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EDITORIAL

Reckoning With Racial Trauma in Rehabilitation Medicine

The trauma of racism

The story of structural racism and brutality toward black and brown people is well known to the communities who endure it. While the suffocating stream of violence affecting these communities has been historically entrenched, this reality has too often been unseen or ignored by others. But as reports spread of George Floyd's death in police custody in late May, the United States appeared to reach a tipping point. In this latest instance of a notorious pattern, a video showed Mr Floyd in handcuffs and subdued by 3 officers, with his neck lethally pinned beneath a fourth officer's knee. "I can't breathe," Mr Floyd said in a tragically familiar refrain before his death. Two autopsies ruled his killing a homicide. Mr Floyd's death, along with the recent extrajudicial killings of Ahmaud Arbery and Breonna Taylor, have catalyzed a rallying cry for justice. From policing to business to academia, the United States faces an overdue reckoning with the trauma of racism—a reckoning to which rehabilitation medicine is not immune.

Disparities in rehabilitation medicine and beyond

Systemic racism, economic injustice, educational exclusion, housing discrimination, and crucial deficits in health care access have been shown to drive health inequities. Black Americans and other populations of color experience disproportionately high rates of disease and premature mortality.[1,2] Black Americans also develop chronic diseases earlier than their white counterparts[3] and are more likely to die of complications.[4,5] In 2015, Meagher et al reported that black and Hispanic adults with traumatic brain injuries were significantly less likely to receive intensive rehabilitation, even when controlling for insurance status.[6] Studying access to health care after the Affordable Care Act went into effect, Manuel reported in 2018 that differential use disparities persisted despite the law's enactment—with black women and men faring worst in terms of improved access to care.[7]

In 2019, Chae et al found that in black women with systemic lupus erythematosus, increasing frequency of racial discrimination was associated with higher levels of systemic lupus erythematosus activity and organ damage.[8] Studies have also shown that black patients with diabetes lose their limbs to amputation at nearly triple the rate of other groups.[9] Poverty doubles the risk of diabetes,[10] and, in some regions, low-income neighborhoods have diabetic amputation rates 10-fold greater than high-income neighborhoods.[11] In a haunting reminder of the structural underpinnings of health disparities, density maps of amputations performed for peripheral vascular disease share a terrible symmetry with maps of the enslaved United States population in 1860.[12]

Compounding these structural disparities is the profoundly unequal effect of the Coronavirus Disease 2019 (COVID-19) pandemic on black and brown Americans. Using data from the Centers for Medicare and Medicaid Services, Godoy reported that black Americans with COVID-19 were hospitalized at quadruple the rate of their white counterparts.[13] The Brookings Institute calculated that age-adjusted COVID-19 death rates for black and Hispanic/Latino people is, respectively, 3.6 and 2.5 times that of white people.[14] In the face of these persistent health inequities, we are in need of a paradigm that recognizes and responds to the function of cultural and systemic racism in shaping population health in the United States.[15]

The road ahead

Rehabilitation medicine strives to help patients adapt to injury and recover from bodily insult of many kinds. We use a multidisciplinary toolbox to help patients move from incapacity toward function, from limitation toward possibility. We pride ourselves on treating the whole person and empowering patients to express themselves through their bodies to the best of their ability. But it is long past time to expand that toolbox: to recognize the ways in which the physical body is inextricably tethered to the body politic and to cultivate an awareness of the historical and structural traumas that are mapped onto the lives of so many of our patients.

Understanding the link between systemic trauma and health is imperative because the conditions we treat may ultimately remain refractory in the absence of remedies to the structural issues that underlie and perpetuate them.[16] The trauma-informed care model may be a useful starting point. The trauma-informed care model is predicated on the notion that trauma—defined not only as interpersonal maltreatment but also as structural and sociohistorical violence—can underlie medical dysfunction.[16,17]

In the case of a patient facing amputation, for example, a broad trauma-informed approach would rigorously inquire about the structural circumstances—such as racism, economic inequality, and access disparities—leading to limb loss as well as downstream barriers that might impair prosthesis acquisition and rehabilitation outcomes. How often does such context enter meaningfully into the awareness of rehabilitation practitioners? How might such awareness inform our care for

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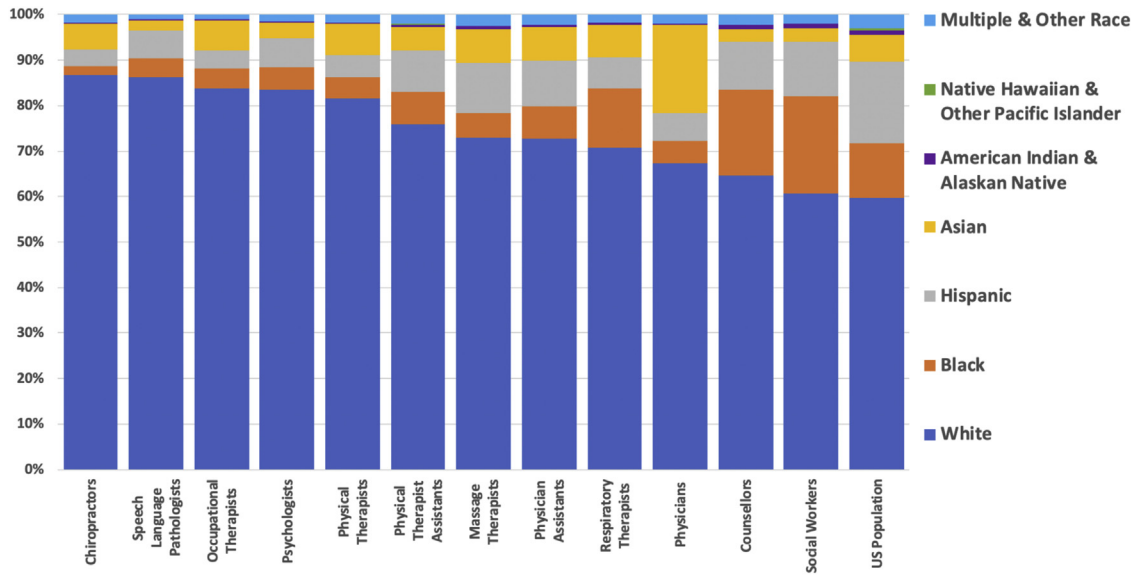

Fig 1 Racial distribution across United States census categories for selected rehabilitation-related health professional groups (2011-2015).[19,20]

individuals and communities? The reality is that without an adequate vocabulary to describe the structural trauma facing our patients, we cannot effectively formulate such questions, let alone put our medical expertise and imaginations to work in answering them.[18]

Just as important, we must examine the makeup of the care teams we work with when we ask these questions, lest our answers be riddled with blind spots that perpetuate the very problems we seek to address. Current United States Department of Health and Human Services data reveal a pronounced mismatch in representation between rehabilitation providers and the populations they serve (fig 1).

There have been many "calls to action" for increasing diversity among the health professions, including the United States Government's first Task Force on Black and Minority Health in 1985. More recently, Cohen et al called for greater racial and ethnic diversity of the health care workforce in America to enable "adequate provision of culturally competent care to our nation's burgeoning minority communities."[21(p91)] Despite a longstanding awareness of this pressing issue, the health care workforce remains unrepresentative across multiple levels, from undergraduate medical education to leadership.

Finally, a trauma-informed approach explicitly admits the pervasive vulnerability of patients, seeing that vulnerability (from the Latin *vulna*, meaning wound) as a moral and emotional bridge between clinicians and those in their care.[22] This attunement to individual vulnerability and the ways in which it is rooted in larger systems holds promise not only for compassionate, culturally competent care on a personal level but also for consequential structural intervention on the population health level. What these interventions look like will ultimately be determined by the response of practitioners to the challenges we face alongside our patients. As it stands now, people of color face worse clinical outcomes in a medical system that does not reflect the diverse fabric of American society. State-sanctioned violence, sociopolitical disenfranchisement, racial prejudice, and economic injustice are grinding down on too many of our patients. For their sake and for the health of our country, these social determinants of health demand a response from our profession. Hardeman et al[23] posit that solutions to racial health inequities "must be rooted in the material conditions in which those inequities thrive."[23(p198)] *How will we measure those inequities in rehabilitation? How will we hold ourselves and our society accountable to addressing them?* The story of our reckoning has long been in motion. With these questions hanging above us, its ending is yet to be written.

List of abbreviations:
COVID-19 coronavirus disease 2019

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