



Short communication

Substance use and homelessness among emergency department patients

Kelly M. Doran^{a,b,*}, Neloufar Rahai^a, Ryan P. McCormack^a, Jacqueline Milian^a, Donna Shelley^b, John Rotrosen^c, Lillian Gelberg^d

^a Department of Emergency Medicine, NYU School of Medicine, 462 1st Avenue Room A-345, New York, NY, 10016, USA

^b Department of Population Health, NYU School of Medicine, 227 E. 30th Street, New York, NY, 10016, USA

^c Department of Psychiatry, NYU School of Medicine, One Park Avenue 8th Floor, New York, NY, 10016, USA

^d Department of Family Medicine, David Geffen School of Medicine at UCLA, Department of Health Policy and Management, UCLA Fielding School of Public Health, Office of Healthcare Transformation and Innovation, VA Greater Los Angeles Healthcare System, Los Angeles, CA, 90024, USA

ARTICLE INFO

Keywords:

Alcohol
Drugs
Overdose
Opioids
Homelessness
Vulnerable populations
Emergency service

ABSTRACT

Background: Homelessness and substance use often coexist, resulting in high morbidity. Emergency department (ED) patients have disproportionate rates of both homelessness and substance use, yet little research has examined the overlap of these issues in the ED setting. We aimed to characterize alcohol and drug use in a sample of homeless vs. non-homeless ED patients.

Methods: A random sample of urban hospital ED patients were invited to complete an interview regarding housing, substance use, and other health and social factors. We compared substance use characteristics among patients who did vs. did not report current literal (streets/shelter) homelessness. Additional analyses were performed using a broader definition of homelessness in the past 12-months.

Results: Patients who were currently homeless ($n = 316$, 13.7%) versus non-homeless ($n = 1,993$, 86.3%) had higher rates of past year unhealthy alcohol use (44.4% vs. 30.5%, $p < .0001$), any drug use (40.8% vs. 18.8%, $p < .0001$), heroin use (16.7% vs. 3.8%, $p < .0001$), prescription opioid use (12.5% vs. 4.4%, $p < .0001$), and lifetime opioid overdose (15.8% vs. 3.7%, $p < .0001$). In multivariable analyses, current homelessness remained significantly associated with unhealthy alcohol use, AUDIT scores among unhealthy alcohol users, any drug use, heroin use, and opioid overdose; past 12-month homelessness was additionally associated with DAST-10 scores among drug users and prescription opioid use.

Conclusions: Patients experiencing homelessness have higher rates and greater severity of alcohol and drug use than other ED patients across a range of measures. These findings have implications for planning services for patients with concurrent substance use and housing problems.

1. Introduction

Homelessness and substance use are intricately related. Estimates of substance use among people experiencing homelessness vary depending on the population studied and definitions used, but are consistently above average (Fazel et al., 2008; Fischer and Breakey, 1991; Koegel et al., 1988; O'Toole et al., 2004). A meta-analysis of international studies found alcohol dependence ranging from 8.1 to 58.5% and drug dependence ranging from 4.5 to 54.2% among homeless populations (Fazel et al., 2008), substantially higher than overall global prevalence rates (WHO, 2018). Drug overdose is the leading cause of death among people experiencing homelessness, with many other deaths also attributable in some way to substance use (Baggett et al., 2014; Baggett et al., 2013).

Better understanding the interactions between homelessness and

substance use is important to respond to these overlapping serious life issues. Homelessness has been associated with worse alcohol and drug use severity and outcomes (Collins, 2016; Eyrich-Garg et al., 2008; Linton et al., 2013). Prior studies have been limited to including only participants who have experienced homelessness or those seeking substance use treatment. One exception, a study of primary care patients with drug problems, found that patients experiencing homelessness had higher DAST-10 and ASI scores, and used the emergency department (ED) more frequently than other patients (Krupski et al., 2015).

Despite these findings—and the fact that frequent ED use is associated with both homelessness and substance use (Capp et al., 2013; Doran et al., 2013; Stergiopoulos et al., 2016; Vandyk et al., 2013)—we were unable to find prior research comparing substance use among homeless and non-homeless ED patients. This paper fills this gap by

* Corresponding author at: Department of Population Health, New York University School of Medicine, 432 1st Avenue, Room A-345, New York, NY, 10016, United States.
E-mail address: kelly.doran@nyumc.org (K.M. Doran).

examining substance use characteristics among homeless and non-homeless patients from an urban, public hospital ED. While our study was exploratory, we hypothesized that ED patients experiencing homelessness would have higher rates of substance use and greater substance use severity than other patients.

2. Methods

2.1. Study design and setting

We conducted baseline survey interviews with patients at an urban, public hospital ED (November 2016–September 2017) as part of a larger prospective cohort study. Cross-sectional survey results are presented.

2.2. Selection of participants

Research assistants (RAs) followed a random sampling scheme to approach patients during assigned shifts scheduled seven days per week and at all hours of the day in a distribution approximating ED patient arrival volume over time. Patients were eligible if they were ≥ 18 years old and spoke English or Spanish. Patients were ineligible if they were medically unstable (e.g., critically ill, in severe pain), in psychological distress, in police/prison custody, could not provide consent (e.g., dementia), or had already participated. Twelve patients enrolled in a concurrent case management study for opioid users were also excluded. For severely intoxicated patients, RAs returned to the patient later when soberer. When the capacity to consent was questionable, RAs consulted the medical provider and/or used the UCSD Brief Assessment of Capacity to Consent (UBACC) (Jeste et al., 2007). Participants provided written informed consent. The study was approved by the [blinded] IRB.

2.3. Methods and measurements

Bilingual RAs used iPads to conduct 20 to 40-minute survey interviews using REDCap electronic data capture tools (Harris et al., 2009). Questions were read out loud to study participants. RAs used techniques to maximize privacy including offering to move participants to private locations, requesting visitors leave, and allowing participants to point to answers on the iPad. RAs informed participants of measures taken to ensure information security, including the study's NIH Certificate of Confidentiality (NIH, 2017). Participants received a \$15 study incentive.

The survey was constructed using questions largely compiled from previously validated or widely used questionnaires, modified as needed based on input from national experts and a stakeholder feedback process. The survey was professionally translated into Spanish.

Participants were asked where they spent the past night using categories from a large VA/HUD study (ASPE, 2007). We defined current homelessness as self-report of spending the past night in a homeless shelter or outdoors, on the street, in an abandoned or public building, an automobile, or another place not meant for human habitation. All participants were also asked whether they had experienced more broadly defined homelessness—including staying in a shelter, on the street, or doubled up with friends/family because they did not have another place to stay—in the past 12-months. As a measure of income insecurity, participants were asked whether they had difficulty meeting basic expenses in the past year (U.S. Census Bureau, 2014). Participants completed a question on self-rated general health from the CDC's Healthy Days Core Module (CDC, 2017). Participants were asked whether a healthcare professional had told them they had any of a list of mental health conditions (depression, anxiety, panic attacks, schizophrenia, bipolar disorder, PTSD, borderline personality, other).

We used previously validated single-item screening questions (SISQ) for unhealthy alcohol use and any drug use in the past year (Smith

et al., 2009, 2010). Participants were also asked about past year use of 10 types of drugs and which had caused them the most difficulties or problems. Participants screening positive for unhealthy alcohol use via the SISQ completed the AUDIT (Bohn et al., 1995; WHO, 2017). Participants screening positive for drug use via the SISQ or individual drug questions completed the DAST-10 (Skinner, 1982; Yudko et al., 2007). All participants were asked about past year substance use service receipt (Gelberg et al., 2012).

2.4. Analysis

Data analysis was conducted with SAS 9.2 (Cary, NC). We followed STROBE guidelines for observational study reporting (von Elm et al., 2007). For bivariate analyses, we used chi-square tests of independence for categorical variables and t-tests for continuous variables.

Multivariable analysis was conducted using logistic regression. Missing data including refusals were rare. Therefore, complete case deletion was used for missing data. We included age, gender, race/ethnicity, education, insurance, difficulty meeting essential expenses, employment, overall physical health, and mental health conditions as potential confounders (Spearman correlation coefficients all < 0.4). We performed manual backward elimination (Hosmer and Lemeshow, 2000); results were qualitatively similar for reduced and full models, so we present only fully adjusted models. Model c-statistics were 0.741–0.892.

We defined current homelessness *a priori* as having spent the last night in the shelter or on the streets/another place not meant for human habitation. Sensitivity analyses using a modified definition of current homelessness to include those also spending the last night in transitional housing or an institution showed similar results. We conducted exploratory subgroup analyses for shelter vs. street dwellers (Supplemental Material). We also present results for participants who reported any experience of homelessness—including staying in a shelter, on the street, or doubled up with friends/family—in the past 12 months, as a more inclusive measure of recent experience with homelessness.

3. Results

3.1. Participation and sociodemographics

Approximately half (52.0%) of patients approached were ineligible ($n = 2,816$) or refused to complete eligibility screening questions ($n = 357$). Primary reasons for ineligibility were expected given the ED population and included being medically unfit ($n = 858$), too intoxicated to participate ($n = 496$), unable to speak English/Spanish ($n = 480$), or in prison/police custody ($n = 361$). Of 2,924 eligible patients, 2,396 participated (81.9%). Duplicate records ($n = 84$) for patients identified by name, birthday, and social security number (if applicable) as having participated more than once and 3 participants without housing status information were excluded, leaving a final analytic sample of $n = 2,309$.

The rate of current homelessness was 13.7% (8.7% shelter, 5.0% street). Most patients spent the last night in their apartment (68.3%), with smaller numbers spending it in someone else's apartment (10.4%) or an institution (5.1%). Approximately 1 in 5 patients overall (21.4%) reported having been homeless at some point in the past year, including being “doubled up.” Patients who were currently homeless differed from other patients in multiple basic characteristics (Table 1).

3.2. Substance use characteristics by homelessness Status

In bivariate analyses (Table 1), patients currently experiencing homelessness had higher rates of past year unhealthy alcohol use, more binge drinking days in the past year, and higher AUDIT scores. Patients experiencing homelessness had higher rates of past year drug use across

Download English Version:

<https://daneshyari.com/en/article/7503013>

Download Persian Version:

<https://daneshyari.com/article/7503013>

[Daneshyari.com](https://daneshyari.com)