

At-risk opioid use following a trauma-related emergency department visit: The role of emergency department opioid analgesics

[B Punches](#)

[U Stolz](#)

[C E. Freiermuth](#)

[R M. Ancona](#)

[S McLean](#)

[R C. Kessler](#)

[K J. Ressler](#)

[K C. Koenen](#)

[S House](#)

[F L. Beaudoin](#)

[Christopher A. Lewandowski](#), *Henry Ford Health System*

[P L. Hendry](#)

[S Sheikh](#)

[P I. Musey](#)

[A B. Storrow](#)

[C W. Jones](#)

[R A. Swor](#)

[M C. Kurz](#)

[J P. Haran](#)

[M S. Lyons](#)

Recommended Citation

Punches B, Stolz U, Freiermuth CE, Ancona RM, McLean S, Kessler RC, Ressler KJ, Koenen KC, House S, Beaudoin FL, Lewandowski C, Hendry PL, Sheikh S, Musey PI, Storrow AB, Jones CW, Swor RA, Kurz MC, Haran JP, and Lyons MS. At-risk opioid use following a trauma-related emergency department visit: The role of emergency department opioid analgesics. *Academic Emergency Medicine* 2020; 27:S14.

Document Type

Conference Proceeding

Publication Date

7-2020

Publication Title

Academic emergency medicine

Abstract

Background and Objectives: Whether ED opioid prescriptions (Rx) lead to future problematic opioid use remains controversial and inadequately characterized. This study examines the relationship between ED opioid analgesics (via prescription (Rx) or ED administration) and self-reported opioid use during a 3-month period after a traumatic event. We hypothesized that ED opioid analgesic exposure would be associated with subsequent at-risk opioid use.

Methods: This retrospective cohort study secondarily analyzed data available from the AURORA multi-center (29 urban EDs), prospective, longitudinal cohort study which enrolled adult, trauma (psychological and/or physical) survivors. Patients who are not chronically using opioids and were discharged home or hospitalized for < 3 days were eligible for enrollment. Self-reported opioid analgesic use and pain scores were recorded at baseline, 2 and 8 weeks, and 3 months. We excluded from analysis those reporting any non-medical substance use (e.g., heroin, opiates) in the 30 days before enrollment and those with missing or incomplete opioid use/exposure or pain scores. We used multivariable logistic

regression to assess the relationship between ED opioid exposure and at-risk opioid use, defined as any non-medical opioid use after initial ED visit or opioid analgesic use at 3-month follow-up.

Results: Of 917 included subjects, at-risk opioid use occurred in 35/641 (6%) without an ED opioid analgesic exposure, 4/17 (24%) with ED opioid Rx only, 21/159 (13%) with ED opioid administration only, and 16/110 (15%) with both ED administration and Rx. In the multivariable model, at-risk opioid use was associated with ED opioid Rx only (OR 3.4, 95% CI 1.002-11.7), ED administered opioids only (OR 1.9, CI 1.1-3.5), and both ED administration and Rx opioid (OR 2.0, CI 1.001-3.9), controlling for patient age, Rx opioid use prior to enrollment, pain at initial ED visit, and moderate or severe pain at 3 months.

Conclusion: Exposure to ED opioids was associated with increased risk of potentially problematic opioid use within three months in a geographically diverse cohort of trauma patients. Study limitations prevent conclusions about causality and the degree to which ED opioid exposures were preventable.

Nonetheless, these results support the need for prospective study focused specifically on the long-term consequences of ED opioid analgesic exposure.

Volume

27

First Page

S14