

Resources, Inspiration, Support and Empowerment (R.I.S.E.) for Black Maternal Mental Health

NIMHD Funded Study – 1R21MD017396-01A1

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cedars-sinai.org

Background – What are PMADs?

- Perinatal Mood Anxiety Disorders (PMADs) encompass a range of mental health disorders and 20% of birthing persons experience PMADs
- Anxiety, Bipolar disorders, Psychosis, Depression, Obsessive-compulsive disorder (OCD), and Post-traumatic stress disorder (PTSD)
- 1/5 have mood or anxiety disorder
- 1/8 report symptoms of depression after birth
- Less than 75% get treatment

Background – What are PMADs?

- Prenatal depression and anxiety are associated with poorer maternal health behaviors and risk of postpartum depression
- PMADs are the most common complication of pregnancy, and left untreated, can have devastating short- and long-term consequences:
 - **2022 CDC Report:** Mental health conditions account for 23% of perinatal deaths. More than 80% of pregnancy-related deaths were preventable

Risk factors for PMAD

- Stressful life events
- Low or no social support
- Previous experience of depression or anxiety
- Family history of depression
- Difficulty getting pregnant
- Pregnancy with twins or multiples
- Adolescent or older age
- Preterm (before 37 weeks) labor and delivery
- Pregnancy and birth complications
- Racial Discrimination

Social determinants of health

SES: The % of low-income respondents reporting postpartum depression almost 2x that of high-income respondents.

Age: Younger respondents (under age 20) are 2.7 times more likely to self-report experiencing postpartum depression compared to respondents above age 35

Race/ethnicity: More American Indian (23%) and African American (18%) respondents reported experiencing postpartum depression compared to White respondents (9%).

<https://www.health.state.mn.us/people/womeninfants/pmad/index.html>

Racial differences in Morbidity and Mortality

- Black women are **twice** as likely to experience severe maternal morbidity (SMM) and **three to four times** more likely to die of pregnancy-related causes compared to non-Hispanic White women
- Black women with college educations are almost **three times more likely** to suffer from SMM than uneducated White women
- Experiencing SMM increases risk of perinatal mood and anxiety disorders (PMADs) - including PTSD - and substance use

Racial differences in PMADs

- In California, Black women experience PMADs at almost double the rate of White women
- Despite higher prevalence rates of PMADs in Black women, White women were twice as likely to initiate mental health treatment as Black women
- When Black women did initiate care, they were much less likely to have any follow up treatment and more likely to decline offers of medication and therapy (instead turn to family or faith leaders)

Background – PMAD Interventions

- Psycho-education
- Basic self-care
- Stress reduction including relaxation techniques and yoga
- Support Groups
- Psychotherapy



Background – PMAD Interventions

- Complementary treatments
 - Acupuncture
 - Supplements
- Psychiatric Interventions
 - Medications
 - Electroconvulsive Therapy (ECT)
 - Transcranial magnetic stimulation (TMS)



Why don't people get help?

- Stigma of discussing mental health concerns
- Fear of baby being taken away
- Marital or family discord
- Exclusive reliance upon religion
- Lack of awareness
- Apprehension due to history of medical racism
- Insurance/financial issues
- Lack of access to Medicaid, low fee or free services

Barriers for Black patients

- Black patients often experience **worse communication** with their physicians and **advocate less for themselves** than their White counterparts
- They express discomfort when discussing mental health struggles with their White providers and the offered interventions felt culturally insensitive
- Only **2%** of American psychiatrists and only **4%** of American psychologists identify as Black
- **28%** of Black mental health professionals have considered leaving the field

Barriers for Black patients

- Participants noted that establishing relationships with community organizations enhance their ability to manage a PMAD
- Mobile health apps during the perinatal period can bridge this divide by improving symptoms & increasing patient knowledge & self-efficacy
- Further contributing to the health disparities in Black women, the majority of available perinatal mHealth apps cater to White women

Bhui et al, 2015; Saha et al., 2020; Takeshita et al., 2020; Turienzo et al., 2021; McLeish et al., 2017; Lara-Cinisomo et al., 2021; Chan et al., 2019; Doherty et al., 2018; Tucker et al., 2021

Our Mission – The R.I.S.E. Study

Black people are at higher risk for physical and mental health complications during pregnancy due to cumulative effects of racism.

Resources, Inspiration, Support and Empowerment (R.I.S.E.) Study for Black Maternal Mental Health

This study is designed to test a **mobile health (mHealth)** web application informed by real world experiences that allows Black pregnant participants to engage with educational modules about stress management techniques and help participants create a self-care plan to achieve emotional wellbeing during this vulnerable period

THE R.I.S.E. STUDY

Resources, Inspiration, Support, Empowerment (R.I.S.E.)
for Black Maternal Mental Health

TEAM LEADERS



Kimberly Gregory, MD, MPH



Eynav Accortt, PhD



Sinmi Bamgbose, MD



Lauren Elliott, MA



Kelly O'Connor, MA



Our Team

Research Coordinator – Karla Gonzalez

Social Workers - Megan Doyle & Anna King

Care Navigators - Clarke Lunara & Barbara Thomas

Biostatistician – Katie Bresee

UCLA Biomarker Consultant – Dr. Judith Carroll

Methods

Engaging with an mHealth web application

- Control modules created by Maternal Mental Health Now



- Intervention modules created by Candlelit Care



Maternal Mental Health Now



Designed in 2019 and launched in April 2020, mycare.mmhnow.org is a free web-based app that helps adjustment to the emotional demands, joys, and stressors of trying to conceive, pregnancy and parenting

Features:

- Psychoeducation: Signs & Symptoms; Ideas for Self-Care; Knowing When to Get Help; What Help Looks Like
- Resources for Managing Stress
- Mindfulness Exercises
- Information for Partners
- Care Plan



Kelly O'Connor, MA,
Executive Director



Funded by California
Health Foundation



Candlelit Care



- Intervention modules designed in 2022
- Based on real-world experiences of Women of Color
- Includes education on medical discrimination, self-advocacy and communication with providers
- A private beta version of *Candlelit Care* was used by 13 new and expectant Black mothers:
 - **70%** said they felt confident using the app, would use it frequently, and found it easy to use without technical assistance
 - Mothers gave a **usability score of 93.25%**, compared to the national standard usability score of 63%



Lauren Elliott, MA – CEO



Clarké Lunara, BS, CD – COO

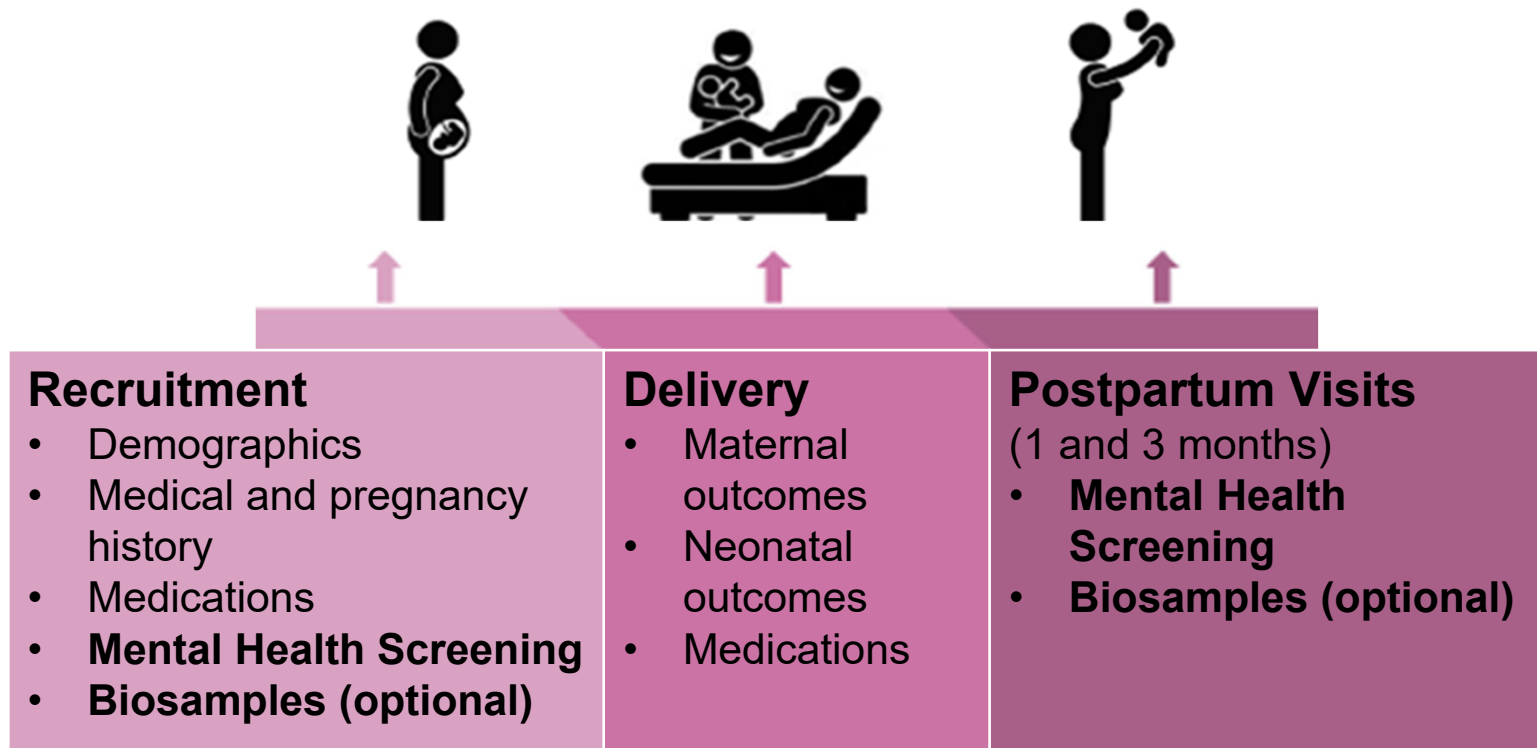
R.I.S.E. Study Methods - Eligibility

- Black pregnant individuals anywhere in the U.S.
- 12-32 weeks pregnant
- At least 18 years old
- English Speaking



Exclusion Criteria: Psychotic Illness; Perinatal loss; No access to smartphones, tablets, or computers.

Study Timeline



Methods - What does this randomized control trial include?

1. Engage with an mHealth web application (1-3 hours) anytime during pregnancy
2. Referrals guided by Care-Navigators
3. Complete 3 online questionnaires: 1 in pregnancy and 2 postpartum (20-45 min per survey)
4. **Possible:** Structured diagnostic interview
5. **Optional:** Studies suggest that stress increases inflammation. We aim to explore this by collecting a small amount of blood at pregnancy visit and 3 months postpartum



Slide 20

7

@Eynav.Accortt@cshs.org should we add something about the option for coaches?

Sinmi Bamgbose, 7/11/2024

What is the benefit of study participation?

- **Up to \$120 for full participation**
 - A \$20 gift card for each survey, totaling \$60 for completing all 3 surveys
 - An additional \$20 for each (optional) blood sample collection, totaling \$40
 - Some participants may be eligible for an additional diagnostic interview and will receive another \$20 gift card

All participants will be provided free access to the Candlelit Care application after study completion

Preliminary Results

- Fifty participants have been recruited out of our goal of 150 participants
- Twenty-five have been randomized to the Candlelit Care mHealth App Intervention, with the remaining 25 randomized to the control application
- **ALL** of the participants who completed the Discrimination in Medical Setting Scale in the prenatal research visit **endorsed at least 1** of the items

Preliminary Results – Discrimination in Medical Settings Scale (DMSS)

Possible answers:

- 0 (never)
- 1 (rarely)
- 2 (sometimes)

Most commonly endorsed “2” or “sometimes”



DMSS item

- You were treated with less courtesy than other people
- You were treated with less respect than other people
- You received poorer service than other people
- A doctor or nurse acted as if they thought you were not smart
- A doctor or nurse acted as if they were afraid of you
- A doctor or nurse acted as if they thought you were dishonest
- A doctor or nurse acted as if they were better than you are
- You felt like a doctor or nurse was not listening to what you were saying**

Preliminary Results – Medical Discrimination (Prenatal)

The 18 participants who completed the MDS in the prenatal time period were asked to choose a “reason” for this discrimination (they could endorse more than one)

Medical Discrimination Reason	Number endorsed
1. Your Ancestry or National Origins	1
2. Your Gender	0
3. Your Race	9
4. Your Age	6
5. Your Religion	0
6. Your Height	0
7. Your Weight	1
8. Some other Aspect of Your Physical Appearance	8
9. Your Sexual Orientation	0
10. Your Education or Income Level	9
11. Other (e.g. because “I am a hospital employee,” “OB is always in a rush,” and “their insecurities and false judgements”)	11

Future Work

We will recruit another 100 Black pregnant individuals!

We will follow them all through delivery and their postpartum periods in order to track their psychological symptoms and experiences with the mHealth apps

We would appreciate **YOUR** help getting the word out!

CSMC IRB No: STUDY00002283 / MOD00008229
CSMC Date Effective: 8/18/2023



Resources, Inspiration, Support, Empowerment (R.I.S.E.) for Black Maternal Mental Health in collaboration with Candlelit and Maternal Mental Health Now

Email us!

RISEStudy@cshs.org

The purpose of the RISE study is to improve clinical care of Black pregnant individuals during pregnancy and the postpartum period.

Black people are at higher risk for physical and mental health complications during pregnancy due to cumulative effects of racism. This study is designed to test a mobile health (mHealth) web application informed by real world experiences that will allow participants to engage with educational modules about stress management techniques and help participants create a self-care plan to achieve emotional wellbeing during this vulnerable period.



Who is eligible to participate?

- Black pregnant individuals anywhere in the U.S.
- 12-32 weeks pregnant.
- At least 18 years old

What does this randomized control trial include?

- Engaging with an mHealth web application (1-3 hours) anytime during your pregnancy
- Completing 3 online questionnaires: 1 in pregnancy and 2 postpartum (20-45 min per survey)

- Optional: Studies suggest that stress increases inflammation. We aim to explore this by collecting a small amount of blood at your first visit and 3 months postpartum

What is the benefit to you?

- You will receive a \$20 gift card for each survey, totaling \$60 for completing all 3 surveys
- You will receive an additional \$20 for each (optional) blood sample collection, totaling \$40



For more information, scan the QR code or contact the study staff at:
Phone: 310-423-3348 Email: RISEStudy@cshs.org



THANK YOU

R.I.S.E. Collaborators on this Presentation

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