

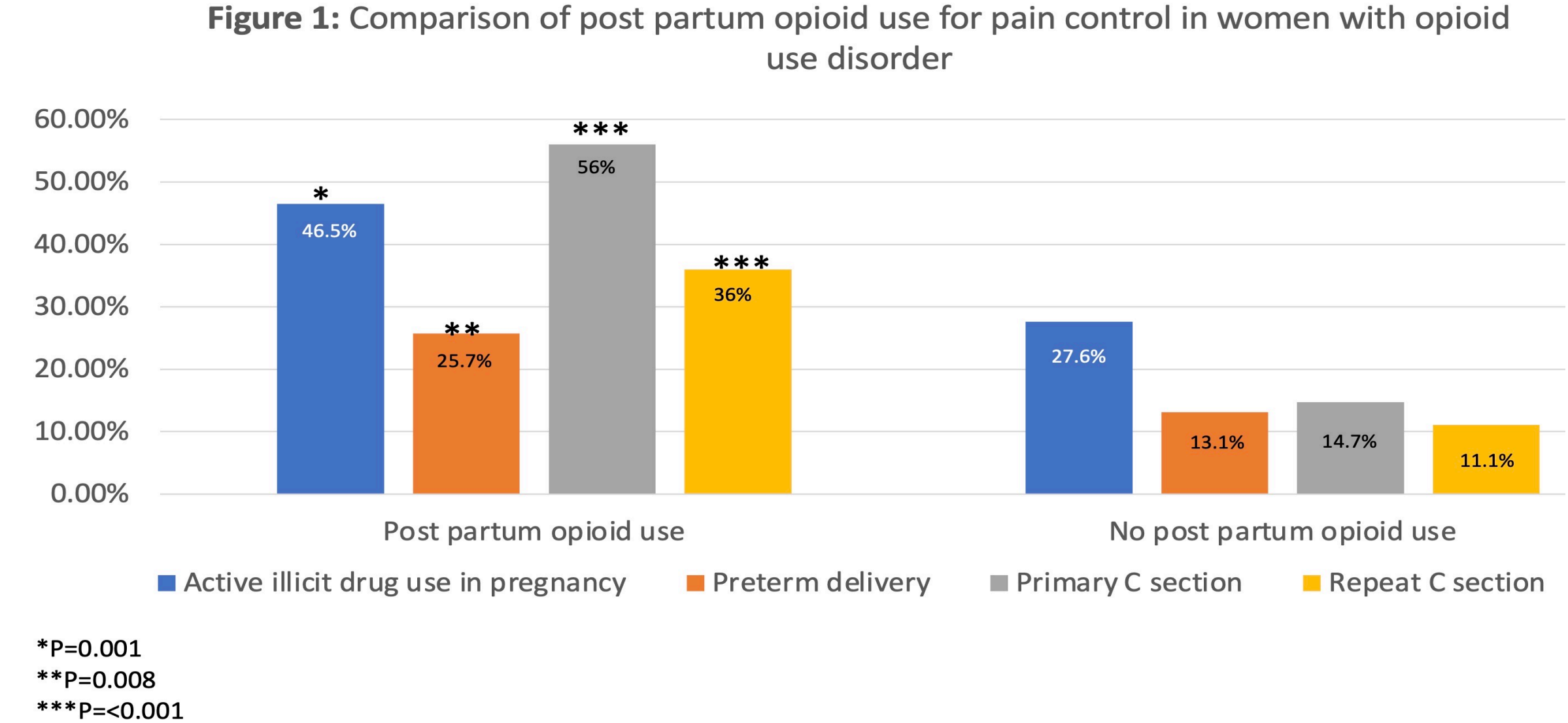
# Factors That Affect Opioid Use for Postpartum Pain Control in Women with Opioid Use Disorder

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## Tables & Figures

**Table 2:** Total daily dose of oxycodone (mg) requirement after delivery

Postpartum Day	Mean	SD	Median	Min	Max
Zero (n=47)	20.19	21.6	15	5	150
One (n=101)	34.93	21.35	30	5	120
Two (n=101)	38.17	18.66	40	5	90
Three (n=96)	34.25	20.17	30	5	120



**Table 1:** Impact of demographic, social, and clinical variables on postpartum opioid use for pain

	Postpartum Opioid Use		P value
	Yes (n=101)	No (n=229)	
Age (years)	31.5 (±5.1)	30.8 (±4.9)	0.241
BMI (kg/m2)	30.7 (±6.8)	30.2 (±6.1)	0.542
Maternal Comorbidities	26 (25.7%)	57 (24.9%)	0.979
Psychiatric Diagnosis	73 (72.3%)	160 (69.9%)	0.755
Caucasian/White	97 (96%)	208 (90.8%)	1.000
Unemployment	54 (80.6%)	112 (75.2%)	0.483
Medicaid Insurance	73 (77.7%)	172 (81.1%)	0.152
Tobacco use	55 (75.3%)	118 (70.7%)	0.557
History of Abuse	15 (15.6%)	28 (12.7%)	0.608
Opioid maintenance therapy			0.053
Methadone	31 (37.3%)	51 (25.1%)	
Subutex/Suboxone	52 (62.7%)	152 (74.9%)	
Polysubstance use	66 (68.8%)	143 (66.5%)	0.797
Active Drug Use in Pregnancy	47 (46.5%)	63 (27.6%)	0.001
Overdose in pregnancy	2 (2.1%)	3 (1.4%)	0.646
Preterm delivery	26 (25.7%)	30 (13.1%)	0.008
Mode of Delivery			<0.001
Primary C section (n=89)	56 (56%)	33 (14.7%)	
Repeat C section (n=61)	36 (36%)	25 (11.1%)	
Vaginal delivery (n=169)	8 (8%)	161 (71.6%)	

Data presented as mean +/- SD or N (%)

## Introduction

- Opioid dependence during pregnancy is a global public health problem. <sup>1,2</sup>
- Pregnant women with opioid use disorder (OUD) can be managed successfully with methadone or buprenorphine at specialized treatment centers. <sup>3</sup>
- Patients with OUD can be hypersensitive to pain, which can precipitate withdrawal. <sup>3,4</sup>
- Factors that influence the use of postpartum opioids for pain control in pregnant women with OUD are not well studied.

## Objective

To determine the impact of various demographic, social, and clinical variables on the use of postpartum opioids for pain in pregnant women with opioid use disorder.

## Methods

- Single center retrospective cohort study from January 2017 through March 2021
- Inclusion: Pregnant women with history of OUD
- Primary outcome: Use of postpartum opioids for pain management
- Need for, amount of, and type of opioid pain management (oral and IV) were collected for all patients.
- Demographic, social and clinical data were collected (Table 1)

## Results

- 330 patients were identified with OUD
- 89 patients (27%) on methadone and 204 patients (62%) on buprenorphine
- 101 (31%) required postpartum pain management with opioids, mostly with oral oxycodone
- Univariate analysis found cesarean delivery (P<0.001), preterm delivery (P=0.008), and active illicit drug use in pregnancy (P<0.001) to be significantly associated with postpartum opioid pain management. (Figure 1)
- Multivariable logistic regression analysis continued to find all three variables statistically significant (all P values <0.001)
- PPD#2 required the largest amount on average (38.17mg ±18.66)

Women with active drug use in pregnancy, preterm delivery or cesarean delivery were more likely to require postpartum opioids for pain control, with the highest dosage on postpartum day 2.



## Discussion

- Women with OUD may require more frequent and higher dosages of pain medication postpartum.
- Further research is needed to develop appropriate postpartum pain control regimens for this cohort of patients.

## References

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