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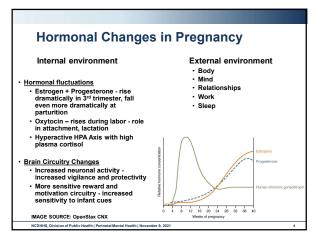
"Normal" Psychological Changes in Pregnancy

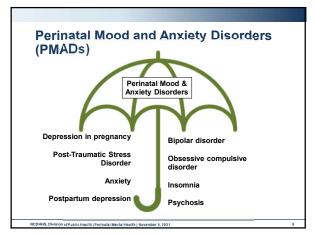
- First Trimester: Mild anxiety (ambivalence, worry), changes in energy, appetite, libido
- Third Trimester: increased anxiety about labor and delivery, impending role change
- Mild forgetfulness, confusion, distractibility
- Worry: health of baby, responsibilities, finances etc.
- Heightened awareness of prior relationships, losses, esp. family of origin

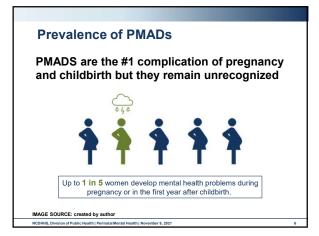


IMAGE SOURCE: OpenStax CNX

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The Baby Blues

- A normal emotional experience
 - Effects 50-80% of postpartum individuals
- · Symptoms include:
 - Tearful, anxious, moodiness, trouble sleeping
- 80% resolve by third week postpartum
- 20% persist and develop postpartum depression

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Postpartum Depression (PPD)

- Peak 2-6 months after delivery
- 11-25% of all births
 - Compare to Gestational Diabetes rate of 9.2%
 - An estimated 900,000 individuals adjusted for miscarriages and stillborn pregnancies
- Likely underreported given the selfreported nature of these CDC estimates
- 20% of postpartum deaths caused by suicide

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PPD: What To Look For

- · Depressed mood
- Irritability
- Anxiety or agitation
- Angei
- Hypervigilance, excessive worries about the baby
 - OR lack of interest in the newborn
- Impaired concentration or feeling overwhelmed
- · Feelings of guilt
 - Unrealistic expectations of motherhood or the baby

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Perinatal Anxiety (PPA)

- The most common PMAD, and often goes undiagnosed
- Symptoms include:
 - Excessive worries
 - Feelings of dread
 - Racing thoughts
 - Feeling overwhelmed
 - Obsessive thoughts
 - Racing heartbeat

SOURCE: Misri, S., Abizadeh, J., Sanders, S., & Swift, E. (2015).

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PPA: What to Look For

- · Symptoms that often are mistaken as normal during pregnancy and postpartum:
 - Difficulty concentrating
 - Trouble sleeping
 - Changes in eating/sleeping patterns
 - Sense of memory loss
 - Nausea, dizziness, hot flashes
 - Irritability
 - Persistent fatigue

SOURCE: Misri, S., Abizadeh, J., Sanders, S., & Swift, E. (2015).

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Bipolar Disorder

- · Onset peaks during reproductive years
- · High risk of relapse with medication discontinuation
- Common symptoms include:
 - Reduced need for sleep
 - Racing thoughts
 - Impulsivity
 - Elated or irritable mood
 - Can have hallucinations and delusions

SOURCE: Viguera et al. American Journal of Psychiatry 2000; Yonkers, American Journal of Psychiatry, 2004

Postpartum Psychosis is a Psychiatric **Emergency**

- 1/1000 women
- > 70% have a diagnosis of bipolar disorder
- · Onset 24 hours-3 weeks postpartum
- Mood symptoms, psychotic symptoms, & disorientation
 - Rule out medical causes of delirium
- 4% risk of infanticide with postpartum psychosis

SOURCE: Wesseloo et al AJP 2016, Manic Depression Illness, Goodwin and Jamison, 2007

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Obsessions vs. Psychosis Obsessive-Compulsive Disorder (OCD) / **Postpartum Psychosis** anxiety / depression Preserved insight Poor insight · Thoughts are intrusive Psychotic symptoms and cause distress · Delusional beliefs or No psychotic symptoms distorted reality present Low risk High risk SOURCE: Margo Nathan, MD

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Risk Factors

Reproductive

- · Personal history of postpartum depression
 • Family history of hormonal
- change associated mood symptoms
- · History of mood changes related to menses

General

- Younger age
- High neuroticism
 Childhood trauma
- · Sexual abuse
- Psychosocial stress
- · Intimate partner violence
- Chronic medical condition
- · Systemic racism

SOURCE: Melville et al OBGYN 2010 ; Meltzer-Brody et al, Arch Women MH2013; Crear-Perry J. 2018; Shepard AKK 2020

Perinatal Stress in the Time of COVID-19

Since COVID-19, increased stress about...

Food running out/availability	59%	
Losing a job/loss of income	64%	
Loss of childcare	56%	
Tension/conflict in house	38%	
Getting infected	93%	
SOURCE: Moyer, C. A., Compton, S. D., Kaselitz, E., & Muzik, M. (2020). Pregnancy-related anxiety during COVID-19: a nationwide survey of 2740 pregnant women. Archives of women's mental health, 23(6), 757–765.		

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Perinatal Stress in the Time of COVID

- · A 2021 survey by Harvard researchers found that pregnant and postpartum women reported increased:
 - Depression
 - Anxiety
 - Loneliness
 - Post-traumatic stress
- · Symptoms were increased due to
- Increased checking for news/updates
- Worries about children & childcare
- Worries about money

SOURCE: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0249780

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Fetal Loss Statistics

Fetal loss is a spontaneous intrauterine death or loss of a fetus during pregnancy

- Miscarriage = fetal loss occurring before 20 weeks
 - For women who know they are pregnant, 10-15% of pregnancies end in miscarriage
- Stillbirth = fetal loss occurring after 20 weeks
- On average in the US, ~3% of pregnancies result in stillbirths

US infant mortality rate: 5.9 deaths per 1,000 live births

- NC: 7.2 deaths per 1,000 live births
- Non-Hispanic Black women have double the fetal mortality rate of non-Hispanic White and Hispanic women



SOURCE: US CDC National Vital Statistics System, March of Dimes

Fetal Loss & Mental Health

- Fetal loss differs from other types of grief because there are no tangible memories of the loved one
- Grief symptoms that do not begin to decline by 6 months are more likely to be accompanied by psychiatric complications, anxiety disorders, major depression, substance misuse, and suicidality
- · Number of miscarriages positively associates with psychopathology across age groups
- Supportive, culturally informed parent-centered bereavement care can help both families and care providers cope with loss

SOURCES: Brier, 2008; Toffol et al., 2013

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PTSD: The Impact of Medical Trauma

Traumatic birth

- Up to 1/3 of moms report a traumatic childbirth experience
- Up to 9% of those women met DSM-V criteria for PTSD

Medical traumas may include

- Previous miscarriage, stillbirth, and/or child death
- Pregnancy-induced preeclampsia, HELLP syndrome, postpartum hemorrhage
- Child in NICU

SOURCE: Elizabeth Q. Cox, MD

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PTSD: The Impact of Medical Trauma

Feelings

- Self-blame
- Feels invisible to medical
- providers Inability to relax
- Hypervigilance to health-related cues
- Loss of dignity
- Powerlessness

Impact

- · Re-experiencing cues
- Avoidance of medical appointments, aftercare, or future pregnancies
- Detachment
- · Intrusive memories
- · Impaired mother-infant bonding

SOURCE: Elizabeth Q. Cox, MD

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PTSD: The Impact of Intimate Partner **Violence**

Feelings

- · Fears of becoming a perpetrator
- Inadequacy in motherhood Concerns about safety/danger outside of home
- Detachment
- · Numbness/strong emotions
- Anger/rage

Impact

- · Re-experiencing cues
- Avoidance of medical appointments
- Doesn't comply with treatment
- Inability to sleep
- · Hypervigilance to infant and their safety

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PTSD: The Impact of Systemic Racism

Feelings

Feeling invisible to medical

- providers

 Feeling disrespected by their medical team
- Experiencing unfair treatment from medical providers
- · Concerns that their pain is devalued

Impact

- · Fear of asking for help
- · Distrust of medical providers
- Black women are 3-4x more likely to die during or after delivery than white women

 • Families of color
- disproportionately reported for abuse and neglect than white, non-Hispanic families

Taylor, J. K. (2020). Structural racism and maternal health among Black women. Journal of Law, Medicine & Ethics, 48(3), 506-517.

https://www.co.gov/grand-rounds/pp/2017/20171114-maternal-mortality.html

https://www.childwelfare.gov/pubpdfs/racial_disproportionality.pdf

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The Treatment Cascade

Women with PPD who	Antenatal	Postpartum
are identified in a clinical setting	50%	31%
Receive treatment	14%	16%
Receive adequate treatment	9%	6%
Achieve remission	5%	3%

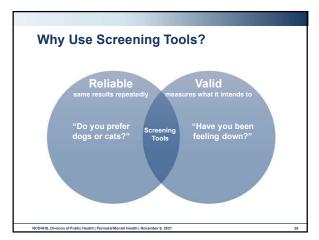
SOURCE: Cox EQ, Sowa NA, Meltzer-Brody SE, Gaynes BN. The Perinatal Depression Treatment Cascade: Baby Steps Toward Improving Outcomes. J Clin Psychiatry. 2016 Sep;77(9):1189-1200. doi: 10.4088/JCP.15r10174. PMID: 2778031.

Screening in Local Health Departments

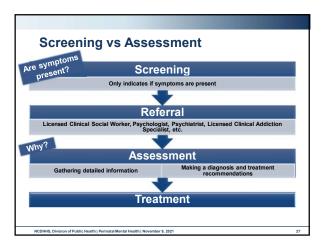
 What tool(s) are you using at your local health department to screen for perinatal mental health symptoms?

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Example Case

- · A patient endorses experiencing the following symptoms "nearly every day" for the last 2 weeks on the PHQ-9:
 - Little interest or pleasure in doing things
 - Feeling down, depressed or hopeless
 - Trouble falling asleep, staying asleep, or sleeping too much
 - Feeling tired or having little energy
 - Poor appetite or overeating

Screening alone is not enough.

All screening should be implemented with adequate systems in place to ensure appropriate follow-up.

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PHQ-9

- · Component of the longer Patient Health Questionnaire
- Widely Used
- Brief
 - Completed in 5 mins or less
- · Validated and documented in many populations and languages
- · Asks about the last 2 weeks
 - Answer scale ranges from "Not at all" to "Nearly every day"

Sources: Arroll et al., 2010; Kroenke, Spitzer, & Williams, 2001

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PHQ-2

- First 2 items of the PHQ-9
- · Assesses for depressed mood and anhedonia
 - 1. Little interest or pleasure in doing things
 - 2. Feeling down, depressed, or hopeless
- Scoring



Sources: Arroll et al., 2010; Kroenke, Spitzer, & Williams, 2001

bothered by any of the following problems?				
	Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)
Little interest or pleasure in doing things				
Feeling down, depressed, or hopeless				
Trouble falling asleep or staying asleep, or sleeping too much				
Feeling tired or having little energy				
Poor appetite or overeating				
Trouble concentrating on things, such as reading the newspaper or watching television				
Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual				
Thoughts that you would be better off dead or hurting yourself in some way				
Patient Health Questionnaire (PHQ-9) Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt No permission required to reproduce, translate, display or dist		eagues, with an edu	scational grant from Pfize	rinc.

Edinburgh Postnatal Depression Scale

- Widely Used
 - Developed for primary care settings
- Brief
- Completed in 5 minutes or less
- · Available in more than 50 languages
- · Asks about the last 7 days
- · Can be used during pregnancy and during the postpartum period

Sources: Cox, Holden, & Sagovsky, 1987; Monson & Rollins, 2008

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Edinburgh Postnatal Depression Scale

Anxiety subscale (EPDS-3A)

- · Questions 3,4, and 5
- Score of 5 or higher on these questions suggests the possible presence of an anxiety disorder
- · May not reliably distinguish between depression and anxiety
- Consider using the Generalized Anxiety Disorder 7-item (GAD-7)

Sources: Cox, Holden, & Sagovsky, 1987; Rowe, Fisher, & Loh, 2008; Smith-Nielsen et al., 2021

	Edinburgh Postnatal Depression Scale' (EPDS)
Edinburgh Postnatal Depression Scale	Your Date of Birth: Phone: Phone: Phone: Phone: As you are prepared to here morely had a bely, we would like to know how you are feeling. Please check the arrows the comes closest to here you had feel in THE PAST T DATE, not just low you feel body.
 Likert scale responses differ by question 	There is to page. I have fit from I Yes, most of the time. This would maser. There felt happy most of the first 'during the past week. I No, roll way "Life File I Passas complete the other questions in the same way. I No, roll and "I not see "I not
 Questions 3 and 5-10 are reverse scored 	The form and the blacky and use for service of these services of the serv
Question 6 Coping with stressors	Definition of the control of the co
WORKING PLANT OF PARTY AND	Name Co. L. I. Andrea, J. M. and Septime S. W. D. Chemistra of processor description. Confessioned of the 1-like in Selection-Dyn Portated General Andrea — Selection of Psychophy 19(2) 500 –
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When to Administer

 How often does your agency administer mental health screening tools to pregnant and postpartum patients?

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When to Administer

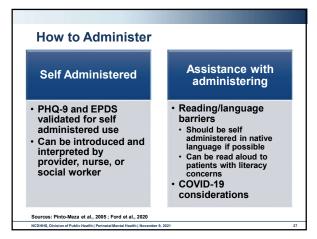
Recommended time frames

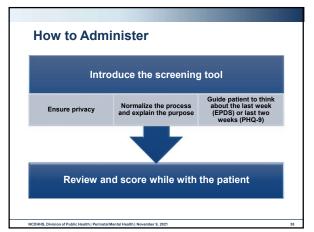
- American College of Obstetricians and Gynecologists (ACOG)
 every pregnant patient should be screened during pregnancy and postpartum
 Maternal Health and High-Risk Maternity Clinic
- Agreement Addenda
- Full screen at initial prenatal visit and postpartum
 2nd and 3rd trimester if indicated by the PHQ-2 score

Other times to screen

- · Clinical judgment and observations
- · Re-administering to monitor symptoms

Source: American Academy of Pediatrics, 2017





Scoring Considerations Clinical judgment Patients may still be struggling with mental health concerns and score below the cutoff Decide what constitutes a "positive" screen for each tool Policies should outline what is considered a positive score and the protocol for scoring Consider sensitivity and specificity Lower cutoff score = High sensitivity and low specificity Higher cutoff score = Low sensitivity and high specificity

Scoring the Tools

Scoring

- EPDS and PHQ-9 scores range from 0-3 for each item
- Total scores range from 0-30 for the EPDS and 0-27 for the PHQ-9

Cut off scores:

- · EPDS: 11 or higher recommended for screening.
- · 13 or higher used for research
- PHQ-9: 10 or higher

Sources: Arroll et al., 2010; Kroenke, Spitzer, & Williams, 2001; Cox, Holden, & Sagovsky, 1987; Levis et al., 2020

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Last Questions

- Thoughts ≠ intent
- · Clarify what patient meant when answering
 - Introduce the conversation using normalizing language
 - "Many people have these kinds of thoughts, and they can be really scary. Can you clarify what you meant when you said you have had thoughts of wanting to hurt yourself or someone else?"

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Assessing Risk

- Ideation
- ·Frequency and intensity of thoughts
- History
 - •Past ideation, attempts, rehearsal behaviors, etc.
- - ·"In what ways have you considered hurting yourself/others?"
 - ·Consider:
 - Means ·Lethality & Access
- ·Specificity of plan ·Preparing or rehearsing
- •"How likely is it that you will carry out this plan on a scale of 0-10?"

Interventions & Referrals

Refer to emergency services if there are acute safety concerns

- · LME-MCOs
- · Information telephone lines
- Mobile Crisis teams
- May refer to a crisis center or a behavioral health urgent care
- Emergency Department & 911
- If patient is at imminent risk to themselves or others

Consider medication treatment

• NC Maternal Mental Health MATTERS

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Referrals

Referring for long-term management

- · Support patient in making referral
- · Give options of providers
- · Let patient know what to expect
- Document referral and follow up with patient

Where to refer

- Internal Licensed Clinical Social Worker if applicable
- Health and Behavior Intervention Services (HBI)
- Private practice or clinician
- · LME-MCO or local agency

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Resources

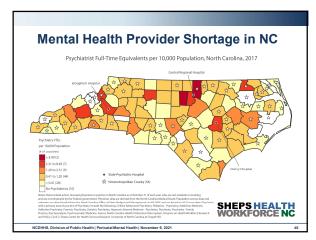
For Patients and Providers

- · Natural Supports!
- Postpartum Support International
 - https://www.postpartum.net/
 Listings by location for mental health providers who specialize in perinatal mental health
- NC MATTERS
- Crisis Resources by County
- http://crisissolutionsnc.org/
- LME-MCO Directory by County
 - https://www.ncdhhs.gov/pro viders/Imemco-directory

Screening

- PHQ-9 in various languages
- https://www.phqscreeners.com/
 Generalized Anxiety Disorder 7
- Item (GAD-7)
- Mood Disorder Questionnaire (MDQ)
- Bipolar Disorder

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What's to be Done?

- Well-developed perinatal psychiatry program, with different settings and providers embedded throughout Primary care and OB, is not available in most settings
- Cannot rely on mental health providers being able to care for perinatal patients
- Patients want to receive care from providers they know and trust – difficulty with navigating system of mental health outside their medical home

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"Based on what you've told me, I'm concerned that you may be having a difficult time or have anxiety. Many people feel this way when they are pregnant or have just had a new baby. There are things that you can do to feel better. Let's talk about some ideas that might work for you." "It's reasonable that you would find things to be challenging right now for you and your family. How can I help you get support for your worries?"

What Can YOU Do?

- Prioritize mental health screening for individuals who are struggling with breastfeeding
- Help new parents connect with family and loved ones to help
 - Reduce feelings of isolation
 - Prioritize protected blocks of sleep
 - Lower distress
- Share that it is common for people to feel distressed during a time of transition. Asking for and accepting help is a sign of strength.
- Have a procedure and referrals ready for anyone who shows severe distress or expresses a desire to hurt themselves or someone else.

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Activity: Mobilize a Team

SLEEP:

- "What could your partner or someone else in the home do to help you sleen?"
- "What things can you do during the day to ensure a good night's sleep?"

RELATIONSHIPS:

- "Who might live far away, but could help you from a distance, maybe using the phone or video chat?"
- "What are three things you and your partner enjoy doing together?"

SUPPORT:

- "Who can you count on in an emergency?"
- "Who can help you with the kids so that you can attend appointments?"

SOURCE: Edith Gettes, MD

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Activity: Stress Relief Ideas

- · Take care of your body
 - Take deep breaths, stretch, or meditate
 - Try to eat healthy and well-balanced meals
 - Go for a walk or a run, outside if you can
 - Get plenty of sleep
 - Avoid alcohol, tobacco, and drugs
- · Make time to relax
- Text or call someone you love
- · Listen to your favorite song
- Watch a funny video or show

SOURCE: Crystal Schiller, PhD

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Explore a Variety of Prevention Strategies and Treatment Options

- · Self care/sleep hygiene
- · Nutrition and exercise
- · Dyadic mother-baby support
- Complementary/alternative therapies (light therapy, yoga, meditation, massage, etc.)
- · Reduce isolation by getting outside
- Socializing and community support
- · Practical support from friends and family
- · Support groups
- Therapy
- Medication

SOURCE: 2020MOM ora

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Telepsychiatry consultation programs are one way to address some of the gaps and barriers that remain. NC Maternal Mental Health MATTERS is one such program, based here in North Carolina.

- Case consultation with psychiatrist for health care providers
- Goal is to keep patients in their medical home
 - Helps meet the increased demand for mental health services
 - · Cuts down on referrals
 - Helps combat the issue of the psychiatrist shortage in NC
 - Decreases physical barriers



NC MATTERS

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700+ patients served by NC MATTERS consult line since November 2019:

- 48% of calls on behalf of pregnant patients
- 43% of calls on behalf of Medicaid recipients
- 24% of calls from non-prescribers

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Case Study

Jess (19 y.o., first baby, lives with partner but not married)

- Prenatal History:

 Avoids questions about her childhood and her mother; doesn't seem to have much family support
 Reluctant to share information about her partner's role; he doesn't come
- to prenatal visits

 Doesn't follow up on joining prenatal support group

- 4 weeks postpartum; EPDS of 16, 0
 Reports feeling very worried about being able to take care of her baby
 and to be a good mother
 Reports struggles with breastfeeding it is painful and baby wants to
- nurse all the time
- Says partner works long hours and does not really help with childcare

References

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