The Current State of Antiracism Curricula in Undergraduate and Graduate Medical Education: A Qualitative Study of US Academic Health Centers

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ABSTRACT

PURPOSE We undertook a study to evaluate the current state of pedagogy on antiracism, including barriers to implementation and strengths of existing curricula, in undergraduate medical education (UME) and graduate medical education (GME) programs in US academic health centers.

METHODS We conducted a cross-sectional study with an exploratory qualitative approach using semistructured interviews. Participants were leaders of UME and GME programs at 5 institutions participating in the Academic Units for Primary Care Training and Enhancement program and 6 affiliated sites from November 2021 to April 2022.

RESULTS A total of 29 program leaders from the 11 academic health centers participated in this study. Three participants from 2 institutions reported the implementation of robust, intentional, and longitudinal antiracism curricula. Nine participants from 7 institutions described race and antiracism-related topics integrated into health equity curricula. Only 9 participants reported having "adequately trained" faculty. Participants mentioned individual, systemic, and structural barriers to implementing antiracism-related training in medical education such as institutional inertia and insufficient resources. Fear related to introducing an antiracism curriculum and undervaluing of this curriculum relative to other content were identified. Through learners and faculty feedback, antiracism content was evaluated and included in UME and GME curricula. Most participants identified learners as a stronger voice for transformation than faculty; antiracism content was mainly included in health equity curricula.

CONCLUSIONS Inclusion of antiracism in medical education requires intentional training, focused institutional policies, enhanced foundational awareness of the impact of racism on patients and communities, and changes at the level of institutions and accreditation bodies.

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INTRODUCTION

The Association of American Medical Colleges (AAMC) states, "America's medical schools and teaching hospitals educate tomorrow's doctors and prepare them to meet society's evolving health needs."[1] A core of that mission is to promote well-being, improve health, address emerging health-related issues, and give hope to everyone in the United States. Racially based societal and interpersonal discrimination undermines those goals and creates and perpetuates systematic disadvantage with wide-ranging consequences for the mission of academic health centers (AHCs). Racism and other forms of social injustice underlie inequities in social, psychological, and physical health.[2] Racism, particularly acts, attitudes, and structures directed against racial and ethnic minorities, dates back to at least the slavery and Jim Crow eras, and the downstream inequities from adverse structural determinants of health are indisputable. Medical schools, however, inconsistently teach students about the impact of structural racism on health care access, quality, and outcomes, and focus primarily on human biological function as the foundation for medical education. This focus, a by-product of the Flexner Report that argued for and led standards for the scientific content of medical training, may have perpetuated neglect of the health impact of social factors, such as racism, in medical education.[3,4]

Recently, some have called for medical education reform to place a greater emphasis on social mission.[5] The Clinical Learning Environment Review created

areas of focus on health disparities, and others have endorsed using the Liaison Committee on Medical Education accreditation process to have a stronger emphasis on health care inequities.[6,7] More recent national attention to institutional racism has grown out of the impact of the COVID-19 pandemic and outcry over high-profile murders of Black people.[8] Those events led to almost universal statements of commitment to antiracism across all AHCs, but translation into the medical education of the health care workforce is unclear.

Recognizing the potential for medical education to contribute to efforts to address social injustices, there is a strong societal interest in training health care leaders and future clinicians in identifying bias, health disparities, and racism.[8,9] In one response, the AAMC developed a framework for addressing racism that includes (1) "innovative and promising pedagogies to educate medical students, residents, and other clinical and research trainees" about racism to promote equitable and culturally sensitive treatment of all patients and coworkers and (2) identifying and using best practices of staff, faculty, and leadership training about racism in the workplace and learning environments.[10] Additionally, the AAMC Group on Diversity and Inclusion created a framework to promote antiracist pedagogy.[11]

Despite these efforts, little is known about how AHCs have translated words of commitment into action by developing, implementing, and evaluating antiracism pedagogy. We undertook this study to evaluate the current state of antiracism pedagogy in undergraduate and graduate medical curricula, including barriers to and facilitators of implementation. The study grew out of consultations with key national stakeholders through the Academic Units for Primary Care Training and Enhancement (AU-PCTE) consortium.

METHODS

Study Design

We conducted a cross-sectional study with an exploratory qualitative approach using semistructured interviews and a survey to collect sociodemographic data at selected AHCs in the United States from November 2021 to April 2022. The study was conducted within the AU-PCTE centers that aim to promote primary care workforce training on the needs of diverse, vulnerable, and rural populations; social determinants of health; health workforce diversity; integrated behavioral health; and oral health.[12] The AU-PCTE has been described previously.[13] In brief, the AU-PCTE was funded by the Bureau of Health Workforce at the Health Resources and Services Administration in 2016 with 6 funded centers addressing (1) integration of oral health into primary care; (2) training for rural health care; (3) training for the social determinants of health; (4) training for integration of behavioral health into primary care; (5) training for vulnerable populations; and (6) health workforce diversity. The study was deemed exempt by the Mayo Clinic Institutional Review Board (study ID 21-009884).

Setting and Participants

Study participants were faculty leaders of undergraduate medical education (UME) and graduate medical education (GME) programs at 11 AHCs. We used purposive sampling to recruit from AU-PCTE and affiliated sites with a goal of geographic diversity. A principal investigator at each AU-PCTE site identified UME and GME directors; clerkship or residency program directors; Diversity, Equity, and Inclusion (DEI) leaders; and other faculty members with knowledge of or oversight roles in institutional curricula development. We specifically sought participation from faculty in family medicine, pediatrics, internal medicine, and obstetrics and gynecology because the AU-PCTE program focused on primary care workforce development. We used snowball sampling to identify other faculty knowledgeable in curricula content and development at each institution.

Data Collection

Our data collection was guided by stakeholder consultations and an antiracism call to action suggested by the AU-PCTE (Supplemental Appendix).[14] Stakeholder engagement included accreditation and certification organizations such as the Accreditation Council for Graduate Medical Education, and academic member associations (eg, AAMC).[12] The interview guide was pretested with a sample of faculty members similar to those in the study. Participants completed an anonymous, brief online questionnaire assessing their sociodemographic and professional characteristics. They then completed semistructured interviews virtually after providing verbal consent. The interview guide explored 5 thematic areas: institutional efforts to address racism; organizational diversity and culture; framework and barriers related to antiracism curriculum; planning and engaging process of antiracism curriculum; and perceptions about antiracism training in peer institutions (Table 1). All interviews were audio recorded and transcribed verbatim using automated software (Otter.ai). Data were collected until saturation was achieved and no new topics emerged.[15]

Data Analysis

We performed qualitative data analysis[16] using Dedoose (version 9.0.18; Socio Cultural Research Consultants LLC).[17] Two authors (G.F. and M.R.) performed thematic content analysis of interview transcripts using a deductive-inductive coding approach.[13,17,18] Deductive coding was used during the first coding cycle, and as new themes emerged, inductive coding was applied.[19] The Cohen κ for the intercoder reliability was 0.84.[20] We enhanced consistency and adherence to established standards for qualitative analysis by holding regular meetings.[21]

RESULTS

Participant Characteristics

We invited 46 program leaders from 17 AHCs to participate in the study, of whom 29 (63%) from 11 AHCs representing

all US Regions (West, Midwest, South, Northeast) participated (Table 2). Participants were predominantly aged 35 years and older (79%) and women (72%). About 62% were White, 21% Black or African American, and 14% Asian. The large majority (69%) were assistant or associate professors.

Themes Regarding Antiracism Curricula

Curriculum Implementation

In qualitative interviews with the 29 participants, 17 participants from 10 institutions stated that their institution had made a public statement of commitment against racism, and 15 participants at 8 institutions reported having an institutional definition for racism, but some were unable to recall the definition. Five participants at 3 institutions stated that a definition was in development.

Eleven participants reported that their institution reviewed existing curricula for the inclusion of health equity content, such as the use of appropriate language and presence of content on race, bias, structural racism, and the use of race as a social construct. Most participants believed their institutions supported changes or had already revised curricula to address racism. For example, one reported the recent development of curriculum:

"… 2 years ago was the first year that the medical school actually implemented an antiracism, diversity, equity, and inclusion curriculum within the formal medical school curriculum." (Participant 3)

A total of 24 participants at 9 institutions reported that their medical school evaluated and revised curricula annually; however, only 6 participants from 5 institutions reported the use of a specific rubric or guide for evaluating and revising curricula at their institution. Feedback from current students, teachers, and outside evaluators was also reported as guiding curriculum changes. Many participants believed that learners' feedback regarding antiracism-related training had been overall positive.

"I think one of the really powerful things in our curriculum is having our residents of color give real-life examples of them developing cases for discussion around what they are experiencing as learners, and so that is powerful." (Participant 22)

Twenty-seven out of the 29 participants felt that antiracism-related content should be infused and integrated throughout the whole curriculum rather than presented as a standalone course or experience. Twelve participants suggested that antiracism training should be a longitudinal experience throughout medical education from UME through GME.

"… we are looking for a way to have a curriculum that is more robust and intentional, and spiral it throughout all 4 years so that we are building critical reflective practice." (Participant 8)

Three participants from 2 institutions reported implementing a robust, intentional, and longitudinal curriculum on structural racism, prejudice in health care, and unbiased care in the core curriculum and clerkships. Nine participants from 7 institutions described race- and antiracism-related topics integrated

Table 1. Topic Guide for the Semistructured Interviews

Institutional efforts to address racism

- What things has your institution done to address racism in the past and present?
- Is there a specific way that your institution defines racism?
- Does your institution have training and/or educational programs for addressing racism?
- Is there a specific way that your institution has demonstrated a commitment to addressing racism?
- Does your institution have a public statement and/or policy on antiracism?
- In what ways does the antiracism program currently complement medical training education?

Organizational culture

- Could you share with me the ways your institution embraces antiracism programs as part of its cultures or ongoing initiatives?
- Are there aspects of your institution's culture that hinder embracing antiracism?

Content, framework, and barriers related to antiracism curriculum

- What is the focus of your institution's current antiracism curriculum?
- Does your program assess competencies related to antiracism within your program?
- Is there a specific framework or model you use to guide the development of your curriculum or activities related to racism?
- Please share with us barriers you face at your institution while implementing antiracism curriculum.

Planning and engagement process of antiracism curriculum

- Was there a specific person, division, or department that began the antiracism curriculum? (We are not asking for a name.)
- What do you see as the strengths and areas of opportunity for improvement of your curriculum?
- Regarding curriculum adequacy, what has been the learner feedback?
- Do you feel the curriculum faculty are adequately trained to teach about antiracism?
- How often does your institution revise the curriculum?
- Do they follow any rubric or guideline to help with revisions?

Antiracism curriculum/program relative to others

- How does your antiracism curriculum compare with other educational programs within your *own* institution?
- Do you know about any antiracism programs at *other* institutions? *[If yes]* How would you compare your curriculum to curriculum at other institutions?
- Are there aspects of curricula at other institutions that you would like to include?
- Do you feel that your curriculum could be used by other institutions? *[If yes]* Could you elaborate? *[If no]* What adaptations do you feel would be needed before it is used at other institutions?

Table 2. Characteristics of Study Participants and Their Institutions and Faculty (N = 29)

Characteristic	Participants, No. (%)
Gender	
Female	21 (72)
Male	7 (24)
Nonbinary	1 (4)
Age-group	
25-35 y	6 (21)
36-45 y	10 (35)
46-55 y	10 (35)
56-65 y	3 (10)
Ethnicity: Hispanic	3 (10)
Race	
Asian	4 (14)
Black or African American	6 (21)
White	18 (62)
Missing	1 (4)
Academic rank	
Assistant professor	10 (35)
Asian	1 (10)
Black or African American	4 (40)
White	5 (50)
Associate professor	10 (35)
Asian	2 (20)
Black or African American	1 (10)
White	7 (70)
Professor	5 (17)
Asian	1 (20)
Black or African American	1 (20)
White	3 (60)
Academic rank *(continued)*	
Adjunct faculty	4 (14)
Asian	0 (0)
Black or African American	0 (0)
White	4 (100)
Title/role	
Chair, vice chair, dean of medical education	6 (21)
Associate director, associate dean for curriculum and assessment	6 (21)
Director, associate dean, vice chair, associate vice chair, DEI leader/social justice curriculum	13 (45)
Program/clerkship director, associate program director	4 (14)
Time in role	
<1 year	2 (7)
1-5 years	21 (72)
6-10 years	4 (14)
>10 years	2 (7)
Specialty	
Family medicine	8 (28)
Internal medicine	10 (35)
Pediatrics	4 (14)
Obstetrics and gynecology	1 (4)
Medical education	3 (10)
Other	3 (10)

DEI = diversity, equity, and inclusion.

into health equity curriculum. Still, despite the incorporation of antiracism promotion into formal teaching activities, respondents reported that the content was not always discernible.

Participants also shared the view that students, residents, and faculty can work together to enhance the implementation of an antiracism curriculum. Oversight committees, such as DEI offices, committees for justice, and student councils, were perceived as having essential roles in addressing racism in AHCs by looking at educational opportunities for UME, GME, and faculty development.

"…the antiracism oversight committee [is charged] to develop and recommend a plan around contributions to eliminate racism and inequities that may exist today [in] medicine." (Participant 20)

Educational Activities

Twenty participants at 8 institutions reported that their institutions had training and educational programs for addressing racism, inside or outside dedicated curricula. This content was mostly incorporated into courses on health equity, social determinants of health, or other social factors in medicine, with few dedicated specifically to antiracism content. For example, at one institution, as reported by 3 participants, a 4-day program was offered that explicitly focused on antiracism topics, looking at redlining and other examples of structural racism, their impact on health disparities, and race-based medicine. (Redlining was a racially discriminatory practice in the 1930s whereby residential areas with large numbers of Black people were color coded as red [or "hazardous"] to discourage investment, but the term more broadly also applies to denial of opportunities, including mortgages and other financial services, on the basis of race.[22])

We found that antiracism training for medical students and residents in primary care specialties was not always a required component. At 4 institutions, mandatory training was structured as hourly group sessions each year for residents, longitudinal courses for medical students, or joint introductory UME or GME lectures.

"I think one other piece, and this is probably really important for you to know, is our entire curriculum is mandatory. So, it is not an elective. It is there for every single student." (Participant 21)

Optional training included comprehensive certification on DEI, courses, interactive lessons by guest speakers, or summer training across the campus related to active antiracist work.

"Many of our students are also offered the training on voluntary basis and many students utilize that opportunity." (Participant 7)

Participants mentioned that having mandatory training for faculty members and leaders would be a valued method for faculty development. They talked about events that discussed racism and how it affects patients or the health care workforce.

"…then we've done faculty development, and we've had a number of Health Equity Series where we've talked significantly about racism, and how it impacts health for patients and populations." (Participant 24)

Participants reported that new clinical and communication skills could be gained from antiracism training through Objective Structured Clinical Examination stations, cases, lived experiences, or a blending of antiracism work with practical clinical teaching.

Another institutional teaching activity that participants highly valued was engagement with learners to help them personalize the experience through organizing health equity events, including dialogs, bias reduction workshops, and conferences dedicated to mitigating racism.

"We're developing a health equity rounds or case conference, where we think about structural competence and its impact on our patients depending on their social identities, including race and racism, and specifically within the primary care residency … ." (Participant 24)

Discussions guided by books and movies were also used extensively as informal teaching approaches to promote learning about racism and antiracism topics. Analyzing journal articles for bias and for understanding of how race is inappropriately used within medicine as an indicator of health was another collaborative learning activity reported by several participants.

"There's also been… book clubs that have been happening on different sort[s] of elements on the campus on different sort[s] of topic[s] from how to be an antiracist and allowing safe places for people to dive into these topics." (Participant 11)

The Focus of Antiracism Training

Participants were asked about the focus of the current antiracism curricula or work, and 12 identified health equity as the core priority.

"We are focusing on health equity. So social determinants of health. So how does racism affect the outcomes of medical conditions?" (Participant 27)

Microaggressions are subtle verbal, behavioral, and environmental actions that communicate hostile, derogatory, or negative attitudes toward a member of a marginalized group. Some noted that curricula focused on raising students' awareness that microaggressions may present as layered, subtle, or unconscious forms of racism and then building the skills of alliance within the context of an inclusive learning environment or clinical practice.

A few participants perceived that their institutions perpetuate the idea of race being a biologic construct rather than a sociopolitical construct. Participants at other institutions reported that students are introduced to the notion that exposure to racism is a predisposing factor but race is not.

"One of the things we do really specifically is, we focus on … race is a social construct, and not at all genetic difference." (Participant 27)

Six participants at 4 institutions emphasized institutional efforts to improve representational diversity in teaching methods. For example, at 1 institution, social determinants of health checklists were being created to look for inclusion of antiracism content for each teaching activity.

"… when we will roll out a new curriculum, we have been actively creating checklists that in every instruction method, you should address disparity in … substance and alcohol … use disorders and social justice, social determinants of health." (Participant 7)

Strengths of Existing Antiracism Training

During the interview, 9 of 29 participants, from 6 institutions, reported the presence of "adequately trained" faculty to educate learners about this topic. The remainder (5 institutions) stated that faculty needed additional formal training, expert guidance, and/or institutional support to help reinforce antiracism training.

"I think our facilitators are less skilled than we would like them to be able to actually facilitate a lot of these challenging conversations." (Participant 25)

Six participants at 4 institutions explained that their institution assigned team experts such as health equity or DEI leaders from each department to help others review content and language that might be discriminatory. Three DEI leaders in medical education felt that faculty with a clinical science background were more prepared than those from basic science backgrounds to incorporate antiracism content within their work.

Twenty-two participants (11 institutions) considered their own antiracism-related content acceptable for other institutions to use. Some believed that it is essential to have content that is aligned to the institution and the community wherein they are practicing and studying. Eight reported their program or curriculum as more advanced than that of other departments within and/or outside their institution.

Barriers to Implementing Antiracism Training

The personal and interpersonal nature of the training, faculty uncertainty about their knowledge, and resistance to change

were commonly voiced and stressed as barriers for implementing antiracism-related training. Participants highlighted that students were more prepared and action oriented than faculty for antiracism-related discussions. Burnout and the impact of the COVID-19 pandemic were mentioned as barriers to implementing antiracism curricula. Further complicating implementation was the reluctance of faculty and students to change or compromise.

"We have students and residents who are more familiar, and able to more quickly point out certain things. And then we have the challenge or struggle of faculty not being at that same place." (Participant 6)

Fourteen participants (7 institutions) stated that sufficient individual faculty time needs to be allocated to the antiracism training. The lack of dedicated time resulted in disruptions or halts in implementation.

"I would say time. And when we think of, you know, about the longitudinal curriculum and being able to develop that, that takes time to do it well. And this is not a curriculum that we want to pull together hastily, or in a disconnected manner." (Participant 3)

Eleven interviewees (8 institutions) described hindering factors related to institutional inertia in embracing antiracism work, less diverse leadership, and lack of awareness. Also, 11 participants from 8 institutions explained that leaders in departments were given the title to do this work, but that progress in moving from rhetoric to action had been slow. As for prioritizing teaching content, responses suggested that health equity programs were considered less important or undervalued than other content.

"I think one issue that comes up is fear that if we're introducing curriculum on antiracism, it will take away from other content that is needed to help make sure our trainees pass their board exams." (Participant 1)

Seven participants stated that hospital systems have been slower to implement an open organizational structure to address racism compared with medical schools because of political backlash, lack of stakeholder support, and/or staffing needs for managing the pandemic. This situation created discrepancies between what medical students learned in the classroom and the behaviors modeled in the clinical or hospital setting where unconscious bias is frequently observed.

"So, we have our school of medicine and then we have our hospital, which are separate entities. And so, there are differences related to how antiracism practices are embraced across those institutions." (Participant 6)

In addition, participants identified the "minority tax," the unnecessary burden and lack of compensation placed on racial and ethnic minorities that are tasked with increasing awareness of racism. Institutions struggled to be more inclusive and showcase antiracism leadership without putting more burden or responsibilities on people from minority groups.

"So that concept of engaging experts in the field of antiracism in a balanced way that is interactive, allows the residents [to] still achieve the goals of the session with the work we hope is being done and does not place, you know, excess burden on people who already do [an] enormous amount of work in this space." (Participant 14)

DISCUSSION

Key Findings

This qualitative study evaluated how antiracism education is conducted in AHCs. We found that 10 of the 11 institutions represented made statements of commitment to antiracism, and many emphasized the importance of integrating antiracism into the teaching of broader health equity topics rather than teaching it in a standalone fashion. Many participants reported assessing the current curricula, based on student and trainee feedback. Despite evidence of assigned roles and implementation of content on antiracism, AHC leaders identified several barriers including institutional culture, resistance from some faculty and students, lack of buy-in from affiliated hospital systems, lower prioritization because of greater focus on preparing for board examinations, few faculty with deep knowledge and expertise, insufficient resources allocated, and perceptions of a "minority tax" as described by one participant.[23] Many participating institutions had not adopted a formal definition of racism or antiracism, including a framework to guide educational programs. Further, relatively few participants affirmed having adequately trained faculty to advance antiracism pedagogy.

Adequately trained educators are critical to effective antiracism pedagogy. Despite the growing need and interest in prioritizing antiracism strategies, leaders interviewed for this study perceived that their institutions have been slow to implement antiracism trainings for faculty, especially those who may be less knowledgeable about structural racism. A competency-based framework may be needed to support faculty development and "train the trainers" models to create the necessary pool of subject matter experts in AHCs to teach about antiracism in UME and GME and train leaders at institutions as envisioned by the AAMC.[24] This approach is also needed, as proposed by some, to "elevate DEI leaders to the role of content experts who train others and build capacity using scalable programs that can be adapted and disseminated."[11]

Areas for Focus

Our study suggests several important areas in antiracism pedagogy, including creating a safe learning environment, promoting diversity of faculty and learners, recognizing barriers for implementation of antiracism training in medical education, and addressing discrepancies between theory and practice. Some existing literature proposes principles and practices for antiracism in medical education.[11,24-27] Areas recognized in extant literature included foundational knowledge and awareness,[11] supporting scientific research focused on addressing and

eliminating racism,[24] public health race praxis, and approaches to the development of antiracist medical educators.[11,26] None, however, propose a stepwise guided implementation of an antiracism curriculum for medical students and residents. On the basis of the themes that emerged from our study, a potential conceptual model for implementing antiracism medical education could be developed. Further research is needed to evaluate the model for guiding antiracism pedagogy.

For the institutional implementation of antiracism education to be successful, adequate resources, including protected time and commitment, are needed.[28,29] Population health or community-oriented programs may serve as "natural homes" for antiracism work. Importantly, institutional cultural, economic, and political barriers must be addressed for organizational change to dismantle existing cultural and structural barriers.[25] We found barriers at the individual, structural, and system levels such as institutional inertia, resistance to change, limited diversity of faculty/leadership, and undervaluation of antiracism programs. These findings suggest that stronger institutional commitment is needed to further advance a focus on antiracism. Furthermore, effective strategies are needed to gain broader support for antiracism teaching in AHCs. An intentional focus on antiracism in metrics used by the Liaison Committee on Medical Education, the Clinical Learning Environment Review, and accreditation bodies such as content on antiracism and health equity may be effective but require study.

Strengths and Limitations

To the best of our knowledge, this is the first study to explore the implementation of antiracism-focused training and education in geographically diverse AHCs in the United States. We include perspectives from leaders knowledgeable in both UME and GME curricula. Limitations of our study include the small sample size and the potential that it may not represent all AHCs in the United States. We focused on faculty leaders and did not include the perspectives of medical students[30] and residents, who are important partners and stakeholders in antiracism-focused education. We found minor inconsistencies between respondents at the same institution. Our study focused on primary care specialties; future studies obtaining perspectives in other specialties are required as well as studies on communication about key priorities at given institutions.

CONCLUSIONS

Antiracism-focused education is being evaluated and included in some UME and GME curricula through the input of learners and faculty; however, the content may not always be readily available to external viewers. Institution-wide changes in policies are needed to improve and/or implement antiracism training in medical education to promote foundational awareness of the impact of racism on patients and communities. Learner feedback plays an important role in shaping the development of curricular content. Including learners in future studies to identify areas of unmet needs for their education may provide a deeper understanding of the value and the barriers and promoters of antiracism education.

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Supplemental materials

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