Partner Incarceration and Maternal Substance Use: 
Investigating the Mediating Effects of Social Support and Neighborhood Cohesion

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INTRODUCTION

• The United States is responsible for the highest incarceration rate globally.
• Collateral consequences of incarceration extend beyond those incarcerated and can affect:
  • Community health
  • Chosen romantic partners or family unit
  • Partner incarceration experience of a primary romantic partner being incarcerated
  • Familial disruption could influence rates of substance use, degree of social support, and perceptions of neighborhood cohesion

AIMS

1. Explore the impact of partner incarceration on maternal substance use
2. Investigate the potential mediating role of social support and neighborhood cohesion between partner incarceration and maternal substance use

METHODS

SAMPLE

• This longitudinal analysis includes data from the Fragile Families and Child Wellbeing Study (FFCWS)
• Sample restricted to biological mothers who completed survey at year 3 (N=2890)

MAIN EXPOSURE

• Partner incarceration (yes vs. no) at year 3

MAIN OUTCOME

• Substance use in past year (yes vs. no) at year 5, 9, and 15
  • Includes marijuana and illegal drugs used without a prescription or in excess of prescription guidelines

MEDIATORS

• Used confirmatory factor analysis to determine factor loadings:
  • Counting on someone to loan $200, providing a temporary place to stay and providing emergency childcare load onto emergency social support
  • Counting on someone to loan $1000, co-sign a bank loan for $1000 and co-sign a bank loan for $5000 load onto financial support
  • Neighborhood cohesion measured via shortened Social Cohesion and Trust Scale

STATISTICAL ANALYSIS

• Multilevel modelling used to estimate association between partner incarceration and substance use, to account for longitudinal data
• Mediation analyses used to investigate social support and neighborhood cohesion
• Assessed social support and neighborhood cohesion as mediators at year 5 and year 9, with substance use lagged one wave

RESULTS

Half of the participants report partner incarceration, <10% report substance use

The final analytical sample included 2246 participants. Nearly half of the respondents (42.7%, N=958) reported experiencing partner incarceration. Within the sample at year 3, 7.3% (N=163) reported using substances; among those who used substances, 57.7% (N=94) experienced partner incarceration.

Odds of substance use 96% greater among people who reported partner incarceration

Substance use (yes vs. no) | 95% Confidence Interval
--- | ---
No | Ref
Yes | 1.96 (1.56, 2.46)

Adjusted for: education, employment, race, age and history of intimate partner violence; aOR: Adjusted Odds Ratio

Financial support at year 5 is the only significant partial mediator

** Figure 1. Mediation schematic demonstrating the mediating effect of financial support at year 5.
** Figure 2. Mediation schematic demonstrating the mediating effect of financial support at year 9.

<table>
<thead>
<tr>
<th>Partner Incarceration</th>
<th>aOR</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>Financial support (year 5)</td>
<td>1.72 (95%CI: 1.25, 2.38)**</td>
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</tr>
<tr>
<td>Financial support (year 9)</td>
<td>2.16 (95%CI: 1.40, 3.33)**</td>
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*** p-value < 0.0001, **p-value< 0.01, * p-value < 0.05

Adjusted for: age, income, education, employment, race, history of depressive and history of intimate partner violence.

Conclusions

Partner incarceration results in increased substance use, a relationship which is partially mediated by financial support. These findings should be taken in the context wherein incarceration rates have dramatically increased alongside policies enacted from the war on drugs. These findings further support the notion that collateral consequences of mass incarceration extend beyond the person who is incarcerated. Policymakers should consider the benefits of providing enhanced financial support to partners of those who are incarcerated, to abate substance use and improve health and well-being.