

## Overview

-Treatment protocol

- Conceptual model and rationale
-Efficacy Data
- Deep dive into PREPP intervention



## PREPP Treatment Protocol

## Brief (5 sessions)

- 28-32 gestational weeks - 6 week postpartum


## For those at risk of PPD

- Stress, depressive symptoms; experiencing poverty

Two unique features

## PREPP

- Begins in pregnancy
- Dyadic approach


## Conceptual Model

An intervention based on the conceptualization of postpartum depression as a potential disorder of the dyad, and one that can be approached through preventative psychological and behavioral changes in the mother that affect her and the child - even before birth

## Efficacy Data

## ORIGINAL ARTICLE

## PREPP: postpartum depression prevention through the mother-infant dyad

Elizabeth A. Werner ${ }^{1} \cdot$ Hanna C. Gustafsson ${ }^{1} \cdot$ Seonjoo Lee ${ }^{3,4}$.
Tianshu Feng ${ }^{3} \cdot$ Nan Jiang $^{1} \cdot$ Preeya Desai ${ }^{1} \cdot$ Catherine Monk ${ }^{1,2}$

## Efficacy Data

- 58\% Latinx, 19\% Black
- Age: 18-45 yrs old, average=30
- At risk for PPD based on Predictive Index of PPD (Cooper, 1996)
- Baseline mild to moderate depression symptoms
- average of 16.11 on the HRSD, max 54, 14-17 mild to moderate
- Adherence: $100 \%$ completed PREPP intervention


## PREPP Reduced Rate of Severe PPD



## PREPP Greater Change in Depression Score



## PREPP Greater Change in Anxiety Score



PREPP Associated with Less Infant/Fuss Cry Behavior at 6 weeks Old


## Efficacy Data

# Preventing maternal mental health disorders in the context of poverty: pilot efficacy of a dyadic intervention 

Pamela Scorza, ScD; Catherine Monk, PhD; Seonjoo Lee, PhD; Tianshu Feng, PhD; Obianuju O. Berry, MD, PhD; Elizabeth Werner, PhD

- $84 \%$ Latinx
- Age: 18-45 yrs old, average=28
- SES: (1) salary "near poor, struggling" ( $200 \%$ of national poverty levels) - $\$ 47,700$ annually for a family of four, based on self-report-or (2) having met the income criteria for Medicaid
- $100 \%$ Medicaid for insurance
- Baseline depressive symptom relatively low
- average of 4.8 on the EPDS, 30 max, 10 possible depression
- Adherence: $83 \%$ completed PREPP intervention

PREPP Greater Change in PMAD


## PREPP Associated More Infant Daily Sleep and Less Day Crying at 6 weeks Old



## PREPP Associated with Higher Infant Development at 4 months old: Bayley Adaptation Score



## Introduction to PREPP Sessions

| Session 1 | PREPP Session | Components |
| :--- | :--- | :--- |
|  | 28-32 weeks gestation <br> In clinic or virtual <br> 45-60 minutes | Harnessing a dyadic focus <br> Establish alliance <br> Selforeflection practice <br> Sleep skills and mindfulness |
|  |  | Distributed Materials: Prepp App/Mindfulness Audio File |


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| Session 2 | 34-39 weeks gestation <br> In clinic or virtual <br> 45-60 minutes | Psychoeducation <br> Infant caregiving techniques <br> Review prior skills |


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| Session 3 | 18-72 hours post delivery Virtual 15-20 minutes | Review PREPP pamphlet <br> Practice techniques: <br> -Swaddling <br> -Carrying <br> -Mindfulness |


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| Session 4 | 2-3 weeks postpartum Virtual 15-30 minutes | Check in about mother $\&$ infant well-being <br> Assess use of techniques <br> Discuss challenges of newborn car |


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| Session 4 | 2-3 weeks postpartum Virtual 15-30 minutes | Check in about mother $\&$ infant well-being <br> Assess use of techniques <br> Discuss challenges of newborn car |
| Session 5 | 6 weeks postpartum In clinic or virtual 45-60 minutes | Practice selforeflection <br> Assess use of techniques <br> Review techniques where necessary |

Session 1: Three Aims

Time Frame: 28-32 Weeks Gestation

Duration: 45-60 minutes

## Aim 1

> To establish a treatment alliance between coach and participant.


Research regarding common factors in all types of therapies that contribute to improvement has revealed that the quality of the therapeutic alliance is the most robust predictor of treatment success.

Establishing a strong treatment alliance is a key component of this intervention.

To this end, we have designed the first session as an opportunity for the coach to begin to develop an alliance with the participant in
 addition to teaching skills and imparting information.

The alliance has been found to predict treatment adherence and concordance across a range of diagnoses and treatment settings.

Based on participant responses to a series of questions, the coach can tailor subsequent sessions to each woman's needs and circumstances, thereby maintaining and strengthening the treatment
 alliance over the course of the intervention.

## Aim 2

Focus on the Mother-Infant Dyad: To promote the mother's maternal reflective functioning capacities both before the child is born and after the birth of her child.


## Reflective Functioning

Reflective functioning (RF), as defined by Peter Fonagy and colleagues, refers to an individual's capacity to understand one's own and others' behavior in terms of underlying mental states and intentions.


In the context of parenting, RF refers to a parent's capacity to "keep the child in mind"-that is, to imagine and make sense of the child's mental states, and to use this understanding in guiding the parent's own responses to the child.


Maternal RF has been shown to be predictive of sensitive caregiving and negatively correlated with hostile, intrusive, or withdrawn caregiving behavior.


## Aim 3

To teach mind fulness skills and sleep hygiene principles that can be used during pregnancy and postpartum to promote affect regulation and better sleep.


MEDITATIONS

Choose Your Meditation

A Mindful Walk

A Mindful Moment

Session 2: Three Aims
Time Frame: 34-39 Weeks Gestation
Duration: 45-60 minutes

## Aim 1

Carry forward the RF and alliance orientation of the first session.


## Aim 2

Draw on prior mindfulness training


## Aim 3

Provide psychoeducation and teach parenting skills to set expectations for the postpartum period and better manage the challenges of caring for a newborn.


Psychoeducation


The focus of this part of the session is to provide information about postpartum factors that contribute to PPD and ways to address these factors and decrease the likelihood of the development of PPD.

## Hormones

During pregnancy, the amount of female reproductive hormones (estrogen and progesterone) in the body increases to ten times the normal level. After delivery, there is a rapid drop in hormone levels, and by the third day after delivery, hormone levels are back to prepregnancy.

In some women, these hormonal changes, along with the dramatic life changes of becoming a mother of a newborn baby (even if you have other kids), can contribute to postpartum depression.

## Baby Blues

Hormones can contribute to "the baby blues"-the irritability, sadness, crying spells, or frustration that many women experience in the first few days and weeks after giving birth.

## Postpartum Depression

Symptoms of PPD are similar to the baby blues but are more persistent and can include sleep difficulties, changes in appetite, and anxiety/panic. PPD can also affect your ability to bond with your baby.

## Sleep

During the first few weeks, newborns typically spend about two-thirds of each day sleeping-between 12 and 20 hours per day.

Newborns wake frequently and rarely sleep for more than three hours at a time, making it difficult for caregivers to get a good night's sleep.

Sleep is critical to the mental and physical health of caregivers.


Sleep and mood are closely intertwined, and lack of sleep can lead to irritability, anxiety, and sadness. Lack of sleep can also trigger or worsen an underlying mood disorder.

## Crying

At about 2 week of age, babies start to cry more each week
By 2 months of age, babies usually cry more than at any other time. This is sor@etimes referred to as the Period of PURPLE Crying .

Every infant is unique, some might have their "peak" at 3 weeks of age, while others have it at 8 weeks of age.

For some infants, the amount of crying at the peak might be 1


It is common for babies to cry more in the late afternoon and evening.

## Period of "PURPLE" Crying

## The Letters in PURPLE Stand for

PURPLE

## Introduction to Skills

"Dealing with all of the changes in your mood and your baby's sleeping and crying patterns can be very stressful, but I am going to share some techniques with you that have been shown by researchers to help improve your baby's and your sleep, lessen the amount of time your baby cries, and improve your mood."


## Comforting Measures

Comforting measures (after checking if the baby is hungry, tired, or has a wet diaper):

Rocking or dancing with baby
Going for a walk in the stroller
Going for a drive in the car
Singing/talking to baby
Rhythmic sounds: vacuum cleaner, washing machine, running water

Giving baby a bath, offering baby a soft blanket
Skin-to-skin contact


## Swaddling

Helps baby fall asleep
Lengthens periods of sleep
Reduces the number of times baby wakes spontaneously
Increases the chances that the baby will be able to fall back to sleep on his or her own
Can be used to soothe a crying baby

## Safe Swaddling:

You need to feel comfortable
Practice proper technique to avoid hip injury
"Back is best!"
Use a light blanket in hot weather
Stop swaddling when baby can roll over

## Carrying

Benefits of Carrying:

Free Hands = Easier Life
Secure Attachment
Increased Bonding
Calms baby
Fosters independence during toddler phase Reduces fussiness


## Day/Night Cues



Interact with your baby as much as possible when your baby is awake during the day

Open the curtains and shades and play lively music

Don't minimize background noise, like the phone or the TV

At night, keep the baby's room quiet and dark

Don't play with baby during night feeds

Avoid turning on the lights during nighttime diaper changes and feedings

Maintain a quiet voice at night

## Focal Feeding \& Lengthening Intervals

## Focal Feeding:

Wake baby for a feeding between 10 pm and 12 am Begin using this tool 2-3 weeks postpartum and only once baby has gained enough weight

Lengthen Feeding Intervals:

Once baby is 3 weeks old, begin to delay feeding for a
 few moments in order not to associate waking with immediate feeding

## Mindfulness and Postpartum Care



If your baby's needs are met but they are still fussy or crying inconsolably try these mindfulness exercises to remind yourself that this period is temporary:

Take a mindfulness walk with baby in carrier

Listen to one of your mindfulness exercises on the iPod

Focus on your breath while comforting baby

Take time for a mindful moment while baby naps

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## Informational Pamphlet




## Welcome to PREPP!

This is a program to help you with the challenges of being a mom to a newborn baby. Every mother can have times when she feels very stressed.

This can be even more true if you felt overwhelmed during your pregnancy. This program will teach you skills that you can use to cope with these difficult moments and to care for your newborn baby.


## Challenges of Being a Mom to a Newborn

All mothers, even mothers who already have children, have moments when parenting a newborn feels frustrating and overwhelming.

## These moments may include:

- When your baby cries more than you expected
- When your baby is crying and won't stop, even though you've tried everything
- When you are tired and feel guilty for not having the energy to care for your baby
- When caring for your baby seems harder and less enjoyable than you thought it would be

Common responses that mothers have in these moments:

- Feeling like a bad parent or that you are doing something wrong
- Feeling angry at yourself, and sometimes at your baby
- Feeling like things will never get better
- Feeling like you are not ready to care for your newborn



## Postpartum Hormones

- During pregnancy, the amount of female hormones in the body increases to 10 times the normal level.
- After delivery, there is a rapid drop in hormone levels.
- This drop in hormones can lead to the "Baby Blues"the irritability, sadness, crying spells, or frustration that almost all women experience to some extent in the days and weeks after giving birth.
- These hormonal changes, along with the big life changes of having a newborn baby, can contribute to postpartum depression (PPD).
- Symptoms of PPD are similar to the Baby Blues but last longer and can include depressed mood, feeling worthless, sleep problems, changes in appetite, loss

(c) Fleshandbores.com Davies et al: Human Physiology of energy, and anxiety or panic.

The skills presented in PREPP may prevent or reduce these symptoms.

## Crying

All babies cry. You may be surprised by how much time your baby spends crying.

- At about 2 weeks of age, babies start to cry more each week.
- By 2 months of age, babies usually cry more than at any other time. This is sometimes referred to as the Period of PURPLE Crying ${ }^{\circledR}$. For more information, please go to www.purplecrying.info.
- As babies become older than 2 months, they begin to cry less with each week.
- Babies still can be normal and healthy even if they cry 5 hours a day.

All of this crying can be overwhelming, but remember: this period of your baby's life will not last forever!


## (7) PREPP Skills: Comforting Measures

When your baby is crying, there are things that you can do
to try to help comfort your baby:

- Check to see if your baby is hungry, tired, or has a wet diaper.
- Rock or dance with your baby.
- Go for a walk in the stroller or a ride in a car.
- Sing or talk to your baby.
- Hold your baby close to you with skin-to-skin contact or in a carrier.

Remember, you can always check with your doctor to see if there is something wrong that is causing your baby to cry.


## (7) PREPP Skills: Swaddling

Swaddling involves carefully and tightly wrapping an infant in a blanket or other piece of fabric. It has been used for hundreds of years to calm babies.
Swaddling can help by:

- Making it easier for your baby to fall asleep
- Lengthening the periods of time your baby stays asleep
- Reducing the number of times your baby wakes up
- Increasing the chances that if your baby does wake up, he or she will be able to fall back asleep on his or her own
Swaddling Method:


You should feel comfortable and take care when swaddling. Try to only use swaddling at nighttime or when you put your baby to bed. o Remember that for sleeping, "back is best". This is true even if you don't swaddle. Make sure to use a very light blanket to swaddle in hot weather so that your baby does not get too hot. If you have any questions about swaddling, please speak with your doctor or with your PREPP counselor.

## Benefits of using an infant carrier:

- Leaves your hands free to do other things (including taking care of your other children)
- Makes the baby happier
- Provides a chance for your baby to feel close to you and for you to feel close to your baby
- Reduces crying and fussiness in babies


Safety tips for using a baby carrier-"T.I.C.K.S.": Tight-Make sure the carrier is fastened tightly around your baby, with no loose fabric.
In view at all times - You should be able to see your baby's face at all times by looking down. There should not be any fabric covering your baby's face.
Close enough to kiss-Keep your baby's head as close to your chin as is comfortable. You should be able to kiss your baby's forehead by tipping your head forward.
Keep chin off the chest-Make sure that there is always at least a finger width of space between your baby's chin and chest.
Supported back-Your baby should be held close to you, with the baby's back supported by the carrier and his or her tummy and chest against you. If the carrier is too loose, the baby's back will slump, which can cause breathing problems.


## (9) PREPP Skills: Day and Night Cues

Almost all newborns need help getting onto our day and night schedule. These tools can help them learn that daytime is for active play and nighttime is for sleeping.


During the day:

- Interact with your baby as much as possible.
- Open the curtains or shades and play lively music.
- Don't minimize background noise, like the phone or the TV.

At night:

- Keep your baby's room quiet and dark.
- Instead of playing with your baby when he or she wakes up, focus on his or her needs, such as feeding or a diaper change.
- Make nighttime interactions with your baby as brief as possible. Avoid turning on the lights during feedings and diaper changes (a nightlight is useful for this). Keep your voice soft and low.
- Swaddle your baby.


## (3) PREPP Skills: Feeding to Help Your Baby Sleep

Making some changes to the way you feed your baby at night can help your baby get onto your sleep schedule and learn to sleep through the night.

Focal Feeding:

- Feed your baby between 10pm and midnight, even if it requires waking him or her.
- The idea is to make sure that your baby is full when you put him or her down for the night.

Lengthening the time between feeding at night:

- When your baby wakes up at night, try to delay feeding him or her for a few moments. You can calmly rest your hand on your baby's belly or change the diaper to add a short delay.

OThis does not involve leaving the baby to cry for a long time or playing with him or her.

Start using these tools 2 to 3 weeks after your baby is born, and only if your baby is healthy and gaining the right amount of weight.


## (2)PREPP Skills: Mindfulness

- Sometimes you will use all of the PREPP skills and your baby will still cry or have a lot of trouble going to sleep. Sometimes being a mom to a newborn can be so stressful! If you feel like you are becoming overwhelmed, it is okay to place your baby is a safe place (e.g., the crib) and take a moment for yourself away from your baby.
- Using mindfulness exercises at these times can be really helpful. Mindfulness is learning a new way to handle your thoughts and feelings. These exercises can help you feel less overwhelmed by upsetting thoughts and remind you that a difficult experience is only temporary.
Exercise 1: Progressive Muscle Relaxation
Close your eyes. Turn your focus to your breathing. Breathe normally. If you notice your mind wander to anything other than your breath, notice where your mind goes and then bring it back to your breath.
Then turn your focus to your tension or stress that you are holding in your body. Each time you breathe in tighten a specific muscle in your body and with each exhale, focus on releasing tension from that part of your body. Start by tightening and releasing tension in your head and neck and work your way down to your toes.
Exercise 2: Mindful Walk (can be done with your baby in carrier or in a stroller)
Take a walk in your neighborhood or in a favorite spot.
Notice your breathing, your body, and how the air feels against your skin. Notice smells and what you see.
When your mind wanders (and it will), gently guide it back to noticing the outside world. Stay present in the moment and in touch with what you are smelling, seeing, and feeling.


Session 3: Three Aims
Time Frame: 18-72 hours postpartum
Duration: 15-20 minutes




## Aim 3 <br> Review when you can start using certain PREPP behavioral techniques.

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Session 4: Two Aims
Time Frame: 2-3 weeks postpartum
Duration: 15-30 minutes

## Aim 1

Discuss PREPP techniques and how often they are being utilized.

## Aim 2

Use motivational interviewing techniques to encourage women to use PREPP skills that could be helpful in managing current care giving goals and challenges


Session 5: Three Aims

## Time Frame: 6 weeks postpartum

Duration: 45-60 minutes



## Interested in getting trained in PREPP?



Institution
Go to: https://www.perinatalpathways.org/prepptraining

Level of Experience of Trainees
(Job tities/degree/work experience, etc. This helps us combine groups if necessary.).

## Trainings are:

- Straightforward
- Tailored to the intended clinical population
- Customized to the trainee's experience \& previous training
- Can be $100 \%$ virtual

Requires $\sim 8$ training hours and a 1 hour certification assessment.


Our previous trainees have come from a variety of clinical backgrounds.

Clinical Psychologists Psychiatrists
Occupational Therapists Sociat Workers Case Managers
Community Health
Workers
Nurse Practitioners
NP Students
Social Work Student
 Masters Psychologist

## Mental health providers \& other clinicians from all over the U.S. \& around the world have been trained in PREPP

ZERO то THREE
Early connections last a lifetime

## 向 COLUMBIA

COLUMBIA UNIVERSITY
DEPARTMENT OF ObSTETRICS AND GYNECOLOGY

University of Minnesota
${ }_{7}$ NewYork-Presbyterian Ambulatory Care Network

Transitional HealthCare

## ROBIN \$HOOD



Eunice Kennedy Shriver National Institute of Child Health and Human Development


## for their support!



If you are interested in more information, you can contact:

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or visit the Perinatal
Pathways website


