# Police Brutality and Mistrust in Medical Institutions

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## Abstract



**Background** People bring the social contexts of their lives into the medical encounter. As a social determinant of health, police brutality influences physical and mental health. However, negative experiences with institutions such as law enforcement might decrease trust in other institutions, including medical institutions. Mistrust might limit engagement with the healthcare system and affect population health. This study investigates the relationship between police brutality and medical mistrust and assesses whether it varies by race.

**Basic Procedures** Data were obtained from a 2018 cross-sectional survey of adults living in urban areas in the USA (N = 4389). Medical mistrust was regressed on police brutality (experiences and appraisal of negative encounters with the police), controlling for socio-demographics, health status, and healthcare access. Means of mistrust were predicted by racial group after including interactions between police brutality and race.

**Main Findings** Respondents who had negative encounters with the police, even if they perceived these encounters to be necessary, had higher levels of medical mistrust compared to those with no negative police encounters. Police brutality increased mistrust for all racial groups.

**Principal Conclusions** Conditions outside the medical system such as experiencing police brutality impact relationships with the medical system. Given that clinicians are in a unique position of having access to firsthand information about the struggles and injustices that shape their patients' health, advocating for systemic change on behalf of their patients might build trust.

 $\label{eq:keywords} \begin{array}{l} \mbox{Police brutality} \cdot \mbox{Medical mistrust} \cdot \mbox{Police brutality} \ and \ \mbox{medical mistrust} \cdot \mbox{Police brutality} \ and \ \mbox{medical mistrust} \cdot \mbox{Police brutality} \ \mbox{and medical mistrust} \ \mbox{Accession} \ \mbox{and medical mistrust} \ \mbox{and medical mist$ 

Police brutality is a social determinant of health that disproportionately affects the health of racialized minority populations [1]. Police brutality encompasses unreasonable use of physical force, as well as actions by police meant to intimidate, harass, or dehumanize [2–4]. Research exploring the relationship between police brutality and health predominantly focuses on the physical and mental health outcomes of people who experience police violence [5–9]. However, police brutality might also shape health outcomes indirectly by creating mistrust or fear of other authority figures and institutions such as

Sirry Alang sma206@lehigh.edu doctors in the formal healthcare system. This study examines variation in medical mistrust based on exposure to police brutality.

In a medical setting, trust reflects the belief that providers or healthcare organizations will act in one's best interest [10]. Medical mistrust indicates suspicion of the healthcare system and providers more generally [11]. Medical mistrust has consequences. It is an important predictor of health outcomes because it leads to lower rates of utilization of health services [12], reduces engagement with care, and lowers adherence to care recommendations [13]. Typically, medical mistrust is thought to develop as a direct result of experiences of discrimination or lack of support within the healthcare system [14]. On the one hand, medical mistrust might be exacerbated among patients who already have low levels of physician trust lack of confidence in the physician's intent, interpersonal competence, or that they will act in the best interest of the patient [15]. Physician mistrust is associated with poor personal experiences with clinicians that then lead to dissatisfaction with care [16, 17]. That physician mistrust is

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greater among ethnoracially marginalized populations than among whites indicates contemporary racial biases experienced during the clinical encounter that may lead to unequal treatment and access to quality care [18, 19].

On the other hand, medical mistrust might also reflect the legacy of institutional racism within the healthcare setting, some of which go back centuries [20, 21]. For example, among some African Americans, mistrust is a direct result of medical atrocities that have been committed against this population throughout history such as surgical experimentation on enslaved black women without anesthesia [22] and the Tuskegee experiment in which black men with syphilis were knowingly denied treatment [23].

In general, African Americans, Latinxs, and Native Americans experience higher rates of medical mistrust compared to Whites [24-27]. That people from ethnoracial minority groups experience racism and discrimination in the healthcare system which then contributes to mistrust is undeniable. However, despite increasing calls for the healthcare system to embrace social medicine [28] and thereby recognize the social contexts of people's lives that they bring to the medical encounter, there has been little research on how experiences that happen outside of healthcare impact medical mistrust. One exception is a study that explores factors associated with medical mistrust among black men. Findings suggest that while perceived racism in healthcare was the strongest correlate of mistrust, broader experiences of discrimination outside of the healthcare setting were also directly associated with mistrust [29]. We know that negative social experiences including racism shape health status and healthcare encounters, and that there is a strong relationship between experiencing discrimination and feeling mistrust [30-34]. Nevertheless, how these experiences play out at the systemic level between two of our main institutions has not been fully explored.

We argue that negative experiences with institutions such as law enforcement might decrease trust in other institutions, including healthcare institutions. Healthcare experiences are also increasingly intertwined with policing. Many healthcare institutions have policies requiring their staff to identify suspicious behaviors and to contact the police. Hospitals across the USA are opting for armed security guards, including police officers, in the name of patient and staff safety [35]. Black patients and their visitors in hospitals are more than twice as likely than their White counterparts to have security called on them [36]. Yet we know little about how experiences with law enforcement shape perceptions of and interactions with the healthcare system.

In the current study, we describe the relationship between perceived police brutality and medical mistrust. We also assess whether the effects of police brutality on medical mistrust vary by race.

#### **Methods**

Data Data came from a national, web-based survey, the Survey of the Health of Urban Residents (SHUR) (N =4389). Respondents are adults ages 18 and older living in urban areas across the contiguous USA. Data were collected in July 2018. Qualtrics LLC [37] administered the survey on a non-probability sample obtained through leveraging multiple databases of individuals who have opted into participating in surveys. SHUR oversampled African American and Latinx populations, and persons whose usual source of care is not a physician's office. A combination of demographic screening questions and recruitment quotas was implemented such that participants were not invited to complete the survey if they were not residing in an urban area (defined by the census as areas with populations of more than 50,000) or if the limit for their specific demographic group was met. SHUR response rate was 58.5%. Qualtrics' panels have increasingly been used in epidemiological research [6, 38].

**Measures** Our main outcome variable is medical mistrust. We used the 12-item group-based medical mistrust index [39]. Respondents were asked how much they agreed with statements like people who belong to my racial and ethnic group should not confide in doctors/healthcare workers, doctors and healthcare workers have the best interests of people who belong to my racial or ethnic group, healthcare workers take the medical complaints of people of my racial and ethnic group seriously, and people in my racial or ethnic group should be suspicious of doctors. Response options ranged from strongly disagree (1) to strongly agree (5). The mean score across the 12 items was computed, resulting in a mistrust scale which ranged from 1 to 5 (Cronbach's alpha 0.80). Higher scores indicate greater medical mistrust.

The main independent variable is perceived police brutality. Respondents were asked if they have ever had negative encounters with the police. Negative encounters included ten police actions: police cursing at the respondent; searched, frisked, or patted the respondent; threatened to arrest the respondent; actually handcuffed the respondent; threatened the respondent with a ticket; actually shoved or grabbed the respondent; actually hit or kicked the respondent; used pepper spray or another chemical on the respondent; used an electroshock weapon such as a stun gun; and, finally, actually pointed a gun at respondent. Respondents who reported at least one negative encounter with the police were asked: Thinking of your most recent experience(s) with the police, would you say the action of the officer was necessary? The respondents' assessment of the necessity of police actions is as important as any other self-assessed measure of stress or discrimination and is assumed to be informed by the context and immediate impact of the encounter on the respondent. We used the binary response (yes/no) to this question as well as the response to

whether they had any negative police encounters to create the variable perceived police brutality with three mutually exclusive categories: no negative encounter, necessary negative encounter, and unnecessary negative encounter.

Respondents reported their race and indicated whether they were of Hispanic/Latinx ethnicity. We created a combined race/ethnicity variable with ethnicity assigned first. Categories include the following: non-Hispanic White, non-Hispanic Black/African American, Hispanic/Latinx, Native American, Asian, and other/multiple race. Control variables included marital status, age, sex, sexual orientation, gender identity, work status, level of education, activity or functional limitations, self-rated mental health, self-rated physical health, health insurance, and usual source of care.

**Analysis** We describe variation in mistrust and experiences of police brutality by respondents' characteristics. In multivariate linear analyses, medical mistrust was regressed on perceived police brutality, controlling for socio-demographics, health status, and healthcare access indicators. We then included interactions between race/ethnicity and perceived police brutality, controlling for covariates. The interactions assessed whether the relationship between police encounters and medical mistrust varies by race/ethnicity. We plotted margins of mistrust for each racial group at the three levels of perceived police brutality.

## Results

As shown on Table 1, the sample is disproportionately female, a little less than two-thirds of respondents identify as White, and the majority are between the ages of 18 and 44. About two in ten respondents do not identify as heterosexual, and 5 % identify as transgender or gender fluid. Most respondents are educated beyond high school and are employed. About 40 % of respondents have a limitation and almost one-quarter perceive themselves in poor health. Nine in ten of respondents have a usual source of care and about 10% are uninsured.

Mistrust significantly varied by respondent characteristics. The mean mistrust score was 2.42 (SD = 0.72). Mistrust was higher for all minority racialized groups compared to Whites. Age was negatively associated with mistrust. There were no sex differences in mistrust, but cisgender persons had lower mean mistrust scores than their transgender or gender fluid counterparts. Respondents without a usual source of care had higher mean mistrust scores than those with a usual source of care, and insured persons had lower average mistrust scores than the uninsured.

We present sample characteristics by experience of police brutality on Table 2. About 57% of respondents reported at least one negative encounter with police. Of these encounters, about 60% were perceived as unnecessary. Overall, White, Black/African American, and Hispanic/ Latinx respondents did not differ in the percentage who reported an encounter with police. In comparison, Native Americans were significantly more likely, and Asians were significantly less likely than Whites to report an encounter. The prevalence of encounters that were perceived as unnecessary also varied by racial group. Blacks/African Americans, Hispanic/Latinx, Native Americans, and those who identified as other or multiple races were more likely to report a negative and unnecessary encounter than their White counterparts.

Table 2 also shows differences in mistrust scores by exposure to police brutality. Respondents who reported a negative but necessary police encounter had higher medical mistrust than those with no encounters. The highest mistrust score was among those who perceived the encounter with police to be unnecessary.

In Table 3, we present the results of regressing medical mistrust on perceived police brutality controlling for demographic, socioeconomic, health status, and access characteristics of respondents. Respondents who had negative encounters with the police (both necessary and unnecessary) reported higher levels of medical mistrust, although perceived unnecessary encounters are more strongly associated with mistrust  $(\beta = 0.32, CI = 0.26 - 0.56)$ . In addition, Blacks/African Americans, Hispanic/Latinx, Asians, Native Americans, and people who belong to multiple or other racial groups had higher levels of mistrust than Whites. Age was negatively associated with mistrust; older persons had lower mistrust scores than those between the ages of 18 and 24. People who identify as female or other gender have lower mistrust scores than those who identify as men. In higher education, having a usual source of care and having health insurance were also associated with lower levels of medical mistrust. Persons who had activity or functional limitations had higher mistrust than those without any limitations.

We then added interaction terms between race/ethnicity and perceived police brutality to the full adjusted model. The main and interaction effects are presented on Table 4. Only the interaction terms between Latinx/Hispanic and perceived necessary policy encounter ( $\beta = 0.20$ , CI = 0.05–0.35) and the interaction term between Asian and perceived necessary policy encounter ( $\beta = 0.36$ , CI = 0.09–0.62) were statistically significant.

To ease interpretation, we plotted marginal average mistrust scores from the full model including interactions. As shown on Fig. 1, having an encounter that is perceived as necessary has a greater impact on mistrust (compared to having no encounter) for Asian and Latinx respondents relative to White respondents. Most importantly, persons from all ethnoracial minority groups had significantly higher levels of mistrust scores than Whites for each type of police encounter. Mistrust levels were also higher for respondents from all racial groups if they reported negative unnecessary encounters

Table 1	Sample characteristics ( $N = 4386$ , mistrust $\overline{x} = 2.42$ , SD = 0.72)	)
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	Medical mistrust (x)	% of sample	Sample size (N)
Sex			
Male (ref)	2.49	25.36	1113
Female	2.41	71.57	3141
Other	2.58	3.08	135
Race and ethnicity			
White (ref)	2.28	63.63	2791
Black/African American	2.83***	14.20	623
Hispanic/Latinx	2.71***	11.63	510
Native American	2.80***	1.39	61
Asian	2.49*	3.81	167
Multiple or other	2.58**	5.34	234
Age category			
18–24 years (ref)	2.58	19.24	844
25-34 years	2.51	27.61	1211
35–44 years	2.54	20.93	918
45–54 years	2.35*	13.70	601
55–64 years	2.16***	9.94	436
65 and older	2.01**	8.57	376
Gender identity			
Cisgender (ref)	2.42	95.35	4182
Transgender or gender fluid	2.65*	4.65	204
Sexual orientation			
Heterosexual or straight (ref)	2.41	82.88	3635
Bisexual	2.54	9.39	412
Lesbian or gay	2.57	5.63	247
Other	2.73**	2.10	92
Education			
No high school (ref)	2.67	6.98	306
High school or GED	2.51	25.26	1108
Associate, technical, vocational	2.41	44.96	1972
Bachelor's and higher	2.33	22.80	1000
Work status			
Not in labor force (ref)	2.33	32.69	1389
Unemployed	2.55	12.31	523
Employed part-time	2.50	15.65	665
Employed full-time	2.46	39.35	1672
Limitations			
No (ref)	2.38	57.76	2504
Yes	2.51	42.24	1831
Self-rated physical health			
Fair/poor (ref)	2.45	24.30	1066
Excellent/very good, good	2.43	75.70	3320
Self-rated mental health			
Fair/poor (ref)	2.45	30.44	1335
Excellent/very good, good	2.42	69.56	3051
Usual source of care			
No (ref)	2.67	8.60	377
Yes	2.41**	91.40	4009
Health insurance status			
Uninsured (ref)	2.60	10.72	470
Public insurance	2.49*	51.73	2269
Private Insurance	2.29***	37.55	1647

 $*p \le 0.05$ 

 $**p \le 0.01$ 

 $***p \le 0.001$ 

Significantly different from the reference category

with police compared to their peers who did not have any negative police encounters. For Native Americans and Whites, mistrust levels remained relatively stable among respondents who reported negative but necessary encounters compared to those with no negative encounters. However, mistrust scores increased substantially when Native Americans perceive negative encounters police to be unnecessary.

# Discussion

Overall, respondents in this sample were more likely to express trust rather than mistrust in healthcare organizations and providers. Our findings are consistent with prior research that shows that people who belong to ethnoracial minority groups such as African Americans, Hispanics, and Native Americans are more likely than Whites to mistrust the medical system [24–27]. But to our knowledge, this is the first study to connect medical mistrust to police encounters. Risk of negative police encounters is distributed by membership in racialized groups. Blacks/African Americans, Hispanics/Latinx, and Native Americans are more likely than Whites to report a negative and unnecessary encounter with the police. We relied on self-reports of whether the encounter was (un)necessary to highlight the importance of an individual's own appraisal of brutality by the police. This approach is consistent with others that investigate the relationship between perceived police discrimination, including police actions that the victim believed lacked probable cause, and health [40, 41].

Unnecessary negative interactions with police are wrong, regardless of how they impact health or healthcare experiences. Here, we found that such encounters are associated with perceptions of providers and healthcare organizations. First, when people have negative experiences with the police, the less likely they are to trust medical institutions. Second, how people appraise their own negative experiences with the police matter for medical mistrust. Those who perceive their encounters with the police to be unnecessary have higher levels of medical mistrust. Indeed, respondents who reported unnecessary negative encounters with the police had about half a standard deviation higher mistrust than the overall sample. Third, while the relationship between police encounters and mistrust is relatively similar across racial groups, the fact that persons from minority racialized groups are more likely to be exposed to negative encounters is important. Previous studies that have assessed patterns and correlates of medical mistrust indicate that mistrust is significant among persons who frequently experience unfair treatment in the broader social environment as well as neighborhood stressors [29, 42, 43]. Our findings here are consistent with these studies given that negative police encounters are stressful and might undermine trust in institutions more broadly.

Blacks, Latinxs, and Native Americans with perceived unnecessary police encounters and who reported the highest levels mistrust might connect contemporary racist experiences

# Table 2 Characteristics of sample by experience of police brutality

	No negative police encounter $(N = 1892, 43.14\%)$		Negative necessary police encounter ( $N = 1348, 30.37\%$ )		Negative unnecessary encounter ( $N = 1146, 26.13\%$ )		Total ( $N = 4386$ )
	N	%	N	%	N	%	Ν
Race and ethnicity							
White (ref)	1244	44.6	916	32.8	631	22.6	2791
Black/African American	251	40.3	159	25.0**	213	34.0***	623
Hispanic/Latinx	188	36.9	158	31.0	164	32.2**	510
Native American	17	27.9***	19	31.2	25	40.1***	61
Asian	100	59.9*	33	19.8**	34	20.4	167
Multiple or other	92	39.3	63	26.9	79	33.8***	234
Age category							
18–24 years (ref)	377	44.7	224	26.5	243	28.8	844
25–34 years	460	38.0	402	33.2	349	28.8	1211
35–44 years	338	36.8	319	34.8	261	28.4	918
45–54 years	243	40.4	202	33.6	156	25.6	601
55–64 years	213	48.9	122	28.0	101	23.2	436
65 and older	261	69.4***	79	21.0	36	9.6	376
Sex	201	07.4	12	21.0	50	2.0	570
Male (ref)	450	40.54	360	32.43	300	27.0	1110
Female	430 1394	44.38	951	30.28	300 796	25.34	3141
Other	48		37	27.41	50	37.04	135
	40	35.56	37	27.41	50	57.04	155
Gender identity	1007	42.7	1000	20.7	1072	25.9	4193
Cisgender (ref)	1827	43.7	1282	30.7	1073	25.8	4182
Transgender or gender fluid	65	31.9**	66	32.3	73	35.8***	204
Sexual orientation	1.500	12.0	1110	20.0	024	05.4	2/25
Heterosexual or straight (ref)	1592	43.8	1119	30.8	924	25.4	3635
Bisexual	139	33.7*	143	34.7	130	31.6	412
Lesbian or gay	117	47.4	69	27.9	61	24.7	247
Other	44	47.8	17	18.5	31	33.7	92
Education							
No high school (ref)	112	36.6	94	30.7	100	32.7	306
High school or GED	475	42.87	298	26.9	335	30.2	1108
Associate, technical, vocational		39.4	679	34.4	516	26.2	1972
Bachelor's and higher	528	52.8***	277	27.7	195	19.5**	1000
Work status							
Not in labor force (ref)	668	48.09	386	27.8	335	24.1	1389
Unemployed	234	44.74	132	25.2	157	30.0	523
Employed part-time	254	38.2	220	33.1	191	28.7	665
Employed full-time	623	37.26	594	35.5	455	27.2	1672
Limitations							
No (ref)	1230	49.12	660	26.4	614	24.5	2504
Yes	612	33.42***	687	37.5*	532	29.1	1831
Self-rated physical health							
Fair/poor (ref)	286	21.3	204	24.9	134	28.5	1066
Excellent/very good/good	566	78.7***	360	75.1***	279	71.4**	3320
Self-rated mental health							
Fair/poor (reference)	433	26.9	261	31.9	152	34.6	1335
Excellent/very good/good	476	73.1**	329	68.1**	285	65.5**	3051
Usual source of care	170	75.1	52)	00.1	200	00.0	5051
No (ref)	160	42.4	98	26.0	119	31.6	377
Yes	1732	43.2	1250	31.2*	1027	25.6*	4009
Health insurance status	1754	73.2	1250	51.4	102/	23.0	-007
Uninsured (ref)	177	37 7	135	28.7	158	33.6	470
Public insurance	177 876	37.7 38.6	135 746	32.9	158 647	28.5	470 2269
Private Insurance	839	50.94**	467	28.3	341	20.7*	1647
Mistrust, mean	1892	2.3	1348	2.4	1146	2.7	4386

 $*p \le 0.05$ 

\*\* $p \le 0.01$ 

\*\*\* $p \le 0.001$ 

Significantly different from reference category

 Table 3
 OLS regression of mistrust on police brutality, adjusting for respondents' characteristics

	β	95% CI
Perceived police brutality (ref: no -ve	encounter)	
Negative but necessary encounter	0.09**	0.02 to 0.13
Negative unnecessary encounter	0.32**	0.26 to 0.56
Race and ethnicity (ref: White)		
Black/African American	0.44***	0.38 to 0.50
Hispanic/Latinx	0.26***	0.19 to 0.32
Native American	0.33***	0.15 to 0.49
Asian	0.25***	0.13 to 0.34
Multiple or other	0.23***	0.13 to 0.32
Age category (ref: 18–24 years)		
25–34 years	0.01	-0.06 to $0.06$
35–44 years	0.04	-0.02 to 0.11
45–54 years	-0.12*	-0.18 to $-0.03$
55–64 years	-0.24 ***	-0.32 to $-0.16$
65 and older	-0.50***	-0.61 to $-0.34$
Sex (ref: male)		
Female	-0.05*	-0.13 to $-0.01$
Other	-0.15*	-0.23 to $-0.09$
Gender identity (ref: cisgender)		
Transgender or gender fluid	-0.07	-0.28 to 0.36
Sexual orientation (ref: straight)	0107	0120 10 0100
Bisexual	0.01	-0.12 to 0.22
Lesbian or gay	0.06	0.01 to 0.19
Other	0.19	-0.04 to 0.47
Education (ref: no high school)	0.12	
High school or GED	-0.10*	-0.18 to $-0.03$
Associate, technical, vocational	-0.18***	-0.27 to $-0.10$
Bachelor's and higher	- 0.18***	-0.23 to $-0.10$
Work status (ref: not in labor force)	0.10	0.25 10 0.10
Unemployed	0.00	-0.06 to 0.07
Employed part-time	0.00	-0.05 to 0.06
Employed full-time	0.06*	0.01 to 0.12
Limitations (ref: no)	0.00	0.01 10 0.12
Yes	0.10***	0.05 to 0.14
Self-rated physical health (ref: fair/po		0.05 10 0.14
Good	-0.02	-0.06 to 0.03
Self-rated mental health (fair/poor)	0.02	0.00 10 0.05
Good	-0.03	-0.01 to 0.03
Usual source of care (ref: no)	0.05	0.01 10 0.05
Yes	-0.23***	-0.30 to $-0.15$
Health insurance status (ref: uninsure		0.30 10 0.13
Public insurance	(-0.04)	-0.12 to 0.01
Private insurance	-0.04 -0.19***	-0.12 to $-0.05$
r nvate insurance	-0.19***	-0.25 to $-0.05$

 $*p \le 0.05$ 

 $**p \le 0.01$ 

\*\*\**p* ≤ 0.001

Model fit statistics: R-squared = 0.2108 P > F = 0.000; root MSE = 0.4923

as well as the legacy of racism enacted by the police with racism within healthcare settings. We know that effects of racism in other settings can spill-over into the healthcare environment [29, 44] and that the racism that people experience in other institutions increases scrutiny toward the healthcare system and shapes expectations of fair treatment [45].

Since the publication of *Unequal Treatment* [44], there has been growing attention from researchers about how differences in the ways by which the health system treats persons

from racial and ethnic minority groups are both morally unjust and produce inequities in health outcomes. Similarly, there has been attention from within medical education about how appropriate training in cultural competence - the ability to effectively interact with and treat patients from diverse backgrounds - will improve medical encounters and therefore health outcomes among patients from racialized groups. Nevertheless, our research emphasizes that conditions outside the medical system impact the quality of medical encounters. For example, it may not be only what a clinician does during their interaction with a patient that shapes trust but also how the patient anticipates being treated based on their experiences with law enforcement. Findings from this study illustrate the power of systemic racism - the constant interaction of multiple systems that confer advantages and disadvantages based on membership in racialized groups [46]. Our experiences within and across systems are intertwined. Perceiving being mistreated in one system spills over to another system. This is not surprising given we do not live our lives in silos. Indeed, one of the earliest studies analyzing sites of discrimination and characteristics of discriminatory actions demonstrated that experiences of discrimination are additive and their effects are cumulative across public sites [47].

One significant limitation of this study is the nonprobabilistic sampling design of the survey. Our estimates might be sensitive to systematic errors as survey respondents may differ from nonrespondents in ways that matter for medical mistrust. However, the average score on the mistrust scale was 2.42, falling between the disagree and neutral categories, is consistent with average mistrust scores in other studies using the same scale [39, 48].

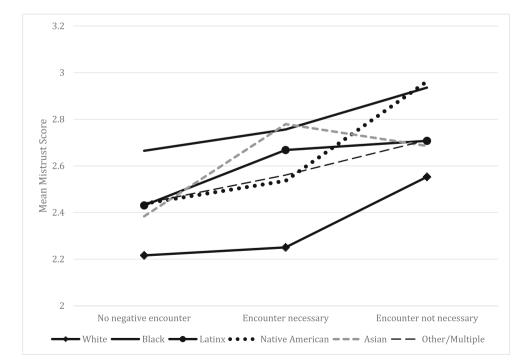
Public Health Implications Groups that have negative experiences with the police are more likely to mistrust the medical system. This is especially true for Blacks/African Americans, Hispanics/Latinx, and Native Americans who have historically been more likely to experience police brutality and historically more likely to be mistreated within the medical system. Systemic racism ensures that experiences outside of healthcare shape perceptions of and expectations toward medical systems. A commitment by healthcare systems and providers to understand and end racism and police brutality is critical. As Bailey and colleagues [46] argue, addressing racial inequities requires "...disruption of leverage points within a sector that might have ripple effects in the system..." (p.1454). If we address police brutality, we will be reducing medical mistrust and ultimately reducing racial health inequities.

We agree with others that neither current research nor medical education models go far enough in acknowledging the importance of structure [49, 50]. As Hardeman and colleagues [49] found, public health researchers rarely name structural or institutional racism as a cause of health inequities. Similarly,

able 4 Adjusted main and teraction effects of perceived		β	95% CI
police brutality and race/ethnicity on mistrust	Perceived police brutality (ref: no -ve encounter)		
	Negative but necessary encounter	0.03	-0.02 to 0.9
	Negative unnecessary encounter	0.34***	0.27 to 0.40
	Race and ethnicity (ref: White)		
	Non-Hispanic Black	0.45***	0.45 to 0.54
	Latinx/Hispanic	0.21***	0.11 to 0.31
	Native American	0.22	-0.12 to 0.5
	Asian	0.16*	0.02 to 0.30
	Multiple/Other	0.22**	0.06 to 0.38
	Police brutality X race/ethnicity		
	Negative encounter necessary # Black	0.06	-0.08 to 0.2
	Negative encounter necessary # Latinx/Hispanic	0.20**	0.05 to 0.35
	Negative encounter necessary # Native American	0.06	-0.39 to 0.5
	Negative encounter necessary # Asian	0.36**	0.09 to 0.62
	Negative encounter necessary # Multiple/Other	0.08	-0.14 to 0.3
	Negative encounter not necessary # Black	-0.06	-0.20 to 0.0
	Negative encounter not necessary # Latinx/Hispanic	-0.06	-0.21 to 0.0
	Negative encounter not necessary # Native American	0.19	-0.24 to 0.6
	Negative encounter not necessary # Asian	-0.03	-0.29 to 0.2
	Negative encounter not necessary # Multiple/other	-0.06	-0.28 to 0.1

 $p \le 0.05$  $p \ge 0.01$  $p \le 0.001$  $p \ge 0.001$ 

medical education's focus on cultural competency has deemphasized the role that structures play in people's lives. Learning about how structural racism operates – requiring this training in the curriculum – holds promise. Therefore we echo the calls for anti-racism education and structural competency that will prepare clinicians to care for patients whose health



**Fig. 1** Adjusted margins of medical mistrust by race/ethnicity and police brutality

outcomes are negatively impacted by systemic racism and structural injustices [50, 51].

Health systems and clinicians should also join scholars in their call for federally supported national data collection of police-related deaths as notifiable conditions [52], as well as other indicators of police brutality. Their support for criminal justice reform, demilitarization of the police, and movements that seek to eliminate police brutality matter. Clinicians are in a unique position of having intimate access to firsthand information about the struggles and injustices that shape their patients' health. Advocating for systemic change on behalf of their patients might build trust.

Finally, while hospital security and safety are important for healthcare workers, patients, and their families, policies that entangle police officers and health systems such as police presence at hospitals might foster medical mistrust among racialized communities. The impact of such policies on medical mistrust and an evaluation of their overall consequences and benefits warrant further investigation.

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#### **Compliance with Ethical Standards**

**Conflict of Interest** The authors declare that they have no conflict of interest.

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