A Retrospective Analysis Investigating Racial Bias in Police Encounters at a Medical Research University

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Introduction

Black and Hispanic/Latino individuals are disproportionately represented in law enforcement encounters that result in health and socioeconomic disparities. We aim to investigate racial/ethnic disparities in police encounters and arrests in a public university setting at the University of Colorado's (CU) Anschutz Medical Campus in Aurora, Colorado.

Materials and methods

We performed a retrospective analysis of 5118 Anschutz CU police encounters from 2010 to 2019. Data was collected from police encounters documented by the campus police department. We evaluated for associations between race/ethnicity with proportions of arrest and the type of crime committed during police encounter. We calculated risk ratios (RR) with 95% confidence intervals (CI) using Poisson regression.

Results

13.2% of police encounters resulted in arrests. Black and Hispanic/Latino individuals were 1.52 and 1.41 times more likely to have an encounter lead to arrest compared to White individuals, respectively after adjusting for age, sex, crime classification, and reason for being on campus. Black individuals were 7.79 times more likely to be arrested for a suspicious incident and American Indian/Alaskan Native individuals were 5.5 times more likely to be arrested for an assault than White individuals. American Indian/Alaskan Native, Black and Hispanic/Latino individuals were more likely to be arrested if they were unaffiliated with the campus.

Table 1. Regression results of the likelihood of arrest during police encounter by race/ethnicity

	RR (95% CI)	aRR (95% CI)[1]
Race[2]		
White	ref	ref
Black	1.58 (1.37 – 1.83)***	1.52 (1.26 – 1.83)***
Asian/Pacific Islander	0.76 (0.44 – 1.31)	0.91 (0.50 – 1.63)
American Indian/Alaskan Native	2.24 (1.06 – 4.74)*	2.88 (1.16 – 7.16)*
Ethnicity[3]		
Non-Latinx	ref	ref
Latinx	1.49 (1.28 – 1.75)***	1.41 (1.16 – 1.71)***

[1.] Adjusting for age, sex, crime classification, and reason for being on campus (student/employee/visitor/patient/other)
[2.] n=4,779 in the simple regression model; n=3,548 in the adjusted regression model
[3.] n=4,225 in the simple regression model; n=3,548 in the adjusted regression model
[+] p<0.10
*p<0.05
**p<0.01
***p<0.001

Table 2. Racial characteristics of campus personnel compared to police contact

	AMC student, staff, faculty (n=83,395)[1,2]	Police Encounter (n=5,118)	**Arrested (n=680)**
Race/ethnicity			
White	77.3% (64,489)	73.2% (3,499)	64.4% (434)
Black	2.9% (2,283)	23.8% (1,135)	33.1% (223)
Asian/Pacific Islander	8.3% (6,917)	2.7% (127)	1.8% (12)
American Indian/Alaskan Native	0.5% (398)	0.4% (18)	0.74% (5)
Latinx	7.6% (6,353)	20.4% (861)	27.7% (174)

1 student data: 2011-2020; staff and faculty data: 2016-2020
2 remaining number/proportion are "more than one race" or international

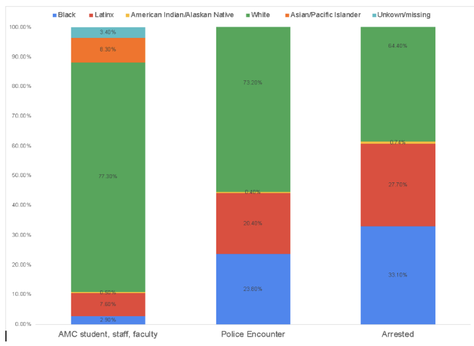

Table 1. We found that Black individuals were more likely to be arrested compared to their White counterparts during the following types of specific criminal police encounters: assault (RR 3.0, 95% CI: 1.54-5.67); larceny-theft (RR 2.42 95% CI: 1.25-4.7. Black individuals were also more likely to be arrested than their White counterparts for non-criminal police encounters such as incident (RR 7.79, 95% CI 1.35-44.9) and suspicious incident (RR 1.66 95% CI: 1.17-2.38).

Table 2. Regression results of the likelihood of arrest during police encounters by race/ethnicity when adjusting for age, sex, crime classification, and reason for being on campus showed that Black (RR 1.52, 95% CI: 1.26-1.83, p<0.001) and Hispanic/Latino (RR 1.41, 95% CI: 1.16-1.71, p<0.001) individuals were more likely to be arrested compared to White individuals.

Conclusions

Black and Hispanic/Latino individuals are at higher risk of arrests than White individuals at a public research university and medical campus setting. Disparities in arrest rates in racial and ethnic minorities at a research University may result in increased mistrust with health and medical institutions.

Strengths and Limitations

The primary strength is that this is the first study conducted to examine the police contact data at a public research university and medical campus. One of the main limitations of this study is that it is retrospective in nature, and we are unable to make any definitive conclusions regarding racial bias in policing at our institution.

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