Rates of Criminal Legal System Involvement Among Patients Who Are Discharged Against Medical Advice

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INTRODUCTION

Patients discharged from the hospital against medical advice (DAMA) are at elevated risk of poor health outcomes, including re-hospitalization and death.¹ DAMA patients are more likely to be young, male, have non-white ethnicity, have low income, experience homelessness, and to suffer from mental illness and substance use disorders.^{2, 3}

The US criminal legal system incarcerates more than 2 million Americans, disproportionately young men of color.⁴ People with a history of incarceration have poorer health, are more likely to be hospitalized after release, and are more likely to utilize the emergency department for care.⁵ Many patients with a history of incarceration report experiencing discrimination by healthcare workers, which may compound feelings of disempowerment and dissatisfaction with care that lead to DAMA.⁶ The purpose of this study was to evaluate whether

DAMA was associated with a history of criminal legal involvement (CLI) among patients at a large urban tertiary-care medical center in the northeastern USA.

METHODS

We performed a chart review at a tertiary-care hospital of all patients with DAMA from 9/1/2015 to 8/31/2016. The study was approved by the Partners HealthCare Institutional Review Board (#2016P002191).

DAMA charts were reviewed for variables including demographics, medical history, behavioral health history, social history, and history of CLI. For appropriate variables, a free-text search of the chart was performed using QPID Health (QPID Health Inc). The tool does not search scanned outside records. We analyzed the results using STATA (Version 15; Statacorp).

RESULTS

DAMA occurred in 297 patients over a 1-year period, of whom 147 (49%) had a history of CLI documented in their

Table 1 Characteristics of Patients Discharged Against Medical Advice, Overall, and by Presence of Criminal Legal Involvement

	Overall N = 297		CLI N = 147		No CLI N = 150		CLI v No CLI p value
	Mean/%	St. dev.	Mean/%	St. dev.	Mean/%	St. dev.	
Age	49.3	16.0	46.5	13.0	52.1	18.1	0.002
Female	30%		18%		41%		< 0.001*
White	79%		82%		77%		0.36
> 1 AMA from inpt/ED	44%		59%		29%		< 0.001*
LOS 48 h or less	46%		48%		45%		0.61
Medicine service	82%		90%		73%		< 0.001*
# medical diagnoses	5.0	3.6	4.2	2.7	5.8	4.1	< 0.001*
Diagnosis of chronic pain	27%		22%		32%		0.047
History or current IVDU	22%		36%		8%		< 0.001*
Opioid use disorder	34%		51%		17%		< 0.001*
Alcohol use disorder	33%		46%		20%		< 0.001*
Smoking	63%		82%		44%		< 0.001*
Withdrawal	29%		43%		16%		< 0.001*
Other behavioral health diagnosis	61%		72%		51%		< 0.001*
Currently homeless	35%		55%		16%		< 0.001*

CLI criminal legal involvement, ED emergency department, LOS length of stay of inpatient admission, IVDU intravenous drug use
Statistical testing, Chi-square test for all measures reported as percentages; Two-tailed unpaired Student's T test with unequal variance for data reported as mean/st. dev.

*Significant

Table 2 Specific Documentation of Criminal Legal Involvement Among Patients Discharged Against Medical Advice*

	N	%
Any criminal legal involvement	147	—
Any Incarceration	117	80
Jail	66	45
Prison	35	24
In custody during at least one hospitalization	9	6
Probation	19	12
Parole	6	4
Open case, not in custody/incarcerated	18	12
Alcohol-related arrest only	4	3

*Some patients met multiple categories; e.g., a patient with a history of a prison stay who is currently on parole is listed in both

chart. Table 1 compares those individuals with DAMA with and without CLI. DAMA patients with a history of CLI were younger and more likely to be male, have a history of homelessness, have multiple DAMAs, receive care on the medicine service, have an injection drug use history, have an opioid use disorder history, have an alcohol use disorder history, smoke, be experiencing withdrawal, have fewer medical diagnoses, and have more behavioral health diagnoses ($p < 0.01$ for each comparison).

Documentation allowed for partial or complete clarification of the nature of CLI in 142 of 147 individuals (Table 2). Of these, 117 (80%) had a history of incarceration or were currently incarcerated, 66 (45%) had a history of jail stays, and 35 (24%) had a history of prison stays. Six (4%) were on parole and 19 (12%) were on probation.

DISCUSSION

Our analysis found that half of patients at our institution with DAMA have experienced CLI. Patients with CLI who left DAMA shared traits with individuals with CLI in the community, including younger age, higher rates of substance use disorders, and a higher burden of behavioral health disorders. They were also more likely to have multiple episodes of DAMA. Study limitations include that we were unable to confirm rates of CLI, which may be underreported in the chart

due to stigma and lack of provider awareness. The rate of CLI was very high in our inner-city population, which may not be true in other cohorts. The CLI population in this study was more likely to be white than the national incarcerated population,⁴ which may be related to our institution's inpatient demographics, thereby limiting generalizability.

Individuals who have previously experienced CLI or incarceration may feel more acutely disempowered during a hospital admission and may have outstanding legal concerns. Knowledge of the association between CLI and DAMA may help providers reduce DAMA rates through improved communication and anticipation of social or behavioral needs.

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Compliance with ethical standards:

Conflicts of interest: The authors declare that they do not have a conflict of interest.

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