Referrals to Integrated Perinatal Mental Health Services: Impact of race, poverty, and pregnancy complications

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What is PROMISE?

- Perinatal Resource Offering Mood Integrated Services & Evaluations (PROMISE)
- Provides integrated behavioral health services to patients who are seen UCHealth’s 5 prenatal clinics
- Offers behavioral health interventions to expectant and new mothers up to 6 months post-partum
- Screen patients for depression, anxiety, thoughts of suicide and bipolar disorder, and trauma

- **Treatment Options**
  - In-clinic consultation and assessment
  - Therapy
  - Medication evaluation and management
Why integrated care?

- 67% of people with a behavioral health disorder do not get behavioral health treatment
- 30-50% of patient referrals from medical provider to an outpatient behavioral health clinic do not make the first appointment
- Two thirds of medical providers report
  - not being able to access outpatient behavioral health for their patients
  - shortages of mental health care providers
  - health plan barriers
  - lack of coverage or inadequate coverage were all cited by primary care providers as critical barriers to mental healthcare access
Providers in Clinic

Prescribers:
Psychiatry MD
Ob/Gyn MD

Certified Nurse Midwife: CNM

Registered Nurse: RN/lactation consultant

Psychologist - PsyD/PhD

Licensed Clinical Social Worker LCSW
Background

- Up to 20% of women in the U.S experience perinatal depression, anxiety, and other mood disorders
- 25.7% of women who had a history of mood and anxiety disorders, had an increased risk of developing gestational diabetes

COVID 19
- Increased rates anxiety/depression in the perinatal period
- 37% reported clinically relevant depression symptoms
- 57% reported clinical symptoms of anxiety

Pregnancy Complications

- Older age or adolescent
- Diabetes
- Multiple pregnancy
- High blood pressure
- Thrombophils
- BMI
Question:
- Which patients were referred to PROMISE Clinic and did providers refer equitably across demographic factors?
- What were the rates and type of pregnancy complications for patients referred for treatment?

Hypothesis:
- Increased pregnancy complications among perinatal women referred for integrated behavioral health treatment
- Differences across demographic groups in medical provider referrals to PROMISE Clinic

Objectives:
- Examine pregnancy complications of patients referred to PROMISE within 4/20/20 - 9/20/20
- Determine the differences in health equity, provider behavior, and PROMISE behavior with perinatal women
Methods

- Clinics Studied: 5 prenatal clinics affiliated with the University of Colorado Hospital
- PROMISE Clinic: integrated behavioral health program
- Study Design: Electronic medical record review of patients referred to PROMISE Clinic during 4/20/20 - 9/20/20
- Analysis: Frequency counts and Chi-Squares
## Results: Demographics

<table>
<thead>
<tr>
<th></th>
<th>Prenatal Clinics (N=1,312)</th>
<th>Referred to PROMISE (N=167)</th>
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<tbody>
<tr>
<td>Race (Black)</td>
<td>215 (16.39%)</td>
<td>34 (20.36%)</td>
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<tr>
<td>Race (White)</td>
<td>688 (52.44%)</td>
<td>79 (47.31%)</td>
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<tr>
<td>Race (Native American)</td>
<td>7 (0.53%)</td>
<td>3 (1.8%)</td>
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<tr>
<td>Race (Asian/Pacific Islander)</td>
<td>118 (9.0%)</td>
<td>4 (2.40%)**</td>
</tr>
<tr>
<td>Race (Other/multiple race)</td>
<td>370 (28.2%)</td>
<td>46 (27.54%)</td>
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<tr>
<td>Ethnicity (Hispanic)</td>
<td>381 (29.04%)</td>
<td>49 (29.34%)</td>
</tr>
<tr>
<td>Public Insurance</td>
<td>579 (44.13%)</td>
<td>96 (57.4%)**</td>
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</tbody>
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** = p < 0.01
Results: Pregnancy Complications

- None: 72%
- Multiple Births: 10%
- Diabetes: 6%
- Pre-e/PIH, HELP Syndrome: 4%
- Advanced maternal age: 3%
- Demise/Fetal Anomalies: 3%
- Other: Obesity, pelvic floor prolapse, uterine infection, adolescent, anemia, heart condition, hyperemesis
Discussion

- 12.7% of prenatal patients referred for Integrated Behavioral Healthcare (IBH) treatment
- Differences in PROMISE referral rates for Asian patients and differences for patients with public insurance is consistent with the literature
  - referral rate for publicly insured patients
  - referral rate for Asian women
- Studies of Asian patients indicate stigma around mental health is widespread and preference for seeking help from friends and family
- 50% of perinatal women living in poverty have PMAD symptoms
- 6-10% of pregnancies have PIH
- 11.9-18.6% diagnosed with GDM
Implications

- Analyze additional demographics of referred patients to better understand prenatal provider referral patterns
- Study how PMAD affects pregnancy complications during/after birth
- Make changes in clinical practice so referrals are better aligned with patient needs
- Statistical significance for pregnancy complications couldn’t be determined; additional analyses needed
Acknowledgement

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Questions?