

The Association Between Craving and Psychopathology Among Patients with Chronic Prescription Opioid Use

Daniel Arnaut¹, Joanne Salas¹, Lisa Matero², Brian Ahmedani², Lynn Debar³, Sarah Gebauer¹, Patrick J. Lustman⁴, Mark D. Sullivan⁵, Jeffrey F. Scherrer¹

1) Department of Family and Community Medicine, Saint Louis University School of Medicine, St. Louis, MO. 2) Center for Health Policy and Health Services Research and Behavioral Health Services, Henry Ford Health System, One Ford Place, Detroit, MI. 3) Kaiser Permanente Washington Health Research Institute, WA. 4) Department of Psychiatry, Washington University School of Medicine, St. Louis, MO. 5) Department of Psychiatry and Behavioral Science, University of Washington School of Medicine, Seattle WA

BACKGROUND

- Patients with chronic opioid use have an increased risk for developing psychopathologies¹
- Opioid medication craving common in this population
- Opioid craving has been associated with anxiety, depression and anhedonia^{2,3}

Objective: Determine if those with vs. without opioid craving, measured by participants reporting a high preoccupation with their opioid medication, were more likely to have comorbid depression, anxiety, PTSD, or anhedonia

METHODS

- **Data source:** Cross-sectional survey administered 11/2019 - 3/2021 from the baseline assessment of a prospective cohort study of chronic opioid use in non-cancer pain
- **Eligible Patients: (n=473)** had been using prescription opioids for 30-90 days and had not used opioids for at least 3 months prior to the current episode of opioid use
- **Instruments:** Major depression as assessed by SSAGA, anhedonia by SHAPS, PTSD by PC-PTSD-5, and anxiety by GAD-7
- **Confounding variables** – see handout (QR code below)
- **Analysis:** Bivariate unadjusted association between patient characteristics and low vs. high opioid preoccupation
- Multivariate logistic regression to estimate the association between high vs. low opioid preoccupation and depression, anhedonia, PTSD, anxiety

DISCLOSURES

- Declaration of interests: all authors report no conflicts of interest that could inappropriately influence this work
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REFERENCES

- 1) Scherrer J, Salas J, Copeland L, Stock E, et al. Prescription Opioid Duration, Dose, and Increased Risk of Depression in 3 Large Patient Populations. *Ann Fam Med.* 2016;14
- 2) Martel M, Dolman A, Edwards R, Jamison R, Wasan A. The association between negative affect and prescription opioid misuse in patients with chronic pain: The mediating role of opioid craving. *J Pain.* 2014;15(1)
- 3) Garland E, Brown S, Howard M. Thought suppression as a mediator of the association between depressed mood and prescription opioid craving among chronic pain patients. *J Behav Med.* 2016;39

RESULTS

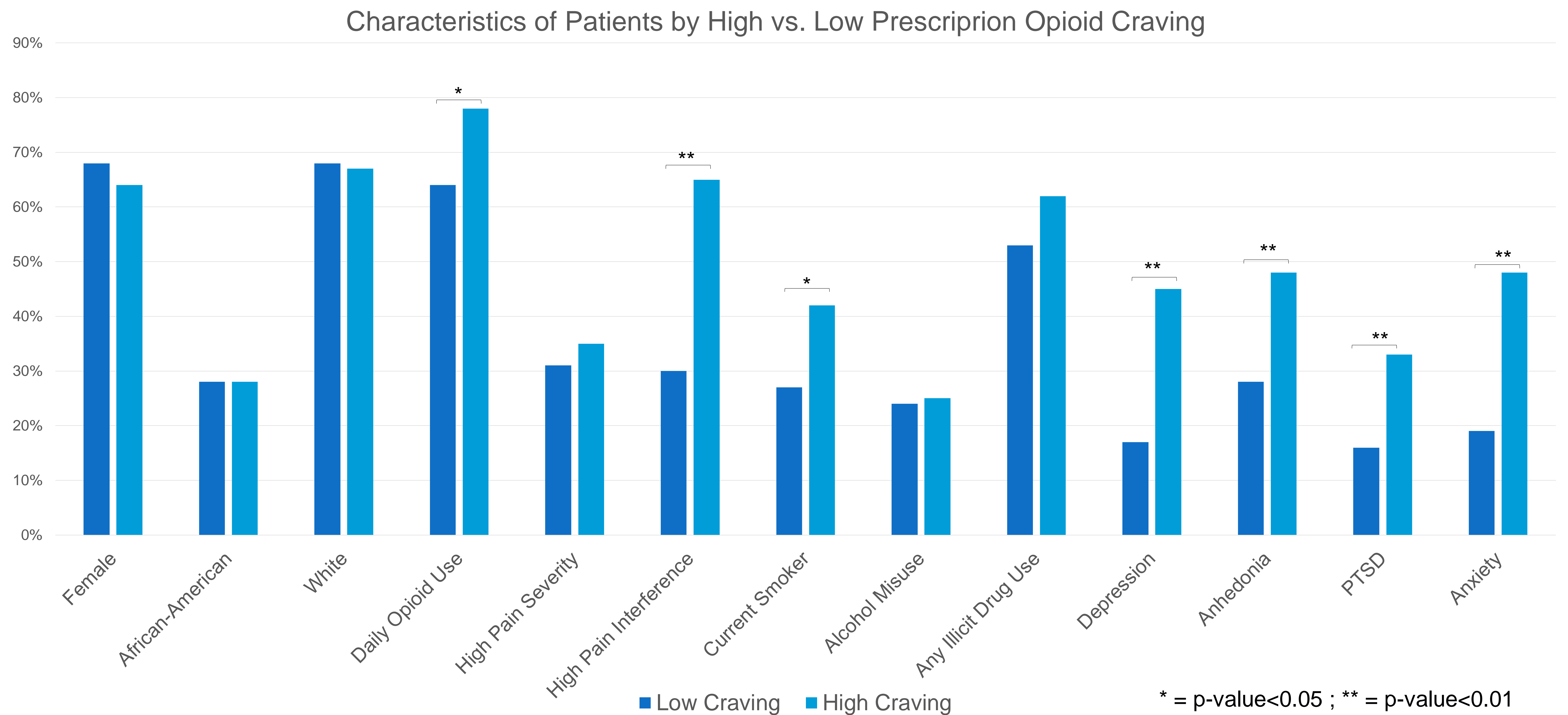


Table 1. Crude and adjusted logistic regression models estimating the association between craving for opioids and mental illness (n=473) with 95% CI

	Depression		Anhedonia		PTSD		Anxiety	
	crude	adjusted	crude	adjusted	crude	adjusted	crude	adjusted
High opioid preoccupation	4.03 (2.35-6.93)	3.06 (1.68-5.56)	2.36 (1.40-3.97)	1.71 (0.98-2.98)	2.61 (1.48-4.60)	2.08 (1.11-3.88)	3.89 (2.28-6.64)	2.93 (1.59-5.37)
Age		0.97 (0.96-0.99)		0.99 (0.98-1.01)		0.96 (0.94-0.98)		0.96 (0.95-0.98)
Female		1.88 (1.09-3.26)		1.13 (0.72-1.75)		1.95 (1.09-3.50)		1.28 (0.75-2.20)
Race								
White		1.00		1.00		1.00		1.00
African American		0.47 (0.26-0.85)		0.71 (0.44-1.15)		0.75 (0.42-1.34)		0.40 (0.22-0.72)
Other		0.74 (0.23-2.37)		0.62 (0.23-1.71)		0.94 (0.32-2.81)		0.50 (0.16-1.55)
Daily opioid use		0.76 (0.45-1.29)		1.18 (0.75-1.84)		1.23 (0.71-2.16)		1.03 (0.60-1.77)
High pain severity		1.03 (0.59-1.78)		0.95 (0.59-1.53)		1.34 (0.78-2.30)		2.07 (1.22-3.51)
High pain interference		2.79 (1.64-4.76)		2.27 (1.44-3.57)		1.94 (1.13-3.34)		3.98 (2.36-6.70)
Current smoker		1.16 (0.67-2.00)		1.27 (0.80-2.02)		1.58 (0.91-2.74)		1.29 (0.75-2.24)
Alcohol misuse		0.96 (0.55-1.70)		0.86 (0.53-1.40)		0.74 (0.40-1.38)		1.18 (0.66-2.11)
Any illicit drug use		2.08 (1.20-3.59)		1.20 (0.77-1.86)		0.89 (0.51-1.54)		0.82 (0.48-1.41)

CONCLUSIONS AND EXPECTED OUTCOMES

- Craving for prescription opioids is associated with depression, anxiety, PTSD, and anhedonia
- With 6-month follow-up data, we anticipate that opioid craving partly explains the risk for chronic opioid use for patients with psychopathology
- With such data, craving should be considered an important clinical marker of comorbid psychopathology in patients with long-term prescription opioid use and chronic pain informing the prescribing to and treatment of this population.