Enhancing Maternal and Newborn Health by Improving Peripartum Mental Health and Substance Use Disorder Treatment

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Peripartum Mood and Anxiety Disorder (PMADs)

1 in 5
women around the world will suffer from a maternal mental health complication
Followed 5,000 Mothers Following Birth Over 3 Years

• Assessed depressive symptoms at 4, 12, 24, and 36 months following delivery.

• 1 in 4 women experienced high levels of depressive symptoms at some point in the three years after giving birth.
Maternal Mental Health Affects Mom, Child and Family

C-sections
Prematurity
Low Birth Weight
NICU Admissions

Cognitive, Motor, Growth Delays.
Behavioral, Academic, Mental Health Problems

Poor Prenatal Care
Smoking
Substance Use

Difficulty Bonding
Breastfeeding
Divorce
Perinatal Substance Use Disorders

**Licit & Illicit Substance Use is Common in Pregnancy & Postpartum**

- ~10-15% of pregnant women use alcohol or tobacco in pregnancy
- 15-20% of pregnant women are prescribed an opioid medication
- 5-7% of pregnant women use marijuana
- 6.5 per 1,000 pregnant women have an Opioid Use Disorder

<table>
<thead>
<tr>
<th>Substance</th>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Opioids</th>
<th>Stimulants</th>
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<tbody>
<tr>
<td>Obstetric, Newborn, Child Outcomes</td>
<td>Ectopic pregnancy</td>
<td>Preterm birth</td>
<td>NICU admissions</td>
<td>Cardiac arrest</td>
<td>Miscarriage</td>
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<td>Miscarriage</td>
<td>Low birth weight</td>
<td>Preterm birth</td>
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<td>Low birth weight</td>
<td>Motor dysfunction</td>
<td>Increased length of stay</td>
<td>Intrauterine growth restriction</td>
<td>Placental abruption</td>
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<td>Preterm birth</td>
<td>Fetal Alcohol Syndrome</td>
<td>Neonatal Abstinence Syndrome (NAS)</td>
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<td>Stillbirth</td>
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<td>Stillbirth</td>
<td>Neurodevelopmental disorder</td>
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<td>Low birth weight</td>
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<td>Intrauterine growth restriction</td>
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<td>Behavioral &amp; cognitive problems</td>
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Suicide & Drug Overdose are a leading cause of maternal death.
The vast majority of mental health conditions are unrecognized & untreated.


The Pandemic Is a ‘Mental Health Crisis’ for Parents

New studies show caregivers with young children are stressed, with no signs of relief on the horizon.

- Pre—Pandemic
  - 10-25% Peripartum Depression & Anxiety
  - 13% Use Drugs or Alcohol During Pregnancy

- Pandemic
  - Lebel et al, 2020 (N=2,000)
    - 37% Peripartum Depression
    - 57% Peripartum Anxiety
  - Davenport et al, 2020 (N=900)
    - 40% Peripartum Depression
    - 72% Peripartum Anxiety
  - Past month use of alcohol and heavy drinking days among women increased 17% and 41%, respectively

MUSC’s Women’s Reproductive Behavioral Health Clinic

Av. Mo. Visits Pre-COVID & COVID

Clinical Service Growth

• Since March 15, 2020
  • > 450 Asynchronous Visits
    • Virtual Care/Zipnosis

• Av. Monthly Visits Increased
  • 45% New Patients
  • 80% Return Patients
MUSC’s Women’s Reproductive Behavioral Health Division

- Our program specializes in the treatment of perinatal mental health and substance use problems [e.g., perinatal stress, trauma, perinatal loss, mood, anxiety, substance use, opioid use, psychotic disorders].

- Our program offers effective, home-video based treatments for perinatal mental health and substance use problems including therapy and/or medication.

- To access services, go to: www.MUSC.care and select “Get Care Now”. Simply create an account and complete a "Women’s Behavioral Health Screening".

- Upon completion of the screening, a care coordinator will contact you Monday-Friday 8am-5pm and provide any needed resources and schedule you for a home video appointment with providers that specialize in the treatment of perinatal mental health or substance use problems.
Women’s Reproductive Tele Behavioral Health to Obstetric & Pediatric Practices in SC
Integrated Prenatal & OUD care in Ob

- 3 Telemedicine practices (N=44)
- 1 In-person practice (N=54)

N.S. Maternal Differences

- Retention in treatment or Positive UDS

N.S. Newborn Differences

- NAS or Newborn Length of Stay
Web-Based Treatment for Perinatal OUD

- Resource for Ob/Gyn Providers
  - Best practices
  - Guidelines
  - Special considerations
    - L&D, Pain, Breastfeeding

- Resource Patients with OUD
  - Psychoeducation
    - OUD
    - Treatments including MOUD
  - CBT/Relapse Prevention
  - Special considerations
    - DSS, Stigma, Pain,
Executive Summary: Preliminary Focus Group Findings

PATIENTS [N=35]

- Valued communication and relationships with trusted care-providers
- Many questions, especially about medication
- Scared and worried, conflicting info from various providers adds to stress and uncertainty
- Value having a reliable source of info from someone they trust

PROVIDERS [N=30]

- Complex patient needs and competing demands on time
- Did not want to log in to ‘another system’
- Provider knowledge gaps and/or lack confidence to treat OUD, prefer to refer to specialist
- Inadequate and inconsistent screening for OUD
Listening to Women

MOBILE PHONE TEXT-MESSAGE BASED SCREENING

REMOTE BRIEF INTERVENTION, REFERRAL AND CARE COORDINATION

HOME-BASED TELEMEDICINE TREATMENT SERVICE.
Text Message Based Screening

Brief Intervention
Remote Care Coordinator

Referral to Treatment
Telemedicine/ Office or Home
Follow up

Communicate with Ob/Peds Team
Screening information
Referral and Tx Progress
LTW, compared to In-Person SBIRT, significantly more:

1) Screened Positive
[81.15% vs. 33.33%; $X^2=169.50$, $p<0.0001$]

2) Were Referred to Treatment
[76.12% vs. 57.63%; $X^2=18.03$, $p<0.0001$]

3) Received Treatment
[94.91% vs. 16.04%; $X^2=245.41$, $p<0.0001$]

*p<0.0001*
Figure B. LTW: White women, compared to black women, were more likely to screen.

Figure D. In-Person SBIRT: 14% of black women received Tx. LTW: 90% black women received treatment.
Current Research

NIH-NIDA
Focus Groups/Key-Informant Interviews
• Modify LTW based on feedback
  • Black women
  • Pregnant or postpartum
• With and w/out PMADs and/or SUDs
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Thank you!