The Alabama Department of Public Health and The March of Dimes Prematurity Summit





march of dimes

Embassy Suites Montgomery, Alabama Friday, November 14, 2014

Perinatal Depression

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Maternal Depression... Did You Know?

- Maternal depression is the # 1 complication of childbirth
- Depression is the # 1 cause of disease - related morbidity in women
- Maternal depression is at the top of the list of the "Most significant mental health issues impeding children's readiness for school"

Maternal Depression... Did You Know?

Mental Health Policy Panel,
 Department of Health Services (2002)

Irritable

No patience

<u>Extension</u>

Grumpy

3///

Can't focus

Frustrated

Unfortunately, Very Few Get Treated

- If treatment were provided, an estimated 80% would show benefits in terms of reduced symptom severity
- Only 52% of those with major depressive disorder receive treatment
- 38% of those receiving treatment receive what is judged to be "only minimally adequate" treatment

Today's Take-Home Messages

- Untreated perinatal depression unnecessarily hurts mothers, infants, children and families
- Adding depression screening to your practice can make a huge difference to the health trajectories of mothers and their families
- In addition to screening, there is much you can do to support families suffering from depression symptoms

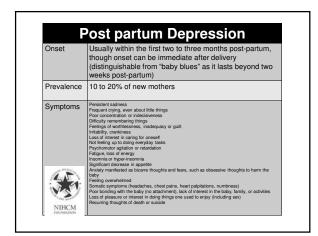
Maternal Depression

- Approximately 12% of all women experience depression in a given year
- For low income women, the estimated prevalence doubles to at least 25 %
- For pregnant and postpartum and parenting women, rates are in general range from 5 - 25 %

Maternal Depression

- Low income mothers of young children, pregnant and parenting teens report depressive symptoms in the 40 – 60 % range
- Leading cause of disease related disability among women

Depressive Disorders in Mothers Continuum of Postpartum Mental Health Prenatal Depression: 10-20% of pregnant mothers Crying, weepiness; Fatigue; Appetite disturbance; Loss of pleasure; Guilt; Anxiety/hopelessness; Poor fetal attachments; Irritability Diagnosis complicated by pregnancy symptoms: Overlap with fatigue, appetite changes, hypersomnia; Affects fetal development: Detection and treatment critical for promoting birth outcomes and reducing birth outcomes disparities Postpartum Blues Baby Blues* As high as 80% of new mothers Sub-clinical depression Diagnosis Postpartum Psychosis



Symptoms Unique to Post Partum Depression

- Intrusive thoughts of harming the infant
- -Extreme anxiety
 - Excessive worry, unable to control worry, mind going 'blank', poor focus, restless or 'keyed up,' tense

<u>Ext∈nsion</u>

Symptoms Unique to Post Partum Depression

- -Anger or agitation
- -Extreme feelings of guilt
 - Wanting to run away, leave, get away
- Obsessive thoughts of inadequacy as a parent

Symptoms Unique to Post Partum Depression

- "Wanting to have this baby was a mistake"
- Extreme exhaustion yet difficult sleeping
- Feelings of disconnection from the baby
- -Feeling a loss of control over one's life

Symptoms Unique to Post Partum Depression

- "A fog over my head or living in a fog
- "If this is what it's going to be like, I do not want to do it"

Maternal Depression: An Equal Opportunity Disease

"I never thought I would have postpartum depression...I thought I would be overjoyed...instead I felt completely overwhelmed. This baby was a stranger to me. I didn't feel joyful. I attributed feeling of doom to simple fatigue and figured that they would eventually go away. But they didn't; in fact, they got worse. I wanted her to disappear. I wanted to disappear. At my lowest points, I thought of swallowing a bottle of pills or jumping out of the window of my apartment."



- Brooke Shields, July 2005

EXTENSION

Major Risk Factors for Post Partum Depression

- Previous maternal or postpartum depression
 - -Recurrence rate 50 80 %
- Depression or anxiety in pregnancy
 - -23 % of women with depression postpartum had depression in pregnancy

Major Risk Factors for Post Partum Depression

- · Depression any other time in life
- Family history of depression or mood disorder (e.g., bipolar)
- · Current / recent stressful life events

<u>€Xt∈nsion</u>

Other Post Partum Depression Risk Factors:

- Think about how many risk factors the population you work with has...
 - Inadequate social, familial or financial support
 - -Minority status
 - History of sensitivity to hormonal shifts

<u> Ext∈nsion</u>

Other Post Partum Depression Risk Factors:

- -Delivery of premature infant
- -History of miscarriage or abortion
- -Abrupt weaning
- -Childhood sexual abuse
- Controlling or perfectionist personality

<u>Extension</u>

Other Post Partum Depression Risk Factors:

- -Single parent
- -Isolation from family
- -Infertility
- -Long, difficult labor
- -Significant loss in life
- -History drug / alcohol abuse
- -Multiples (twins, triplets)

EXTENSION

Myths of Motherhood:

- Contribute to stigma, lack of detection and recognition of PPD and are barriers to women seeking treatment
 - -Pregnancy is wonderful
 - Motherhood is instinctive / intuitive mothering capability
 - -Mothers should be happy when the baby is born

Myths of Motherhood:

- -Perfect baby
- -Perfect mother
- Motherhood is mandatory to be a "real" woman
- -Babies sleep
- Babies are beautiful
- -"Natural" births are better
- -Madonna images

<u>Extension</u>

Perpetuation of Beliefs in Myths Include...

- Mothers
 - Feeling of guilt and shame by not being able to live up to mythical expectations
 - -Fear of being judged a bad person
 - -Fear of baby being taken away

Perpetuation of Beliefs in Myths Include...

- Being seen as having a weak character
- -Fear of being a "bad" mother
- These feelings can be magnified when either dismissed or not acknowledged by professionals as real

Facts About Post Partum Depression

- Remains
 - -Under recognized
 - -Under diagnosed
 - -Under treated
- 50 % of all cases go undiagnosed and untreated

EXTENSION

Facts About Post Partum Depression

- Only 12 20 % of women with maternal depression actually receive treatment (Horowitz, 2006)
- Episodic, but without treatment can turn chronic

EXTENSION

Facts About Post Partum Depression

- Most moms will feel better in 6 months even without treatment, but then will re - occur
- Moms with untreated depression that turns chronic are likely to still have depression symptoms at 2 year (Horowitz, 2007, 2009)

<u>Extension</u>

Treatment for Post Partum Depression

- · Highly responsive to treatment
- Most common types of treatment are:
 - -Psychotherapy
 - Individual, group, or motherinfant / family
 - -Medications
 - Antidepressants

<u>Extension</u>

Treatment for Post Partum Depression

- -Goal
 - Right treatment for the individual woman's needs, context, and goals

<u>€Xt∈nsion</u>

How Does Maternal Depression Impact Mothers, Their Children, Family, And Society In General?

Maternal Depression and Child Outcomes

- Depressed mothers:
 - -Provide less stimulation, are less responsive to infants, show more parenting difficulties, are less likely to seek appropriate medical care for their child and less likely to use prevention practices (car seats, smoke alarms)

Maternal Depression and Child Outcomes

- Children exposed to maternal depression are at higher risk of:
 - Delayed cognitive and language development, mental health problems, suboptimal physical growth and myriad interpersonal, neuroendocrine, and behavioral problems

Maternal Depression and Child Outcomes

 Maternal depression associated with poorer outcomes in the child from infancy through adulthood

Maternal Depression and Participation in Programs

- · Mothers may appear:
 - -Disengaged
 - -'Lazy' or unmotivated
 - Express good intentions, lack follow through
 - Angry, feelings of guilt, disappointment

<u>Extension</u>

Maternal Depression and Participation in Programs

- Reduced memory recall, learning, performance
- · Slower progress towards goals
 - -Increased cost of care

<u> Ext∈nsion</u>

Relationship Between Maternal Depression and Child and Family Outcomes

Examples from my research

Parenting For The First Time Study

- 682 women no previous live births
- Sample
 - -396 teens (15 18 yrs old when pregnant, had not graduated high school or obtained GED)
 - -286 adults (22 35 years)
 - 169 low resource adults

Parenting For The First Time Study

- No formal education beyond high school / GED
- Lived in low resource neighborhoods
- 117 high resource adults
 - Completed at least 2 years post secondary education

Parenting For The First Time Study

- Income substantially above poverty
- 65 % African American, 19 %
 European American, 14 % Hispanic /
 Latina, and 3 % other race / ethnic identity

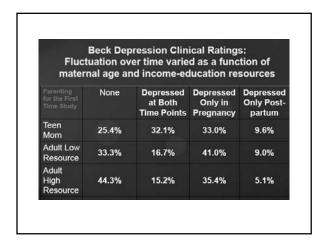
Parenting for the First Time Data Collection

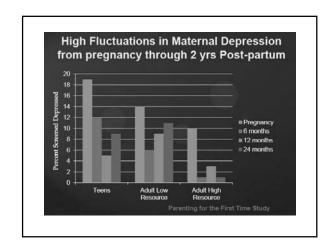
- Face to face interviews with mothers in clinic or community setting
 - -Last trimester of pregnancy and 6 months
- Face to face interviews in lab (combined with child assessments)

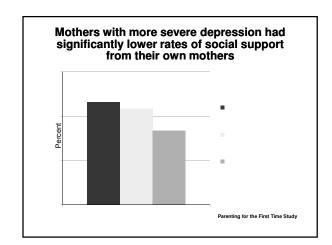
Parenting for the First Time Data Collection

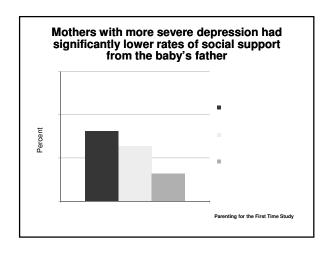
- -12, 24, and 36 months
- · By telephone
 - -Every two weeks between birth and 4 months
 - -4, 8, 18, and 30 months
- Home visits and additional interviews with mothers
 - -4, 8, 18, and 30 months

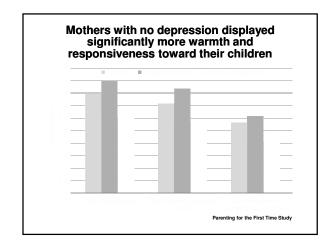
| | | | rted highes symptom | |
|---|------|-----------------------------|-------------------------------|----------------------|
| Parenting for the First Time Study | None | Mild-Moderate Depression | Moderate-Severe Depression | Severe Depression |
| | Du | ıring Pregnancy (x2 | ? (6) = 15.05, p<.05) | |
| Teen | 36.9 | 41.8 | 17.2 | 4.1 |
| Adult Low Resource | 48.7 | 32.9 | 15.8 | 2.5 |
| Adult High Resource | 49.1 | 40.2 | 10.7 | 0 |
| | | | | |
| | 6 mc | onths post-partum | (x2 (6) = 21.36, p<.01) | |
| Teen | 58.0 | 26.9 | 11.3 | 3.8 |
| Adult Low Resource | 73.2 | 19.5 | 4.9 | 2.4 |
| Adult High Resource | 80.2 | 19.8 | Ō | 0 |

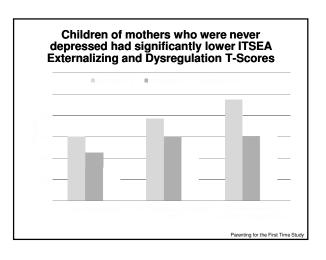












Maternal Depression and Short Interpregnancy Intervals (The TAPP Study)

- Short inter pregnancy intervals are considered a risk factor for post partum depression
- We investigated whether depression during the inter - pregnancy interval is a risk factor for short interpregnancy intervals

Maternal Depression and Short Interpregnancy Intervals (The TAPP Study)

 The study sample was inner city, adolescent mothers served in a community - based clinic that provided both prenatal care and ongoing teen parenting health and social service supports

The Teen Alliance for Prepared Parenting (TAPP; Director, Loral Patchen)

- Program serves 13 18 yr old mothers in inner city clinics, providing:
 - -Childbirth education
 - -Parenting supports
 - -Abstinence / family planning counseling
 - -Life skills development

The Teen Alliance for Prepared Parenting (TAPP; Director, Loral Patchen)

- Program Aims:
 - -To extend the inter pregnancy interval among teen mothers
 - -To prevent additional unintended pregnancies during teen years





Data Collection Methods

Reviewed records of 58 adolescent mothers to abstract caseworker notes about mental health issues or concerns, including the timing of the mental health concern (when receiving prenatal care every 2 wks through post - partum period at 2 and 6 wks then every 10 - 12 wks thereafter)

TAPP Study

Data Collection Methods

 The sample included 29 mothers with a short inter - pregnancy interval (< 24 mos) and 29 who did not become pregnant in the 24 months after delivering a child

TAPP Study

Examples of Mental Health Notations Searched for in Records

- Sadness
- Discouragement
- · Feel like a failure
- No pleasure out of things usually enjoyed
- Trauma
- Rape

TAPP Study

Examples of Mental Health Notations Searched for in Records

- · Physical abuse
- · Emotional abuse
- · Sexual abuse
- · Death of a loved one
- Suicidal thoughts
- · Attempted suicide
- · Desire to hurt others

TAPP Study

Examples of Mental Health Notations Searched for in Records

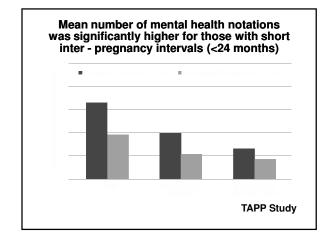
- · Crying often / inability to cry
- Restlessness
- · Difficulty making decisions
- · Tiredness / Fatigue
- · Change in sleeping pattern
- Anxiety
- · Change in appetite

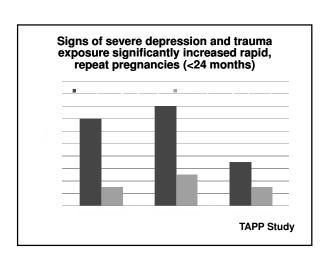
TAPP Study

Examples of Mental Health Notations Searched for in Records

- · Anger / Irritability
- History of depression/mental health issues
- Counseling requested / suggested
- · Counseling received
- Missed appointment for mental health reasons

TAPP Study





Screening for Postpartum Depression

- · "I know what depression looks like"
- "I can tell when someone is depressed"

Routine Screening

- Is critical to detect and treat depression early
 - -Early detection
 - Can reduce symptom duration and severity
 - Reduce negative effects on infants / children
- · Reduces the stigma of depression

Routine Screening

- -Helps women feel they are not alone
- · Health care providers
 - Increases comfort talking about depression and managing positive screens

<u>Extension</u>

Screening versus Diagnosis

- · Screening tools are not diagnostic tools
- A positive screen does not make a diagnosis
 - -25 40 % of persons who screen positive for depression will be diagnosed with depression
- Women who screen positive should be referred to a <u>qualified</u> mental health professional for clinical evaluation and formal diagnosis

Range of Depression Symptoms Sub-clinical Depression Diagnosis No Symptoms Several Symptoms Many Symptoms Increasing severity CXTENSION

Edinburgh Postpartum Depression Scale

- EPDS (postpartum) or EDS (pregnancy)
 - -Same questions and scoring
 - -Simple to complete
 - It is a screening tool, not clinical diagnostic instrument
 - -10 questions

Edinburgh Postpartum Depression Scale

- -Sum responses
 - 5 items are 'reverse coded' Question # 3, and # 5 - 10
 - Normal: 0 = 0, 1 = 1, 2 = 2, 3 = 3
 - Reverse: 0 = 3, 1 = 2, 1 = 2, 3 = 0
- -Scores range from 0 to 30
 - Higher score = more severe depression symptoms

ox et al, 1987

| | 5399E |
|---|--|
| or Date of Birth: | |
| By's Date of Bets: Pr | Note: |
| pice are progress or have recently had a balls, we would be arrower that connect showed to have you have but \$4 THE P or is on example, otherwise showed to have been \$4 THE P or is on example, otherwise showed to be the house Yes, and the home Yes, and of the home This would mean. "I have feet had not you cannot be the home to be the house the home to be the home." | AST CAYS, not just how you have testing appy most of the time' during the post week. |
| No. not very often. Please complete the other quest No. not at all | uns in the caree way |
| the just 7 days | |
| A humber of lease of the Control of the Contro | They have been parties and we are a few or a few of the common of the co |

Instructions for Using Edinburgh

- The mother is asked to check the response that comes closest to how she has been feeling in the previous 7 days
- · All of the items must be completed
- Care should be take to avoid the possibility of the mother discussing her answers with others

<u>Extension</u>

Instructions for Using Edinburgh

- Goal for the answers to come from the mother or pregnant woman
- The mother should complete the scale herself, unless she has limited English or has difficulty with reading
- Build a relationship of trust prior to conducting the screening

<u>Extension</u>

Scoring

- 1 of 4 possible responses that comes the closest to symptoms during the previous 7 days
- · All 10 items must be completed
- Items are scored 0, 1, 2, 3
- Maximum score: 30
- · Possible depression: 10 or greater

<u>€x̃t∈nsion</u>

Scoring

- Always look at item 10!
 - Warrants immediate discussion if > 1 (suicide risk)

<u>Extension</u>

Discussing Screening Results

- "Your score indicates that you may be depressed. How does that fit with what you've been experiencing?"
- "Your score isn't in the range for likely clinical depression, but it sounds like you're struggling right now. Let's talk about what kinds of support would feel helpful."

EXTENSION

Discussing Screening Results

- Notice especially high items and use as discussion starter
 - -"You marked...could you tell me more about that? Could you tell me about a time when you felt that way?"
- Always check item # 10 thoughts of harming herself

<u>Extension</u>

Talk Openly About Safety

- Reassure that you are asking because you want her to feel safe and secure
- · Matter of fact approach
- · Openers:
 - -"Some women who are feeling depressed or overwhelmed have thoughts of hurting themselves. Do you ever have these kinds of thoughts?"

Talk Openly About Safety

- -"How about your baby? Do you worry about his safety or that you might hurt him?"
- "Tell me more about these thoughts...."
- Normalize that it is difficult to talk about
- Provide emergency resource information, even if not needed now

<u>Extension</u>

Create an Action Plan

- Components
 - -Referral
 - -Ensure Safety
 - -Social Support
 - -Nutrition Diet
 - -Sleep
 - -Exercise Activity
 - -Support to Family

- 3 Questions Commonly Used To Guide Decision - making Around Possible Risk For Suicide:
- Does the person <u>have a plan</u> to commit suicide / self - harm (i.e., can the individual answer questions about what, when, where, and how)
- Does the person <u>have means</u> available for carrying out the plan

- 3 Questions Commonly Used To Guide Decision making Around Possible Risk For Suicide:
- Are there <u>any factors that are</u> <u>keeping</u> the person from carrying out their plan?
- Create a clear plan to address all responses:

Fleshing out the Plan

- These are important for all mothers, but most especially those who do not choose to seek diagnosis and treatment (or are unable)
- You can assemble an action plan even for mothers who refuse screening, but who are suffering and struggling

Fleshing out the Plan

- · One size does not fit all
 - Tailor these recommendations to what is appropriate to your mom and their family

Making the Connection

- · Remind Her:
 - -To be the best mom she can, she needs to take care of herself
 - -She is not "crazy, weak or to blame"
 - PPD is real, affects hundreds of thousands of women and is usually a combination of biological factors and stress

Making the Connection

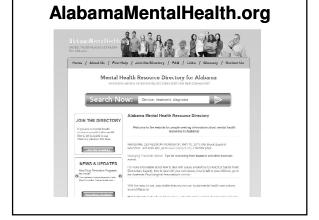
- Getting outside input or another perspective may help her find the best way to take care of herself during this difficult time
- Recognize that in addition to fear about treatment, it is difficult to follow through when depressed due to symptoms such as fatigue:

Making the Connection

- Call to make referral from mom's home with her present
- Or get her permission to have provider contact her directly
- Discuss how she will get to first appointment

Things To Think About

- · What is the scope of your role?
- Therapy versus a therapeutic relationship
 - -What does this mean to you?
- What steps, safeguards, or back ups might you put into place when questions come up or for difficult cases?





WHO Proposition: "There Can Be No Health Without Mental Health"

- Mental health affects progress towards the Millennium Development Goals, including:
 - Promotion of gender equality and empowerment of women, reduction of child mortality, improvement of maternal health, and reversal of the spread of HIV / AIDS

WHO Proposition: "There Can Be No Health Without Mental Health"

 Mental health awareness needs to be integrated into all aspects of health and social policy, health - system planning, and delivery of primary and secondary general health care

The Parenting Responsibility and Emotional Preparedness (PREP) Screening Tool

- A 3 item screen that identifies teen mothers at high risk for non – optimal parenting
- Because there are no easy to obtain, non - stigmatizing tools that reliably identify teen mothers who are at high risk for non - optimal parenting during pregnancy, we developed and tested the utility of the PREP, a 3 - item screening tool for use during pregnancy
 - Lanzi, Ramey, and Bert (2012) Archives of Pediatrics and Adolescent Medicine

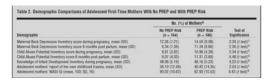
PREP Items Lanzi, Ramey, and Bert (2012)

- Now that you are pregnant, are there some new areas in which you are accepting responsibility or want to become responsible in?"
- "I am uncertain about whether I can provide emotional support to my children"
- "I feel uncertain about my ability to do a good job raising my children"

PREP Screen: No Differences in Age, Ethnicity, Income

| | No. (%) of Mothers* | | | |
|--------------------------|---------------------------|------------------------|-----------------------------|--|
| Demographic | No PREP Risk (n = 164) | PREP RISK (n = 106) | Test of Significance | |
| Maternal age, y | | | 0.295 (x ² test | |
| 15 | 16 (10.1) | 10 (9.5) | | |
| 16-17 | 81 (50.9) | 57 (54.3) | | |
| 18-19 | 62 (39.0) | 38 (36.2) | | |
| Maternal race/ethnicity | | | 4,904 (x ² test) | |
| Back or African American | 118 (72.0) | BB (83.0) | | |
| White or son-Hispanic | 20 (12.1) | 9 (8.5) | | |
| Latina | 18 (11.0) | 9 (8.5) | | |
| Other | 8 (4.1) | 0 | | |
| Monthly income, \$1 | | | 6.912 (x ² limit | |
| <415 | 20 (29.4) | 17 (33.3) | | |
| 415-835 | 11 (16.2) | 16 (31.4) | | |
| 836-2085 | 20 (29.4) | 13 (25.5) | | |
| ≥2016 | 17 (25.0) | 5 (9.8) | | |

But, Significantly Different In Terms of Depression, Trauma, and IQ



And, how they interacted with their children over the first 18 months: PREP Predicted significantly lower quality of home environments and higher levels of non-optimal mother - child interactions

| | Independent / Text, Mean (SD) | | | Mean Rook (by Wilcoom Signed-Hank Test) | | |
|-------------------------------------|-------------------------------|--------------|---------|--|-------|-----------|
| Vertable | No Rose | Risk | / Value | No Fresh | Risk | : / Table |
| 4 Months | | | | | | |
| IT+OME | 32.43 (5.04) | 29.03 (4.64) | 3.79* | 91.51 | 71.60 | -2.59 |
| IT-HOME plus SHIF | 47.95 (5.81) | 44.15 (0.20) | 9.42* | 93.77 | 47.87 | -3.36 |
| Warnth-seeking from infant | 3.60 (5.91) | 3.29 (1.11) | 0.97 | 85.97 | 26.65 | -1.22 |
| Sensitivity toward infant | 4.05 (5.00) | 3.72 (0.90) | 2.385 | 88.28 | 72.74 | -2.04 |
| Contingent responsiveness to infant | 4.04 (1.00) | 3.75 (1.05) | 2.292 | 86.31 | 26.07 | -134 |
| Physical introduces with infant | 4.73 (0.50) | 4.03 (0.00) | 0.86 | 25.66 | 80.54 | -0.45 |
| Verbal content with infant | 4.86 (0.20) | 4.03 (0.56) | 0.18 | 96.12 | 24.02 | -1.61 |
| General verballness with infant | 2.80 (1.22) | 2.44 (1.12) | 2.470 | 87.82 | 73.55 | -1.00 |
| Months | | | | | | |
| IT-HOME | 22.51 (4.81) | 29.89 (5.38) | 2.557 | 81.12 | 54.40 | -3.76 |
| IT-HOME when SHIP | 48.54 (7.56) | 43.80 (6.20) | 9.575 | 80.56 | 54.35 | -3.71 |
| Warmfo-seeking from infant | 3.85 (3.96) | 3.22 (0.90) | 3.124 | 25.54 | 60.66 | -2.11 |
| Sensitivity toward others | 3.63 (1.10) | 3.36 (0.97) | 1.465 | 73.72 | 63.32 | -1.51 |
| Contingent responsiveness to infunt | 2.67 (3.32) | 2.29 (1.33) | 2.800 | 73.92 | 63.09 | -1.50 |
| Physical introduments with infant | 4.65 (2.54) | 4.49 (0.74) | 1.645 | 69.32 | 69.77 | -0.01 |
| Verbal postert with infant | 4.72 (0.40) | 4.67 (0.44) | 0.31 | 71.51 | 86.55 | -0.71 |
| General verbalness with infant | 247 (5.10) | 2.29 (1.00) | 1.425 | 72.21 | 61.53 | -0.91 |
| 16 Months | | | | | | |
| IT-HOME | 32.61 (5.63) | 31.89 (4.71) | 0.22 | 72.97 | 67.82 | -0.73 |
| 1T-HOME plus SHIF | 46.43 (7.01) | 45.57 (6.54) | 4.004 | 74.60 | 45.19 | -1.33 |
| Wartelly-seeking from infant | 2.51 (1.00) | 2.44 (1.12) | 0.09 | 71.04 | 73.63 | -0.36 |
| Sensitivity lowerd infant | 2.19 (1.06) | 3.09 (1.31) | 0.17 | 71.44 | 72.94 | -0.21 |
| Confequet responsiveness to infant | 3.41 (5.54) | 3.29 (1.2%) | 0.30 | 72.98 | 20.54 | -0.33 |
| Physical introduces with infant | 4.49 (5.21) | 4.40 (0.23) | 0.02 | 29.71 | 24.19 | -0.51 |
| Verbal content with intent | 4.26 (0.78) | 4.02 (5.85) | 1.517 | 24.38 | 67.90 | -0.90 |
| General verbatness with infant | 7.90 (5.17) | 2.61 (1.66) | 3.735 | 26.26 | 68.15 | 0.86 |

Impacting Their Children's Cognitive And Socio - emotional Development At 24 Months

 With significantly lower child outcomes at age 2 for cognitive scores and higher depressive / withdrawal symptoms and dysregulation / negative emotionality

| | Mea | | |
|---|---------------|---------------|----------------------|
| Heasure | No Risk | PREP Rink | 130 |
| Bayley score | 86.02 (13.16) | 81.80 (12.67) | 1.831 |
| PLS-4 auditory comprehension standard score | 88.59 (13.79) | 89.30 (14.81) | 0.01 |
| PLS-4 expressive communication score | 92.70 (13.53) | 92.44 (13.91) | 0.01 |
| PLS-4 tirtal language standard score | 90.61 (14.23) | 90.65 (14.80) | 0.00 |
| TSEA aggression/deflance | 0.65 (0.33) | 0.70 (0.32) | 0.50 |
| TSEA depression/withdrawal | 0.20 (0.24) | 0.33 (0.27) | 0.50 5.90 4.47 |
| TSEA dysregulation-negative emotionality. | 0.69 (0.36) | 0.85 (0.55) | 4.42 |

Public Health Implications

- Findings support policies for universal screening for depression at multiple stages in a family's evolution
- Screening is particularly important for low - income populations, including prior to pregnancy (inter - pregnancy intervals) and during pregnancy

Public Health Implications

 Although chronic and more severe depressive symptoms identify the highest risk group, early detection and treatment should be considered for all mothers – for their well-being and their children's health and their social, emotional, and cognitive development

Public Health Implications

 Many practitioners who intersect with mothers and young children have an opportunity to address the issue