

## Table of Contents

---

Hiatt, Shirin - #5760 - Characterizing the Growing Population of Patients Hospitalized with Methamphetamine-Associated Heart Failure at Two Hospitals in Oregon.....	1
Abstract submission for Institutional Repository .....	1



# Research Week 2024

## Characterizing the Growing Population of Patients Hospitalized with Methamphetamine-Associated Heart Failure at Two Hospitals in Oregon

Hiatt, S.O., Camacho, S.A., Lee, C.S., Dieckmann, N., Macon, C., Shalen, E., Robles, Y., Mitchell, J., Habecker, B., & Denfeld, Q.E.

Oregon Health & Science University, School of Nursing, Portland, OR

### Keywords

Heart failure, Methamphetamine, Methamphetamines-associated heart failure, Hospitalized patients, Substance use

### Abstract

#### Introductions

Methamphetamine-associated heart failure (MethHF) is quickly becoming a recognized healthcare problem with devastating patient and societal impact, especially in the state of Oregon, which has the highest rate of methamphetamine abuse in the US. However, our understanding of this phenomenon is very limited.

#### Objective

We aimed to describe the sociodemographic and clinical characteristics of patients hospitalized with MethHF as compared with patients hospitalized with HF but not using methamphetamine.

#### Methods

This is an analysis of screening and baseline data collected from a large on-going study of patients hospitalized with acute decompensated HF at two sites between August 2021 and December 2022. Screening data were analyzed for those patients admitted with MethHF as these patients are excluded due to pre-specified inclusion/exclusion criteria. Baseline data were analyzed for those patients admitted with HF and enrolled in our study. For both groups, we examined and compared sociodemographic and clinical characteristics using standard comparative statistics.

#### Results

Our sample (n = 186) included 99 patients with MethHF and 87 patients with HF. The sample of patients with MethHF represented about 20% of our total screened patients.

Compared with patients with HF, patients with MethHF were about a decade younger ( $60.6 \pm 13.2$  years vs.  $50.5 \pm 11.3$  years) yet nearly 37% were over 55 years of age, more often male (54.0% vs. 77.8%), less often non-Hispanic white (67.8% vs. 56.6%), mostly living in urban counties (69.0% vs. 83.8%), and with higher emergency room utilization in the prior year (range 0-13 vs. range 0-44) (all  $p < 0.05$ ). Clinical characteristics of patients with MethHF were defined by mostly non-ischemic HF etiology (namely methamphetamine-induced) with reduced ejection fraction; patients with MethHF had lower ejection fraction compared with patients with HF ( $27.2 \pm 12.5$  vs.  $39.9 \pm 17.6$ ,  $p=0.0005$ ).

## Conclusions

We found significant sociodemographic and clinical differences between patients hospitalized with MethHF and patients hospitalized with HF but not using methamphetamine. Given the increasing rates of methamphetamine availability and use in Oregon, and the potential physical, psychological, and social impact of the prolonged and recurrent use, it is crucial to understand the patient characteristics and burden to aid in developing effective and lasting interventions.