Postpartum contraceptive choice and fulfilment in patients with opioid use disorder

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Introduction

- Rates of unintended pregnancy in patients with opioid use disorder (OUD) are higher than the general population
- Lower uptake of postpartum contraception is one of the reasons cited for this difference
- Only a small percent of patients with OUD choose highly effective contraception based on the Model of Tiered Contraceptive Efficacy.
- Aim: Examine the differences in postpartum contraceptive desires and rates of fulfillment in gravidas with and without OUD

Methods

- Retrospective cohort analysis of patients delivering at a single urban, tertiary care institution from 2012-2014
- Patients with and without OUD compared on clinical, demographic, and obstetric characteristics, adequacy of prenatal care (>5 visits), tier of desired contraception.
- Outcomes evaluated compared fulfillment of contraceptive plan, postpartum visit attendance, pregnancy within 365 days of index delivery.
- Tests of differences, univariable, and multivariable analysis performed

Results

- Of 8,454 deliveries, 200 (2.3%) were complicated by OUD
- Patients with OUD were more likely to be white and not receive adequate prenatal care
- After propensity score matching, patients with OUD were less likely to choose highly effective vs moderately effective contraception and were less likely to have their contraceptive plan fulfilled compared to women without OUD.
- There were no differences in the rates of postpartum visit attendance or pregnancy within 365 days between groups

Discussion

- Differences in rates of contraceptive fulfillment despite similar patient characteristics may be explained by system-level barriers faced by women with OUD.
- Patients should be counseled about contraceptive options in a non-coercive manner and concerns about highly effective contraception should be addressed.
- Clinicians should be mindful of addressing the contraceptive needs of these patients prior to and after delivery.

Despite **no differences** in **postpartum visit attendance**, patients with **opioid use disorder** are **less likely** to have their **contraceptive plan** fulfilled

Table 1: Clinical and demographic characteristics

	No OUD	OUD	p
n	8454	200	
Maternal age at delivery**	32.00 (2.83)	27.94 (4.50)	0.21
Parity			0.06
0	3181 (37.6)	58 (29.6)	
1	2362 (27.9)	65 (33.2)	
2+	2911 (34.4)	73 (37.2)	
Gestational age at delivery*	39.0 (38.6-39.0)	37.0 (36.5- 39)	0.23
Adequate prenatal care	6640 (80.9)	143 (74.5)	**0.03**
Route of Delivery			0.96
Cesarean section	2155 (25.5)	49 (25.0)	
Operative vaginal delivery	283 (3.3)	6 (3.1)	
Spontaneous vaginal delivery	6016 (71.2)	141 (71.9)	
Insurance			0.64
Medicaid	6222 (87.7)	160 (90.4)	
Medicare/other public	530 (7.5)	11 (6.2)	
None	346 (4.9)	6 (3.4)	
Race			**0.02**
White	2982 (40.0)	90 (51.1)	
Black/African American	3940 (52.9)	73 (41.5)	
Asian	188 (2.5)	5 (2.8)	
Other	337 (4.5)	8 (4.5)	
Married	1860 (22.5)	43 (22.2)	0.98
Attended College	2664 (32.8)	60 (32.3)	0.94
Planned method of contraception at hospital discharge			**0.03**
Highly effective *	2324 (27.5)	66 (33.0)	
Moderately effective **	3979 (47.1)	79 (39.5)	
Less effective ***	381 (4.5)	4 (2.0)	
None	1770 (20.9)	51 (25.5)	
Contraceptive plan fulfillment	6488 (76.7)	136 (69.4)	**0.02**
Postpartum visit attendance	5671 (67.1)	126 (64.3)	0.46
Short interval pregnancy	2276 (26.9)	51 (25.5)	0.71

Presented as counts (%) unless otherwise specified.
* sterilization and long acting reversible contraception
** injectables, pill, patch, and vaginal ring
*** barrier, fertility awareness, withdrawal, and abstinence

Table 2: Contraceptive outcomes for women with and without OUD

Outcome	Unmatched Univariable OR (95% CI)	Matched* Univariable OR (95%CI)
Plan – Highly effective vs. Moderately effective	0.57 (0.22-1.66)	**0.24 (0.05-0.93)**
Plan - Highly/Moderately effective vs. Less effective/None	1.22 (0.72-1.94)	1.26 (0.60-2.56)
Plan fulfillment	**0.69 (0.51-0.94)**	**0.64 (0.42-0.99)**
Postpartum visit attendance	0.88 (0.66-1.19)	1.08 (0.73-1.61)
Short interval pregnancy	0.93 (0.67-1.27)	1.13 (0.72-1.77)
Short interval pregnancy accounting for contraceptive provision	*NA*	1.15 (0.73-1.80)

*Matched on parity, race, marital status, college education, route of delivery, adequacy of prenatal care, and insurance