

A pregnant woman is shown from the waist up, wearing a brown ribbed sweater. She is holding a small, rectangular ultrasound image of a fetus in her right hand. The background is a blurred image of a baby's clothing, including a white onesie and a brown hat. The overall tone is warm and intimate.

Addressing Perinatal Depression in Primary Care

Tessa Chesher, D.O., IMH-E®



May is Maternal Mental Health Month

Objectives

- To know the definition of perinatal depression.
- To review the epidemiology of perinatal depression.
- To learn the risks of perinatal depression to parents and infants.
- To identify the role of the primary care provider in the prevention and identification of perinatal depression.
- To learn interventions for perinatal depression.

Postpartum? Perinatal?

- Previous focus was on the postpartum period, but around 50% of pregnancy-related depression started during pregnancy.



Perinatal Period Definition

Inconsistent

- WHO: 22 completed weeks of gestation and ends 7 completed days after birth
- DSM-5-TR: conception to 4 weeks after birth
- Psychiatry Clinics of North America: conception to one year after birth



Today's Definition

From conception to
one year after birth



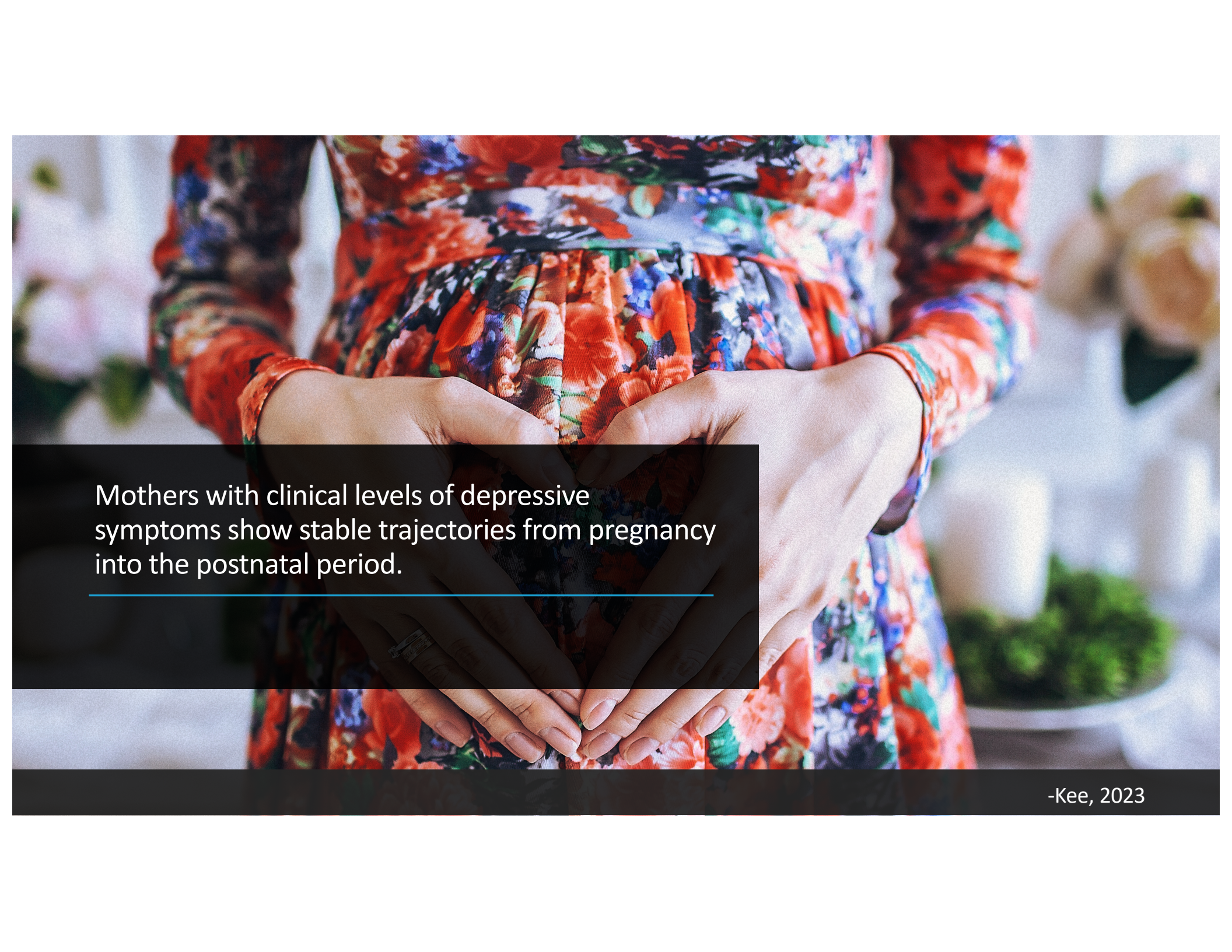
Perinatal Mental Health: The Numbers

660,000 Babies are at risk for being affected by PPD each year

- Over four million live births in the US each year.
- Postpartum depression = about 15%
- Postpartum depression in teen moms = 30-50%
- 10% of births

Doesn't include prenatal numbers.



A close-up photograph of a pregnant woman's midsection. She is wearing a vibrant, multi-colored floral patterned dress. Her hands are gently cupping her pregnant belly. The background is softly blurred, showing hints of a white tablecloth and some greenery. A semi-transparent dark grey box with white text is overlaid on the lower left portion of the image.

Mothers with clinical levels of depressive symptoms show stable trajectories from pregnancy into the postnatal period.

-Kee, 2023



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NEWS RELEASE 30-JAN-2025

New national study finds homicide and suicide is the #1 cause of maternal death in the U.S.

[Reports and Proceedings](#)

SOCIETY FOR MATERNAL-FETAL MEDICINE



MATERNAL RISKS OF UNTREATED DEPRESSION

- Obstetrical risks (higher rates of miscarriage, preterm labor, placental abruption, preeclampsia)
- Lack of adequate prenatal care
- Higher use of tobacco, alcohol and drugs
- Subsequent depression
 - Postpartum
 - Recurrent episodes



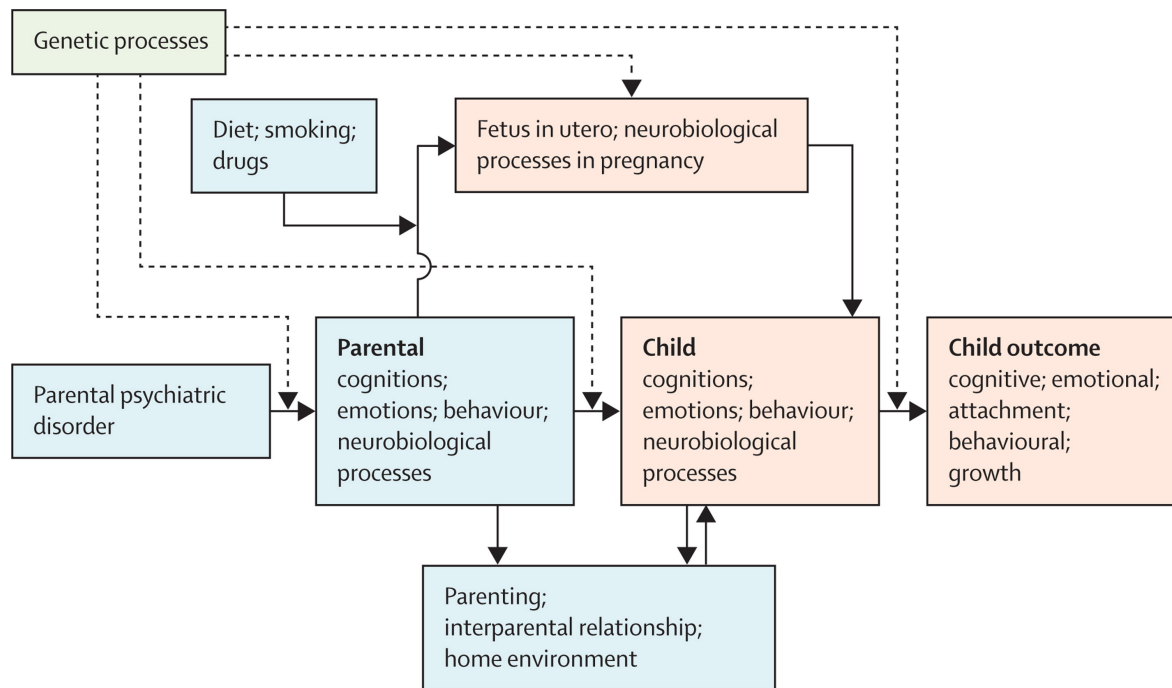
INFANT RISKS OF EXPOSURE TO MATERNAL DEPRESSION

- Low Birth Weight, Pre-Term Birth, Inter-uterine Growth Retardation
- Increased risk of behavioral and emotional problems
- Developmental delays
- Changes in brain morphology
 - prefrontal, lateral temporal, premotor cortex, medial temporal lobe, cerebellum


INFANT RISKS OF EXPOSURE TO MATERNAL DEPRESSION

- Continued increased risk of psychiatric illness
- Diminished vocational capacity
- Increase risk of hypertension, obesity, type II diabetes, and cardiovascular disease
- Earliest “ACE”

Avon Longitudinal Study Of Parents And Children



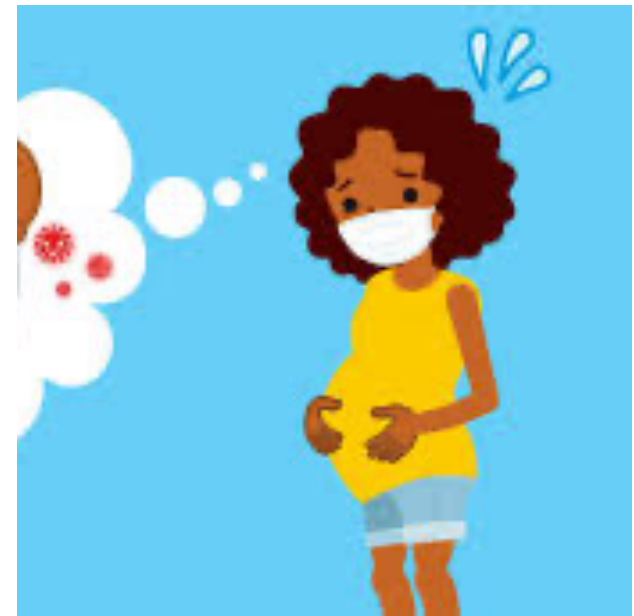
Possible mechanisms
underlying the
association of parental
psychiatric disorders
and child outcome

A small, vibrant green seedling with several leaves is growing out of a crack in a dark, textured asphalt surface. The background is a blurred, light-colored sky, suggesting a bright, sunny day. The seedling's growth is a symbol of resilience and overcoming adversity.

Maternal adversity can
disrupt maternal-infant
attachment and interfere
with positive forms of
maternal care.

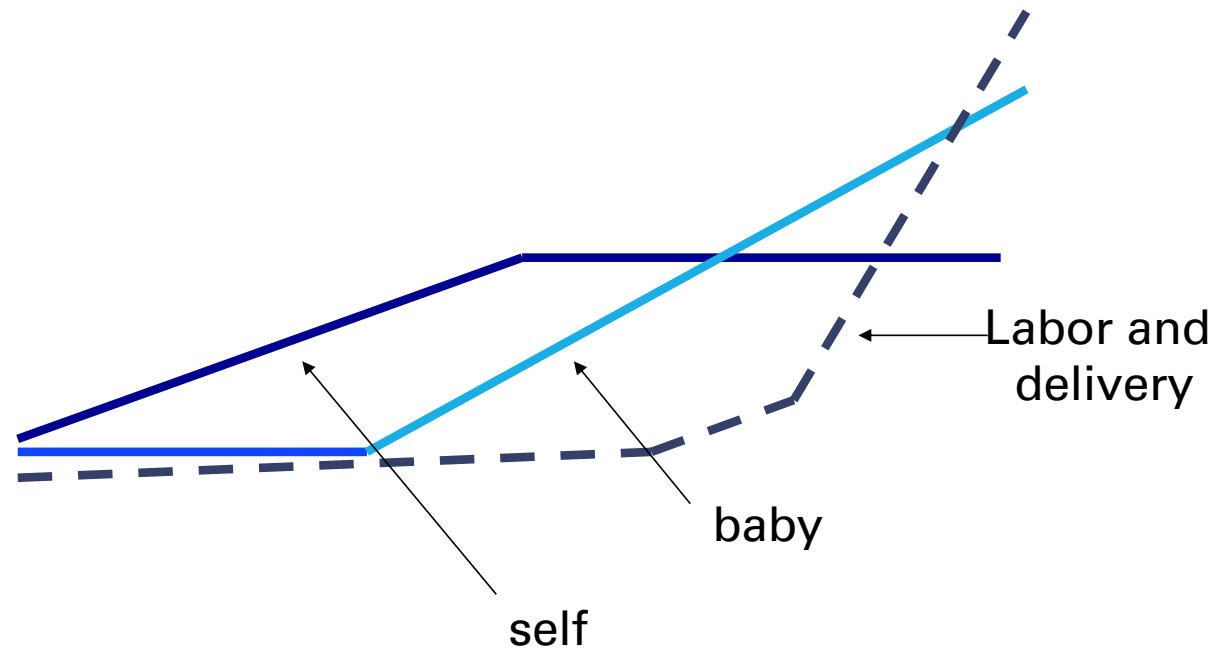
Relationship with baby: Prenatal

- Expectations of the baby
- Parental expectations
- “Backpack of experiences”



Tulane Infant Institute

Psychological Preoccupations of Pregnancy



Relationship with baby: Postpartum

- Postpartum
 - Relationship continues to grow
 - Attachment forms 7-9 months
 - Foundation of development



Tulane Infant Institute

Risk Factors

Poverty

Illiteracy

Migration

Lack of health-care facilities

Extreme stress

Violence (domestic and sexual)

Abuse

Conflict situations

Multiparous



Emily Jankowski Newton



STRONGEST RISK
FACTOR FOR
PERIPARTUM
DEPRESSION IS A
HISTORY OF
DEPRESSION

Don't Forget Dads

Paternity blues

- Inadequacy to frustration
- related to the new paternal role, within the first three months postpartum





Fathers And Postpartum Depression

10% of dads get postpartum depression

18% develop a clinically significant anxiety disorder and post traumatic stress disorder at some point during the pregnancy or the first year postpartum

There are no
established criteria
for PPD in men

Symptoms


- irritability
- restricted emotions
- depression

Risk factors

- history of depression in
either parent
- poverty
- hormonal changes



Scarf, 2019



Recommendations for Prevention and Intervention of Peripartum Depression

Step 1: Screening

OBSTETRICIANS

- Initial Intake
- Visit following 1-hour glucose challenge
- 2-week postpartum if the patient is a high-risk
- 6 weeks postpartum

PEDIATRICIANS

- Within the first month
- 2-month visit
- 4-month visit
- 6-month visit

Screening: Edinburgh Postnatal Depression Scale

Edinburgh Postnatal Depression Scale¹ (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 This would mean: "I have felt happy most of the time" during the past week.
☐ No, not very often Please complete the other questions in the same way.
☐ No, not at all

In the past 7 days:

- | | |
|---|--|
| 1. I have been able to laugh and see the funny side of things
<input type="checkbox"/> As much as I always could
<input type="checkbox"/> Not quite so much now
<input type="checkbox"/> Definitely not so much now
<input type="checkbox"/> Not at all | *6. Things have been getting on top of me
<input type="checkbox"/> Yes, most of the time I haven't been able to cope at all
<input type="checkbox"/> Yes, sometimes I haven't been coping as well as usual
<input type="checkbox"/> No, most of the time I have coped quite well
<input type="checkbox"/> No, I have been coping as well as ever |
| 2. I have looked forward with enjoyment to things
<input type="checkbox"/> As much as I ever did
<input type="checkbox"/> Rather less than I used to
<input type="checkbox"/> Definitely less than I used to
<input type="checkbox"/> Hardly at all | *7. I have been so unhappy that I have had difficulty sleeping
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, not at all |
| *3. I have blamed myself unnecessarily when things went wrong
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, some of the time
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, never | *8. I have felt sad or miserable
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, not at all |
| 4. I have been anxious or worried for no good reason
<input type="checkbox"/> No, not at all
<input type="checkbox"/> Hardly ever
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> Yes, very often | *9. I have been so unhappy that I have been crying
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Only occasionally
<input type="checkbox"/> No, never |
| *5. I have felt scared or panicky for no very good reason
<input type="checkbox"/> Yes, quite a lot
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> No, not much
<input type="checkbox"/> No, not at all | *10. The thought of harming myself has occurred to me
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Sometimes
<input type="checkbox"/> Hardly ever
<input type="checkbox"/> Never |

Administered/Reviewed by _____ Date _____

¹Source: 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.

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

Users may reproduce the scale without further permission providing they respect copyright by quoting the names of the authors, the title and the source of the paper in all reproduced copies.

Other Recommended Screeners

Depression: PHQ-9 (alternative to EPDS)

Anxiety: GAD-7

Bipolar Disorder: Mood Disorders Questionnaire

PTSD: Primary Care PTSD Screen

EPSD Result =
<10

Education

Physical, mental health changes in both
parents

Importance of support

Signs and symptoms of depression,
anxiety, and other mental health disorders

Resources

Education

“Do you have any concerns you would like to talk about?”

Physical, mental health changes in both parents

Importance of support

Signs and symptoms of depression, anxiety, and other mental health disorders

Resources

EPSD Result =
>10

Interview
further to
assess severity

Recent stressors

Symptom frequency and duration

Impacts to daily functioning

Current tx? Past psychiatric tx, including hospitalizations?

Feelings of hopelessness, helplessness

Current suicidal ideation, plan, intent, previous attempts?

Family history

Mild Severity

EPSD Result =
10-14

Symptom frequency and duration - mild

No or minimal difficulty caring for self or baby

No previous psychiatric hospitalizations?

Feelings of hopelessness, helplessness - none

No suicidal ideation

Moderate
Severity

EPSD Result =
15-19

Symptom frequency and duration -
moderate, more often

Past psychiatric including
hospitalizations? yes

Feelings of hopelessness, helplessness -
sometimes

No suicidal ideation, plan, or intent,
previous attempts

Difficulty caring for self or the baby

Severe Severity

EPSD Result =
over 19

Symptom frequency and duration - constant

Multiple psychiatric hospitalizations

Often Feels hopelessness, helplessness, worthless

Hallucinations, delusions, or other psychosis

History of multiple medication trials

+ suicidal ideation, plan, or intent, + previous attempts

Often unable to care for self or baby

Don't Forget

Check for medical conditions

- TSH, B12, folate, Hgb, Hct

Assess for substance use or medications which can cause the symptoms

Interventions for Mild Symptoms

Education: Sleep hygiene, self-care,
exercise

Parenting Groups

Home Visiting Programs

Therapy

Medication?



Parenting Groups

Interventions designed to provide parent education and improve parent–infant interactions for women with perinatal disorders.

Most focused on postpartum depression

Oklahoma examples

- Circle of Security
- Strengthening Families

Home-visiting programs

Show improved outcomes in the quality of maternal–infant interactions in women with depression.

Oklahoma examples

- The Maternal, Infant, Early Childhood Home Visiting (MIECHV) Program
- Children First Program (Health Dept)
- Tulsa Family Connects – The Parent Child Center of Tulsa

Individual Therapy for Parents

Interpersonal
Therapy (IPT)

Cognitive
Behavioral
Therapy (CBT)

The Data

Maternal depression can be successfully prevented and treated, BUT just decreasing the depressive symptoms alone has not been shown to improve mother–child interactions.

Efforts should also focus directly on improving mother–child interaction to improve the relationship and thus, child outcomes.





Dyadic Interventions

Can improve outcomes in the quality of maternal–infant interactions in women with depression.

Oklahoma examples

- Attachment and Biobehavioral Catchup – prenatal and postnatal
- Child Parent Psychotherapy – prenatal and postnatal

Interventions
for Moderate
Symptoms

Parenting Groups

Home Visiting Programs

Therapy

Medication?

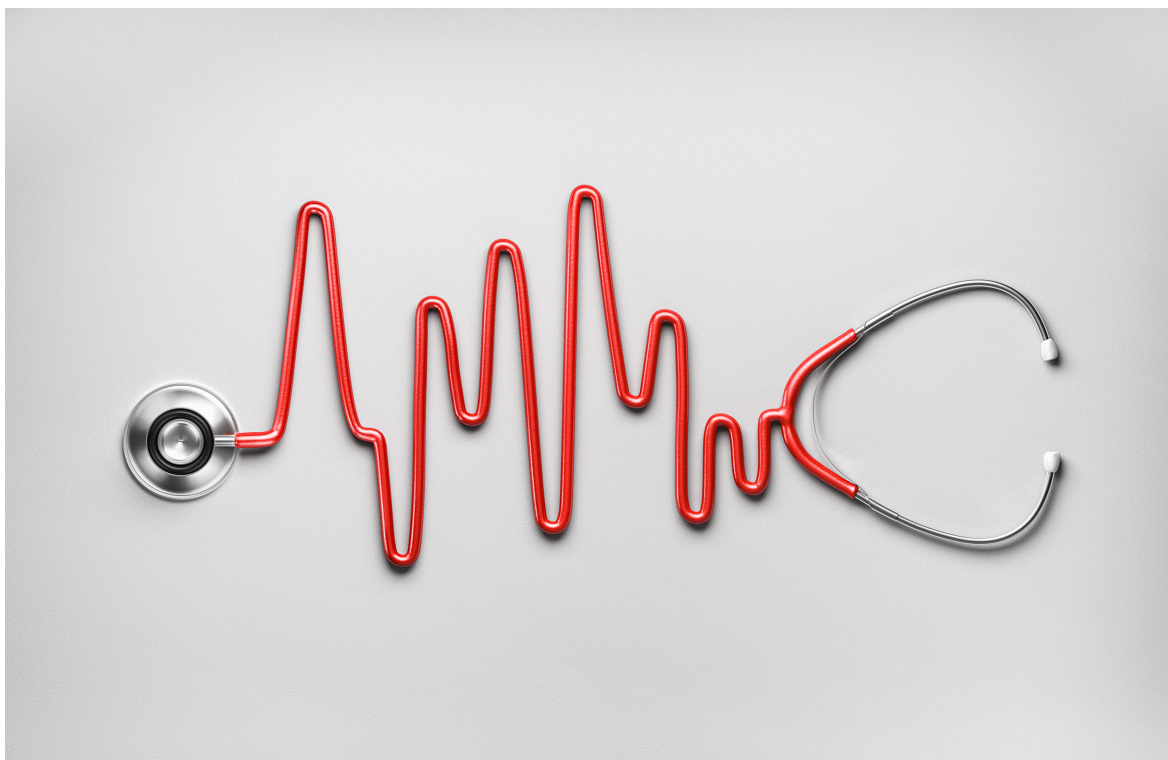
Interventions
for Severe
Symptoms

Parenting Groups

Home Visiting Programs

Therapy

Medication



If a patient is at
an imminent risk
to self or others,
refer to
emergency
services



Psychotropic Medications in the Peripartum Period

Weighing the Risks

Maternal Disorder	Pregnancy Risks and Outcomes
Depressive Disorders	Inadequate maternal weight gain
Major Depression	Substance abuse
Persistent Depression Disorder	Pre-eclampsia, preterm birth, low birth weight
Minor Depression	Fetal distress
	Increased risk of cesarean birth, increased risk of NICU admission

Creeley, 2019



The Numbers

During the last 30 years, the use of prescription drugs by pregnant women has grown by more than 60%

Almost 90% of women report taking at least one medication

70% report taking a prescription drug

Nearly 8% of pregnant women were prescribed antidepressants during the years 2004 and 2005.

- Most common AD was the SRI (6.7%)
- Followed by other ADS (1.3%) such as Bupropion (0.7%), Venlafaxine (0.3%) and Trazodone (0.3%)

Creeley, 2019, Mitchell, 2011



Antidepressants During Pregnancy: In General

Conversations pre-conception

Preferred

- Single medication at a higher dose over multiple medications
- Medications with fewer metabolites, higher protein binding, and fewer interactions

All psychotropic medications cross the placenta, are present in amniotic fluid, and can enter breast milk.

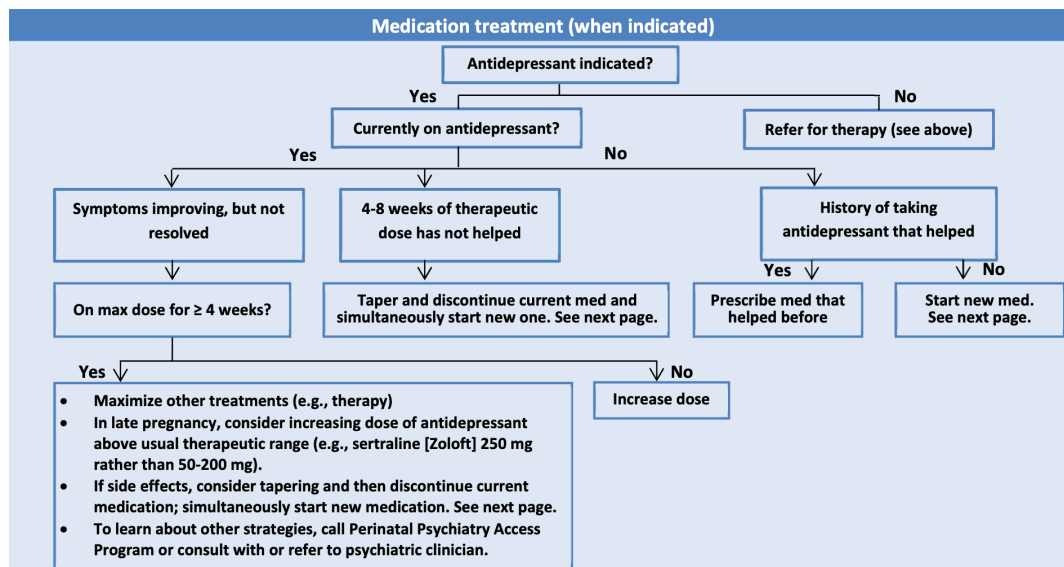
Antidepressants During Pregnancy

Does not appear to be linked with birth complications

Has been linked with small but inconsistent risk of birth defects when taken in the first trimester

Has been linked with transient (days to weeks) neonatal symptoms (tachypnea, irritability, insomnia)

Has inconsistent, overall reassuring, evidence regarding long-term neurobehavioral effects on children (months to years)



Copyright © 2019 UMass Chan Medical School all rights reserved. Revision 02-22-22. Lifeline for Moms Perinatal Mental Health Toolkit. Funding provided by CDC grant number U01DP006093. Authors: Byatt N., Mittal L., Brenckle L., Logan D., Masters G., Bergman A., Moore Simas T.

ACOG Toolkit

First Line

Sertraline



Escitalopram



Fluoxetine*



Celexa



Start low and go slow.

DRUG CLASS and NAME	TRADE NAME	CURRENT DRUG LABEL INFORMATION ^b
ANTIDEPRESSANTS		
Tri- and *Tetra-cyclics (TCAs)		
Amitriptyline	Elavil	<p>Few teratogenic effects are reported, except at doses of amitriptyline which far exceed the MRHD. Results of animal research on desipramine, nortriptyline, and imipramine are described as “inconclusive.” At doses >MRHD, increased pup mortality and low body weight were reported for amoxapine and doxepin. Trimipramine exposure at 20X MRHD caused an increased risk of major abnormalities. There are no adequate and well-controlled studies in pregnant women. Adverse events in humans (central nervous system effects, limb deformities, developmental delays) have been reported for amitriptyline. Neonatal withdrawal and anticholinergic symptoms have been observed. The kinetics of this drug change during pregnancy, serum levels should be monitored and the dose should be adjusted if needed.</p>
Amoxapine	Asendin	
Desipramine	Norpramin	
Doxepin	Silenor	
Nortriptyline	Aventyl, Pamelor	
Protriptyline	Vivactil	
Trimipramine	Surmontil	
*Mirtazapine	Remeron	
*Maprotiline	Ludiomil	

Creeley, 2019

Monoamine Oxidase Inhibitors (MAOIs)		
Phenelzine	Nardil	Phenelzine may increase fetal/pup mortality in rats. There is little information on the effects of exposure to tranylcypromine or isocarboxazid in animals. Exposure to selegiline at many times the MRHD increased the risk for major malformations (delayed ossification) and decreased fetal weight. There are no adequate and well controlled studies in pregnant women.
Tranylcypromine	Parnate	
Isocarboxazid	Marplan	
Selegiline	Eldepryl, Zeladar	

Creeley, 2019



Serotonin Reuptake Inhibitors (SRIs) and *Serotonin-norepinephrine reuptake inhibitors (SNRIs)

General FDA warning: A study of women with history of major depression who were euthymic at the beginning of pregnancy showed women who discontinued AD medication during pregnancy were more likely to experience a relapse than women who continued medication use. Neonates exposed late in the 3rd trimester have developed complications requiring prolonged hospitalization, respiratory support, and tube feeding. Reported clinical findings include: respiratory distress, cyanosis, apnea, seizures, temperature instability, feeding difficulty, vomiting, hypoglycemia, hypo-/hypertonia, hyperreflexia, tremor, jitteriness, irritability, and constant crying.

These features may be a direct toxic effect or a withdrawal syndrome. In some cases, the clinical outcome is consistent with serotonin syndrome.

Citalopram	Celexa	Animal studies did not suggest teratogenic effects for sertraline or escitalopram, and only at toxic doses for citalopram. At doses >MRHD, increased risk of skeletal abnormalities and decreased fetal growth/survival. There are no adequate and well-controlled studies in pregnant women. First trimester fluoxetine use is associated with increased risk of cardiovascular malformations; paroxetine is linked to cardiac malformations (ventricular septal and valve defects). Consideration should be given to either discontinuing paroxetine use or switching to another antidepressant.
Escitalopram	Lexapro	
Fluoxetine	Prozac, Sarafem	
Paroxetine	Paxil	
Sertraline	Zoloft	
*Venlafaxine	Effexor	

Creeley, 2019

Atypical Antidepressants		
Bupropion	Wellbutrin	Animal studies show no clear evidence of teratogenic effects, but there is evidence of a higher pup mortality rate, and lower birth weights, at >MRHD. There are no adequate and well-controlled studies in pregnant women.
Mirtazapine	Remeron	
Nefazodone	Serzone	
Trazodone	Deseryl, Oleptro	
Vortioxetine	Trintellix	

Creeley, 2019



Brexanolone

First drug approved specifically for postpartum depression

60-hour continuous infusion

Discontinued April 14, 2025





Cannot breastfeed during treatment.

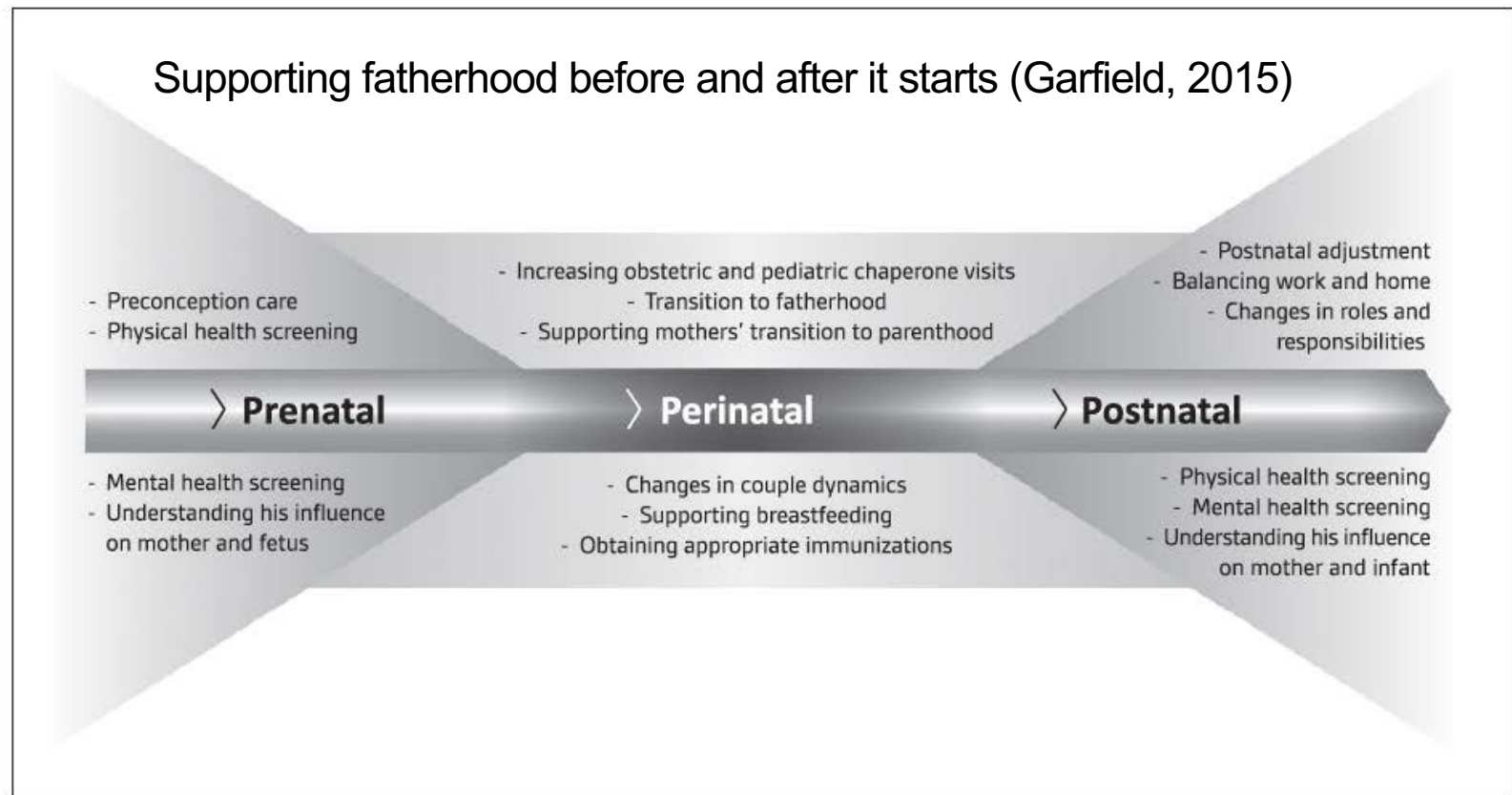


FIGURE 1

Conceptualization fathers' involvement in health from preconception through to the postnatal period.



THE GOLDEN RULES OF TREATMENT

1. Every baby deserves a healthy mother/parent
2. Psychiatric illness and psychotropic medications each pose risks to the mother and the fetus
3. Treatment decisions are always a risk/benefit analysis on a case-by-case basis
4. There is no one drug that is safest or “best” for use during pregnancy and the postpartum
5. The best treatment strategy is to minimize or eliminate one of the exposures whenever possible
6. No single study tells the whole story, all of the literature must be read in context

Consultation Resources for Physicians

The Statewide Psychiatry Access, Resources and Knowledge (SPARK)

- Supports the medical provider's provision of mental health care in the clinical setting.
- Provide Oklahoma's medical providers with psychiatry and mental health consultation, enhanced mental health education, and referral assistance to local and statewide mental health services.
- Free, available M-F, 1-5
- www.okspark.org

PSI Medical Providers (For Prescribers):

- The Perinatal Psychiatric Consult Program is staffed by experts in the field of psychiatry who are members of PSI and specialists in the treatment of perinatal mental health disorders.
- Free and available by appointment.
- <https://postpartum.net/professionals/perinatal-psychiatric-consult-line/>

Education Resources for Physicians

MCPAP for Moms Obstetric Provider Toolkit

- www.mcpapformoms.org/Toolkits/Toolkit.aspx

MCPAP for Moms Pediatric Provider Toolkit

- <https://www.mcpapformoms.org/Toolkits/PediatricProvider.aspx>

MGH Center for Women's Mental Health

- **Reproductive Psychiatry Resource and Information Center**
- www.womensmentalhealth.org/resource/for-providers/

ACOG Perinatal Mental Health Toolkit

- <https://www.acog.org/programs/perinatal-mental-health>



Training Resources for Physicians

PSI Medical Providers (For Prescribers):

- Certificate trainings and coaching for professionals
- www.postpartum.net

National Curriculum in Reproductive Psychiatry

- <https://ncrptraining.org>

Consultation Resources for Patients

HRSA Maternal and Child Health's National Maternal Mental Health Hotline

- Free, confidential
- 24/7
- Text/Call

PSI Help Line

- 1-800-944-4773
- English/Spanish
- Free

Crisis Line

- 988

Education Resources for Patients

MGH Center for Women's Mental Health Patient Guides

- <https://womensmentalhealth.org/resource/patient-support-services/>

Post Partum Support International

- www.postpartum.net



Thank you

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