

Table: Analysis of factors associated with non-use of oxycodone during in-hospital stay for cesarean delivery under neuraxial anesthesia (N=1635)

	Use of Oxycodone (N = 1098; 67.2%)	Non-Use of Oxycodone (N = 537; 32.8%)	Univariable analysis		Multivariable analysis	
			P-value ^a	Crude OR (95%CI)	Adjusted OR ^b (95%CI)	P-value
Hospital			< 0.001			
Main academic hospital (N=1125; 68.8%)	790 (70.2%)	335 (29.8%)		0.65 (0.52-0.80)	0.68 (0.54-0.87)	0.002
Satellite hospital (N=510; 31.2%)	308 (60.4%)	202 (39.6%)				
Adherence to post CD order set	871 (79.3%)	462 (86.0%)	0.001	1.60 (1.21-2.13)	1.48 (1.10-1.99)	0.010
Patient demographics						
Maternal age (years)	32 (27-36)	32 (28-36)	0.28	1.01 (0.99-1.03)		
Race (data for N=1266)			0.032			
- White (N=560; 44.2%)	377 (67.3%)	183 (32.7%)		Ref.	Ref.	Ref.
- Hispanic (N=348; 27.5%)	226 (64.9%)	122 (35%)		1.11 (0.84-1.47)	1.09 (0.84-1.41)	0.53
- Black (N=280; 19.5%)	199 (71.1%)	81 (28.9%)		0.84 (0.61-1.15)	0.83 (0.63-1.11)	0.22
- Asian (N=80; 6.4%)	42 (52.5%)	36 (45%)		1.77 (1.09-2.85)	1.70 (1.08-2.66)	0.021
BMI (per 1 unit increase; data for N=1633)	32.0 (28.6-36.5)	31.2 (27.8-34.7)	< 0.001	0.97 (0.96-0.99)	0.98 (0.96-0.99)	0.025
Parity ≥ 1	662 (60.3%)	307 (57.2%)	0.249	0.88 (0.71-1.08)		
Gestational age (weeks)			< 0.001			
- ≥ 39 (N=1036; 63.4%)	653 (63.0%)	383 (37.0%)		Ref.	Ref.	Ref.
- 35 to 38 (N=500; 30.1%)	366 (73.2%)	134 (26.8%)		0.62 (0.49-0.79)	0.71 (0.55-0.91)	0.006
- ≤ 34 (N=99; 6.1%)	79 (79.8%)	20 (20.2%)		0.43 (0.26-0.72)	0.464 (0.27-0.79)	0.004
Preeclampsia (N=157; 9.6%)	127 (80.1%)	30 (19.1%)	< 0.001	0.45 (0.30-0.68)		
Tubal ligation (N=203; 12.4%)	150 (73.9%)	53 (26.1%)	0.035	0.69 (0.50-0.96)	0.66 (0.47-0.93)	0.019
Night time (N=658; 40.2%)	448 (68.1%)	210 (31.9%)	0.55	0.93 (0.75-1.15)		
Primary CD (N=865; 52.9%)	583 (67.4%)	282 (32.6%)	0.86	0.98 (0.79-1.20)		
Elective (no labor) vs intrapartum CD			0.008			
Elective CD (N=737; 45.1%)	498 (67.6%)	239 (32.4%)		Ref.	Ref.	

Intrapartum CD (N=551; 33.8%)	365 (66.2%)	186 (33.8%)				
- Labor duration < 10 hours (N=171)	106 (62.0%)	65 (38.0%)		1.28 (0.91-1.78)	1.15 (0.82-1.63)	0.42
- Labor duration 10-20 hours (N=257)	162 (63.0%)	95 (37.0%)		1.22 (0.92-1.62)	1.03 (0.76-1.39)	0.84
- Labor duration > 20 hours (N=123)	97 (78.9%)	26 (21.1%)		0.56 (0.36-0.88)	0.49 (0.31-0.78)	0.003
Anesthesia			0.99			
- CSE (N=109; 6.7%)	73 (67.0%)	36 (33.0%)		Ref.		
- Intrapartum Epidural (N=545; 33%)	365 (67.0%)	180 (33.0%)		1.00 (0.65-1.55)		
- Spinal (N=981; 60%)	660 (67.3%)	321 (32.7%)		0.99 (0.65-1.50)		
Spinal clonidine (N=160; 14.7% of spinal/CSE)	117 (73.1%)	43 (26.9%)	0.107	0.73 (0.51-1.05)		

CD: cesarean delivery; CI: confidence interval; OR: odds ratio; Ref.: reference

Night time= CD between 5pm-7am (whether scheduled or not); spinal clonidine is given at the discretion of anesthesiologist (usually for repeat CD, BTL or patients deemed at higher risk for post-CD pain)

Results are expressed as median (25th-75th percentiles) or count (%).

^a P-values are from Chi-square or Wilcoxon tests.

^b Adjusted OR > 1 means that this factor is associated with greater likelihood of not using oxycodone

All predictors with a P-value in the univariate analysis ≤ 0.20 were entered in a logistic regression model. The relationship between continuous candidate predictors and the outcome was examined using the relationship between the predictor and the logarithm of the odds of the outcome. Continuous predictors were kept continuous unless a non-linear relationship was identified or categorized according to clinically relevant thresholds. Selection of variables used a backward procedure with a P-threshold of 0.05 for exclusion of variables.