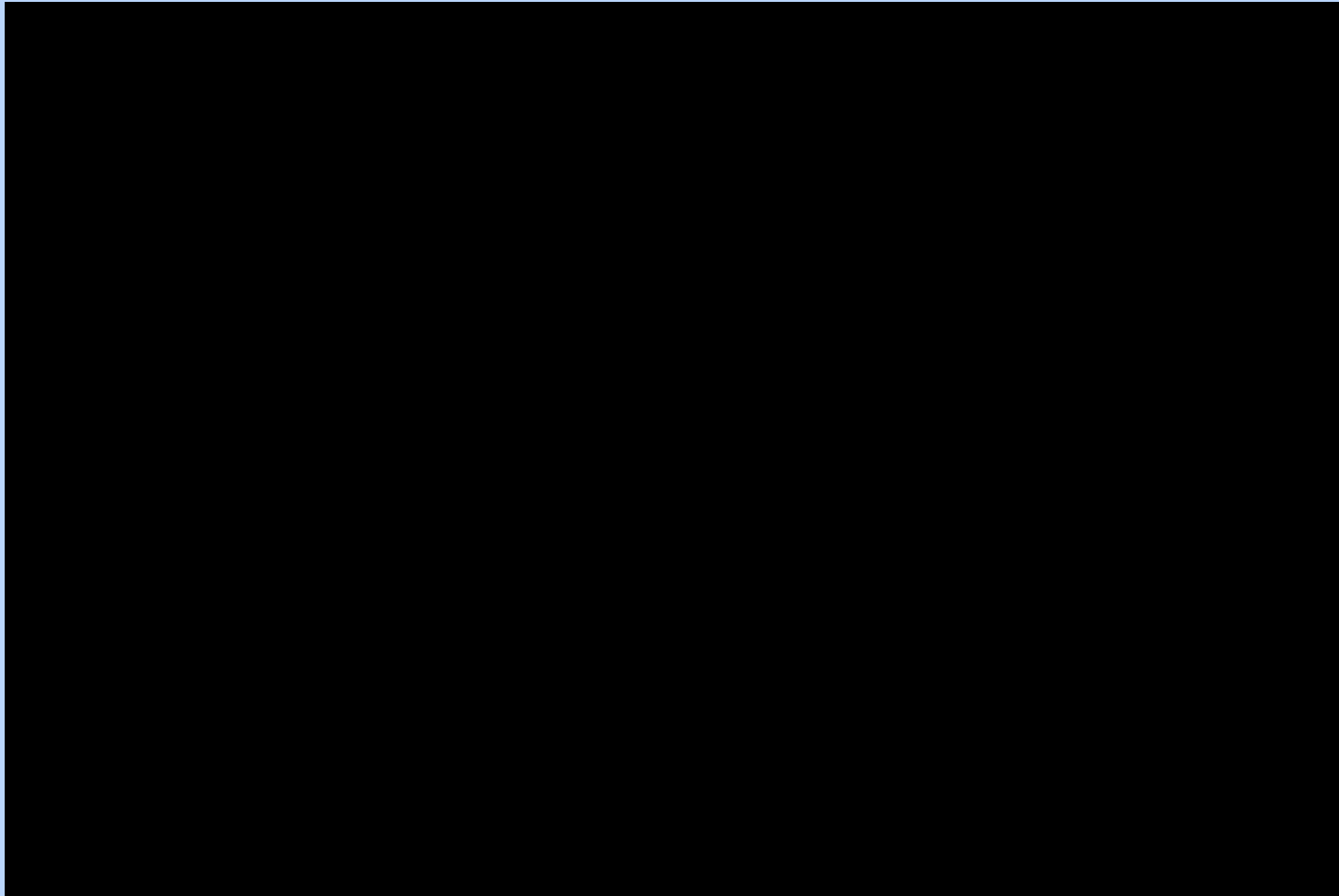


# RED FLAGS: TODDLERS

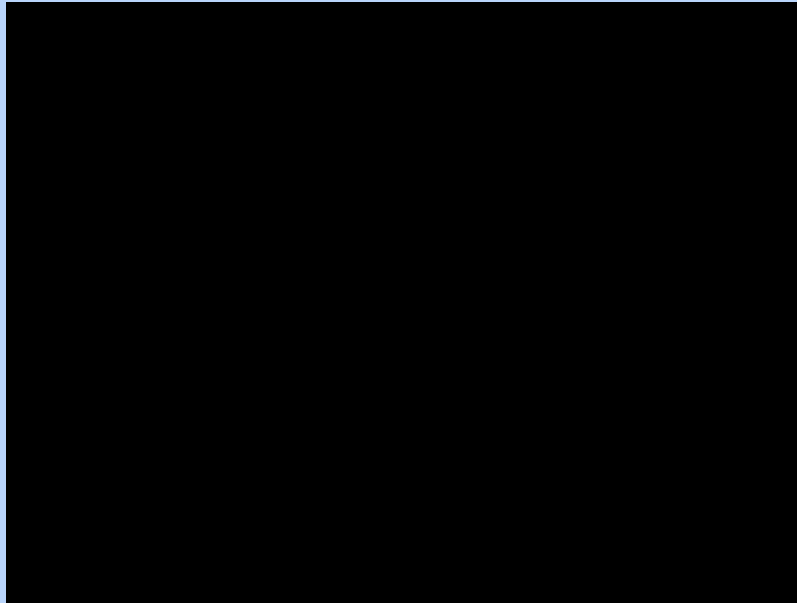
- ◉ Indiscriminate behaviors
- ◉ Overly withdrawn and clingy
- ◉ Proximity to mother does not resolve infant's distress
- ◉ Mother resents or rejects comfort-seeking behaviors



# PARENT PERCEPTION



WHEN PROXIMITY  $\neq$  COMFORT





# FORMAL CATEGORIES OF ATTACHMENT BEHAVIORS

- ⊙ A- avoidant
- ⊙ B- secure
- ⊙ C- withdrawn/resistant
- ⊙ D- disorganized
- ⊙ Insecurity is NOT a sign of psychopathology
- ⊙ Organized patterns most strongly predict future mental health

# WHY DOES ATTACHMENT MATTER? ANIMAL MODELS

- ◎ Stress response system (including HPA axis) developed in response to caregiving environment
  - Impaired early caregiving in monkeys -> high CRF and fearful behaviors
  - Rat mother nurturing increases synapse formation in hippocampus, development of HPA axis
  - Rats born to non-nurturing mothers raised by nurturing mothers showed brain development similar to the biologically related offspring

# WHY DOES ATTACHMENT MATTER?

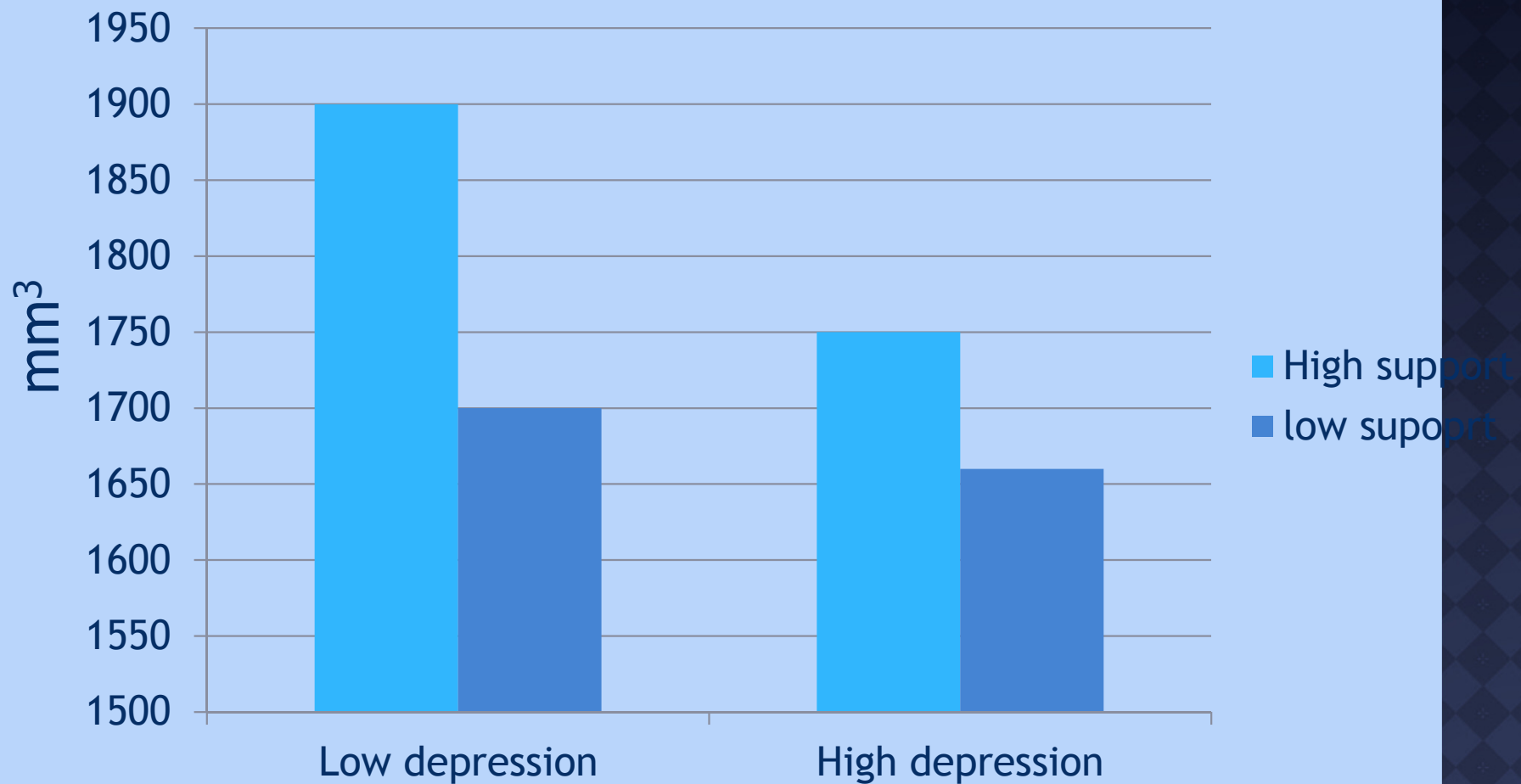
## ◎ Securely attached infants vs insecure infants

- More pro-social as school aged children
- Less aggressive as school aged children
- More concerned attentiveness
- More positive self-image as school aged children

## ◎ Securely attached adults vs insecure

- Have more satisfying adult intimate relationships
- Are better able to seek care
- Are better able and more likely to provide care to others

# HIPPOCAMPAL VOLUMES (LUBY 2013 PNAS)



# WHY DOES ATTACHMENT MATTER?

- Attachment relationships are intergenerationally transmitted

# INTERGENERATIONAL TRANSMISSION

Grandmother's  
Perception of  
own  
attachment  
relationship



Adult  
Mother's  
perception of  
own  
attachment  
relationship



Prenatal  
perception of  
self in intimate  
relationships  
**and** perception  
of child



Infant attachment  
classification at 1  
year old



Child's  
perception of  
own attachment  
relationship

Arrows indicate  
prediction, although  
not necessarily  
causation

# WHEN RELATIONSHIPS ARE DISTURBED

- ◎ Child may not use parent for comfort effectively
  - Self-soothe/not soothe
  - Seek comfort from strangers
- ◎ Child and parent may not share joy together
- ◎ Child may not learn to organize feelings
- ◎ Parent may not protect child effectively
- ◎ Child and parent may have trouble understanding each other's cues

# CAREGIVING DEPRIVATION AND CNS DEVELOPMENT

- ⦿ Lower EEG power
- ⦿ Lower brain volume (grey and white)
- ⦿ Decreased uncinate fasciculus connectivity  
Lower grey-white differentiation in areas related to cortical/amygdala connectivity
- ⦿ HPA axis dysfunction (cortisol, CRF)



# CAREGIVING QUALITY AND METHYLATION

- ◎ 14 children in institution since birth (Russia)
- ◎ 14 children raised at home
- ◎ Mean age 8 (7-10 yo)
- ◎ Measured whole genome methylation
- ◎ Higher methylation in institutional group
  - Especially immune responses
  - Cellular signaling (neural communication and brain development)

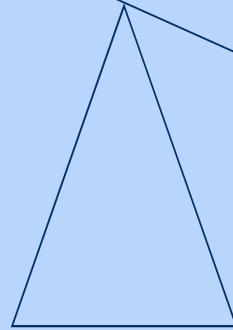
# REACTIVE ATTACHMENT DISORDER

# REACTIVE ATTACHMENT DISORDER

- ◉ Occurs in children with history of pathogenic caregiving
- ◉ Inhibited- do not effectively use caregivers in times of distress, limited reciprocity
- ◉ Indiscriminate- show minimal selectivity in use of adults

# HIGH STRESS/LOW SAFETY SITUATION

*Attachment  
System*

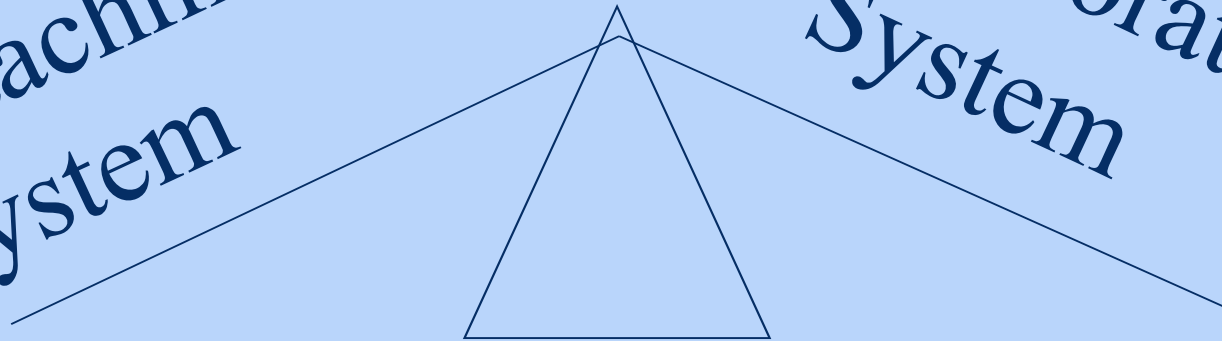


*Exploratory  
System*

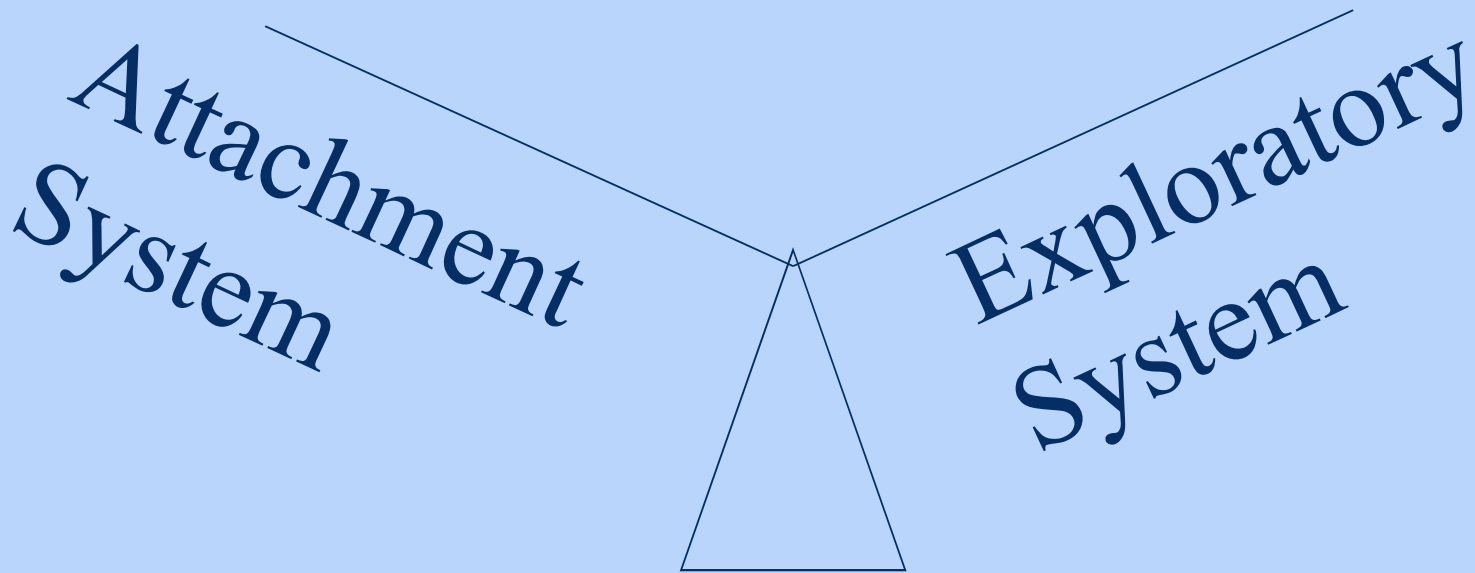
# HIGH STRESS/LOW SAFETY SITUATION: INHIBITED RAD

Attachment  
System

Exploratory  
System



# HIGH STRESS/LOW SAFETY SITUATION: DISINHIBITED RAD



# EPIDEMIOLOGY

- ◎ Rates of RAD in institutionalized toddlers
  - indiscriminate RAD ~30%
  - Inhibited RAD ~4%
- ◎ Intensity of RAD symptoms correlates with risk of pathologic care
- ◎ Institution > high ratio pilot unit in institution > never institutionalized group
  
- ◎ Gleason et al, 2011; Zeanah, Smyke, and Dumitrescu, 2002

# CLINICAL PRESENTATION OF RAD

- ◎ Two disorders
  - Different correlates
  - Different treatment responsiveness
- ◎ Both associated with caregiving adversity
- ◎ Both associated with functional impairment (concurrent and predictively)
- ◎ Clinical presentation in older children is less clear
  - *Gleason et al. 2011*



# INDISCRIMINATELY SOCIAL TYPE RAD

- ◎ Symptoms continue in a setting of deprivation and slowly decline after placement
- ◎ Some ADHD symptoms, but low rates of true comorbidity
- ◎ Can have organized attachment patterns
- ◎ Associated with significant concurrent and future impairment

(Gleason et al 2011)

# INHIBITED TYPE RAD

- ⦿ Responds rapidly to treatment
- ⦿ Lower prevalence
- ⦿ Appear depressed, withdrawn, do not use parent selectively for comfort even when distressed

# RAD IN SCHOOL AGE CHILDREN

- ◉ No longitudinal studies
- ◉ Descriptions of behaviors are quite divergent from data in younger children
- ◉ Descriptions on internet etc use extraordinarily inclusive criteria
- ◉ Preliminary findings suggest that signs of RAD are stable up to 8 years using strict criteria

# TREATMENT FOR RAD

- ◎ Removal from institution and placement in foster homes is related to decreased reactive attachment disorder symptoms (inhibited >> disinhibited)
- ◎ No other treatments have been studied as interventions for reactive attachment disorder
- ◎ *Zeanah et al 2010; Smyke et al. under development*

# CLINICAL ASSESSMENT OF PARENT CHILD RELATIONSHIPS

# FORMAL ASSESSMENT OF ATTACHMENT

- ◉ Child perception: Must be inferred
- ◉ Child Behaviors
- ◉ Parent Perception
- ◉ Parent Behaviors

Infer: child perception



Listen: parent's perception



Observe: child behaviors



Observe: parent behaviors

# Assessing the relationship

# ASSESSMENT: OBSERVATIONS

- ◎ Serial observations important
- ◎ Attend to child's interactions with stranger (clinician) and parent
- ◎ Observe child's ability to comfort, and parent's ability to anticipate needs for comfort and to provide comfort
- ◎ Can provide opportunity for planned separation and watch reunion strategies
- ◎ Be aware of child's excessive friendliness with strangers





# ASSESSMENT OF ATTACHMENT: CHILD BEHAVIORS

- ◉ Is child overly friendly with office staff or MD?
- ◉ Does child reference parent during appt
- ◉ Does child seek proximity to parent under stress
- ◉ Does proximity to parent help calm child during exam or immunizations

# PRIMARY CARE ASSESSMENT OF ATTACHMENT: PARENT PERCEPTION

- ◉ Tone when parent talks about child
- ◉ Attributions about child appropriate?
- ◉ Is description of child coherent or fragmented/difficult to follow?



# PRIMARY CARE ASSESSMENT OF ATTACHMENT: PARENT BEHAVIORS

- ◉ Does parent allow child to explore appropriately and safely?
- ◉ How does parent overly limit exploration?
- ◉ Does parent recognize child distress
- ◉ Does parent try to soothe distressed child?
- ◉ Does parent allow child to approach for calming



# PROTECTIVE COMMUNITY FACTORS IN EARLY CHILDHOOD

- ◉ Having at least one supportive adult (even in setting of family violence)
- ◉ Community identity and pride (even in low-income neighborhoods)
- ◉ Affluence (only by reducing number of risk factors, not in a direct manner)

# PEDIATRIC ROLE

- ◎ Promote well-being through anticipatory guidance
- ◎ EBCD Grid
  - Explore the child's environment
  - Build relationships and reciprocity
  - Cultivate development
  - Develop parenting confidence

*[http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/EBCD/Documents/EBCD\\_Well\\_Child\\_Grid.pdf](http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/EBCD/Documents/EBCD_Well_Child_Grid.pdf)*

**PEDIATRICIANS are Encouraged to** →  
**General Principles** →

**Explore the child's**

**Build relationships / reciprocity**

**Cultivate development**

**Develop parenting confidence**

**What pediatricians might teach parents about development**

**How pediatricians might support parents as they nurture their child's development**

**4 months**

Encourage reaching for objects that are safe and easy to hold

Recommend regular bedtime routine

**6 months**

Anticipate the development of social-emotional distress (eg, separation anxiety, stranger anxiety)


Support the enjoyment of books

# EBCD PURPOSEFUL PARENTING




**Building  
"Piece" of Mind**


**First visit**  
Face Time and Emotional Health



**The 9-month visit**  
Feelings are an early language



**The 18-month visit**  
Tantrums, time out, and time in



**The 36-month visit**  
Building emotional health

## PEDIATRIC ROLE

- ◎ Identify children in unsafe caregiving situations including institutional care or maltreatment
- ◎ Acknowledge caregiving challenges for children with such histories
- ◎ Identify co-morbid conditions



# PEDIATRIC ROLE: RECOMMENDATIONS FOR PARENTS

- ◎ “Time in”
- ◎ Encourage
  - Perspective taking
  - Consistency and dependability
- ◎ Re-frame maladaptive behaviors
- ◎ “Walk through” the Circle of Security

# DIAGNOSTIC UNCERTAINTY

HELP build a therapeutic alliance:

- H = Hope
- E = Empathy
- L<sup>2</sup> = Language, Loyalty
- P<sup>3</sup> = Permission, Partnership, Plan

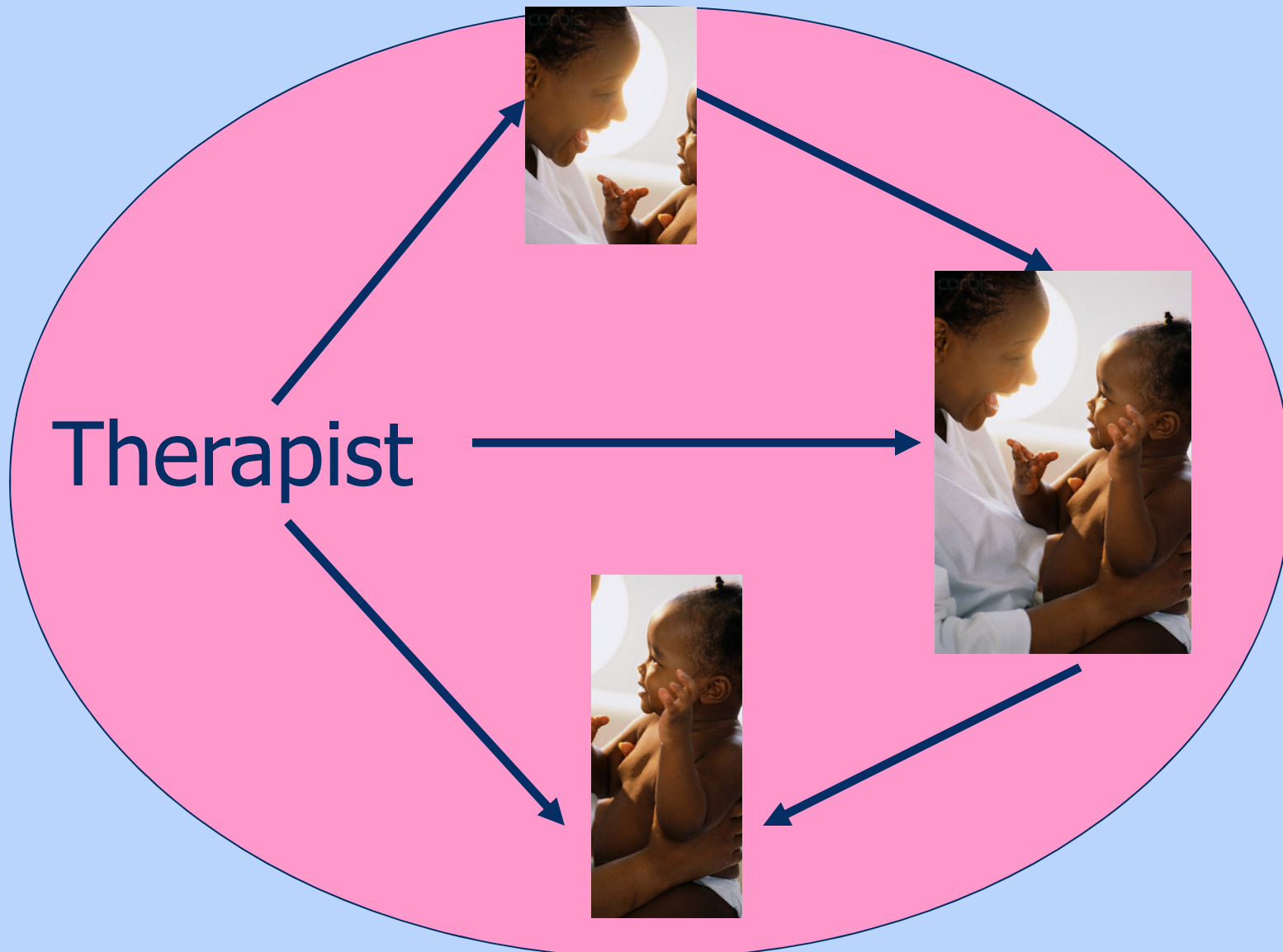
# PEDIATRIC ROLE: REFERRALS

- ◉ When family ready
- ◉ Consider for
  - Overwhelmed parents
  - Not sure of diagnosis/clinical problem
  - Severe relationship disturbances
  - Children whose inhibition is precluding developmentally appropriate interactions
  - Indiscriminate behaviors putting child at risk
  - Co-morbid conditions interfering with functioning

## PEDIATRIC ROLE (3)

- ⦿ Do not prescribe medications for attachment or coercive therapies
- ⦿ Collaborate with therapist to treat re: co-morbid conditions

# EARLY CHILDHOOD ATTACHMENT- FOCUSED TREATMENT



# EVIDENCE BASED THERAPEUTIC INTERVENTIONS: CONSISTENT THEMES

- ◉ Dyadic work most promising
- ◉ Must include a strong emphasis on developing a strong, respectful and nurturing therapeutic alliance with mother
- ◉ Strength-based approaches
- ◉ Increase insightfulness (perspective taking)
- ◉ Increase sensitivity to cues
- ◉ In vivo positive interactions

# COERCIVE THERAPY

- ◉ = for  
other
- ◉ has b  
organ

purpose  
ssional



# SUMMARY

- ◎ Parents and infants contribute to the developing relationship



**Your Questions?**

# SELECTED REFERENCES

- ◉ Benoit, D., Parker C.H., Zeanah, C.H. (1997) Mothers' representation of their infants assessed prenatally *Journal of Child Psychology and Psychiatry* 38(3): 307-313.
- ◉ Boris, N. Aoki, S. Zeanah, CH. The Development of Infant Parent Attachment: Considerations for Assessment Infants and young children 11(4): 1-10
- ◉ Cooper, Hoffman, Marvin, & Powell (2004) Circle of Security: Attachment-based intervention for caregiver-preschool child dyads *Attachment and Human Development* 4(1): 107-124.
- ◉ Lieberman, A., Weston D.R., Pawl, J.H. (1991) Prevention intervention and outcomes with anxiously attached dyads. *Child Development* 62: 199-209.
- ◉ Lyons-Ruth, K., Easterbrooks, M.A., & Cibelli, C.D. (1997) Infant attachment strategies *Developmental Psychology* 33(4): 681-692.
- ◉ Main M., Cassidy, J. (1988) Categories of response to reunion with the parent at age 6: predictable from infant attachment classifications and stable over a 1 month period *Dev Psychology* 24, 415-426
- ◉ Sameroff A, Fiese, B. (2000) Models of Development and Developmental Risk In C.H.Zeanah, ed *Handbook of infant mental health* (2<sup>nd</sup> ed.) pp 3-19.
- ◉ Van Ijzendor, M.H., Scheungel, C., Bakersmans-Kranenburg, M.K. (1999) Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants and sequelae. *Development and Psychopathology* 11: 225-249.
- ◉ Zeanah, Boris, Scheeringa, 1996 *Infant Development: The first three years of life*. In Tasman, ed. *Psychiatry*.