

Optimizing Care for the Mother-Infant Dyad: Understanding Unplanned Pregnancy Among Women with Opioid Use Disorder in Two Rural Maine Family Medicine Practices

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Introduction

Pre-conceptual planning is crucial for optimal health of the mother-infant dyad. Opioid use disorder (OUD) among women of reproductive age is a pressing health issue and pregnancy planning can significantly improve maternal and infant outcomes. Family medicine is uniquely positioned to improve the health of reproductive age women with OUD by providing both reproductive care and opioid dependence treatment.

The goal of this study is to better understand pregnancy planning and health characteristics among women with OUD in contrast to those without OUD in two rural Maine primary care practices.





Methods

Retrospective observational study of female patients

- 18-40 years of age
- Confirmed pregnancy between Jan 1, 2013 and December 31, 2015
- Received care at the Family Medicine Institute (FMI) or at Maine Dartmouth Family Practice (MDFP) located in central Maine

Data collection:

- Method of pregnancy diagnosis
- Gravidity and parity
- ICD-9/10 codes related to pregnancy and substance use
- Mental health diagnoses
- Health insurance
- Medication-assisted treatment (MAT) prescriptions and dosing

Two reviews performed on each medical record

- Initial chart reviews: family medicine residents, medical students, and undergraduate students
- Second review: senior residents and the principal investigator

Results

Work in progress:

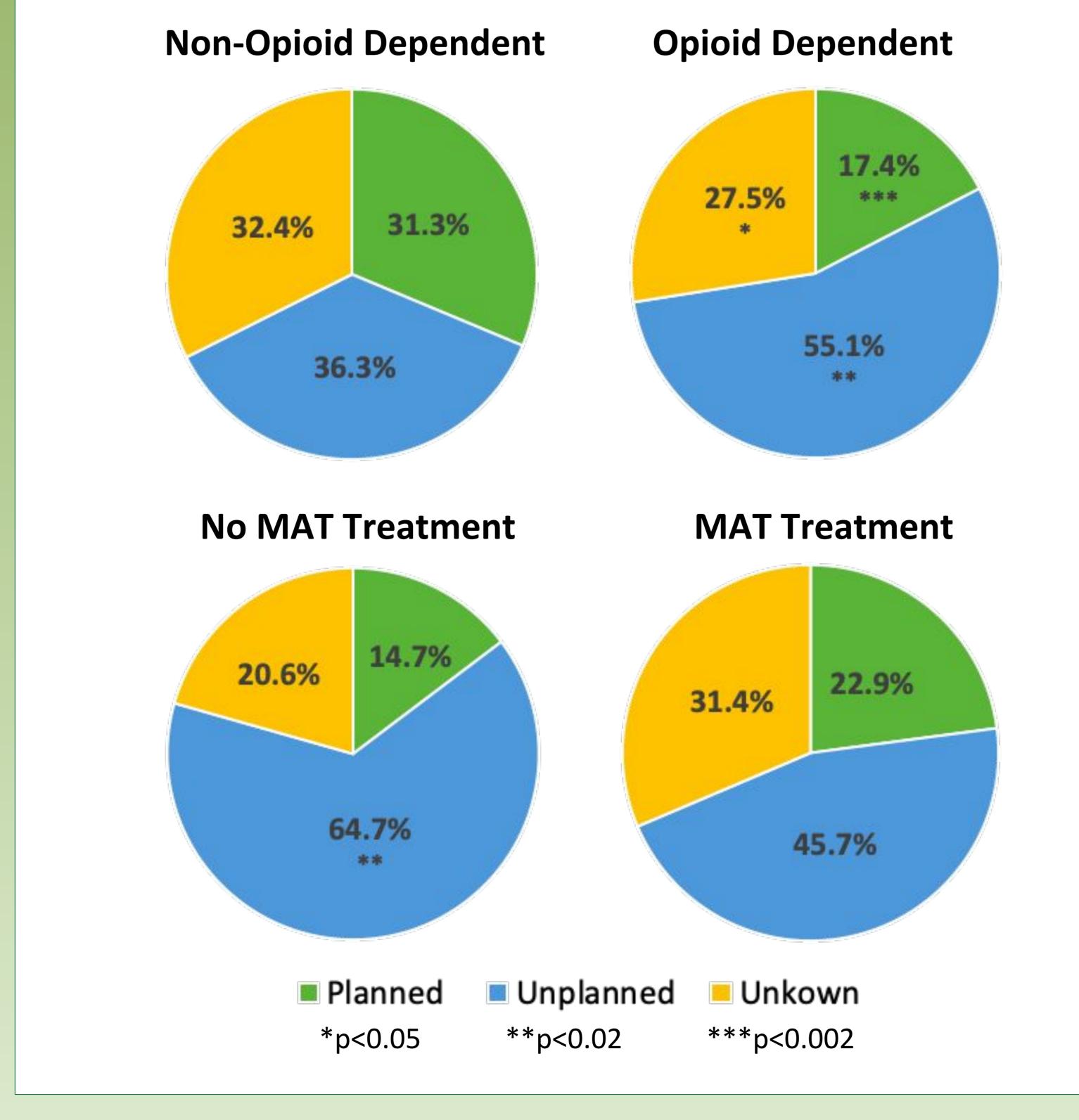
- To date 828 initial and 509 second reviews completed
- A sample of the data (N=250) has been analyzed

Data elements that have been analyzed:

- Gravidity and parity
- ICD-9/10 codes related to pregnancy and substance use
- Mental health diagnoses

Findings

- Significantly higher proportion of pregnancies among women with OUD were unplanned than among women without OUD (55.1% vs. 36.3%, P < 0.002)
- Significantly higher proportion of pregnancies were unplanned among women with OUD who were *not* receiving MAT at the time of a positive pregnancy test than among women who were receiving treatment (64.7% vs. 45.7%, P<0.02)



Discussion

High prevalence of unplanned pregnancy among women with OUD leads to downstream consequences:

- Impacts on the health of the mother-infant dyad
- Significant financial and social costs

Implications of this study:

- Lower prevalence of unplanned pregnancy in women in MAT suggests women with OUD may benefit from a more integrated approach to health care
- Family medicine is specially equipped to provide both reproductive care and opioid dependence treatment

Limitations:

- Not a randomized controlled trial
- Cannot make causal statements about OUD and pregnancy planning because of the retrospective design
- Study population consists only of patients from two family practices in a single rural Maine county, limiting generalizability
- Transcription from medical record could have resulted in inaccuracies or misclassifications

Next Steps

Continue chart reviews:

• Conduct a more complete analysis of the data set

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