

Social determinants of health among emergency department patients who screen positive for unhealthy alcohol or drug use: implications for ED SBIRT

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Disclosures

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Background

- ED patients have high levels of substance use, and high levels of social determinants of health (SDOH).
- These SDOH could affect success of ED SBIRT programs.
- Yet, little research on SDOH among ED patients with unhealthy alcohol or drug use.

ED-CARES Study

- Emergency Department Patient Characteristics Associated with Risk for Future ED and Shelter Use
 - Prospective cohort study at an urban, public, teaching hospital ED
 - Random sample survey of ED patients will be linked to NYC Department of Homeless Services data to track future shelter use
 - Primary Objective: To develop a brief screening tool to identify emergency department (ED) patients who are at risk for future homelessness and to explore potential models for ED homelessness prevention interventions

Methods

- Bellevue Hospital Center ED
 - Random Sample

Eligible patients:

- Adults (≥ 18 years old)
- English & Spanish speakers
- Medically/psychiatrically stable
- Not in police/prison custody
- Had not already participated



Methods

- RAs administer 20-40 minute survey, containing:
 - Single-item screeners for current unhealthy alcohol and drug use^{1,2}
 - Questions about social needs during the past 12 months taken from previously validated or widely used questionnaires (e.g., USDA U.S. Food Security Survey)
- Compared prevalence of social needs by substance use screening status in bivariate analyses using chi-square tests of independence

1. Smith PC, Schmidt SM, Allensworth-Davies D, Saitz R. Primary care validation of a single-question alcohol screening test. *J Gen Intern Med.* 2009;24(7):783-788.
2. Smith PC, Schmidt SM, Allensworth-Davies D, Saitz R. A single-question screening test for drug use in primary care. *Arch Intern Med.* 2010;170(13):1155-1160.

Results

- November 18, 2016 – August 20, 2017
- 5762 patients approached
 - 2978 ineligible (51.8%)
 - 2784 eligible
 - 2280 participated (39.6%)
 - 2210 unduplicated participants



Results

- **Race/ethnicity**

- Hispanic/Latino: 55.3%
- Non-Hispanic Black: 23.2%
- Non-Hispanic White: 12.2%
- Other: 9.4%

- **Age**

- 18-30 years old: 20.6%
- 31-50 years old: 37.0%
- 51-65: 30.1%
- >65: 12.4%

- **Gender**

- Male: 56.1%
- Female: 43.5%
- Transgender: 0.3%

- **Unhealthy alcohol use: 32.0%**

- **Drug use: 21.5%**

Results

- **Unemployed or Unable to Work**
 - Overall: 43.6%
 - Among those with unhealthy alcohol use: 46.0% (p=0.12)
 - Among those with drug use: 56.0% (p<0.0001)
- **Homelessness (including living “doubled up”)**
 - Overall: 21.5%
 - Among those with unhealthy alcohol use: 30.3% (p<0.0001)
 - Among those with drug use: 42.9% (p<0.0001)

Results

- **Inability to Meet Essential Expenses**

- Overall: 40.9%
- Among those with unhealthy alcohol use: 45.8% (p=0.001)
- Among those with drug use: 53.2% (p<0.0001)

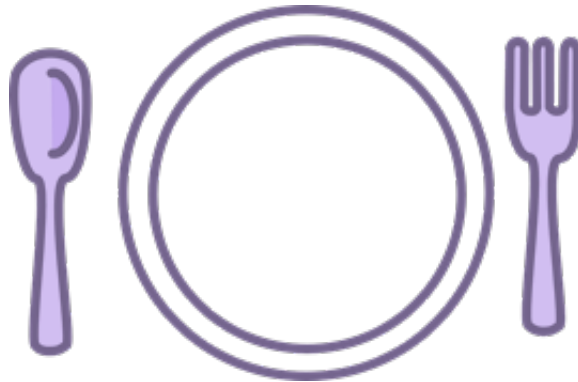
- **Telephone Service Disconnected**

- Overall: 19.5%
- Among those with unhealthy alcohol use: 23.1% (p=0.009)
- Among those with drug use: 27.8% (p<0.0001)

Results

- **Food Insecurity**

- Overall: 51.0%
- Among those with unhealthy alcohol use: 56.3% ($p=0.0005$)
- Among those with drug use: 63.4% ($p<0.0001$)



Limitations

- Single center.
- Study might bias toward those who needed the \$15 / have a higher level of need.
- Any study that uses a sample of current ED patients will bias toward people who use the ED more frequently.

Discussion

- ED patients overall have high rates of social needs.
- Social needs are even more common among patients who use drugs and, to a lesser extent, those with unhealthy alcohol use.



Discussion

- Findings suggest ED SBIRT programs must recognize patients' SDOH, which might impact the effectiveness of interventions to address their substance use.



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THANK YOU



BONUS SLIDES

Side Project: SDOH Registry

- Linkage of patient surveys with SPARCS (NY all-payer healthcare data)
- Effects of SDOH on ED use & hospitalization
- Funding from United Hospital Fund