

Factors Associated with Overdose Risk Among Perinatal Women with OUD

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Background

- Unintentional overdose is the leading cause of maternal death in the United States.¹
- In 2020, the economic burden of drug overdose exceeded \$800 billion.²
- Pregnant and postpartum women with Opioid Use Disorder (OUD) face elevated risk of overdose, particularly during the postpartum period.³
- Evidence on factors associated with heightened overdose risk in this population is limited
- Identifying risk factors is critical for developing targeted, effective interventions for perinatal women with OUD

Objectives

- 1) To identify commonly reported non-prescribed opioids used by perinatal women with OUD, and
- 2) evaluate factors associated with overdose risk in this population.

Methods

Study design: Cross sectional survey

Participants: Women with OUD who were currently pregnant, within 12 months post-partum, or had miscarried within the past 24 months

Recruitment period: July 2025- January 2026

Recruitment method: Eligible patients identified through Jefferson's electronic health record were contacted through MyChart messages, emails, phone calls, and texts.

Survey items

- Self-reported overdose in the past year
- Sociodemographic characteristics (e.g., race, housing status, annual household income)
- Types of commonly used non-prescribed opioids and addiction severity

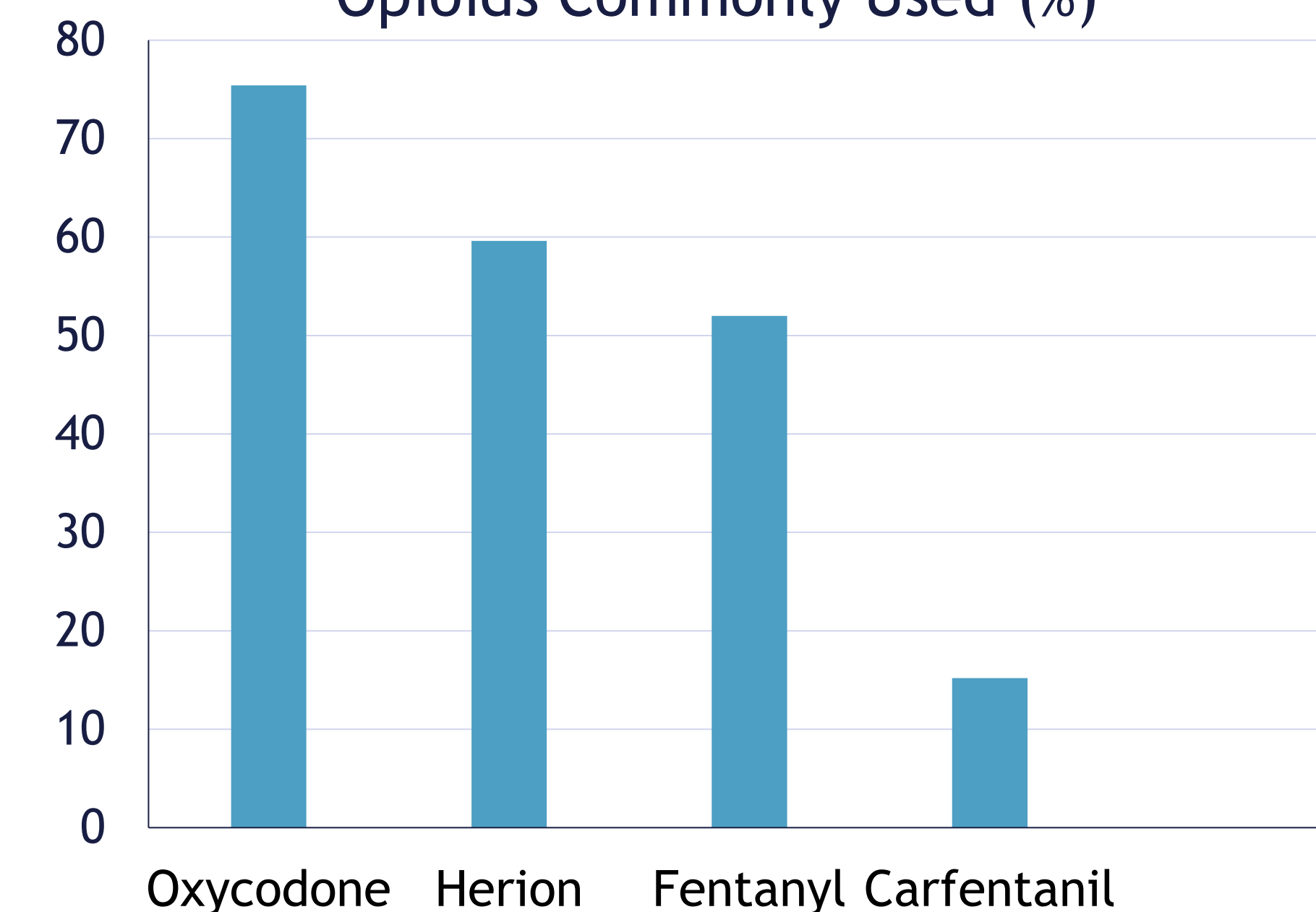
Data analysis

- Descriptive statistics were used to summarize participant characteristics and commonly misused opioids
- Multivariable statistics assessed associations between overdose history, addiction severity, and sociodemographic variables

Results

- Out of 198 participants 28 reported an overdose in the last 12 months
- Figure 1 shows the proportion of commonly used non-prescribed opioids
- Hispanic women were four times more likely to experience an overdose (OR=4.3, 95%CI=1.32-14.04, p=0.016)
- With addiction severity every additional unit increase was associated with higher overdose likelihood (OR =1.32, 95%CI=1.09-1.60, p=0.004)

Figure 1. Proportion of Non-Prescribed Opioids Commonly Used (%)



Implications and Next Steps

- Translate study findings into provider education to improve recognition of perinatal overdose risk across sociodemographic groups.
- Integrate risk stratification into postpartum care pathways for individuals with OUD.
- Inform health system-level strategies for overdose prevention during the postpartum period.

Future Studies

- Identify and test interventions aimed at reducing disparities in overdose risk, particularly among Hispanic women.
- Evaluate the cost-effectiveness of perinatal overdose prevention strategies to inform health system and payer decision-making.

Conclusions

1. Our findings highlight prevalent contemporary non-prescribed opioid types and key factors associated with overdose among perinatal women with OUD.
2. Interventions that address addiction severity and sociodemographic disparities, particularly among Hispanic women, may help mitigate overdose risks in this patient population.

References

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