ADDRESSING MATERNAL DEPRESSION AND ANXIETY IN PRIMARY CARE

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Objectives

- Describe Perinatal Mental Health Conditions
- Summarize Factors that Contribute to Perinatal Depression and Anxiety
- Describe Strategies to Identify and Address Perinatal Depression and Anxiety in Primary Care
  - Screening measures
  - Individual-level collaborative care vs. Family-level collaborative care
    - Preliminary findings from a clinical trial of a family-level collaborative care model
- Describe Strategies to Help Mothers Communicate Needs to Primary Care Providers
- Summary
- Questions

PERINATAL MENTAL HEALTH CONDITIONS

- **Perinatal mental health conditions** are usually characterized by persistent distress that results in functional impairment during pregnancy and up to year after the baby is born.[1]
  - Examples of perinatal mental health conditions include: Major Depressive Disorder, Bipolar Disorder, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, Phobias, Post-Traumatic Stress Disorder, and Postpartum Psychosis.
- It is recommended for primary care providers screen pregnant and postpartum women for **Major Depressive Episodes.**
  - **Major Depressive Disorder** is characterized by one or more Major Depressive Episodes without manic or hypomanic episodes.[2]
- Screening for perinatal anxiety disorders is not widely implemented in primary care clinics. Of the primary care providers who do screen, they typically focus on **Generalized Anxiety Disorder**.

Major Depressive Disorder (MDD)

- MDD is commonly referred to as "depression."
- MDD symptoms can range from mild to severe.
- Research has shown that on average, 11.5% of perinatal women develop MDD.[3] Between 10-14% of pregnant women develop MDD, and 12-20% of postpartum women develop MDD.[4]
  - Pregnant women can develop MDD in any trimester.
  - Postpartum women often develop MDD within 3 months after the baby is born, after weaning the baby, or when the menstrual cycle resumes.[5]
- Research has shown that untreated prenatal MDD can increase the risk for in problems with fetal development and pre-term labor.[6]
- Research has shown that children of mothers with postpartum depression incurred 12% higher total healthcare costs in the first 24 months of life than did those of mothers without postpartum depression.[7]

Generalized Anxiety Disorder (GAD)

- GAD symptoms can range from mild to severe.
- Research has shown that around 9% of pregnant women have GAD,[8-9]
- Between 6-8% of postpartum women develop GAD within 6 months after the baby is born [5].
- Pregnant women can develop GAD in any trimester.
- Research has shown that untreated prenatal GAD can increase the risk for pre-term birth and low birth weight.[10]

FACTORS THAT CONTRIBUTE TO PERINATAL DEPRESSION AND ANXIETY

Biological Factors

- Hormonal changes such as increased activity of the HPA axis and decreased norepinephrine.[11-12]
- Low vitamin D is associated with developing perinatal depression.[13]
- Women who are biologically predisposed to anxiety and depression are at increased risk for developing these conditions during the perinatal period.[11-15]
- Women with a history of depression are at increased risk for developing anxiety during the perinatal period.[12]

Psychosocial Factors

- High stress (e.g., current pandemic, family conflict, high work demands, financial hardship, living in high crime neighborhoods, children with behavioral problems, histories of or current trauma such as intimate partner violence, etc.) and inadequate coping skills and resources to manage the stress can lead to perinatal depression and anxiety.[12]
  - Non-violent family conflict is a precipitant and consequence of perinatal depression and anxiety. [11, 16-17]
    - Low relationship satisfaction, resulting from low cohesion, is also associated with the development of perinatal depression and anxiety.[12]
    - Perinatal depression and anxiety in combination with the current pandemic place demands on families that they are unprepared to meet, which increases family conflict.

- Some developmental transitions can be a source of stress that can exacerbate depressive and anxiety symptoms in postpartum women.
  - We have observed that commonly reported sources of parenting stress include:
    - **Period of Purple Crying**
    - **Changes in Infant Sleep**
    - **Teething**

STRATEGIES TO IDENTIFY AND ADDRESS PERINATAL DEPRESSION AND GAD IN PRIMARY CARE

Commonly Used Depression and Anxiety Screening Measures for Perinatal Populations in Primary Care

- ***Patient Health Questionnaire***: 2 item version (PHQ-2) and 9 item version (PHQ-9)
  - A PHQ-2 score of 2 indicates possible depression, and PHQ-2 scores of 3 or more indicate clinically significant depressive symptoms that warrant further assessment.[18]
  - PHQ-9 scores of at least 10 indicate clinical depression.[19]
    - Scores of 5-9 indicate "watchful waiting" and a need to readminister the PHQ-9 in 2 weeks.[20]
- ***Edinburgh Postnatal Depression Scale*** (EPDS)
  - EPDS Scores of at least 10 indicate probable depression.[21]
- ***Generalized Anxiety Disorder Scale:*** 2 item version (GAD-2) and 7 item version (GAD-7)
  - GAD-2 score of 2 indicates possible clinical anxiety, GAD-2 scores of 3 or more indicate clinically significant anxiety symptoms that warrant further assessment.[22]
  - GAD-7 scores of at least 10 indicate clinically significant anxiety.[23]

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

ID #: _____ **DATE:** _____

Over the last *2 weeks,* how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so figety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3
add columns		+	+	

(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card).

TOTAL: _____

10. If you checked off *any problems,* how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all _____
- Somewhat difficult _____
- Very difficult _____
- Extremely difficult _____

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Edinburgh Postnatal Depression Scale[1] (EPDS)

Name: _____ Address: _____

Your Date of Birth: _____ _____

Baby's Date of Birth: _____ Phone: _____

As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

Here is an example, already completed.

I have felt happy:
- □ Yes, all the time
- ☒ Yes, most of the time
- □ No, not very often
- □ No, not at all

This would mean: "I have felt happy most of the time" during the past week. Please complete the other questions in the same way.

In the past 7 days:

1. I have been able to laugh and see the funny side of things
   - □ As much as I always could
   - □ Not quite so much now
   - □ Definitely not so much now
   - □ Not at all

2. I have looked forward with enjoyment to things
   - □ As much as I ever did
   - □ Rather less than I used to
   - □ Definitely less than I used to
   - □ Hardly at all

*3. I have blamed myself unnecessarily when things went wrong
   - □ Yes, most of the time
   - □ Yes, some of the time
   - □ Not very often
   - □ No, never

4. I have been anxious or worried for no good reason
   - □ No, not at all
   - □ Hardly ever
   - □ Yes, sometimes
   - □ Yes, very often

*5 I have felt scared or panicky for no very good reason
   - □ Yes, quite a lot
   - □ Yes, sometimes
   - □ No, not much
   - □ No, not at all

*6. Things have been getting on top of me
   - □ Yes, most of the time I haven't been able to cope at all
   - □ Yes, sometimes I haven't been coping as well as usual
   - □ No, most of the time I have coped quite well
   - □ No, I have been coping as well as ever

*7 I have been so unhappy that I have had difficulty sleeping
   - □ Yes, most of the time
   - □ Yes, sometimes
   - □ Not very often
   - □ No, not at all

*8 I have felt sad or miserable
   - □ Yes, most of the time
   - □ Yes, quite often
   - □ Not very often
   - □ No, not at all

*9 I have been so unhappy that I have been crying
   - □ Yes, most of the time
   - □ Yes, quite often
   - □ Only occasionally
   - □ No, never

*10 The thought of harming myself has occurred to me
   - □ Yes, quite often
   - □ Sometimes
   - □ Hardly ever
   - □ Never

Administered/Reviewed by _____ Date _____

[1]Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150:782-786 .

[2]Source: K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199

GAD-7 Anxiety

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid, as if something awful might happen	0	1	2	3

Column totals _____ + _____ + _____ + _____ =

Total score _____

If you checked any problems, how difficult have they made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
☐	☐	☐	☐

Source: Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD-PHQ). The PHQ was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues. For research information, contact Dr. Spitzer at ris8@columbia.edu. PRIME-MD® is a trademark of Pfizer Inc.

Scoring GAD-7 Anxiety Severity

This is calculated by assigning scores of 0, 1, 2, and 3 to the response categories, respectively, of “not at all,” “several days,” “more than half the days,” and “nearly every day.”
GAD-7 total score for the seven items ranges from 0 to 21.

0–4: minimal anxiety

5–9: mild anxiety

10–14: moderate anxiety

15–21: severe anxiety

Collaborative Care Models are used in Ob/Gyn, Family Medicine, and Pediatrics to address perinatal depression and/or anxiety and typically include:[24]

- Universal screening; *and*
- A team of providers who communicate with each other to assist mothers who screen positive for depression and/or anxiety. The team typically include the following types of providers:
  - **Treating Medical Provider** (e.g., physician, APRN) who may prescribe psychiatric medication.
  - Embedded **Care Manager** to conduct needs assessments, risk assessments, and provide expedited referrals to community resources and services.
  - **Psychiatrist** serves as a consultant for psychiatric medication management for treating medical providers who work with mothers with severe or more complex psychopathology.

Continued…

- ***Integrated care*** is the highest level of collaboration and includes embedded mental health clinicians who provide psychotherapy to mothers, and embedded psychiatrists to provide medication management services to mothers with complex psychiatric needs.[24-25]
  - Many primary care clinics in rural areas do not have embedded mental health clinicians due to the mental health clinician shortages.

Individual-Level Collaborative Care Models

- Most common type of collaborative care model used in primary care settings for perinatal depression and anxiety.
- Designed to meet the mother's needs but don't involve her close significant others/family members in the treatment for perinatal depression and anxiety.
  - Research has shown that teams that include embedded social workers or psychologists to deliver Cognitive-Behavioral Therapy, Mindfulness-Based Cognitive Therapy, or Interpersonal Therapy to mothers can be effective in reducing maternal depressive symptoms.[26]
  - Research has shown that 36%-70% of women with perinatal depression do not complete the embedded, in-person, individual psychotherapeutic treatments.[25,27-29]
  - Research has shown lower drop out rates (e.g.,16% - 26%) for perinatal women who receive psychiatric medication in combination with individual therapy.[30-33]
  - Few controlled trials have been conducted on psychotherapeutic treatments for perinatal anxiety in primary care settings but current research has shown that virtual interventions have lower drop out rates.[34-35]

Family-Level Collaborative Care Model

Although family member involvement in the mother's treatment is promoted by the American Academy of Pediatrics,[36-38] American College of Obstetricians and Gynecologists[39] and the American Academy of Family Physicians,[40] there is a paucity of research on family-level collaborative care models for treatment of perinatal depression and anxiety.[41-42]

- A Family-Level Collaborative Care Model for treatment of perinatal depression and anxiety is designed to address the mother's symptoms, parenting needs, educate family members on symptoms,[31] and improve her relationships with family members.
- Include an expert consultant to provide education to the treating medical providers on ways to address the parenting needs of mothers with perinatal depression and anxiety.
  - **Ardis Olson, MD**, developed a training for Pediatricians and Family Medicine infant care providers on addressing the parenting needs of mothers with depression that is endorsed by the American Academy of Pediatrics Task Force on Maternal Depression.[36-38]
- Psychotherapeutic treatment directly targets family dynamics and typically includes the mother and her adult family member.

Continued…

- Ardis Olson, MD, and Fallon Cluxton-Keller, Ph.D. received funding from the Couch Family Foundation to conduct a clinical trial to explore the feasibility, acceptability, and preliminary effectiveness of an innovative Family-Level Collaborative Care Model. This study has been approved by the Dartmouth-Hitchcock Health Institutional Review Board.
- This clinical trial has the following two goals:

  1) Explore the feasibility and acceptability of implementing the Family-Level Collaborative Care Model in Ob/Gyn, Family Medicine and Pediatrics at Dartmouth Health-Lebanon;

  and

  2) Explore the potential effectiveness of the model in reducing maternal depressive symptoms and maternal anxiety symptoms, and family conflict; and infant care provider report of usefulness of the training during well-child visits.

Continued…

Our innovative Family-Level Collaborative Care Model includes the following two components:

1) Video-delivered family therapy sessions to reduce perinatal depression and anxiety, and reduce family conflict.

- A total of10, 30-minute, video-delivered family therapy weekly sessions are delivered by Fallon Cluxton-Keller, Ph.D. using HIPAA compliant video technology to mothers with perinatal depression and anxiety and their partners/spouses with whom they have nonviolent conflict. They participate in sessions using electronic devices (e.g., cell phone, tablet) from home. The intervention is informed by Dialectical Behavior Therapy skills training[44] and includes systemic techniques to improve family functioning.

2) Education for infant care providers in Family Medicine and Pediatric primary care clinics on addressing the parenting needs of mothers with depression and anxiety.

- Dr. Olson expanded her training for maternal depression[38] to include maternal anxiety.

Characteristics of Participants

	Mothers (n=24)	Partners (n=24)
Age (M/SD)	32.79 (3.08)	34.13 (4.84)
Race (%)		
White	88	96
Asian	8	0
Multiracial	4	4
Highest level of education (%)		
High school diploma/GED	4	0
Some college	0	8
Associates degree	0	4
College degree	21	34
Some graduate school	12	8
Graduate school degree	63	46
Employed (%)	78	92
Married	88	88
Family Conflict[1] (M/SD)	17.50 (3.80)	16.92 (3.06)

[1]Perceived Hostility Survey-Ages 18 +, PHS, scores range from 8-40 and scores of at least 16 indicate moderate conflict.

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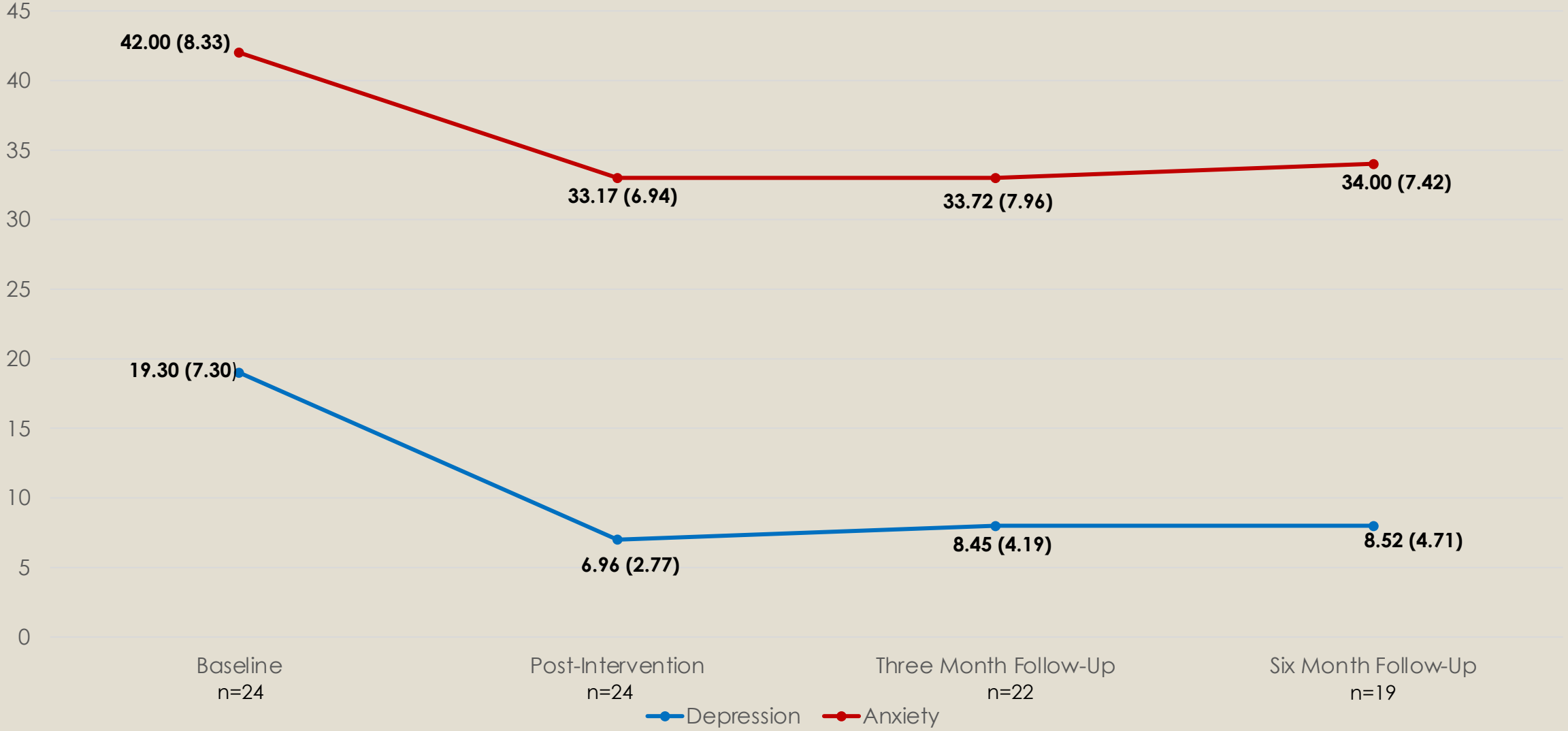
	Mothers (n=24)
First time mother (%)	50
Pregnant (%)	83
Postpartum (%) Number of weeks postpartum (M/SD)	17 5.25 (3.77)
Beck Depression Inventory-Second Edition Total Score[2] (M/SD)	19.30 (7.30)
State-Trait Anxiety Scale-State Anxiety Subscale[3] (M/SD)	42.00 (8.33)
Both Depression and Anxiety (%)	66
Depression Only (%)	17
Anxiety Only (%)	17
[1]Beck Depression Inventory-Second Edition, BDI-II, total scores range from 0-63. [2]State-Trait Anxiety Inventory-State Anxiety scale, STAI-SA, scores range from 20-80.	

Preliminary Findings for Maternal Depression and Anxiety

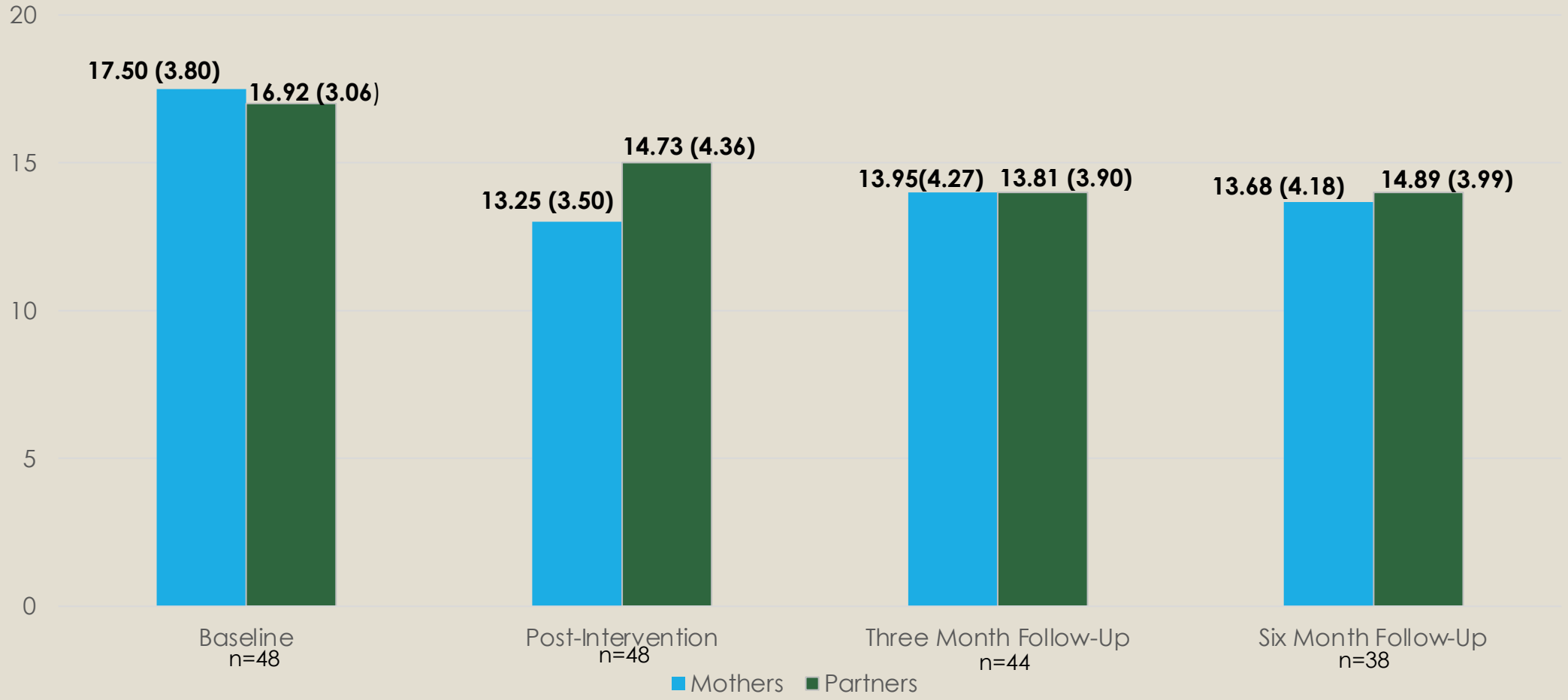
Note: Data collection will continue through early 2023



Preliminary Findings for Family Conflict

Note: Data collection will continue through early 2023.

Scores of 16 or more indicate moderate conflict



Preliminary Findings on Training Infant Care Providers

- Dr. Olson provided virtual educational sessions to 31 infant care providers (primarily Pediatricians and Family Medicine Physicians).
- All infant care providers were eager to learn how to address the parenting needs of mothers with depression and anxiety during well-baby visits.

Primary Care Provider's Role

Review screening

- Stress and anxiety or depression
- Motivate to seek help

Engage support from family

- Educate family members and discuss how can help

Parenting

- Development
  - Assessment and tangible education about what to expect next
- Infant temperament
  - How to engage-withdrawn or neutral, irritable
- Common parenting sources of stress
  - Fussy baby, sleep issues, teething

How to respond if a mother screens positive for depression or anxiety

How have you been feeling since our last visit?

Moms often see themselves as "stressed" rather than depressed, which opens up the option for asking about what is stressful.

Do you have enough help and support at home?

Spouse and family support are often more important than friends' support

Do you have any time for yourself?

Do you think you might be depressed?

Parenting during Depression: Exploring Questions

"How do you think your kids are doing?"
Look for areas of strength or areas of concern.

"How do you feel you are doing as a parent since you have felt depressed?"

What About the Older Child in the Family?

- Encourage parents to continue or resume daily routines.
- Help parents participate in children's activities outside the home.
- Help parents reestablish their own and their children's social connections.
- Help the family understand the illness as a medical illness.

Guidance for the Fussy Baby

The 5 S's for soothing baby

SWADDLE

STOMACH (BELLY TIME)

SHHHHHH

SWING/ MOVEMENT

SUCKING

STRATEGIES TO HELP MOTHERS COMMUNICATE NEEDS TO PRIMARY CARE PROVIDERS

Talk About Depression and Anxiety During Pregnancy and After Birth

Ways You Can Help

Pregnancy and a new baby can bring a mix of emotions—excitement and joy, but also sadness and feeling overwhelmed. When these feelings get in the way of your loved one taking care of herself or the baby—that could be a sign that she's dealing with deeper feelings of depression or anxiety, feelings that many pregnant women and new moms experience.

LISTEN

Open the line of communication.

- "I know everyone is focused on the baby, but I want to hear about you."
- "I notice you are having trouble sleeping, even when the baby sleeps. What's on your mind?"
- "I know a new baby is stressful, but I'm worried about you. You don't seem like yourself. Tell me how you are feeling."
- "I really want to know how you're feeling, and I will listen to you."

OFFER SUPPORT

Let her know that she's not alone and you are here to help.

- "Can I watch the baby while you get some rest or go see your friends?"
- "How can I help? I can take on more around the house like making meals, cleaning, or going grocery shopping."
- "I am here for you no matter what. Let's schedule some alone time together, just you and me."

OFFER TO HELP

Ask her to let you help her reach out for assistance.

- "Let's go online and see what kind of information we can find out about this." Visit **nichd.nih.gov/MaternalMentalHealth** to learn more.
- "Would you like me to make an appointment so you can talk with someone?" Call her health care provider or the Substance Abuse and Mental Health Services Administration's National Helpline at **1-800-662-HELP (4357)** for 24-hour free and confidential mental health information, treatment, and recovery services referral in English and Spanish.
- "I'm very concerned about you." Call the National Suicide Prevention Lifeline at **1-800-273-TALK (8255)** for free and confidential emotional support—they talk about more than suicide.

- **Ask the mother what she hopes to get out of the upcoming prenatal care visit, postpartum medical visit, or well-child visit.**
  - If she says she doesn't know, then generally describe the purpose of the visit.
    - **Example for Prenatal Care Visit:** *"The prenatal care visit focuses on your physical health and mental health during your pregnancy. A healthcare provider typically checks your weight, heart rate, and blood pressure, asks questions about excessive swelling (edema), checks for any complications, conducts ultrasounds to check the baby's development, and discusses lifestyle and dietary topics."*
    - **Example for Postpartum Medical Visit:** *"The postpartum medical visit focuses on your physical and mental health. It happens six weeks after your baby is born. A healthcare provider performs the postpartum medical visit. The healthcare provider does a physical exam, checks wounds, immunizations, and discusses birth control options, infant feeding, medications, changes in the family since the baby was born, and general health and mental health."*
    - **Example for Well-Child Visit:** *"Well-child visits begin in infancy and continue through late adolescence and focus on health and development. The services include physical exam and measurements, vision and hearing screening, and other health assessments. Parental well-being is also health is also a focus of the visits. Parents can request documents on what to expect during developmental phases and parenting tips at well-child visits."*

Continued…

- **Ask the mother if she would be willing to make a list of questions and/or topics she wants to discuss with her provider at the visit.**
  - Recommend for the mother to bring the list of topics and/or questions to the visit to discuss with her provider.
    - Alternatively, you could recommend for her to log into her patient portal to send her provider the list of topics and/or questions she wants to discuss at the upcoming visit.

Continued…

- Reinforce the infant care provider's recommendations to address commonly reported sources of parenting stress:
- Pediatricians often recommend for parents to go to the American Academy of Pediatrics **https://healthychildren.org**

website for information on child development and tips for managing common sources of parenting stress.

Websites with Information on Common Sources of Parenting Stress

- *Period of Purple Crying*: **http://purplecrying.info**
- *Infant Sleep (American Academy of Pediatrics)*: **https://www.healthychildren.org/English/ages-stages/baby/sleep/Pages/getting-your-baby-to-sleep.aspx**
  - *BabyCenter Sleep Training*: **https://www.babycenter.com/baby/sleep/baby-sleep-training-the-basics_1505715**
- *Teething (American Academy of Pediatrics)*: **https://www.healthychildren.org/English/ages-stages/baby/teething-tooth-care/Pages/Teething-Pain.aspx**

What if the mother reports the recommendations don't work?

- Ask the mother to list the top 2 sources of parenting stress and the infant's behaviors in response to her use of the recommendations for these sources of stress.
- Ask the mother if she would be willing to either send the infant care provider the list in the Patient Portal, or schedule an appointment with the infant care provider to discuss the list.

SUMMARY

- The perinatal period is a challenging time for most women and the current pandemic has made it more stressful for many of them.
  - Normalize the stress
  - Assess for depression and anxiety

- Assist mothers with the methods to communicate with their primary care providers to get their mental health needs met in routine visits.
  - Remember to define the purpose of the visit for mothers who aren't sure what to expect.
  - Reinforce infant care provider recommendations to address common sources of parenting stress.

QUESTIONS

Contact information

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