Study Findings of Mind-Body Interventions for Perinatal Depression

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Study #1: Experience of Stress & Depression in Pregnant, Urban, African-American Adolescents

Study #2: Perceptions of Women regarding Mind-Body Interventions for Symptom Self-Management

Study #3: Guided Imagery for Stress in African American Pregnant Women

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Perinatal Depression

- Depressive symptoms are projected to be a leading cause of illness and disability in the world by 2030
- Nearly 20% of pregnant women experience depressive symptoms during their pregnancy


Depression Risk Factors

• Pregnancy is often a time of multiple stressors

• Stress & anxiety have potential to impact physical and emotional health

• Other Risk factors:
  – Ethnicity/race (African American>Caucasian, Hispanic pregnant women)
  – Socioeconomic & insurance status

Research Aims

**Study #1**
- Community-based qualitative study using focus groups to explore adolescents’ perceptions of stress and depression and their interest in mind-body therapies
  - Study sample: $n=17$ currently pregnant adolescents, age 14-21

**Study #2**
- Community-based qualitative study using focus groups to explore women’s experiences with mind-body therapies for stress & depression symptom management
  - Study sample: $n=14$ currently or recently pregnant women, age $\geq 18$ and above who participated in prenatal yoga in some form within the past 6 months
Findings - Study #1

Experience of adolescent pregnancy

- Pervasive stress and depression symptoms
- Sense of isolation

Perception of stress/depression management

- Any intervention must:
  - be group-based & interactive
  - include others of similar age and background
  - be facilitated by someone who "understands"
  - provide information about managing difficult emotions

- Yoga and guided imagery are perceived to be appealing because it may:
  - decrease stress
  - prevent isolation
  - decrease physical discomforts of pregnancy
  - enhance relationship-building with others

Findings- Study #2

Lived Experience of a Mind-Body Therapy
(Prenatal Yoga)

Theme #1: attracted to mind-body practices because of stress and depressive symptoms

Theme #2: Psychological & Physical Benefits
  Psychological Benefit: self-care
  Psychological Benefit: community-building
  Physical Benefit: ultimately creates psychological strength

Theme #3: Prenatal yoga more beneficial than other prenatal groups

Conclusion from Studies #1 and 2

- Women are interested in mind-body therapies for symptom management
- Mind-body approaches may be useful in the management of psychological distress and in development of community among pregnant women
Complementary Health Approaches

- Mind-body practices
  - Physical activity
  - Yoga
  - Guided imagery
  - Massage
  - Acupuncture
  - Mindfulness
Study #3: Aim

Test the effects of a guided imagery intervention on maternal stress (perceived stress), related symptoms (fatigue, anxiety) in pregnant African American women beginning early in the second trimester
Methods

• Study Design & Setting
  – 12 week prospective longitudinal repeated measures RCT with 2 groups (GI and usual care
  – Community obstetrical practices

• Sample
  – 72 pregnant African American women at 14-17 weeks gestation
  – Inclusion criteria: > 18 yo, no major obstetrical or medical complications
Perceived Stress Scale

$p = <0.05 \ @ \ 8 \ weeks$
NRSS-GI Group

$p = <0.0001$
NRSS-GI and Usual Care

$p = 0.0191$
Anxiety

$p = <0.05$ @ 8 weeks
Brief Fatigue

![Graph showing Brief Fatigue levels across baseline, week 8, and week 12 for GI and UC groups.](image)

- **Baseline**
- **Week 8**
- **Week 12**

**p = <0.05 @ 8 weeks**

Conclusions

• Significant reduction in perceived stress scores in GI group compared to UC group at 8 weeks
• In the GI group, significant reduction in the weekly means of the post-GI compared to pre-GI NRSS scores
• Significant reduction in the weekly means of the post GI compared to UC NRSS scores
• Significant reduction of anxiety and fatigue scores in GI group compared to UC
• Participants found in helpful in coping with their stress and minimizing its negative effects
Future Studies

• Stress coping interventions can be delivered using mobile technology
  – Current Study: A Pocket Computer Delivered Stress Coping Intervention for Hospitalized Pregnant Women at High Risk for Preterm Birth (PI: Jallo; funded by VCU SON)

• Maternal stress is associated not only with negative pregnancy and birth outcomes but also may have negative consequences for fetal neurobehavioral development, and consequently, child outcomes.
  – Potential upcoming study: effects of Wellness mobile app on maternal and infant outcomes (PI: Jallo; pending)
Future Studies (cont)

• Yoga may be integrated into prenatal care programs
  – Current Study: Centering Pregnancy Care + Yoga
    (PI: Kinser; funded by STTI/SNRS)

• Women can be empowered to engage in self-management of chronic depressive symptoms in pregnancy
  – Current Study: nurse-patient partnership for enhancing awareness of symptoms and engagement in mindful physical activity
    (PI: Kinser; funded by National Institute of Child Health & Human Development)
QUESTIONS?

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