EDITORIALS



Diagnosing and Treating Systemic Racism

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For physicians, the words "I can't breathe" are a primal cry for help. As many physicians have left their comfort zones to care for patients with Covid-19-associated respiratory failure, the role of the medical profession in addressing this lifedefining need has rarely been clearer. But as George Floyd's repeated cry of "I can't breathe" while he was being murdered by a Minneapolis police officer has resounded through the country, the physician's role has seemed less clear. Police brutality against black people, and the systemic racism of which it is but one lethal manifestation, is a festering public health crisis. Can the medical profession use the tools in its armamentarium to address this deep-rooted disease?

The role of the physician in times of social injustice and societal distress is difficult to navigate. Since the importation of enslaved Africans as chattel to provide the labor that built this country began, Americans have functioned within the intricate injustices that are the vestiges of that institution. Slavery has produced a legacy of racism, injustice, and brutality that runs from 1619 to the present, and that legacy infects medicine as it does all social institutions. Slaves provided economic security for physicians and clinical material that permitted the expansion of medical research, improvement of medical care, and enhancement of medical training.1 This long and troubled history has permeated the physician-patient relationship with mistrust, reducing the potency of one of medicine's most powerful tools for healing and changing behavior.2

In an effort to engender trust in what they would like to see as a "postracial" society, some

U.S. clinicians proclaim that they "don't see color." But color must be seen. By looking through a racially impervious lens, clinicians neglect the life experiences and historical inequities that shape patients and disease processes. They may inadvertently feed the robust structural racism that influences access to care, quality of care, and resultant health disparities. At times, we fail to make even the simplest efforts: for instance, even though Covid-19 disproportionately affects black Americans, when physicians describing its manifestations have presented images of dermatologic effects, black skin has not been included. The "Covid toes" have all been pink and white.

In the review of systems, we query patients about exposure to toxicants, but we never ask about one of the most dangerous toxicants: racism. The work of David Williams details the morbidity and risk of death related to perceived discrimination.³ Discrimination and racism as social determinants of health act through biologic transduction pathways to promote subclinical cerebrovascular disease, accelerate aging, and impede vascular and renal function, producing disproportionate burdens of disease on black Americans and other minority populations.⁴⁷

Such research is part of a growing body of literature on health and health care disparities and their manifestations at every level of care. One recent study, for instance, found racial bias baked into a commercial algorithm used to predict the needs of patients with uncontrolled illnesses. Using health spending as a proxy for gravity of illness, the algorithm ignored the fact that disparities in access result in lower spending on black patients and thus failed to identify

black patients with complex needs.⁸ Such studies, if prioritized by health care institutions and journals — and approached with the same rigor we expect for the treatment of any disease — could lead to critical evidence-based interventions, whether medical or social.

Other research shows that in a world still shaped by systemic racism, black patients are more likely to trust, and heed the advice of, black physicians: a randomized, controlled trial found that black men assigned to a racially concordant doctor sought more preventive care than those assigned to a racially discordant one.9 The investigators estimated that black doctors could reduce the cardiovascular mortality gap between black and white patients by 19%, but structural racism in medicine and medical education continue to compromise our ability to deliver the best culturally competent care. Black patients, who are already affected by health inequities and impaired health care access, have a much lower chance than white or Asian-American patients of finding a racially concordant physician. Correcting this disparity requires bringing more black people into the medical workforce, beginning with early messages sent to black children about their abilities and possible careers, and working to remove racial bias all along their educational path.

Even as the social contract between the government and the American people has frayed in the complex struggle over the pandemic, racial injustice, and police brutality, physicians must reflect on the condition of medicine's own contract with society. Our society expects physicians to live up to standards of professionalism, deliver state-of-the-art, timely care with competence and integrity, and promote the public good.¹⁰ To carry out these duties, physician-citizens must recognize the harm inflicted by discrimination and racism and consider this environmental agent of disease as a vital sign — alongside blood pressure, pulse, weight, and temperature — that provides important information about a patient's condition. Medical skill has allowed us to respond rapidly to a novel virus to save lives; we must also use our expertise to address racism and injustice and to protect vulnerable people from harm.

Now, amid an acute public health crisis that is transforming medicine, perhaps we have an opportunity to reset our priorities to face this deeper, more chronic crisis as well. It is time to reimagine the medical interaction and the doctor–patient relationship, recommitting ourselves to the quiet work of doctoring and building trust with individual patients. We can become more conscious of our biases when we care for minority patients and push ourselves to go the extra mile. Even if we can't change the social determinants of health for any individual patient in any given encounter, we can think more seriously about how they affect what the patient can and can't do, tailor the patient's care accordingly, and show that we're invested.

As the vulnerability and inadequacy of our health care system are once again exposed, it is also time to reconceive that system, including the development of its workforce. Our actions must be driven by the data highlighting inequity in medical school admission and graduation rates, the dearth of black medical faculty, and the low grant-funding success rates for black biomedical researchers. We must also acknowledge past injustices and the persistent pain experienced by minority trainees and faculty, by listening and openly discussing racism and its health effects on rounds and at conferences and by broadening medical school curricula to include cultural sensitivity, cultural humility, and upstander training to equip students with advocacy tools to assist their patients and colleagues. Direct action to eliminate persistent health disparities obliges us to redouble our demands for a system that recognizes health care as a human right, providing an avenue to health equity for all.

Although effecting such fundamental transformation may feel impossible, the energy, idealism, and visions of young people have long fueled movements for change. Martin Luther King, Jr., was 26 when he led the Montgomery bus boycott and 34 when he delivered his powerful "I have a dream" oration. If we blend our voices with those of the newest members of our profession to advocate for the most vulnerable and to reinvigorate every aspect of their care, perhaps we can use our current public health crisis as a catalyst to, as Reverend Al Sharpton put it, "turn this moment into a movement."

Disclosure forms provided by the authors are available at NEJM.org.

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This editorial was published on June 10, 2020, at NEJM.org.

- 1. Washington HA. Medical apartheid: the dark history of medical experimentation on black Americans from colonial times to the present. New York: Random House, 2006.
- 2. LaVeist TA, Nickerson KJ, Bowie JV. Attitudes about racism, medical mistrust, and satisfaction with care among African American and white cardiac patients. Med Care Res Rev 2000;57: Suppl 1:146-61.
- 3. Williams DR, Lawrence JA, Davis BA. Racism and health: evidence and needed research. Annu Rev Public Health 2019;40: 105-25.
- 4. Beatty Moody DL, Taylor AD, Leibel DK, et al. Lifetime discrimination burden, racial discrimination, and subclinical cerebrovascular disease among African Americans. Health Psychol 2019:38:63-74.
- Beatty Moody DL, Leibel DK, Darden TM, et al. Interpersonal-level discrimination indices, sociodemographic factors, and telomere length in African-Americans and Whites. Biol Psychol 2019;141:1-9.
- 6. Beatty Moody DL, Leibel DK, Pantesco EJ, et al. Interactive

- relations across dimensions of interpersonal-level discrimination and depressive symptoms to carotid intimal-medial thickening in African Americans. Psychosom Med 2020;82:234-46.
- 7. Beydoun MA, Poggi-Burke A, Zonderman AB, Rostant OS, Evans MK, Crews DC. Perceived discrimination and longitudinal change in kidney function among urban adults. Psychosom Med 2017;79:824-34.
- **8.** Obermeyer Z, Powers B, Vogeli C, Mullainathan S. Dissecting racial bias in an algorithm used to manage the health of populations. Science 2019;366:447-53.
- 9. Alsan M, Garrick O, Graziani G. Does diversity matter for health? Experimental evidence from Oakland. Am Econ Rev 2019:109:4071-111.
- **10.** Cruess RL, Cruess SR. Expectations and obligations: professionalism and medicine's social contract with society. Perspect Biol Med 2008;51:579-98.

DOI: 10.1056/NEJMe2021693
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Antiplatelet Treatment to Prevent Early Recurrent Stroke

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Without urgent treatment, the risk of major stroke in the week after a transient ischemic attack (TIA) or minor stroke can be as high as 10%.¹ Some studies have shown that immediate medical treatment with antiplatelet agents and statins, as well as blood-pressure control, reduces that risk by 70 to 80%,¹¹² with the benefit attributable mainly to aspirin,³ but the residual 7-day risk of recurrent stroke is still 2 to 3%.⁴ Given the effectiveness of aspirin, might more intensive antiplatelet treatment with another drug or with dual antiplatelet treatment reduce this residual risk?

No other single antiplatelet drug has been shown to be clearly superior to aspirin in the acute phase after TIA or minor stroke, and dipyridamole and cilostazol appear to be less effective than aspirin.3 Ticagrelor is widely used for prevention of coronary thrombotic events,⁵ but it is less well established for secondary prevention after TIA or stroke. In a trial that directly compared ticagrelor with aspirin alone in patients with acute minor ischemic stroke or high-risk TIA, ticagrelor was associated with a lower risk of a secondary outcome of early recurrent ischemic stroke,6 particularly when it was started within 12 hours after the onset of stroke symptoms, without increasing the risk of intracranial hemorrhage or major extracranial bleeding. However, in that trial, ticagrelor did not significantly reduce the risk of stroke, myocardial infarction, or death (the composite primary trial end point), although the P value was 0.07.

Aspirin, therefore, remains the standard antiplatelet treatment for patients with acute minor ischemic stroke or TIA, but other agents can be added in high-risk patients. Although the addition of dipyridamole to aspirin has been shown to be no more effective than aspirin alone in preventing early recurrent ischemic stroke,³ aspirin plus clopidogrel has been shown to be more effective than aspirin alone, albeit with an increased risk of extracranial bleeding.⁷ In a trial involving patients with acute TIA or stroke, the extension of this approach to triple therapy with the addition of dipyridamole to aspirin and clopidogrel resulted in an excess of bleeding.⁸

Two comparisons of dual-therapy regimens that had remained untested in such patients are aspirin plus ticagrelor versus aspirin alone and aspirin plus ticagrelor versus aspirin plus clopidogrel. In this issue of the *Journal*, Johnston et al. report on the former comparison in more than 11,000 patients in the Acute Stroke or Transient Ischaemic Attack Treated with Ticagrelor and ASA for Prevention of Stroke and Death (THALES) trial. In this randomized, double-blind trial, patients who had had acute mild-to-moderate noncardioembolic ischemic stroke or high-risk TIA and who were not undergoing thrombolysis