Antiracism in Academic Medicine: Fixing the Leak in the Pipeline of Black Physicians

Elorm F. Avakame¹, Tessie W. October^{2*}, and Gabrina L. Dixon³

¹Department of Pediatrics, ³Division of Hospital Medicine, and ²Division of Critical Care Medicine, Children's National Hospital, George Washington University School of Medicine and Health Sciences, Washington, DC

ABSTRACT

Black physicians remain severely underrepresented in academic medicine despite the documented benefits of a diverse medical faculty. Only 3.6% of academic medical faculty self-report as Black or African American. Efforts to improve faculty diversity at academic medical institutions nationwide have not made meaningful impacts. Sustained improvements in faculty diversity cannot be achieved without an actively antiracist approach, including the intentional transformation of policies, practices, and systems that persistently produce worse outcomes for Black medical students, trainees, and faculty.

Keywords:

antiracism; medical education; faculty diversity

In 2004, the Institute of Medicine issued a landmark report arguing that increasing diversity in the healthcare workforce is critical to improving the healthcare system overall (1). The authors observed that racial and ethnic minority healthcare professionals are significantly more likely than their white peers to serve minority and medically underserved communities, who suffer from worse access and worse health outcomes. More recent work demonstrates that increasing physician diversity is often associated with greater access to care for low-income patients, racial and ethnic minorities, patients who do not speak English, and patients with Medicaid, making physician diversity a key strategy for reducing persistent health disparities (2). One randomized experiment found that Black men are much more likely to choose preventive services, especially invasive preventive services, after meeting with a racially concordant physician. The authors concluded that increasing the number of

(Received in original form September 29, 2020; accepted in final form February 2, 2021) This article is open access and distributed under the terms of the Creative Commons Attribution Non-Commercial No Derivatives License 4.0 (https://creativecommons.org/licenses/by-nc-nd/4.0/). For commercial usage and reprints, please contact Diane Gern (dgern@thoracic.org).

*T.W.O. is Associate Editor of *ATS Scholar*. Her participation complies with American Thoracic Society requirements for recusal from review and decisions for authored works.

Author contributions: All authors contributed to the content and writing of this manuscript. Correspondence and requests for reprints should be addressed to Elorm F. Avakame, M.D., M. P.P., c/o Pediatric Residency Program, Department of Pediatrics, Children's National Hospital, 111 Michigan Avenue, NW, WW 3.5, Washington, DC 20010. E-mail: eavakame2@childrensnational.org.

ATS Scholar Vol 2, Iss 2, pp 193–201, 2021 Copyright © 2021 by the American Thoracic Society DOI: 10.34197/ats-scholar.2020-0133PS Black physicians could reduce the Black– white male gap in cardiovascular mortality by as much as 19% (3).

Increasing diversity among academic physicians can also enrich the development of all physicians, regardless of minority status. The aforementioned Institute of Medicine report holds that diversity in health profession training settings can improve the cross-cultural training and cultural competencies of all trainees. Furthermore, greater representation of racial minorities among trainees and faculty can lend new perspectives to inform research, innovation, and quality improvement efforts.

However, despite the many documented benefits of increased physician diversity, Black physicians remain severely underrepresented in academic medicine (4). Though they comprise 13% of the U.S. population, just 3.6% of academic medical faculty self-report as Black or African American (5). Regarding the critical care workforce, though the number of academic fellowship positions grew by more than 50% between 2004 and 2014, the percentage of Black fellows decreased slightly from 5.1% to 3.9% (6). This shortage of Black physicians is partly explained by a shortage of Black medical students, as Black undergraduates matriculate to medical school at strikingly low rates. According to the Association of American Medical Colleges, there were 543 Black male matriculants to M.D.granting institutions in 1978. Nearly 40 years later, in 2014, there were 515 such matriculants-despite an overall increase in the number of Black male college graduates (7).

Although much is made of the dearth of racial minorities entering the physician pipeline, this does not fully explain the underrepresentation of Black physicians in academic medicine. Minority physicians experience lower rates of promotion than nonminority colleagues-and are more likely to leave academic medicine altogether-at every tier of the academic hierarchy (8). Importantly, this "leaky pipeline" does not begin at the faculty ranks. The barriers that drive racial minorities away from careers in academic medicine are present as early as medical school and continue throughout the academic continuum. To meaningfully improve the retention of Black physicians, academic medical institutions must adopt an "antiracist" approach to medical education.

The status quo condition of the systems that shape American society—including the healthcare system—is structural racism. Here, "structural racism" is conceptualized as an objective descriptor of systems that produce worse outcomes for racial and ethnic minorities. Contemporary public health scholarship holds structural racism as a key determinant of persistent racial health disparities in the United States (9). Furthermore, the American Medical Association has identified systemic and structural racism as the primary drivers of racial health inequity (10).

We argue that the concept of structural racism as applied specifically to the arena of academic medicine is a useful analytic framework for explaining the persistence of worse career outcomes for racial and ethnic minority physicians. In addition, we argue that the concept of "antiracism" provides an important reframing that can inform approaches to improving physician diversity. "Antiracism," most recently popularized by the historian Dr. Ibram Kendi, rejects the premise of raceneutrality (11). Under this framework, to be merely "not racist" is to support increasing diversity in academic medicine without taking deliberate action to achieve it. Similarly, to claim "colorblindness" is to willfully blind oneself to the barriers that Black students and physicians face.

These ostensible pronouncements of solidarity ultimately position individuals and institutions as passive, powerless observers, obscuring their potential for action, and relieving them of their responsibility to act. Antiracism requires actively transforming policies and systems that persistently produce worse outcomes for Black physicians in academic medicine.

STUDENTS AND TRAINEES

Beginning in the preclinical years, Black medical students experience the academic medical system as poorly equipped to contend with issues of race and racism. Examples include uncritical and often incorrect discussions of race as a discrete biological risk marker or failure to portray dermatologic findings on a variety of skin pigments (12, 13). And although Black students are no less likely to be interested in careers in academic medicine, they are more likely to perceive that racial minorities have a harder time succeeding in academic medicine (14). These perceptions are reinforced by early experiences on the wards. Minority medical students report overt discrimination from classmates, senior physicians, and patients (15). The mere threat of being stereotyped as less capable based on group identity is known to have deleterious consequences on academic performance (16). Though clerkship evaluations are heavily subjective, the subjectivities of evaluators-the vast majority of whom are non-Black-are rarely interrogated. Small inequities in performance evaluation can compound, leading to large

downstream inequities in grades and awards (17).

These factors persist at the trainee level, as minority residents continue to report racial discrimination, from frequent misidentification as nonmedical staff to explicitly racist comments from patients or senior physicians (18). Importantly, they also describe frustration with additional burdens placed on them to promote diversity at their institutions amid the overwhelming demands of residency training, often without sufficient institutional resource support (18).

Along the continuum of academic medicine, approaches to increasing diversity have been persistently insufficient. Just as the pipeline problems begin early, so must the solutions. Many training programs have invested in recruiting talented, underrepresented minority candidates, including facilitating visiting elective rotations, designing interview day experiences, and coordinating "second look" opportunities, among other efforts. Programs have also designed dedicated faculty mentorship and networking opportunities for their minority trainees intended to address barriers specific to the minority experience. Minority trainees undoubtedly benefit from dedicated recruitment and mentorship opportunities. However, in addition to targeted interventions, programs must improve their overall climate by building antiracist training environments. The following sections include suggested strategies for achieving this objective (Table 1).

ANTIRACISM IN THE FORMAL CURRICULUM

Trainees' educational experiences are principally dictated by the formal curricula established by their training programs. A program's priorities are reflected in the content and skill areas that it defines as core competencies. The Accreditation Council for Graduate Medical Education (ACGME) issues a set of common program requirements that shapes the landscape of graduate medical education nationwide. Current requirements "encourage systematic recruitment and retention of a diverse and inclusive workforce" and "respect and responsiveness to diverse patient populations" (19). Specifically including antiracism training as one such common program requirement would encourage all training programs toward operationalizing an antiracist learning environment.

Establishing antiracism as a core competency would require incorporating the robust body of scholarship regarding racism and medicine as essential literature for medical trainees. For example, no resident should graduate residency without learning that Black patients have been shown to receive less analgesia than white patients for similar long bone fractures or that medical trainees have been shown to exhibit false beliefs about biological differences between Black individuals and white individuals (e.g., "Black people's skin is thicker than white people's skin") associated with inappropriate treatment recommendations (20, 21).

That racialized perceptions of pain can lead to inappropriate analgesia should be an elementary concept mastered by first-year residents. Through formal didactics, journal clubs, and other clinical education activities, residents should develop a sophisticated enough grasp of race and medicine to critique the fundamental premise of race as an immutable genetic property rather than a sociohistorical construct with shifting boundaries. These concepts need not be sequestered to separate discussions; they can be regularly and creatively incorporated into typical didactic exercises. Ultimately, graduating residents should understand that socially constructed racial boundaries are so imprecise that there are more genetic differences within defined racial groups than between racial groups, though contemporary medical science perpetuates the false premise of racial groups as distinct biological populations and obscures the role of racism as a preventable etiology of racial health disparities (22).

ANTIRACISM IN THE "HIDDEN CURRICULUM"

Antiracism cannot be limited to the formal curriculum. It must also be informally practiced via the so-called "hidden curriculum" of clinical training. As physicians, we often implicitly consider ourselves separate from broader socializing forces. We learn to see racial health disparities as deriving from factors outside our institutions and to see ourselves only as remedying the damages wrought. Unless the healthcare system is the lone exception among American social systems, our policies and practices also produce worse outcomes for racial minorities. That is, our system is also structurally racist. Antiracism acknowledges that systems, policies, and practices that were not purposefully designed to be structurally racist can still be so.

Although countless physicians, hospitals, and physician advocacy groups have recently stood forcefully against racism in policing, we are yet to interrogate potential manifestations of similar forces in our own practices. Even as we condemn fear of the Black body in policing, how often does that same fear animate our responses to agitated Black patients? Though we reject assumptions of Black criminality in law enforcement, how often do those same assumptions inform our assessments of Black patients as "painseeking"?

All physicians in the United States are human beings exposed to the same anti-Black socialization that permeates the American milieu. Unless we imagine ourselves a distinct class of humans immune to the shortcomings of human cognition, we should expect to exhibit the same conscious and unconscious biases that produce differential outcomes for racial minorities in other settings. Again, this applies to all physicians, irrespective of racial identity. The question, then, should not be whether racial bias occurs in our institutions but where it occurs.

The fallacy of race-neutrality suggests that if we avoid thinking about race, we avoid acting on it. Antiracism accepts that structural racism exists in all systems, dispensing with our "race-neutral" selfimage and actively seeking to identify the manifestations specific to academic medicine. Antiracism recognizes that actions that were not intended harmfully can still have racist impacts and that impact is always more important than intent. And, importantly, beyond acknowledging that many or most individuals in academic medicine exhibit some unconscious biases as a byproduct of socialization, antiracism recognizes that some individuals harbor overtly racist attitudes and establishes mechanisms for remedying harms and providing corrective feedback. Our academic environments must normalize discussing the potential impacts of racism on specific clinical cases, calling out interpersonal racism in team conversations, and reexamining performance evaluation processes for vulnerabilities to racial bias as well as other practices that move antiracism

from the realm of formal didactics to the informal "hidden" curriculum.

FACULTY

Despite the ACGME requirement for training programs and sponsoring institutions to promote diversity and inclusion, many institutions do not provide support, mentorship, and sponsorship for minority faculty (19, 23). To build an antiracist academic medical institution, minority faculty must have mentorship and sponsorship to support their efforts. In our own work evaluating factors influencing racial minority pediatricians to choose an academic career compared with a private practice, early career mentorship was identified as a critical determinant (24). The paucity of underrepresented minority leaders in academic medicine was an important barrier. These findings are supported by other data confirming the impact of dedicated faculty mentorship, even as underrepresented minority faculty are less likely to receive dedicated mentorship (25). Taken together, the data suggest that nonminority mentors are needed to fill mentorship gaps and must make minority retention and promotion a personal mission.

Recent scholarship underscores the importance of sponsorship in minority career advancement. Sponsorship, defined as "active support by someone appropriately placed in the organization who has a significant influence on decisionmaking processes or structures and who is advocating for, protecting, and fighting for the career advancement of an individual," is related to mentorship but critically distinct (26). Mentorship entails guidance in the development and pursuit of career goals, with interactions primarily between the senior mentor and junior mentee—for example, encouraging a mentee to apply for an institutional leadership position. Sponsorship, instead, describes interactions between a senior individual and the broader institution on behalf of the junior individual—for example, a senior leader advocating for decision makers to consider a junior individual for a leadership position. As the overwhelming majority of senior leaders in academic medicine are nonminorities, including roughly 90% of full professors, these individuals must actively prioritize sponsorship of minority faculty (27).

Minority academicians are often asked to serve on institutional committees related to recruitment, diversity, and inclusion, accepting a larger administrative burden than other colleagues without a specific time or resource allocations for these activities. As minority faculty are often few in number at any given institution, these demands can fall heavily on these individuals. This "minority tax," as this is called, makes it harder for faculty to do work rewarded by the promotion process, leading to career stagnation and burnout and even to Black flight from academia (23, 28, 29). Even where resources are committed, these committees are rarely endowed with the authority to make

Table 1. Suggested approaches to antiracism in academic medicine

Establish antiracism training as an ACGME common program requirement

Include scholarship on race and medicine in journal club discussions

Develop specific formal didactics on issues of racism in medicine

Incorporate issues of racism in medicine into typical didactic exercises

Antiracism in the hidden curriculum

Normalize discussing potential impacts of racism on specific clinical cases

Call out interpersonal racism in team conversations

Reexamine performance evaluation processes for vulnerabilities of racial bias

Establish mechanisms for remedying harms and providing corrective feedback

Antiracism in faculty advancement

Encourage sponsorship and mentorship of Black junior faculty

Relieve the "minority tax" of administrative burden

Allocate protected time and resources to diversity and inclusion-related committees

Review promotion and tenure criteria to reward equity-focused work

Identify sources of funding for equity-based research

Add minority faculty to selection committees

Require a diverse pool of applicants for all new hires

Definition of abbreviation: ACGME = Accreditation Council for Graduate Medical Education.

institutional changes. These efforts, doomed from inception, serve only to exacerbate the minority tax for faculty who participate.

ANTIRACISM IN FACULTY ADVANCEMENT

Though publications and grants remain the currency of academic medicine, Black physicians are more likely to engage in important work such as institutional leadership on issues of diversity and inclusion, outreach to underserved communities, advocacy, and mentorship and education of trainees. These activities are often pursued out of personal commitment on the part of Black physicians but are critical professional activities that serve their institutions' missions. However, these activities have traditionally been devalued by tenure and promotion processes. Until we place equal value on these important contributions, Black faculty will continue to be left behind. Institutions should review retention and promotion criteria and identify opportunities to legitimize work in these arenas as equally deserving of awards and promotions.

But even when Black faculty choose the "traditional" path of research, they are less likely to receive funding. Black researchers were found to be significantly less likely than white researchers to receive funding from the National Institutes of Health (NIH), and at least 20% of this disparity can be attributed to the choice of research topic alone (30, 31). Less funding is awarded for research at the community and population level, which Black scientists tend to conduct. Until NIH study sections and review panels better reflect the diversity present in our society, this disparity in funding by topic will persist. An antiracist approach to scholarly activity places equal value on community-oriented advocacy, education, and research activities of faculty members.

CONCLUSIONS

In diversifying the workforce in academic medicine, our system consistently produces failing results. In fact, some estimates show that Black physicians were more underrepresented across all academic ranks in 2016 than in 1996 (8). Minority students, trainees, and faculty encounter implicit and explicit racial discrimination, professional isolation, insufficient mentorship, and the minority tax as barriers to professional advancement. An antiracist approach holds that "awareness" is insufficient to effect meaningful change. Listening and learning are important steps, but they are still the first steps. Changing those results will require wholesale changes to the system. Crucially, academic medical centers must abandon passive "support" and symbolic "solidarity" in favor of the active and constant work of antiracism.

<u>Author disclosures</u> are available with the text of this article at www.atsjournals.org.

REFERENCES

- 1. Bristow LR, Butler AS, Smedley BD, editors. In the nation's compelling interest: ensuring diversity in the health-care workforce. Washington, DC: National Academies Press; 2004.
- Marrast LM, Zallman L, Woolhandler S, Bor DH, McCormick D. Minority physicians' role in the care of underserved patients: diversifying the physician workforce may be key in addressing health disparities. *JAMA Intern Med* 2014;174:289–291.

- Alsan M, Garrick O, Graziani GC. Does diversity matter for health? Experimental evidence from Oakland. Cambridge, MA: National Bureau of Economic Research; 2018 [updated 2019 Aug; accessed 2020 Dec 12]. Available from: https://www.nber.org/papers/w24787.
- Nivet MA. Minorities in academic medicine: review of the literature. J Vasc Surg 2010;51(Suppl): 53S-58S.
- Association of American Medical Colleges. Percentage of full-time US medical school faculty by race/ethnicity 2018. Washington, DC: Association of American Medical Colleges; 2020 [accessed 2020 Jul 15]. Available from: https://www.aamc.org/data-reports/workforce/interactive-data/ figure-15-percentage-full-time-us-medical-school-faculty-race/ethnicity-2018.
- Lane-Fall MB, Miano TA, Aysola J, Augoustides JGT. Diversity in the emerging critical care workforce: analysis of demographic trends in critical care fellows from 2004 to 2014. *Crit Care Med* 2017;45:822–827.
- Association of American Medical Colleges. Altering the course: Black males in medicine. Washington, DC: Association of American Medical Colleges; 2015.
- 8. Lett LA, Orji WU, Sebro R. Declining racial and ethnic representation in clinical academic medicine: a longitudinal study of 16 US medical specialties. *PloS One* 2018;13:e0207274.
- Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. *Lancet* 2017;389:1453–1463.
- American Medical Association. AMA: racism is a threat to public health. Chicago, IL: American Medical Association; 2020 [updated 2020 Nov 16; accessed 2020 Dec 12]. Available from: https:// www.ama-assn.org/delivering-care/health-equity/ama-racism-threat-public-health.
- 11. Kendi IX. How to be an antiracist. New York, NY: One World; 2019.
- 12. Martin GC, Kirgis J, Sid E, Sabin JA. Equitable imagery in the preclinical medical school curriculum: findings from one medical school. *Acad Med* 2016;91:1002–1006.
- Tsai J, Ucik L, Baldwin N, Hasslinger C, George P. Race matters? Examining and rethinking race portrayal in preclinical medical education. *Acad Med* 2016;91:916–920.
- Sánchez JP, Peters L, Lee-Rey E, Strelnick H, Garrison G, Zhang K, *et al.* Racial and ethnic minority medical students' perceptions of and interest in careers in academic medicine. *Acad Med* 2013;88: 1299–1307.
- Odom KL, Roberts LM, Johnson RL, Cooper LA. Exploring obstacles to and opportunities for professional success among ethnic minority medical students. *Acad Med* 2007;82:146–153.
- Burgess DJ, Warren J, Phelan S, Dovidio J, van Ryn M. Stereotype threat and health disparities: what medical educators and future physicians need to know. *J Gen Intern Med* 2010;25:S169–S177.
- Teherani A, Hauer KE, Fernandez A, King TE Jr, Lucey C. How small differences in assessed clinical performance amplify to large differences in grades and awards: a cascade with serious consequences for students underrepresented in medicine. *Acad Med* 2018;93:1286–1292.
- Osseo-Asare A, Balasuriya L, Huot SJ, Keene D, Berg D, Nunez-Smith M, et al. Minority resident physicians' views on the role of race/ethnicity in their training experiences in the workplace. JAMA Netw Open 2018;1:e182723.
- Accreditation Council for Graduate Medical Education. ACGME common program requirements (residency). Chicago, IL: Accreditation Council for Graduate Medical Education; 2020 [updated 2020 Feb 3; accessed 2020 Jul 15]. Available from: https://www.acgme.org/Portals/0/PFAssets/ ProgramRequirements/CPRResidency2020.pdf.

- Todd KH, Deaton C, D'Adamo AP, Goe L. Ethnicity and analgesic practice. Ann Emerg Med 2000; 35:11–16.
- Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proc Natl Acad Sci USA* 2016;113:4296–4301.
- 22. Boyd RW, Lindo EG, Weeks LD, McLemore MR. On racism: a new standard for publishing on racial health inequities. Bethesda, MD: Health Affairs; 2020 [accessed 2020 Oct 8]. Available from: https://www.healthaffairs.org/do/10.1377/hblog20200630.939347/full/?utm_medium=social.
- Palepu A, Carr PL, Friedman RH, Amos H, Ash AS, Moskowitz MA. Minority faculty and academic rank in medicine. *JAMA* 1998;280:767–771.
- Dixon G, Kind T, Wright J, Stewart N, Sims A, Barber A. Factors that influence the choice of academic pediatrics by underrepresented minorities. *Pediatrics* 2019;144:e20182759.
- Beech BM, Calles-Escandon J, Hairston KG, Langdon SE, Latham-Sadler BA, Bell RA. Mentoring programs for underrepresented minority faculty in academic medical centers: a systematic review of the literature. *Acad Med* 2013;88:541–549.
- 26. Raphael JL. The role of sponsorship in achieving workforce diversity in academic pediatrics. *Pediatrics* 2019;144:e20191532.
- Xierali MI, Malika FA, Nivet MA. Faculty diversity in US medical schools: progress and gaps coexist. Issue brief. Washington, DC: Association of American Medical Colleges; 2016 [accessed 2020 Aug 12]. Available from: https://www.aamc.org/media/8406/download.
- Blackstock U. Why Black doctors like me are leaving academic medicine. Boston, MA: STAT; 2020 [updated 2020 Feb 3; accessed 2020 Sep 8]. Available from: www.statnews.com/2020/01/16/blackdoctors-leaving-faculty-positions-academic-medical-centers/.
- Rodríguez JE, Campbell KM, Pololi LH. Addressing disparities in academic medicine: what of the minority tax? *BMC Med Educ* 2015;15:6.
- Ginther DK, Schaffer WT, Schnell J, Masimore B, Liu F, Haak LL, et al. Race, ethnicity, and NIH research awards. *Science* 2011;333:1015–1019.
- Hoppe TA, Litovitz A, Willis KA, Meseroll RA, Perkins MJ, Hutchins BI, et al. Topic choice contributes to the lower rate of NIH awards to African-American/Black scientists. Sci Adv 2019;5: eaaw7238.