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ORIGINAL RESEARCH

The Practice of Emergency Medicine

Assessing experiences of racism among Black and White patients in the emergency department

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Abstract

Objective: The objective of this study was to investigate the differences in patient-reported experiences related to emergency department (ED) care using a post-discharge text messaging survey.

Methods: This was a prospective cohort study of patients discharged from the ED using an automated text messaging platform to assess patient experience and impact of race on ED care. The study was conducted for 7 weeks between August 6 and September 24, 2021. Participants included adults (aged ≥18 years) discharged from 2 urban, academic EDs with an active mobile phone number in the electronic health record. The primary outcome of interest was patient-reported impact of race on overall rating of ED care. Secondary outcomes included overall satisfaction with care and perceived impact of race on components of care, including respect, communication, and quality of care. A 6-point Likert scale was used, and chi-square and Wilcoxon rank sum tests were used to analyze responses.

Results: A total of 590 (14%) discharged patients consented, and 462 patients completed the entire survey; the mean age was 43 years (SD 17.3); 67% were women, and 60.0% were Black. Black patients reported a higher overall rating of ED care (median 5 [3, 5]; $P = 0.013$). Proportionately, when compared with White patients, more Black patients reported that race negatively impacted the rating of care (10.8% vs 1.4%; $P = 0.002$). More than a quarter of Black patients (27.4%) reported race highly impacting being treated with respect ($P = 0.024$), and 22.4% reported a high impact on quality of service ($P = 0.003$) when compared with White patients.

Conclusion: Health systems lack methods that specifically identify patient experiences of racism. We demonstrate the feasibility of using text messaging to collect patient-reported experiences of racism. For a significant number of Black patients, race negatively impacted their care, including communication, quality, and respect.

KEYWORDS
digital health, equity, learning health systems, quality improvment, racisim

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1 | INTRODUCTION

1.1 | Background

Black patients experience racism in healthcare settings.[1,2] More than 20% of Americans report experiencing some form of discrimination in the healthcare system, and racial discrimination is the most common form reported by patients.[3] Experiences of racism lead to mistrust, poor communication between patient and clinician, and lower engagement in preventive health services.[4–7] Therefore, identifying and addressing racism is a critically important aspect of providing quality healthcare, advancing equity, and dismantling structural racism in healthcare.[1,8,9]

1.2 | Importance

To eliminate experiences of racism within their walls, health systems need data to know when, where, and how these experiences are happening. Yet there are few examples of systematic approaches to measuring patients' experiences of racism after individual clinical encounters. Although experience surveys offer the opportunity for patients to include general comments on their care, to our knowledge many of these surveys do not specifically include questions on experiences of racism in clinical encounters. In that vacuum, patients and their family members have begun using third-party online review platforms, such as Yelp or Google, to share their experiences of racism in healthcare.[10] These organic uses of existing platforms, developed for a different purpose, point to a gap and need for methods to intentionally track and understand patients' experience of racism in their care.

1.3 | Goals of this investigation

We tested a novel approach toward assessing the experience of patients discharged from the emergency department (ED) with a large population of Black patients to explore and understand the experience of racism in healthcare. EDs attract diverse populations and for many are the front door of healthcare institutions. We describe the results from a post-discharge automated text messaging platform to identify experiences of racism and the impact of race and racism on patient-reported satisfaction with ED care. The study was designed to test a systematic method of engaging patients to understand their satisfaction with the emergency care received and perceptions of the impact of their race on overall experience, communication, clinical care, and respect.

The Bottom Line

To assess patient-perceived experiences related to race in emergency department (ED) care, the authors collected data from patients discharged from 2 urban, academic EDs using a post-discharge text messaging survey. The primary outcome of interest was patient-reported impact of race on overall rating of ED care. Proportionately, when compared with White patients, more Black patients reported race negatively impacted rating of care (10.8% vs 1.4%; $P = 0.002$). More than a quarter of Black patients (27.4%) reported race highly impacting being treated with respect ($P = 0.024$), and 22.4% reported a high impact on quality of service ($P = 0.003$) when compared with White patients. Health systems lack methods that specifically identify patient experiences of racism, and this gap offers an area for future investigation.

2 | METHODS

2.1 | Study population and time period

We deployed the text messaged–based survey between August 6 and September 24, 2021, for all patients discharged from 2 urban, academic EDs in Pennsylvania. One ED provides tertiary care with >70,000 annual visits with a patient population that is 60% Black. The second is a level 1 trauma center with >45,000 annual visits with a patient population that is 77% Black. Patients were considered eligible if they were aged ≥18 years, were discharged from either ED, if they had a listed mobile phone number in the electronic health record (EHR), were English speaking, and could provide consent. This study was approved by the Institutional Review Board of the University of Pennsylvania. This article follows the Strengthening the Reporting of Observational Studies in Epidemiology reporting guidelines.[11]

2.2 | Data collection

Discharged ED patients with a listed mobile phone number were identified from a daily EHR-generated report and entered into an automated text messaging platform (Way to Health, Philadelphia, PA) programmed to administer the text messaged–based survey and collect patient responses on care and treatment.[12] The survey questions were informed from existing literature on discrimination and racism in healthcare and created by the study team that included experts in healthcare delivery, emergency care, and equity-based research.[13] The initial message obtained consent to receive additional text messages and described the study objectives. Patients could opt out at any time by replying "STOP." Patients were asked to self-report overall satisfaction with ED care (scaled 0–5, 5 = excellent); the impact they believed their race played in their care (positive, negative, or none); and if they believed their race affected key components of their care, including being treated with respect, quality of service, and communication with the clinical team. These questions were scaled from 0 to 5 (0 = not affected, 5 = strongly affected).[3,13] The 6-point scale was used to avoid a neutral option

TABLE 1 Discharged patient responses to initial text messaging

	Invited, responded ($n = 462$)	Invited, no response ($n = 3086$)	*P* value
Age in Years, mean (SD)	42.9 (17.3)	42.6 (17.7)	0.762
Sex, n (%)			<0.001
Female	310 (67.1)	1721 (55.8)	
Male	137 (29.7)	1251 (40.5)	
Missing	15 (3.3)	114 (3.7)	
Race, n (%)			<0.001
Black	277 (60.0)	2301 (74.6)	
White	143 (31.0)	556 (18.0)	
Other/unknown	11 (2.4)	64 (2.1)	
Asian	16 (3.5)	91 (3.0)	
Multiracial	7 (1.5)	23 (0.8)	
American Indian	0 (0)	6 (0.2)	
Native Hawaiian or Other Pacific Islander	1 (0.2)	1 (0.0)	
Time of arrival, n (%)			0.941
Morning (7:00–3:00 p.m.)	247 (53.5)	1647 (53.4)	
Evening (3:00 p.m.–11:00 p.m.)	142 (30.7)	933 (30.2)	
Night (11:00 p.m.–7:00 a.m.)	73 (15.8)	506 (16.4)	
Emergency department, n (%)			< 0.001
Level 1 trauma center	250 (54.1)	1936 (62.7)	
Tertiary care	212 (45.9)	1150 (37.3)	
Treatment area, n (%)			0.341
Acute care	163 (35.3)	1114 (36.1)	
Mid acute care	197 (42.6)	1215 (39.4)	
Urgent care	102 (22.1)	757 (24.5)	

and to provide patients with a true "zero" negative scale to capture this extreme. Questions related to experiences of racism were adapted from prior literature and specifically asked patients if they believed their race played a role in any aspect of their care and how strongly race affected the quality of care, communication, and respect (Appendix). ED clinicians were not involved with enrollment, consent, or follow-up. Demographic information was obtained from the EHR.

2.3 | Statistical analysis

The primary outcome of interest was patient-reported impact of race on ED care rating. Secondary outcomes included overall satisfaction with care and association of race and key components of care, including perceived respect, communication, and quality of care. Descriptive statistics were used to summarize patient demographics. Comparisons were done with chi-square and nonparametric Wilcoxon rank sum tests.

3 | RESULTS

During the study period, 4306 patients were discharged from the 2 EDs, and 3548 (82.4%) patients had a listed mobile phone number. A total of 590 (16.6%) patients provided consent through the automated text messaging system, and 462 (78.3%) completed all survey questions. Participants not responding or not completing all survey questions were excluded. The mean age of the consenting patients was 43 years (SD 17.3), 67.1% were women, and 60.0% were Black. Nonresponding patients were more likely to be men, Black, or seen at the tertiary care ED (Table 1).

Black patients reported a higher overall ED care rating compared with White patients (median 5; $P = 0.013$). Of the Black patients, 11.6% reported low overall ED experience, which was defined as a rating of 0, 1, or 2. Overall, 10.8% of Black patients and 1.4% of White patients reported that race negatively affected their ED care ($P = 0.002$). Black patients indicated a larger impact of race on respect when compared with White patients (27.4% vs 17.5%; $P = 0.024$). Black patients indicated a larger impact of race on quality of service when compared

TABLE 2 Ratings of emergency department care and impact of race between Black and White patients

	Black ($n = 277$)	White ($n = 143$)	*P* value
Rating of overall care			
Median (IQR)	5 (3, 5)	4 (3, 5)	0.013
High (3–5 rating), n (%)	245 (88.5)	115 (80.4)	0.026
Low (0–2 rating), n (%)	32 (11.6)	28 (19.6)	
Perceived impact of race on care, n (%)			
Negative impact	30 (10.8)	2 (1.4)	0.002
Positive impact	21 (7.6)	16 (11.2)	
No impact	226 (81.6)	125 (87.4)	
Impact of race on respect			
Overall median (IQR)	0 (0, 3)	0 (0, 1)	0.049
High (3–5 rating), n (%)	76 (27.4)	25 (17.5)	0.024
Low (0–2 rating), n (%)	201 (72.6)	118 (82.5)	
Impact of race on quality of service			
Overall median (IQR)	0 (0, 2)	0 (0, 0)	0.005
High (3–5 rating), n (%)	62 (22.4)	15 (10.5)	0.003
Low (0–2 rating), n (%)	215 (77.6)	128 (89.5)	
Impact of race on communication			
Overall median (IQR)	0 (0, 0)	0 (0, 0)	0.272
High (3–5 rating), n (%)	47 (17.0)	16 (11.2)	0.116
Low (0–2 rating), n (%)	230 (83.0)	127 (88.8)	

Abbreviation: IQR, interquartile range.

with White patients (22.4% vs 10.5%; $P = 0.003$). Communication between patients and the care team was not statistically different by race (Table 2).

Among Black patients, there were no differences across age or sex when surveyed on overall ED experience. For Black patients reporting an impact of their race on ED care, there were no differences in ED site, treatment area, time of day, age, or sex. Within all Black patients, a low overall ED experience was associated with higher reported racaes of race negatively impacting care compared with those with a high overall experience (26% vs 5.0%; $P < 0.0001$). When comparing Black patients who reported a negative versus positive impact between their race and ED care, Black patients who indicated that their race negatively affected their care reported statistically significant poorer overall experience (median, [IQR] 2 [0, 3]; $P < 0.001$), quality of service (median 1 [0, 3]; $P < 0.001$), communication with their care team (median 2 [0, 3]; $P < 0.001$), and feelings of being treated with respect (median 1 [0, 2]; $P < 0.001$).

4 | LIMITATIONS

The study has several limitations. It was conducted in a single academic health system and across 2 urban EDs during a fixed span of time. Although incorporating data collection via text messaging into routine care allowed us to solicit responses from all patients, selection and nonresponse bias remain present in that individuals must opt in to the text messaging survey. The response rate for this digital method of engaging patients was 14%, which, although not high, is comparable with published data on ED experience survey response rates.[14–16] It remains difficult to compare the findings reported here as specific surveys exploring the intersection of racism and clinical care are limited and the scale used here was adapted from prior literature. Furthermore, participants needed to have a listed phone number in the EHR and regular access to a text message–capable device, and the "digital divide" has been documented to have a disproportionate effect on Black Americans.[17]

Future efforts to develop methods of engaging patients to understand their health care experiences specific to race would also benefit from assessing heterogeneity in patient responses and accounting for degree of nonresponse. This study did not assess race or ethnicity concordance between clinicians and patients. Nonetheless, this study is among the first to prospectively engage and begin to investigate patient-reported instances and perceptions on race and acute care in a remote and automated fashion immediately after an ED visit. Among those responding, we rely on self-report here, so patients could be altering their responses, although of note no clinical changes were made to an individual's care as participants were notified that data collection was only for research. The demographics of the study population did not allow for sufficient comparisons for other racial or ethnic minorities or those of mixed-race background and thus we focused

on those identifying as Black or White. Future research would benefit from investigating the experiences of individuals from other racial and ethnic backgrounds. In addition, the responding population had a higher proportion of women and White individuals compared with those not responding. A larger scale study is needed to further explore this variation.

The study also has strengths in that it applies a novel, "low-tech" method (eg, simple text messaging) to engage patients and collect patient-reported information to inform healthcare in a meaningful way. It did not burden clinical staff with consenting and collecting data from patients. This approach is patient centered and easily administered post-encounter and provides health systems with a method of expanding the core concepts of learning health systems and continuous quality improvement.

5 | DISCUSSION

This study tested an automated text messaging platform to assess experiences of racism after discharge from an ED visit. The study had 4 key findings. First, we demonstrate the ability to engage patients to understand the intersection of their clinical care and race. Second, we find an early signal and key difference in how Black and White patients perceive the impact of their race on received ED care. Third, Black patients who report race negatively impacting their care cite respect, quality, and communication as significant manifestations of racism. Fourth, an overall positive patient ED care experience may mask the racism some patients experience.

Essential to reducing the burden of racism in healthcare is a way to identify its existence. Creating opportunities for patients to share when and how they felt race impacted their care is important for identifying areas for remediation and may serve as longitudinal measures of progress. Indeed, ongoing systematic assessments of perceived racism may in themselves help patients feel heard. This study highlights that patients are willing to share their experiences and that these insights can be obtained quickly. Patient experience survey response rates remain persistently low, especially in emergency medicine where response rates have been documented from 10% to 15%.[14,15] This study had a similar response rate. Immediacy in collecting patient-reported experience is important as it may lessen recall bias and in today's digital era provides for potential rapid-cycle improvement to identify problems in care delivery.[18] Next steps can explore how specific questions related to patient perceptions of racism in their care can be included in larger scale, widely adopted patient experience surveys to collect and integrate these data to inform operational change.

Our respondents were representative of the patient population served in a large, urban, academic ED that includes a majority Black patient population. In this initial work, we begin to see the differences in how Black and White patients experience ED care. Although limited by the approach and single institution design, we note that 1 in 10 Black patients believed that their race negatively impacted their ED care, including the respect they were treated with, communication, and the quality of care received. In contrast, 1 in 50 White patients reported their race negatively impacting their care.

Lastly, overall patient experience and experiences of racism are likely intertwined. We noted high patient-reported scores on overall care but substantially lower scores among those reporting racism—associations that would have been otherwise missed. Intentional questions using the terms "race" and "racism" drew out these differences. Important next steps will investigate the deeper clinical and narrative context of these experiences to inform institutional and clinical change. Ongoing work from this research team includes a qualitative follow-up investigation to help explore these patient narratives. Institutions must make efforts to highlight a focus on race, racism, and patient experience to illicit the information needed to advance equity and dismantle racism.

Health systems lack approaches to identify patients' experiences of racism. We demonstrate early signals in patient-reported experiences of racism from a novel, scalable, and patient-centered approach. Developing ways to identify racism in clinical care will bolster equitable and quality care. These approaches can identify specific areas for improvement and serve as overall measures of institution-wide efforts to combat racism.

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CONFLICT OF INTEREST

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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