

Predictors of Positive Postpartum Edinburgh Postnatal Depression Scale in Opioid Use Disorder

Lama Nouredine, MD¹, Anna Fuchs, DO¹, Mia Heiligenstein, MD¹, Richelle Fassler, BA¹, Omar Abuzeid, MD¹, Chaitali Korgaonkar-Cherala, MD¹, Nicole Iovino, MD¹, Kimberly Herrera, MD¹, David Garry, DO¹, Diana Garretto, MD¹, Cassandra Heiselman, DO¹

¹Stony Brook Medicine, Department of Obstetrics, Gynecology and Reproductive Medicine

Introduction

In the current opioid epidemic facing the United States, opioid use disorder (OUD) in pregnancy has become increasingly prevalent. ¹Women with OUD have a higher risk of developing postpartum depression, especially in the setting of pre-existing psychiatric comorbidities.²

Objective

The objective of this study is to determine the impact of various demographic, social, and clinical variables on the incidence of postpartum depression in women with OUD.

Methods

- **Retrospective single-site cohort study** of patients with a history of OUD who presented for prenatal care or delivery at a tertiary academic center between January 2017 and March 2021.
- The **primary outcome** is a positive Edinburgh Postnatal Depression Scale (EPDS) at the six-week postpartum visit (**PP-EPDS**), defined by a score >10.
- **Other variables** collected: Demographics, pregnancy behaviors, maternal and neonatal outcomes (Table 1).
- **Statistical tests used:** Fisher’s, Chi-squared, and t-tests, significance level of p-value < 0.05.

Results

- 360 patients identified with a history of OUD
- 115 (32%) women were compliant with their postpartum visit and received a PP-EPDS screen.
- 24 (20.9%) had a positive PP-EPDS and 91 (79.1%) had a negative score.
- 70 (45.2%) women had both a postpartum EDPS and an Initial Obstetrical Visit (NOB) EDPS screen. Among the 20 patients who had a **positive NOB EPDS**, 9 (50%) had a positive PP-EPDS vs 11 (21.2%) who had a negative PP-EPDS (OR 3.65, 95%CI 1.02-13.45, p=0.03) (Figure 1).
- No other factors significantly predicted a positive PP-EPDS (Table 1).

Discussion

- In women with opioid use disorder, a **positive screen for postpartum depression at the six-week postpartum** visit is significantly correlated with a positive depression screen at the beginning of the pregnancy.
- Given the high morbidity of postpartum depression, it is important for providers to identify patients at risk antenatally, implement interventions, and provide adequate support to prevent postpartum depression.

References

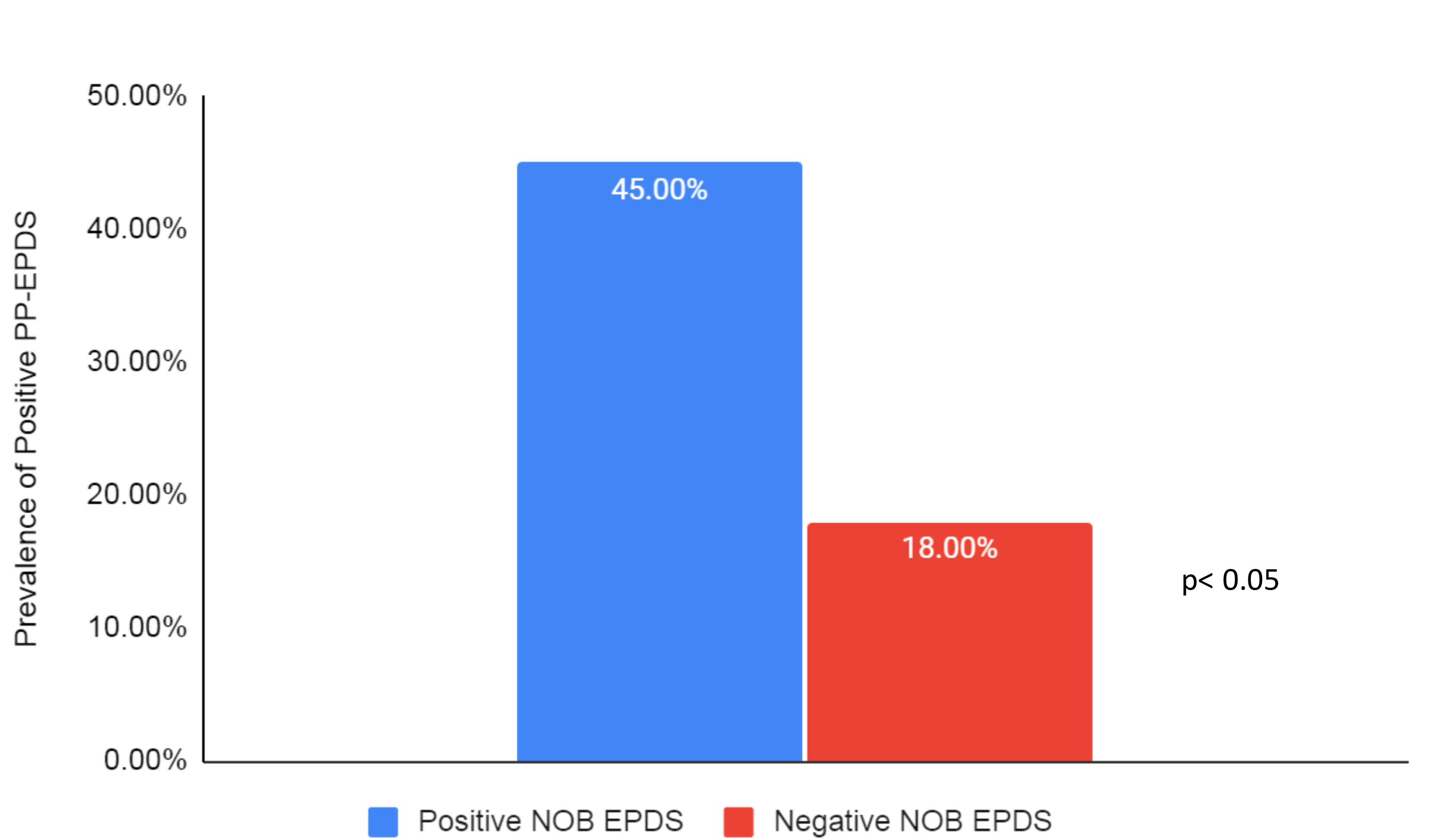
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Table 1: Variables Affecting Positive Postpartum Edinburgh Depression Scale in women with Opioid Use Disorder

Variable		PP- EPDS Positive	PP- EPDS Negative	p-value
NOB EPDS	Positive	9 (45.0%)	11 (55.0%)	0.033
	Negative	9 (18.0%)	41 (82.0%)	
Initiation of prenatal care (trimester)	First	19 (79.2%)	59 (66.3%)	0.019
	Second	1 (4.2%)	24 (27.0%)	
	Third	2 (8.3%)	1 (1.1%)	
Race	White/Caucasian	24 (100%)	87 (95.6%)	1.000
Employment status	Employed	4 (22.2%)	15 (24.6%)	1.000
	Unemployed	14 (77.8%)	46 (75.4%)	
Insurance Status	Medicaid	18 (90%)	69 (85.2%)	1.000
	Private	2 (10%)	10 (12.3%)	
Number of Prenatal Visits		12.0	11.5	0.752
Age (mean, years)		34.1	28.1	0.142
Preterm Delivery		8 (31.7)	16 (68.3%)	0.176
Pre-existing psychiatric diagnoses		21 (87.5%)	3 (12.5%)	0.273
Use of psychiatric medications		5 (19.2%)	21 (80.7%)	0.770
Active Drug Use in pregnancy		11 (31.4%)	24 (68.6%)	0.082
History of Maternal Abuse		4 (28.6%)	10 (71.4%)	0.479
History of Polysubstance Abuse		16 (21.6%)	58 (78.4%)	1.000
Active Illicit Drug Use in Pregnancy		11 (31.4%)	24 (68.6%)	0.082
Use of Opioid Maintenance Therapy		18 (22.0%)	64 (78.0%)	1.000
NICU Admission		9 (17.6%)	42 (82.6%)	0.957
Neonatal Abstinence Syndrome		6 (20.0%)	24 (80.0%)	1.000

Data Presented as N (%)

Figure 1. Prevalence of positive postpartum Edinburgh Postnatal Depression Scale according to Initial Visit Edinburgh Postnatal Depression Scale. *p< 0.05



In women with opioid use disorder, a positive screen for postpartum depression at six weeks postpartum is significantly correlated with a positive depression screen at the beginning of the pregnancy.

