



Treatment History Among Patients with Recurrent Opioid Overdoses: A Multicenter Study

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Background

- Non-fatal overdoses increase the risk of a subsequent fatal overdose.¹
- Providing emergency care for non-fatal overdoses affords a key opportunity to engage the patient in treatment and improve patient outcomes.^{2,3}
- **Research Question:** What is the association between overdose history and engagement with addiction treatment services among patients who present to the emergency department after a clinically suspected opioid overdose?

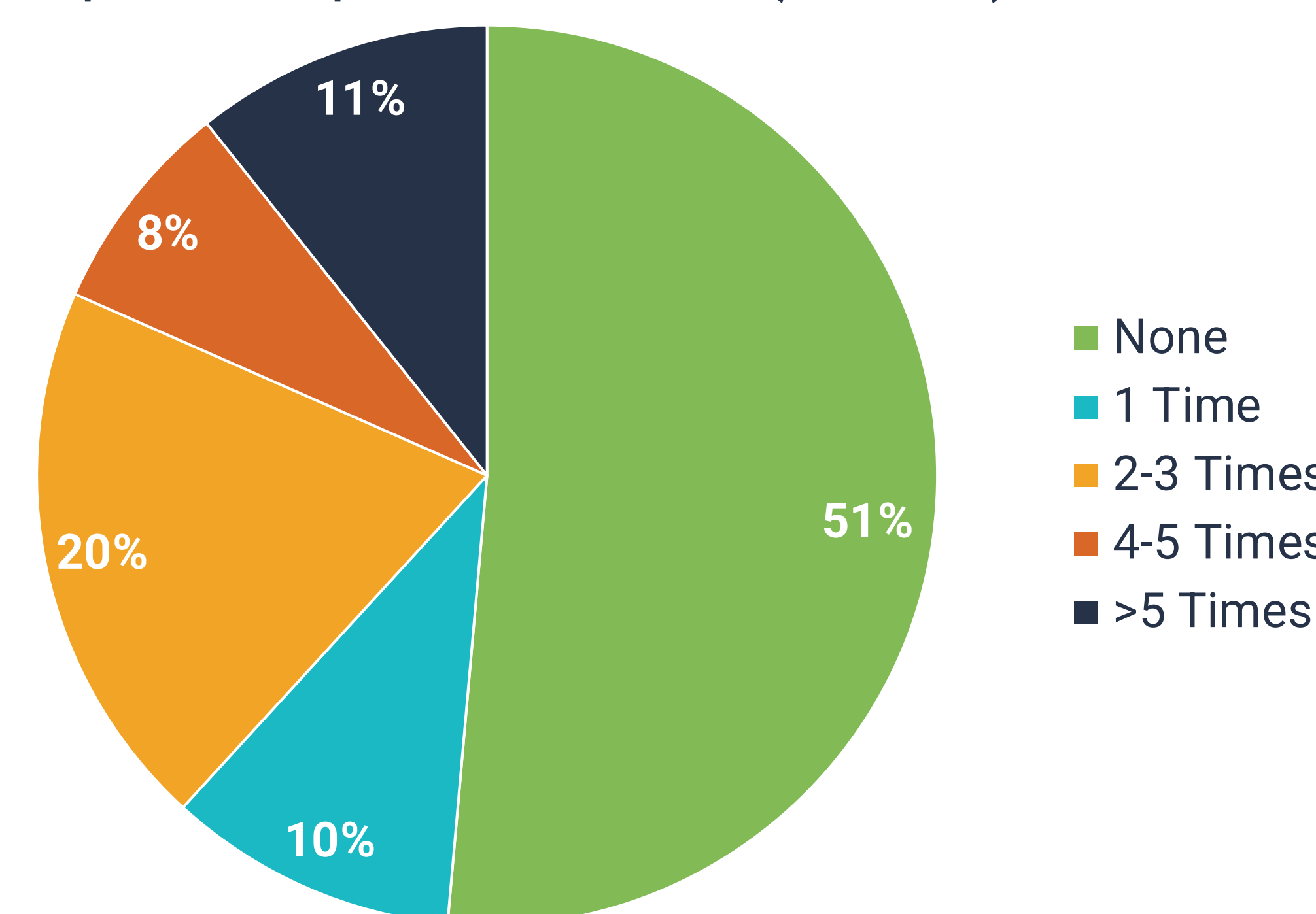
Methods

- The Toxicology Investigator's Consortium (ToxIC) Drug Overdose Toxico-Surveillance (DOTS) Reporting Program enrolled patients with severe or life-threatening opioid or stimulant overdoses at 17 U.S. sites between 2022 and 2024.
- This analysis included only those who presented after a clinically suspected opioid overdose.
- Data collection methods included chart reviews, structured patient interviews, and advanced qualitative and quantitative toxicology testing.
- The main outcome consisted of a composite measure of 1) Self-reported past 3-month use of medication for opioid use disorder (MOUD), and/or 2) Participation in adjunct behavioral addiction treatments such as therapy, counseling, psychiatric care, 12-step programs, or peer recovery support.
- Multivariable logistic regression was used to identify the association between overdose history and past 3-month addiction treatment.
- All participants provided written informed consent, and the study was approved by central and site IRBs.

Results

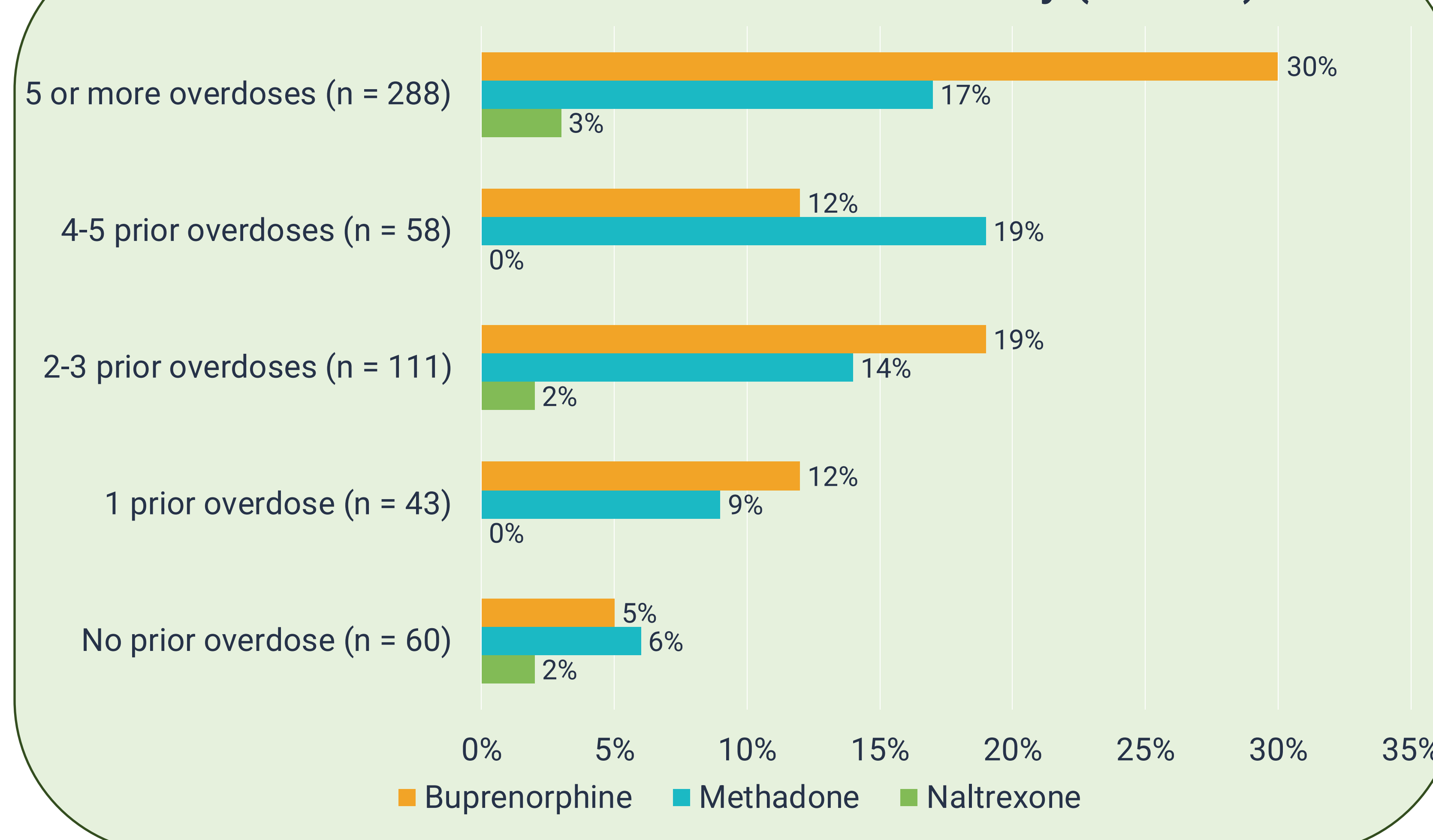
- Among the 997 patients enrolled, 689 (69%) clinically presented as an opioid overdose, and 560 (56%) completed the interview questions of interest.

Self-Reported Number of Prior Opioid Overdoses Requiring Naloxone among Patients Presenting to the ED after a Suspected Opioid Overdose (n = 560)



- Among those with prior opioid overdoses requiring naloxone, 127/272 (46.7%) reported past 3-month engagement in addiction treatment services and/or MOUD.

Past 3-Month MOUD and Overdose History (n = 560)



Results

Multivariable model of reporting past 3-month addiction treatment and overdose history

Variable	Adjusted Odds Ratio (95% Confidence Interval)
Age	1.00 (1.00, 1.00)
Sex	
Male	-
Female	1.00 (0.92, 1.09)
Race & Ethnicity	
Black	0.90 (0.82, 0.98)
White	-
Hispanic	1.00 (0.86, 1.15)
Other	0.86 (0.72, 1.02)
Number of Prior Overdoses	
0	-
1	1.23 (1.09, 1.40)
≥ 2	1.27 (1.17, 1.37)
Site Location	
Northeast	-
Midwest	0.80 (0.73, 0.88)
West	0.81 (0.73, 0.90)

Conclusions

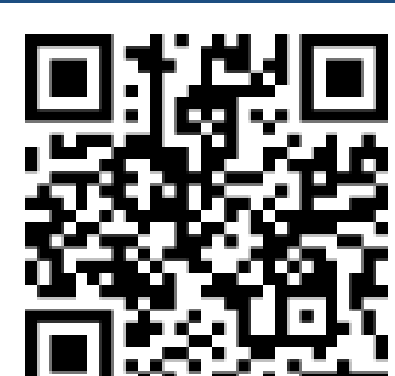
- One-third of ED patients with opioid overdoses reported receiving addiction-related treatment in the prior three months.
- Patients with ≥ 2 previous overdoses were more likely to report past 3-month addiction treatment.
- Black patients were less likely to have received behavioral therapy and/or MOUD.
- Despite receiving addiction-related treatment, patients are still at high risk for overdose.

Acknowledgments

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DOTS Study and see a
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