Substance Use and Depression in Postpartum Women

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Today’s Talk

- Background
- Methods
- Results
  - Substance Use Prevalence among Postpartum Women;
  - Postpartum Depression and Substance Use among Adults;
  - Postpartum Depression and Substance Use among Adolescents.
- Discussion
  - Treatment;
  - Screening and Referrals.

The Problem

2002-2003 Substance Abuse Prevalence

<table>
<thead>
<tr>
<th>Women aged 15-44 years</th>
<th>Binge Alcohol Use*</th>
<th>Illicit or Nonmedical Rx Drug Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Pregnant/Postpartum</td>
<td>23.8%(^1)</td>
<td>10.6%(^1)</td>
</tr>
<tr>
<td>Pregnant</td>
<td>4.1%(^2)</td>
<td>4.3%(^2)</td>
</tr>
<tr>
<td>Postpartum</td>
<td>14.9%(^3)</td>
<td>8.5%(^3)</td>
</tr>
</tbody>
</table>

*Blood alcohol concentration (BAC) levels are >0.08 g/dL, which usually occurs after about 4 drinks within 2 hours for women.

Period of Vulnerability

- Mental health issues often go overlooked during pregnancy and in the postpartum period.\(^6\)\(^5\)
- Depression correlates with substance use and disorders via multiple processes.\(^6\)\(^7\)
- Women with postpartum depression may be at greater risk for substance use compared to postpartum women without similar depression.

Postpartum Depression

- A moderate to severe depression occurring within a year of giving birth;
- Affects approximately 10-15% of all women.\(^9\)
- Thought to result from hormonal changes, psychological adjustments, and fatigue.\(^3\)
Postpartum Depression

- Adolescents may be particularly vulnerable to postpartum depression
- Factors associated with postpartum depression in adolescents include:
  - Age,
  - Hispanic Race,
  - Stress,
  - Perceived Familial Support...


Examples of Adult and Adolescent Risks

- Limited social support;
- History of depression, especially in pregnancy;
- A partner experiencing poor mental health;
- Young age;
- History of substance abuse.

A Critical Time

- Postpartum substance use and depression increase risk of child neglect and abuse;
- The postpartum period is transitional and a critical time to intervene;
- Mothers with past substance use problems may be especially vulnerable to recidivism.

Methods

- We identified 23 studies published from 1999 to 2012;
- Eleven focused on adults and twelve on adolescents;
- For a full discussion of methods, please see Chapman and Wu, 2013a and b.

Alcohol Use

- A standard drink contains ~0.6 fluid ounces of alcohol.
- Problem drinking is characterized by heavy or binge drinking.

Prevalence of Alcohol Use

- Problem drinking ranged from 1.5% - 8.4% among postpartum women;
- Lower than among those neither pregnant nor postpartum (7.2%-25.8%);
- Higher than among pregnant women (0.02%-3.2%);
- Postpartum drinkers were characterized by being white and low-income;
- Correlates of postpartum problem drinking included being unmarried, smoking cigarettes, and being unemployed.
Alcohol Use and Breastfeeding

- While drinking responsibly in the postpartum period may not be a cause for concern, breastfeeding can complicate this issue;
- The American Academy of Pediatrics recommends restricting alcohol consumption when lactating;
- Myths about the benefits of alcohol consumption while breastfeeding persist.

Alcohol Use and Breastfeeding

- Breastfeeding studies suggest breast feeding may be protective against risky drinking;\textsuperscript{24,25}
- However studies also find that when compared to nursing mothers and women who never nursed, women who weaned early drank most often and reported the most binge drinking.\textsuperscript{25}

Prevalence of Illicit Drug Use

<table>
<thead>
<tr>
<th></th>
<th>Any Use in the Past 30 Days\textsuperscript{23}</th>
<th>Postpartum</th>
<th>Pregnant</th>
<th>Not Pregnant nor Postpartum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana/Haish</td>
<td>4.6%</td>
<td>2.8%</td>
<td>7.3%</td>
<td></td>
</tr>
<tr>
<td>Polydrug Use</td>
<td>3.9%</td>
<td>1.4%</td>
<td>6.6%</td>
<td></td>
</tr>
<tr>
<td>Psychotropics</td>
<td>2.0%</td>
<td>1.3%</td>
<td>4.0%</td>
<td></td>
</tr>
<tr>
<td>Cocaine (B &amp; Ck)</td>
<td>0.6%</td>
<td>0.3%</td>
<td>1.2%</td>
<td></td>
</tr>
</tbody>
</table>

Illicit Drug Use and Breastfeeding

- There is a need for studies that address breastfeeding among drug using postpartum women.
- Drugs in breast milk may harm infants and negatively impact mother/child relations.

Illicit Drug Use

- Drug use was higher among postpartum women than pregnant women but lower than among non-pregnant/non-postpartum women
- Marijuana, non-medical Rx drug, and cocaine use were highest among Whites, followed by Blacks, and then Hispanics;\textsuperscript{21-23}
- However, odds of drug use among Black new mothers did not differ from Black women neither pregnant nor postpartum.\textsuperscript{23}

To Recap

- During its peak period postpartum depression may occur in up to 14.5% of new mothers;
- Clinical and epidemiologic studies have shown that substance use and depressive disorders are risks for one another;
- We found five studies that addressed postpartum depression and substance use or abuse.
Postpartum Depression & Substance Use among Adults

Bryan et al., 1999

- Of the 3.7% of new mothers who displayed depressive symptoms, 20% had a history of substance abuse;
- Only 4.6% of new mothers without depressive symptoms reported a similar history of substance abuse;
- Prenatal drug use was also higher among those with postpartum depressive symptoms (46.7%) when compared to those without (16.3%).

Postpartum Depression & Substance Use among Adults

Pajulo et al., 2001

- Compared to 12 women without a history of substance use, postpartum depressive symptoms were higher among 12 new Finnish mothers in treatment for substance use from 1994-1995 (8% vs. 25% at 3 months and 8% vs. 42% at 6 months);
- Sample size limited usefulness of findings.

Postpartum Depression & Substance Use among Adults

Homish et al., 2004

- Postpartum alcohol use positively associated with depressive symptoms, cigarette use, and binge drinking in any of the three trimesters.

Postpartum Depression & Substance Use among Adults

Salisbury et al., 2007

- Depressive symptoms were prevalent among 385 women who used cocaine prenatally (19.7%);
- Prenatal cocaine users with depressive symptoms were more likely than those without depressive symptoms to report postpartum cocaine use (26.3% vs. 14.3%).

Postpartum Depression & Substance Use among Adults

Wilton et al., 2009

- 38.7% of postpartum alcohol users indicated a high level of depressive symptoms at 6-months postpartum;
- Alcohol use at baseline or six-month follow-up did not correlate with depressive symptoms;
- However, level of depressive symptoms were significantly reduced among those who received a brief alcohol intervention.

Postpartum Depression & Substance Use among Adults

Synthesis of Findings

- Identified studies focused predominantly on socially marginalized populations and on women with substance use history;
- However, they found prevalent postpartum depressive symptoms among these women (19.7%-46%); 16, 28
- And women with higher depressive symptom scores were more likely than those with lower scores to engage in alcohol or illicit drug use. 16, 28
What It Means

- Findings suggest that women with postpartum depressive symptoms are more likely to use substances than new mothers without similar symptoms.
- Women with a history of substance abuse also appear more likely to experience postpartum depressive symptoms.
- Postpartum depressive symptoms and substance use may influence each other, resulting in adverse consequences.

Adolescents

- There is no acceptable substance use for this age group.
- Adolescent studies differed from studies of adult women.

Adolescents

- Among adolescent mothers, substance use significantly increased in the postpartum period.\(^\text{18}\)
- Substance use was more prevalent among adolescent mothers compared to the general population of adolescent girls.\(^\text{18}\)

Adolescents

- Only Barnett et al. (1995) specifically examined postpartum depression among adolescent mothers;
- Postpartum alcohol (24%) and drug use (22%) were prevalent;
- Odds of any alcohol or illicit drug use at 4 months postpartum were 3.3 times higher for those with high depressive symptom scores compared to those with lower scores.

Adolescents

- Alcohol and marijuana were the substances used most often.\(^\text{18}\)
- Substance use was disproportionately higher among girls with a history of sexual abuse, a drug-using boyfriend, a low self-worth, and depression.\(^\text{18}\)
- Psychological distress and low self-esteem appeared to influence continued use.\(^\text{18}\)

Adolescents

- Adolescent girls were not a homogeneous group;
- It appeared that some adolescent mothers were more prone to difficult life trajectories than others and better classification is needed for more targeted prevention efforts.\(^\text{18, 31}\)
Adolescents

- Problem Behavior Theory: Problem behaviors cluster because they may serve the same purposes socially, developmentally, or psychologically or are the manifestation of similar underlying factors.

- Self-Medication Hypothesis: Adolescent mothers may self-medicate to deal with mental distress or illness or feelings associated with things, such as low self-esteem.

Adolescents

- Assisting new adolescent mothers refrain from substance use is imperative, as

  - Substance use remained prevalent and relatively stable as girls transitioned to adulthood, with rates much higher than the general population.18

Treatment

- Women often enter substance abuse treatment to keep their children;

  - Specific postpartum substance abuse treatment is often lacking;

  - In the 1990s researchers began to integrate infant and early-childhood parent training into programs for recent mothers;

  - Today, researchers are exploring how to incorporate strengthening mother/child bonds as part of treatment.

Treatment

- Research also suggests potential success for treating depression and co-occurring substance abuse together;

  - Kuo et al. (2013) explored the treatment desires and needs of 18 pregnant and postpartum women with depression and in substance use treatment;32

  - Women viewed social support and imperative to dual recovery.32

Who Can Screen and Intervene

- Obstetricians (postpartum care);

- Pediatricians (well-baby checks);

- Family Physicians (postpartum and well-baby checks);

- Public Health Nurses;

- Neonatal Care Nurses;

- WIC Providers;

- Lactation Consultants;

- Parents as Teachers;

- Anyone in Contact with New Mothers...

Screening and Intervention

- Multiple intervention models exist (additional research is needed on which work best in this population);

  - Briefly screening women can identify those at risk of misusing substances and allow for appropriate referral.
Screening and Intervention

- Postpartum depression and substances abuse can affect anyone;
- However, women identified as possibly having increased risk were:
  - Those with limited social support,
  - Those with a history of depression or a depressed partner,
  - Those with a history of substance abuse,
  - Adolescents (particularly older adolescents),
  - Women who experienced difficulties with breastfeeding,
  - Women who were socially or economically marginalized, and
  - Women with low self-worth.

Screening Tool
- There is no optimal screening tool identified for determining substance use in pregnancy;\(^31\)
- Maternal interviews asking open-ended, non-judgmental questions are more likely to elicit disclosure of perinatal substance use;\(^5\)
- Examples of questionnaires include the T-ACE, TWEAK, and ALPHA.\(^31\)
  - T-ACE (http://www.mentalhealthamerica.net/take-care-of-yourself/take-ace-and-take-care-
    of-yourself.html)
tweak psy.html

Questions

Works Cited