



Reaching and Supporting Mothers with Depressive Symptoms and Anxiety in Early Intervention

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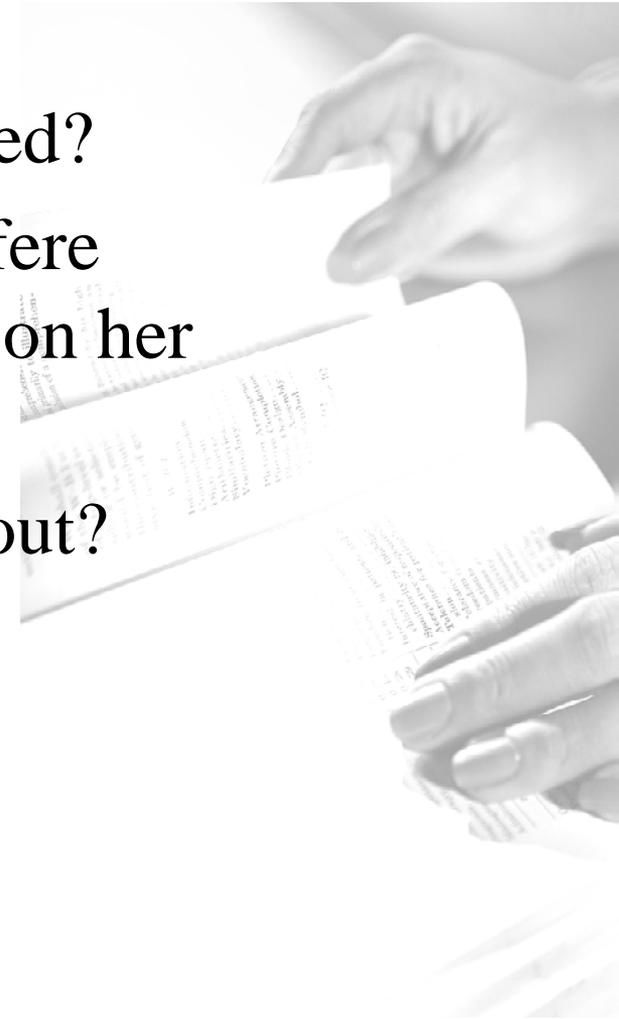
Durham Children's Developmental Services Agency
Early Intervention Branch/Division of Public Health/NC
Department of Health and Human Services

About Our Research

- *“Reducing Depressive Symptoms in Low-Income Mothers”*
 - National Institute of Mental Health
- *“EHS Latina Mothers: Reducing Depressive Symptoms and Improving Infant/Toddler Mental Health”*
 - DHHS/Administration for Child and Family/ACYF Early Head Start-University Partnership Grant
- *“Alumbrando el camino/Bright Moments:” A Curriculum for Staff Working with Early Head Start Parents with Depressive Symptoms*
 - DHHS/Administration for Child and Family/ACYF Early Head Start-University Partnership Grant
- *Feasibility of Screening and Recruitment of Low-Income, LEP Latina Mothers Community-Dwelling Mothers”*
 - National Institute of Mental Health
- *A UNC-Community Partnership to Enhance Outcomes for Infants and Toddlers with Suspected Disability Who Are Enrolled in Early Intervention Services*
 - *UNC TraCS Institute*
- *Enhancing Communication between Children in EI and their Depressed Mothers*
 - *National Institute of Child Health and Development*

We will talk about:

- How do I know a mother is depressed?
- How do depressive symptoms interfere with mothering and have an impact on her infant or toddler?
- What risk factors should I know about?
- What can I do?



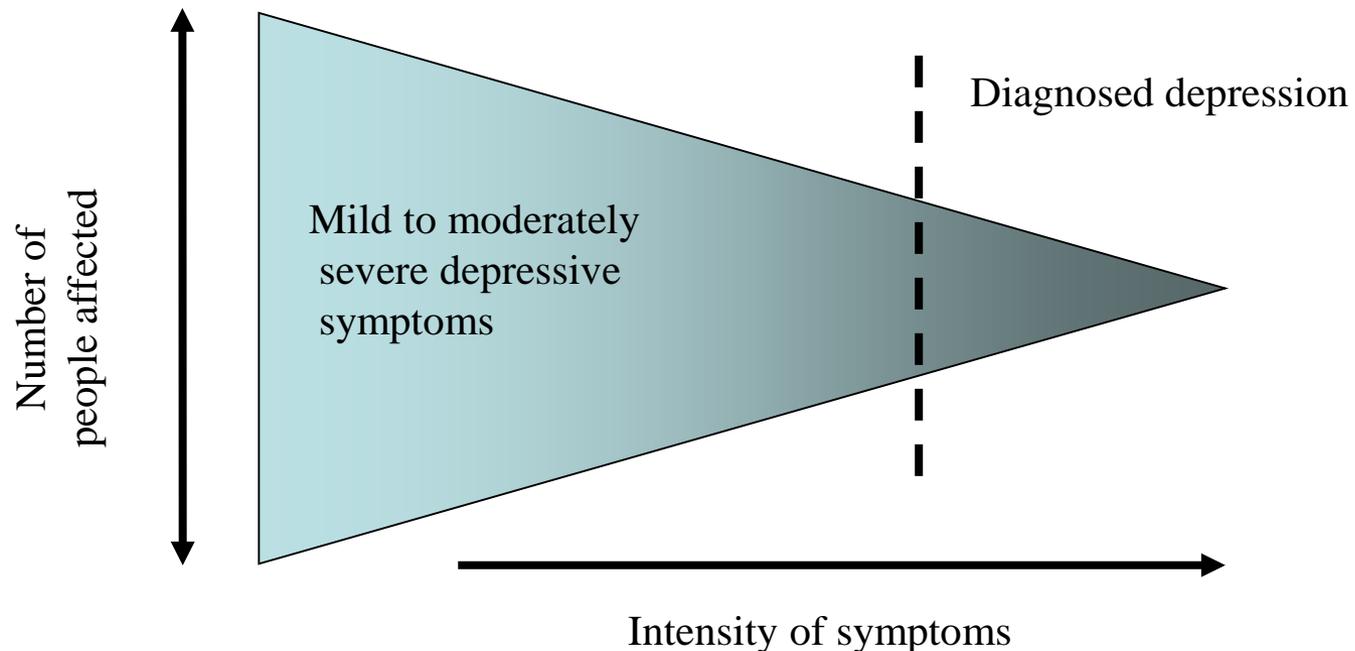
Depression in Pregnancy & Postpartum

- In US, DSM Major Depressive Episodes:
 - 3.1 - 4.9% during pregnancy
 - 1.0 - 5.9% during the first postpartum year
 - Caucasian higher than African American with Latinas equal to Caucasians
- These prevalence estimates were not significantly different from those of similarly aged non-childbearing women --- Gaynes, 2005
- **HOWEVER....**these figures underestimate affects mothers & potential danger for infants and toddlers

Problems with Estimates

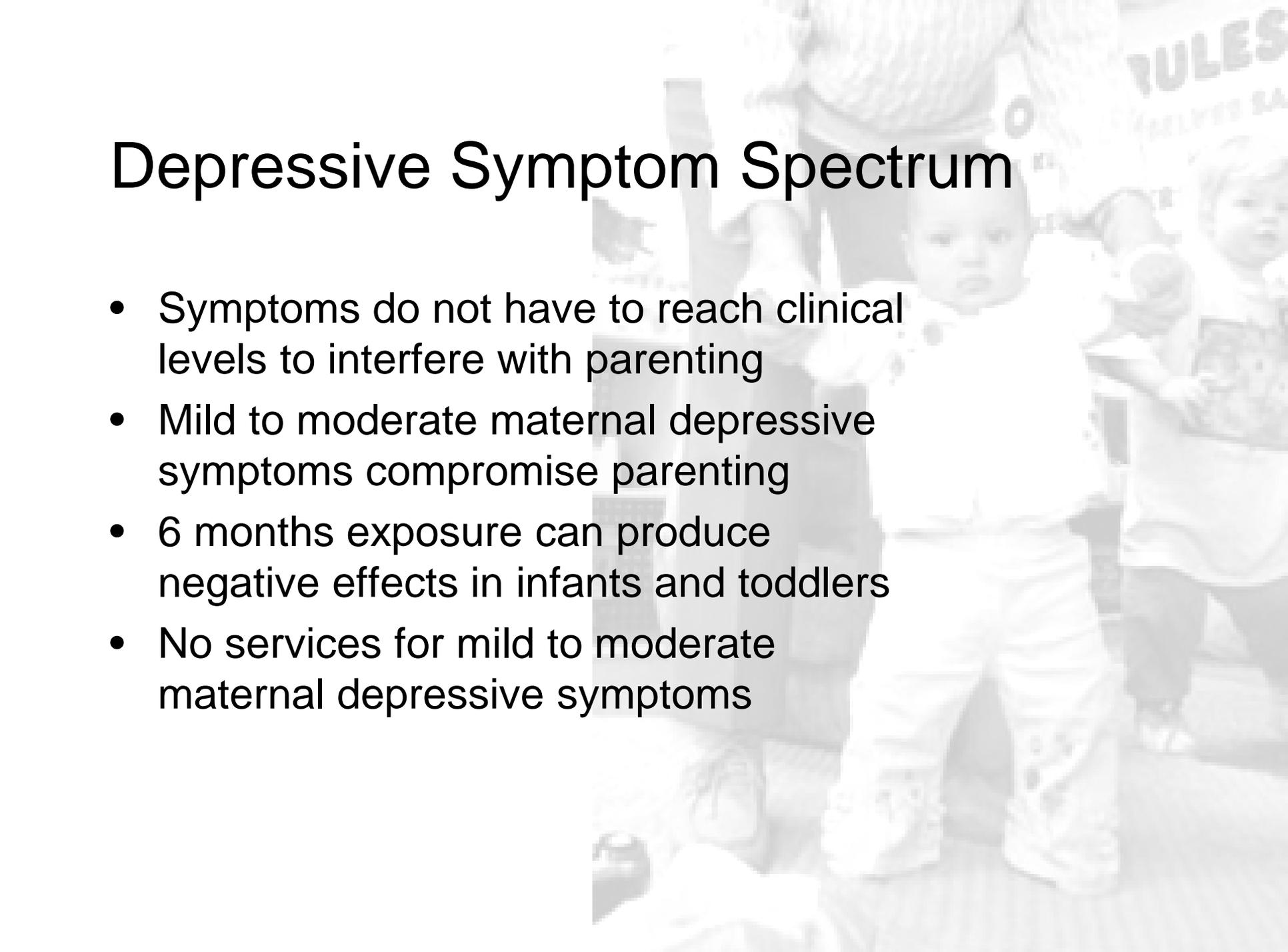
- Prevalence and impact of maternal depression & depressive symptoms is underestimated by:
 - ***Counting only women with diagnosed depressive disorders & not considering the dyad (mother-child)***
 - Aggregating low, middle and high income levels & varying levels of life stress

Counting Only Diagnosed Depression Ignores the Full Depressive Symptom Spectrum



- 25% of mothers with depressive symptoms progress to diagnostic severity in 1 year --- intervention at earlier points is key & surveillance past postpartum (12 mos)

Depressive Symptom Spectrum



- Symptoms do not have to reach clinical levels to interfere with parenting
- Mild to moderate maternal depressive symptoms compromise parenting
- 6 months exposure can produce negative effects in infants and toddlers
- No services for mild to moderate maternal depressive symptoms

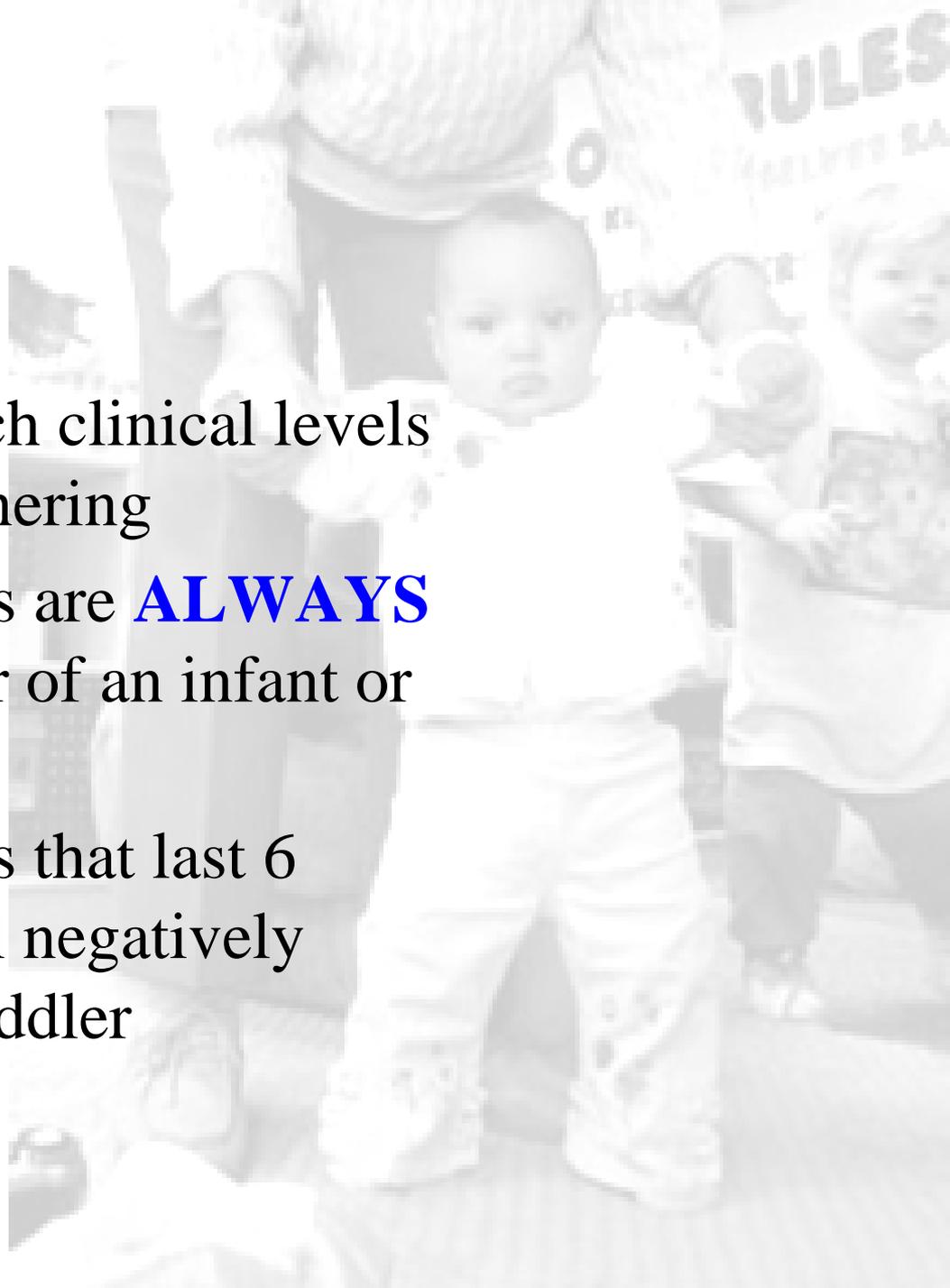
How do I know a mother is
depressed?

Depression is...

- a **persistent sad mood and loss of joy** accompanied by **changes in thinking, feeling, behaving, relationships, and bodily functions.** The symptoms of depression may be different from one person to the next, but the **sad mood** and **loss of joy** are almost always present, even if the person seems outwardly angry or irritable

Depression

- Does not have to reach clinical levels to interfere with mothering
- Depressive symptoms are **ALWAYS** important in a mother of an infant or toddler
- Depressive symptoms that last 6 months or longer will negatively affect the infant or toddler



Three Presentations

- **“Blunted mother”**
 - Sad or emotion-less
 - Slowed, fatigued
- **“Angry, irritable mother”**
 - Emotionally reactive to noise, frustrations
 - Unpredictable
- **“Good enough mother”**
 - Adequately nurtures the child
 - No energy for other aspects of her life



3 Presentations: Anxiety

- **“Worried Mother”**
 - Difficulty being relaxed with the baby
 - Minor issues become major concerns
 - Helplessness
 - Crying, physical symptoms
- **“Tight Mother”**
 - Mother looks “all together”
 - Symptoms are value-congruent (e.g., cleanliness, independence)
 - Symptoms are rationalized



Depressive Symptoms are:



Baby Blues or Depressive Symptoms?

Baby Blues	Depressive Symptoms
2-3 days after delivery	May be there during pregnancy, appear anytime after delivery
Last a week or less	Persist for more than a week
A few symptoms; come and go (sad, crying, overwhelmed) Mother can be “cheered up”	Many symptoms are present (see list on “What to Do” handout) Mother cannot be “cheered up”

Grief or Depressive Symptoms?

Grief	Depressive Symptoms
Focused on the lost person/object	Focused on the self
Sadness is expressed - crying, moaning, rocking	“Frozen” feelings, sometimes tear-less
Behaviors are understood by others	Behaviors are a puzzle to others
Transient symptoms of sleep disturbance, appetite loss, physical symptoms of anxiety	Persistent changes in sleep, appetite, physical symptoms & anxiety

How Do Depressive Symptoms Surface during Mother's Interactions with the Child?

- Short, less frequent interactions
- Little interest or child-centered attention
- Rarely touches
- Rough touch
- Sad, angry face toward the child
- Critical judgments of child
- Negative responses to the child that are not anchored to her/his behavior
- Persistent guilt over causing child's developmental delays



How Do Depressive Symptoms Surface when a Mother is Parenting?

- Intrusive parenting actions that don't correspond to the child's cues
- Talking “at” the child – ordering the child to do things
- No joy when the child accomplishes something
- No playfulness with the child (everything is serious business)
- No pride in being a parent or *persistently* angry about being a parent of a child with developmental delays



How Do Depressive Symptoms Surface During Therapy or Educational Sessions?

- Repeatedly cancels appointments
- Persistently late or needs to stop appointments early
- Persistently bored or distracted in the session
- Regularly leaves the session
- Highly critical of the therapy or help offered
- Doesn't follow through on parenting activities that are suggested
- Either avoids or confronts providers or coordinators
- Complains to administration about services or individual staff

0-3 Era: Depressive Symptoms & Anxiety Compromise Parenting

- Shorter, less child-centered interactions
Rosenblum, 1997; Zeanah, 1997;
- Less sensitive, responsive interactions
Cohn & Tronick, 1989; Weinberg, et al, 1998; Hammen, 1991
- Less frequent touch, play, joy
Rosenblum, 1997; Bettes, 1988; Stepakoff, 2000
- Negative judgments of child's behavior (depression)
Koschanska, 1987; Murray, 1996; Radke-Yarrow, 1990
- Highly stimulating, "rough touch" (depression)
Cohn, 1989; Weinberg, 1998

Endangerment for Two: Infants of Mothers with Significant Depressive Symptoms

- Smaller fetal body & head growth
El Marroun, et. al., 2012
- Twice as liable for low birth weight & premature birth
Sandman, 2015
- Infant neurodevelopmental changes predictive of later depression
Nksansah-Amakraa, 2015
- Slower weight gain & more sleep disruption (3-9 months)
Gress-Smith, 2011

Endangerment for Two: Toddlers of Mothers with Significant Depressive Symptoms

- Negative affect & severe tantrums
Goodman, 1993; Needlman, 1991
- Delayed language & developmental milestones
Murray, 1996; Zeanah, 1997
- Less positive affect toward self
Cicchetti, 1997
- Less confidence in social situations
Hart, 1999

How do depressive symptoms interfere with optimal mothering and affect her infant or toddler?

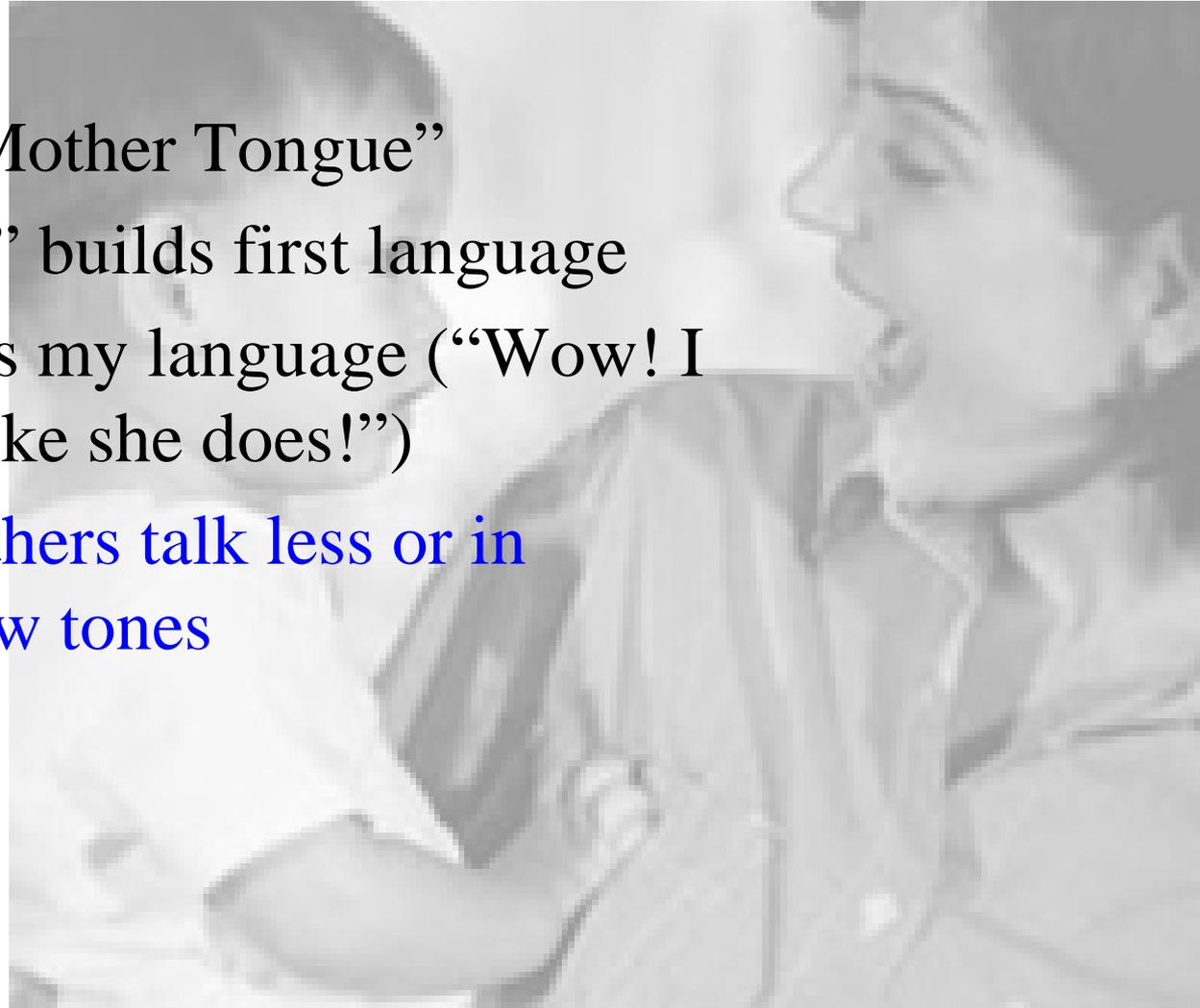
To An Infant or Toddler, Mother is “the World”

- Teaches the “Mother Tongue”
- Creates the beginning of “Me”
- Models the very first intimate relationship
- Makes the first “Social Introductions”



To An Infant or Toddler, Mother is “the World”

- Teaches the “Mother Tongue”
 - “Motherese” builds first language
 - Mother talks my language (“Wow! I can sound like she does!”)
- Depressed mothers talk less or in consistently low tones
- Example?



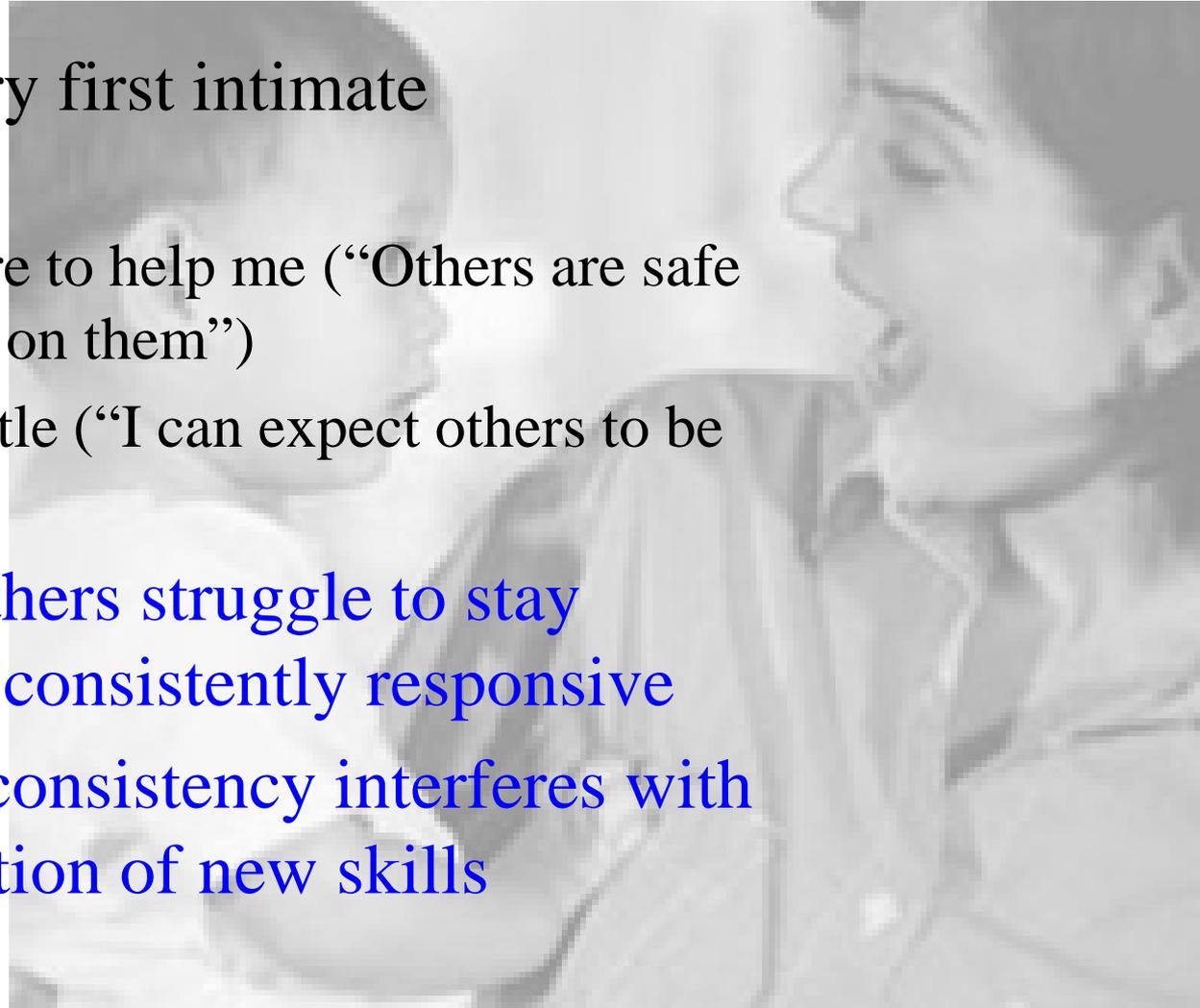
To An Infant or Toddler, Mother is “the World”

- Creates the beginning of “Me”
 - Mother smiles at me (“I must be beautiful”)
 - Mother kisses me (“I must be loveable”)
 - Mother looks joyfully at me (I must be a good person!”)
- Depressed mothers struggle to show joy and positive feelings
- Compounded by emotional response to concerns about child’s developmental delays



To An Infant or Toddler, Mother is “the World”

- Models the very first intimate relationship
 - Mother is there to help me (“Others are safe and I can rely on them”)
 - Mother is gentle (“I can expect others to be trustworthy”)
- Depressed mothers struggle to stay connected and consistently responsive
- Struggle with consistency interferes with child’s acquisition of new skills



To An Infant or Toddler, Mother is “the World”

- Makes the first “Social Introductions”
 - Mother shows me off to kin and community (“I must be somebody!”)
 - Mother tells me how to behave in her social circle (“I must belong here”)
- Depressed mothers isolate themselves and are anxious in social settings
- Compounded by social response to child’s appearance or behavior



Outcomes & Behaviors Observed in Infants of Depressed Mothers

- Low weight, smaller head size at birth
- “Difficult” temperament; little self-regulation
- Feeding & growth problems
- Delayed cooing, pre-verbal “talk”
- Tense with mother (face aversion; back arching)
- Look dull, sad, tense
- Less self-initiated exploratory behavior
- Poorer developmental outcomes
- Low resistance to illness



Outcomes & Behaviors Observed in Toddlers of Depressed Mothers

- Feeding & growth problems
- Delayed talking
- Tense with mother (face aversion; flat face)
- Look dull or sad & irritable
- Shy or awkward in social contexts
- Severe, protracted tantrums
- Little self-regulatory behaviors (self-calming; self-limiting); “behavior problems”
- Negative toward self (non-recognition; negative affect)



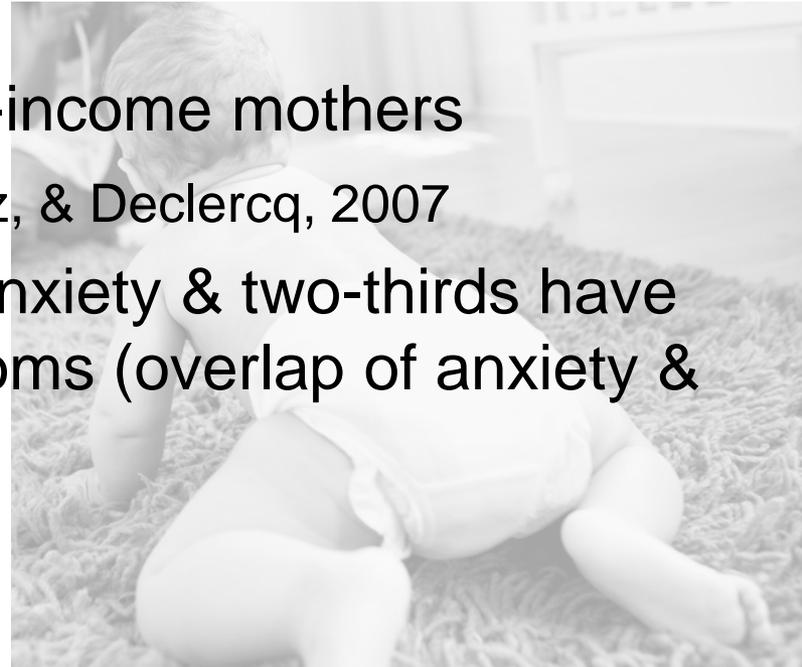
What **risk factors** should I know about?

Risks to Mothers?

- Previous depressive symptoms, postpartum depression, diagnosed depressive disorder, or other mood disorder
- Childhood trauma
- Recent “exit” events
- “Shame” or “Entrapment” events
- Current stressors (may be mild but chronic)
- Interpersonal tensions
- Poor social support, especially confidant support
- Losses (developmental delays may represent a loss)
- Self-determination vs. fatalism (specific to parents of children with developmental delays)

Economic Hardship Increases Risk

- Disaggregated: depressive symptom prevalence increases as income decreases
 - e.g., 11-15% (high-low income countries) global estimates
 - e.g., 27.7% in samples with 50% low-income mothers
Chang, 2014
 - 40-59% in samples of all low-income mothers
Beeber, 2014; Mayberry, Horowitz, & Declercq, 2007
 - 20% elevated symptoms of anxiety & two-thirds have co-morbid depressive symptoms (overlap of anxiety & depressive symptoms)
Anniverno, 2013



Population Risks Raise Prevalence



- Recent immigration; limited English language proficiency (LEP)
- 64% experience clinically significant depressive symptoms and generalized anxiety
Alderete, et al., 2000; Finch, Kolody & Vega, 2000; Beeber, 2010
- Immigrants 2x more liable to show PPD compared to non-immigrants
Falah-Hassani, et al. 2015
- Immigrants have lower odds of receiving treatment even if *employed & have insurance*
Farr, et al. 2010

How Might Maternal Depressive Symptoms Affect EI Service Provision?

- Initiation of services?
- Follow-through on referrals for evaluation?
- Routines-based intervention?
- Advocacy for the child?
- Retention of educational content?



What Can I Do?

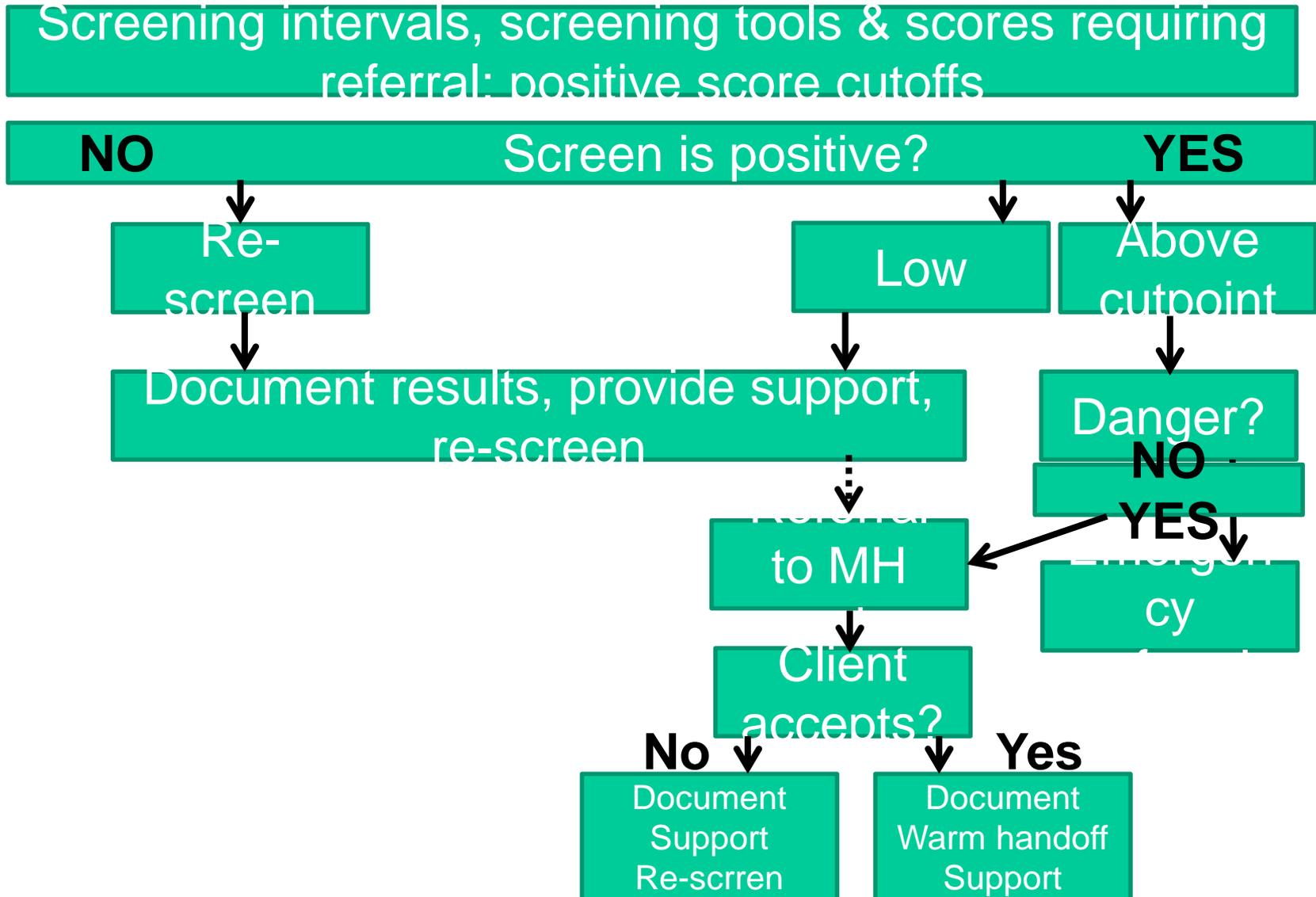
?What Can I Do – 6 Steps?

- Recognize
- Broach the topic
- Screen
- Refer
- Support
- Monitor safety

Screen

- Depressive Symptoms:
 - Patient Health Questionnaire (PHQ-2) plus 1 question
 - Plus-One Question – “Would you like help for the issues in questions 1 or 2?”
 - If 1 item is positive, follow up with the Patient Health Questionnaire 9-item scale (PHQ-9)
 - *PHQ-9 score ≥ 10*
- Anxiety:
 - Generalized Anxiety Disorder 7-item scale
 - (*GAD-7*) ≥ 10

Build an Effective Referral Decision Aid



Alert!

- **Mother must be evaluated immediately:**
 - Depressive thoughts that are aggressive (harming herself or the child)
 - Suicidal ideas
 - Hears voices or has unusual beliefs
 - Unable to function (remaining in bed all day; cannot care for the child)
 - Has not slept or eaten for several days
 - Using alcohol or substances in addition to being depressed (this increases risk)

Barriers to Referral

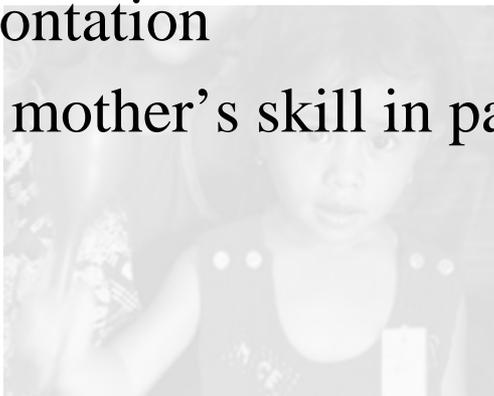
- Few or no services for subthreshold symptoms
- No one is willing to treat pregnant women
- Mother had negative experience with treatment
- Transportation, childcare, stigma, competition with meeting basic needs
- Problems with acceptability, adequate “dose”
- Language, cultural congruence, literacy, suspicion
- In-program support resources
- Outreach, education
- “Warm” handoff
- In-home psychotherapy
- In-program coordinated support
- Community Health Workers

Curriculum Project

- Regular **program activities** can support a depressed parent
- **Stigma** may prevent a parent from accepting a mental health referral
- Greatest benefit may come from **within the programs** they are willing to accept
- **You need support** to work closely with depressed parents

Principles

- Mental health is part of a total health & strength package
- Build on strengths
- Self-efficacy is the antidote
- Promote self-efficacy via:
 - emotional “weight training” through gradual steps in problem confrontation
 - strengthen the mother’s skill in parenting



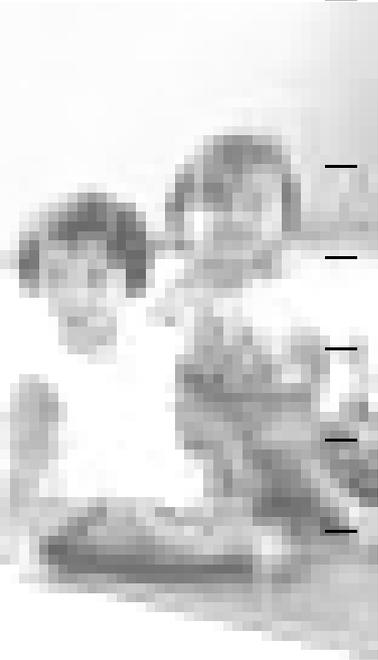
Getting Started with Interventions to Support Mothers' Mental Health

- Principles:
 - Strengthen the family or support network surrounding the mother and child
 - Gather available community resources
 - Keep the mother in EI
 - Help the mother keep her *eye on the prize* while keeping *her feet on the ground* taking *one step at a time*



Interventions to Support Mothers' Mental Health

- Principles:
 - You may need to reach out to her more than she reaches back
 - Keep trying...*And after that, try again*
 - Be patient. *She may be working harder than it appears*
 - Flex to accommodate changes in her symptoms
 - Acknowledge *one strength* each time you are with her
 - Acknowledge *only one strength* each time you are with her

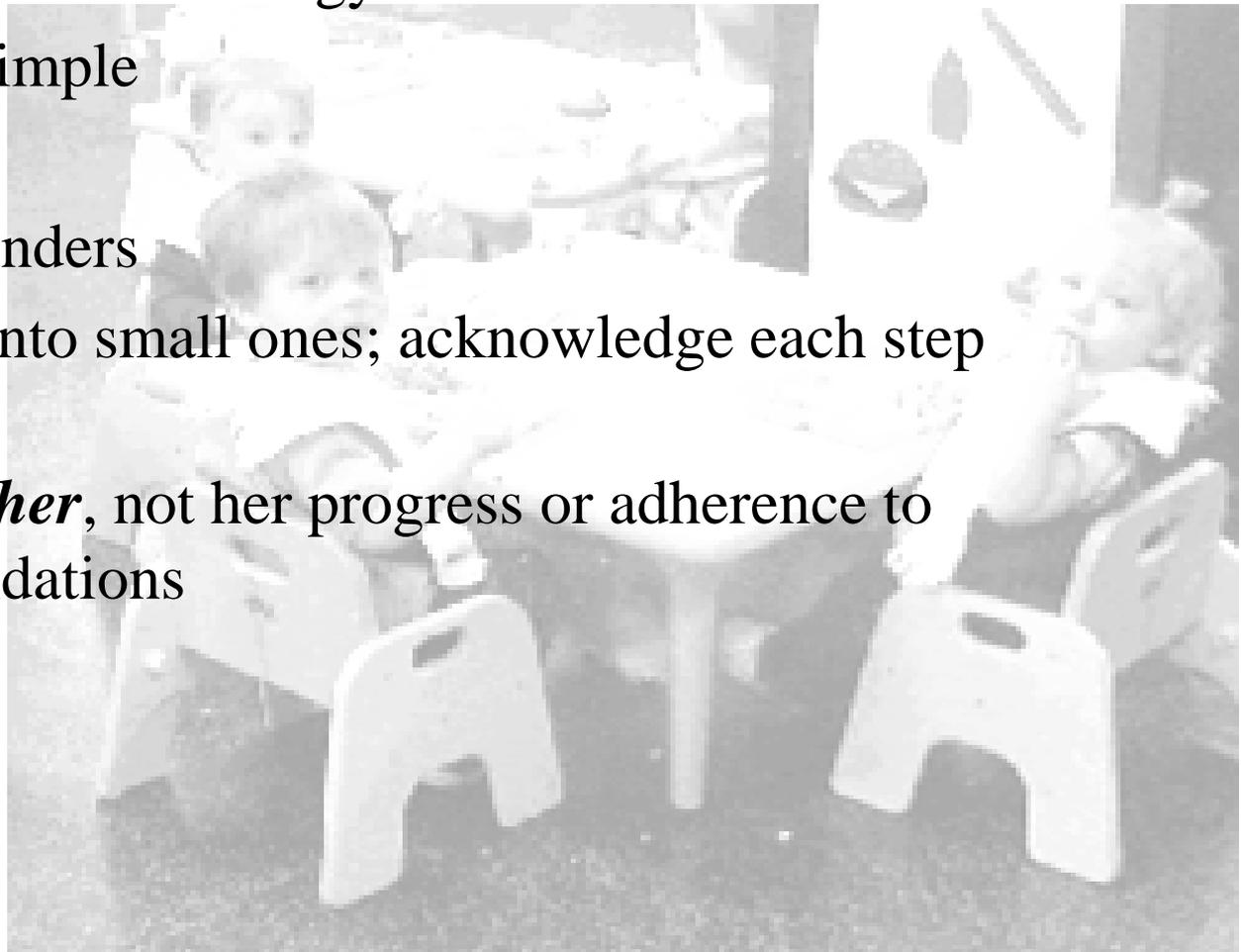


Interventions to Support Mothers’ Mental Health

- Guidelines:
 - Be cautious with praise
 - Be consistently NEUTRAL but WARM in your mood and affect
 - “You did a great job! I’m so proud of you!”  NO
 - “Hey --- you got that done!”  YES
 - “Witnessing” her struggle is sufficient
 - Don’t Take Over! (No matter how hard she tries to get you to...)
 - Keep your expectations low...and your optimism high

Interventions to Support Mothers' Mental Health

- Stay sensitive to her low energy
 - Keep things simple
 - Repeat things
 - Give her reminders
- Break big goals into small ones; acknowledge each step toward the goal
- Invest in the *mother*, not her progress or adherence to the EI recommendations



Interventions to Support Yourself

- Depression is contagious; monitor your mood and stress level constantly
- Practice:
 - Getting healthy, caring for yourself
 - Stress reduction
 - Problem solving (self-efficacy)
 - Strong, consistent social support

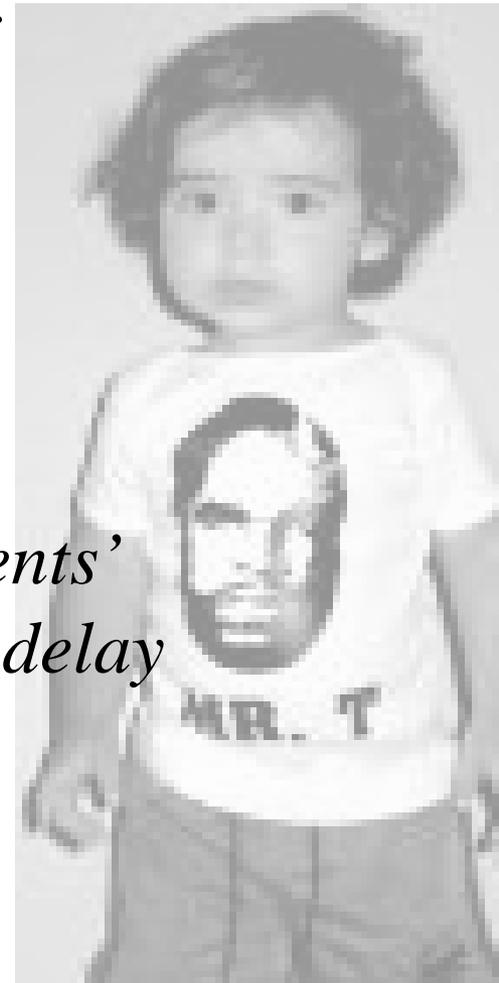


Interventions to Support Mothers

- Mothers' Depressive Symptoms Respond to:
 - Getting healthy, caring for herself
 - Stress reduction
 - Problem solving (self-efficacy)
 - Improved social support
 - More parenting skill and self-esteem

These are inherent in the process of parents' acceptance of the child's developmental delay

Your support can go a long way



Suicide & Self-Harm

- Basic recognition is key
- Mental health preparation is not needed for recognition
- Every person in a provider entity can be sensitized to recognize danger
- Key is having an effective crisis management aid

Build an Effective Crisis Management Aid

- Recognition & Assessment
- Notification (recognition)
- Referral options
- Action for referral
- Action for refusal of referral
- Action for safety of mother and child
- Notification (action steps taken)
- Documentation\Communication
- Follow-up
- Relevant emergency services contact numbers are prominent

E.g., Components of an Effective Crisis Management Aid

ASSESSMENT & INITIAL ACTIONS: Key symptoms, notification of agency supervisor [**phone numbers are placed here**]

REFERRAL: Call [mental health emergency services – **phone # here**; client's mental health provider; responsible family; 911]; notify agency supervisor

CLIENT

REFUSES ACTION:
[911; remain with client]

CHILDCARE: Child safety [family; child protective - **phone # here**]

FOLLOW-UP: Next contact [specify]; next appointment [specify actions]

CLIENT

ACCEPTS ACTION: Child safety [family; child protective - **phone # here**]

TRANSPORTATION: Safe transport to MH emergency service or provider

FOLLOW-UP: Next contact [specify]; next appointment [specify actions]

Resources

Source: National Institute of Mental Health

<http://www.nimh.nih.gov/index.shtml>

- *What is Depression?*

<http://www.nimh.nih.gov/health/publications/depression/what-is-depression.shtml>

- *Men and Depression*

<http://www.nimh.nih.gov/health/publications/men-and-depression/index.shtml>

- *Women and Depression: Discovering Hope*

<http://www.nimh.nih.gov/health/publications/women-and-depression-discovering-hope/index.shtml>

- **All of the above are En Espanol**

Depression in Mothers: More Than the Blues

A Toolkit for Family Service Providers

- <http://store.samhsa.gov/s hin/content/SMA14-4878/SMA14-4878.pdf>
- Substance Abuse and Mental Health Services Administration. Depression in Mothers: More Than the Blues—A Toolkit for Family Service Providers. HHS Publication No. (SMA) 14-4878. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014



Resources

- Physical health & nutrition

Healthfinder.gov DHHS

<http://healthfinder.gov/Default.aspx>

Stay Active During Pregnancy

<http://healthfinder.gov/HealthTopics/Category/nutrition-and-physical-activity/physical-activity/stay-active-during-pregnancy-quick-tips>

- PHQ-9 and GAD-7 Instructional Manual

<http://www.phqscreeners.com/instructions/instructions.pdf>

Resources: Crisis

- Suicide recognition: Screening for Mental Health, Inc
<http://www.stopasuicide.org/signs.html>
Clear directions on what are important cues, what to say, what not to do, how to help, resources
- Access to help: 1-800-273-TALK (1-800-273-8255)
Connects to a counselor at a crisis center in your area 24/7
- Local crisis center
- Primary health provider, mental health provider

The Study

- *A UNC-Community Partnership to Enhance Outcomes for Infants and Toddlers with Suspected Disability who are Enrolled in Early Intervention Services*
- **Co-Principal Investigators:** Linda S. Beeber & Samantha Meltzer-Brody
- **Co-Investigators:** Anne Wheeler, Marcia Mandel, George Knafl
- **Community Partner:** Raleigh Children's Developmental Services Agency (CDSA)

Funded by:

- University of North Carolina NIH Clinical Translational Science Award (CTSA)/North Carolina Transitional & Clinical Sciences Institute (TraCS) Translational Research Pilot \$50K Program
- The Leo M. Croghan Memorial Foundation

The Study: Purpose & Setting

- Purpose:
 - Fully document maternal depression and mental health profiles
 - Determine the feasibility of integrating newest assessment and treatment best practices into EI services
 - Understand in greater depth the stressors and resources faced by mothers and families of very young children receiving EI for developmental delays

Preliminary Work: Learning about EI Families

- Focus groups with mothers and fathers before the data collection
- Multiple stressors:
 - Family members were not always on the same page about the child's delays or disabilities (partner-partner; grandparent-parent)
 - Acceptance of the child's condition took time; priority was the child not the mother
 - The team learned that participants were wary of labels (stigma of additional label), protective of the EI child & eager to help

Sample Characteristics n = 106

<u>Mother</u>	Freq.	Mean(SD)	Range
English preference (language of interview)	83%		
<u>Race/Ethnicity</u>			
White	57%		
Hispanic	22%		
Black	13%		
Multiracial	7%		
Native American	1%		
Mother's age (years)		32.95(5.78)	22-45
Working out of the home/seeking employment	39%		
Years of Education		14.45(3.55)	3-26
Currently Partnered	84%		
Family Income (monthly)		\$3,528(3,228)	0-26,000

Stressors

- Financial
- Constant demands; balancing multiple therapies against other family and life needs
- Chronic lack of additional resources to meet life demands
- Language (Spanish speakers)
- Constant vigilance, needs & challenging behaviors of child
- Worry about other children, pregnancy
- Guilt
- Surprising lack of partner/marital stress

Strengths

- EI
- Extended family
- Community programs that provide respite
- Other parents (but the time to connect with them is very limited)

Intervention in EI?

- Enthusiastic
- Need to be fit into a very tightly-scheduled life
- De-emphasize mental health
- Emphasize support
- Low/no cost

EI Service Coordinators & Providers: What about Intervention in EI?

- Enthusiastic
- Could help us engage difficult to engage mothers and families
- Need skills and resources to identify, engage, screen, refer and support depressed mothers
- Plate already full and time is limited
- Must be simple and easy to integrate

What Could be Next Steps?

- Resources for Service Coordinators
- A simple, easy to use intervention for Service Providers

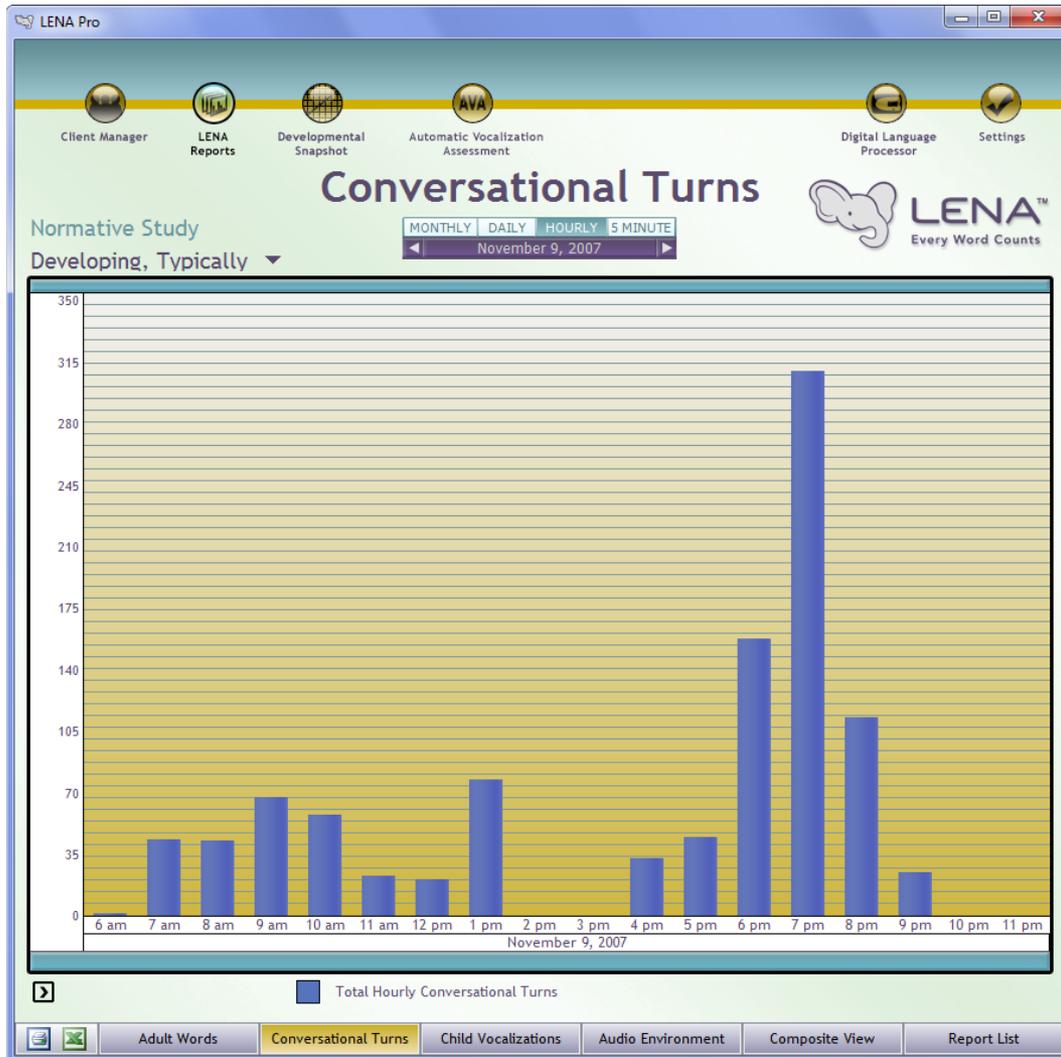
Resources for Service Coordinators

- Maternal Depression Screening Toolkit developed for EISCs, based on staff input
 - Screening tools and strategies
 - Decision aids
 - Resources for EISCs
 - Resources for parents
- Six EISCs trained to screen, and refer and support as needed
- 88 parents screened as of 8/15/17
- 7 additional EISCs trained February 2018

A simple, easy to use intervention for Service Providers: LENA (Language Environment Analysis) System

- LENA monitors infants' and toddlers' language and audio environment.
- The original normative data was based on 12-hour in-home audio recordings from 329 typically developing children resulting in 2,682 recordings (Gilkerson & Richards, 2008).
- The LENA System has two components:
 - Digital Language Processor (DLP)
 - Weight: 2.5 ounces
 - Capacity: 16 hours of data
 - Range: 4-6 foot radius
 - LENA™ Software
 - Collect and manage multiple recordings across children
 - View reports in 5-minute, hourly, daily, or monthly time frames
 - Listen to and view audio files





- LENA can provide feedback across a given day, allowing parents to link language exposure with typical daily routines
- Can be a touchpoint for times/routines during which concrete skill building strategies can be implemented

The Idea

- What if we could use LENA as a visual feedback tool to improve the language environment for children AND empower mothers?
 - Could assist with meeting language and relationship building goals.
 - Could allow more objective data collection and progress monitoring.
 - Could provide a method to help parents feel empowered and reduce feelings of depression



Questions??



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