Endarkening the Epistemé: Critical Race Theory and Medical Education Scholarship
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The pervasive violence of racism has been revealed vividly in the past year. The response to the COVID-19 pandemic exacerbated undeniable inequities in health care. Across the globe, people responded to the continual assault on Black life, crystallized by the death of George Floyd and others, by participating in mass uprisings. People have had to reckon, in unanticipated ways, with the unflinching disparities in opportunities, including access to equitable education, health care, and social infrastructure, and the complexity of race in our justice systems. Institutions, especially those of higher learning, also have had to reckon with their means of confronting structural racism within their own systems. Public letters of apology, reading lists, online panels, addenda to curriculum in medical schools, and statue removals have permeated our institutional news. The medical education research community is not immune to a need for reckoning. We too must answer the question: What steps have we taken to advance scholarship that dismantles systems of oppression and brings marginalized voices to the forefront?

The Research in Medical Education (RIME) committee members are conscious of the role we play in amplifying voices and drawing attention to systems of oppression, such as policies that result in the overrepresentation of White individuals matriculating to medical schools, who proceed to train in higher-paid specialties, progress faster up the academic ladder, and are more likely to be found in leadership positions. As practical evidence of continued efforts to push against these systems, the committee released a call encouraging both work about underrepresented perspectives and by authors that are underrepresented in medical education literature. Here, to undergird these efforts, we have relied on the definition of underrepresented in medicine put forth by the AAMC, which refers to those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population. We are pleased to highlight the papers that responded to the call and are included in the RIME supplement: Anderson et al., Bullock et al., Hamza and Regehr, Mickleborough and Martimianakis, Ortega et al., and Wyatt et al. As further evidence, RIME will be recognizing outstanding work in this category through the introduction of an award at the Learn Serve Lead meeting in November 2021.

We challenge the RIME community to engage with underrepresented voices and perspectives in medical education and encourage our community to submit work for consideration for the RIME program on these important issues. In this year’s Foreword, we—the past, present, and future RIME chairs—highlight the importance of and need to question traditional research practices and provide overarching principles for medical education scholars looking to study equity and inclusion, particularly for those using critical race theory.

The Nature of the Epistemé

Foucault has described sociohistoric rules fundamental to research, which he calls epistemé (i.e., the grammatological foundations of truth) of society. Epistemé are politically negotiated rules regarding what methods lead to the uncovering of truth—quantitative or qualitative; and what institutions are sanctioned as knowledge producers—governments or educational institutions. In other spaces, these rules are sanctioned as paradigms, but the notion of epistemé expands paradigms to include the explicit notion of who is “allowed” to contribute to knowledge creation and how (i.e., epistemology), and these distinctions in who and how often shape our metaphors of how we discuss, describe, and conceptualize research practices.

For example, research in the biomedical field typically espouses experimental and translational research as idealized research approaches. In these research traditions, we consider the metaphor of research as a cake recipe, where the researcher (chef) is detached from the subject (the ingredients), to maintain objectivity and reliably produce the cake. Researchers in the social sciences—particularly those involved in ethnic, cultural, and feminist studies—argue a need to move away from such metaphors where the participants are viewed as ingredients or that research practices unfold in linear prescribed ways. Scholars in these traditions maintain that all research is socially constructed and dependent on the ideology of the researcher. Attention to the epistemological levels of research requires a shift in research metaphors and change in the practices that have been taken for granted to be gold standards in medical education research. Thus, metaphors that align with newer epistemologies are needed.

Drawing from social sciences and feminist theories, Collins and Dillard propose that epistemologies need to be “colored.” That is to say, epistemologies need to move away from detachment and move toward the relationship between the researcher and the researched, and the research community should incorporate theories, perspectives, views, positions, and discourses that emerge from the experiences and points of view of subjects and researchers of color. For example, in contrast to the term “enlightened” epistemology to express new knowledge insights, Collins and Dillard use “endarkened” epistemology to articulate how reality is known through the historical roots of Black thought. Grounded in feminist theories, scholars in these traditions posit that enlightened White feminist thought must also become endarkened, embodying a distinguishable difference in cultural standpoint.

Despite decades of documented health disparities, medical education and the research which informs it has not adequately addressed issues of culture, race, and racism. On the one hand, voices of White education researchers have been privileged over researchers of color. On the other hand,
people of color historically have been misrepresented, exploited, silenced, and taken for granted in education research.\textsuperscript{14,15} Globally, researchers have lamented about the domination and control of academic discourse by the American and Euro-centric academy.\textsuperscript{23,24} For those interested in pursuing race- or culture-related research, researchers themselves do not necessarily need to come from the culture or community under study, but they do need to possess and pursue deeper cultural knowledge about the community and about themselves, that is, they need to understand their own biases.\textsuperscript{12,25} To adequately address issues of culture, race, and racism, scholars of color have had to create alternate research paradigms and methodologies to study the lived experience of people of color.\textsuperscript{14,26}

**Disrupting the Epistemé**

If we consider the epistemé as the rules of who can contribute to knowledge and how, and we acknowledge the historical underrepresentation of certain voices, it is these rules that need to be challenged to successfully undertake, appreciate, and amplify research related to race and culture. Therefore, promoting epistemic reflexivity about the origin of knowledge, the creation processes and interests served is essential.\textsuperscript{27} Critical theory is one way to disrupt epistemé. Emerging from University of Frankfurt, in post-World War I Germany, critical theory is an umbrella term for several critical stances including but not limited to: postcolonial, antiracist, critical feminist, and queer theory.\textsuperscript{28} Critical race theory (CRT) was initially created to highlight the slow progress of racial reform in the United States, primarily in the legal arena.\textsuperscript{29} Since then, the pioneering work done by Bell, Delgado and Stefancic, and Ladson-Billings and Tate, Crenshaw has expanded to multiple disciplines including medical education research.\textsuperscript{30–32} CRT is a theory, and also a practice,\textsuperscript{31} a tool, and a research method which illuminates the impact of White supremacy and racism on laws and policies adopted by societal institutions.\textsuperscript{33}

The premise of CRT is that history matters in shaping how we understand a phenomenon or experience, which then must be considered while undertaking research. However, CRT scholars warn that the history is distilled, narrated, and then often used by researchers, who may be biased by their own agenda, epistemology, and positionality on the topic of research. This stands in contrast to a metaphor of researcher as “chef” and highlights the notion that researchers do not exist in a vacuum—their epistemological perspectives are shaped by their own social history and experiences. For example, a researcher studying medical school admission process may or may not consider social, cultural, and economic issues impacting applicants. If they choose to formulate and study the question through the lens of CRT, such a study could shed light on marginalization and deficit representation.\textsuperscript{34} We draw attention to the fact that the premise of objectivity in positivist or postpositivist research traditions is often used as a means to decrease bias but can, through another lens, be viewed as a means to maintain the status quo in research, particularly when it comes to race and culture.

**Principles of Critical Race Theory for Medical Education Scholars**

The RIME address–associated Commentary this year by Antonio Bush defines CRT and provides tenants of the CRT movement.\textsuperscript{35} Building on the Commentary, we provide some foundational principles on how to incorporate CRT in research,\textsuperscript{36} aiming to help scholars disrupt the more classic positivist- or postpositivist-inspired episteme. Below are examples of how CRT might apply to research in the field of medical education as we collectively seek to dismantle systems of oppression. In short, below is a guide intended for those who may be new to CRT approaches, and we hope can provide some concrete examples of how to engage with the principles of CRT within our research contexts.

**Make race, racism, and social justice central to research**

One of the main principles of CRT is to acknowledge that race is a consistent factor that influences policies, laws, and practices in education. CRT is a transformative and emancipatory approach with the goal to end racial oppression through systemic change and can be used as a lens to explore the impact newly formulated antippression, antiracism curricula, or policies created in the wake of Black Lives Matter. In another example: Underrepresented minorities (URMs) make up 15% of total medical school enrollment in contrast to the 31% of the current national URM population.\textsuperscript{2} Despite affirmative action policies laid out by the AAMC, there are several states including California, Texas, Mississippi, Louisiana, and Washington which legally prohibit giving any consideration to the race and ethnicity of applicants to any higher education institution.\textsuperscript{7} In fact, these states have passed affirmative action initiatives (known as Initiative-200 in Washington state and Proposition-209 in California).\textsuperscript{37} A critical race scholar who chooses to study minority patient experiences in California would need to keep in mind the impact of Proposition-209, which has deterred thousands of qualified URM students from applying to any University of California (UC) campus, and therefore limited URM physicians being trained. For example, the state of California has 40% of Latinx population but only 6% of MDs are Latinx.\textsuperscript{38}

**Consider the impact of social and economic standing**

We know that banks treat Black people as risky lenders which relegates them to the poorer parts of town and influences where their children go to school and their entire educational experience.\textsuperscript{39} A critical race scholar wishing to study professional identity formation through the CRT lens would need to explore the impact of zip codes, which reflect property rights and high schools attended by URM medical college applicants, the impact of learning environments in the schools attended before matriculation, and the impact of poverty on their professional identity formation. The tradition of “red-lining” becomes an important consideration for study design and positioning in the perspective of a critical race scholar. In a recent meta-ethnography that studied professional identity formation in physicians, only one study evaluated experiences of URM physicians and there was an almost complete absence of critical stances exploring the impact of social or economic backgrounds on these physicians.\textsuperscript{40}

**Foreground intersectionality in race-related research**

Medical education tends to examine binaries such as gender and race.\textsuperscript{41} However, to dismantle power structures in medicine, there is a
need to incorporate complexities and intersectionalities to move away from one-dimensional research—work where we focus on gender, or race, or sexual orientation only. Instead, we need to move toward considering how a Black woman experiences racism may be different, for example, from how a Black queer man experiences racism. Therefore, a researcher wishing to study gender and power dynamics in medical education would need to use not only an antiracism theoretical framework but also one that incorporates the study of the impact of patriarchy on women. Similarly, studying gender issues through the lens of feminism alone could fail women of color, as feminist movements have been criticized for not being inclusive of women of color or other marginalized groups.

**Challenge the ideology of color blindness**

CRT questions the status quo and terms such as neutrality, objectivity, or color blindness. Color blindness is described as a process of knowing designed to produce not knowing surrounding White privilege. Statements that one does not see race invalidate the lived experiences of racialized minorities in a racially oppressive society. Using CRT, scholars can challenge color blindness by drawing attention to the centrality of experiential knowledge through amplifying voices and focusing on experiences of people of color. Therefore, a critical race scholar intending to study learning environment at an institution can use CRT to amplify voices through narratives/stories and counter-stories (challenging dominant narratives) of URM regarding their experiences, including stereotype threats and microaggressions. Considering faculty members, a CRT scholar could study why the proportion of Black, Latino, and Native American faculty in U.S. academic medical centers has increased by a minuscule amount over the last 20 years from 7% to 8%. URM faculty are more frequently found in junior faculty positions than leadership positions and are promoted at lower rates than their White counterparts. Underrepresented faculty members are often asked to take on committee work in the area of diversity frequently described as “minority tax.” This increased workload to support diversity efforts is evident in many areas: diversity efforts, racism, isolation, mentorship, clinical responsibilities, and promotion. A critical race scholar exploring promotion and tenure experiences of faculty would need to look beyond neutrality and objectivity of promotion and tenure committees and interview URM faculty, to document their challenges with promotion and tenure compared with White faculty.

**Recognize the myth of meritocracy**

The myth of meritocracy challenges the idea that people get out of the system what they put into it based on individual merit. It has been shown that White medical students have learned skills which result in better Medical Student Performance Evaluation (MSPE) letters from mentors, and increased likelihood of selection for the Alpha Omega Alpha Honor Medical Society (AOA). White individuals are also more likely than minoritized individuals to secure their first R01 research grant. Factors that help White students achieve an insider-status include access to high-quality preparatory education, previous work experience, and other modalities of privilege. Employing principles of CRT a researcher could study how implicit bias training is/or is not being conducted at an institution to train and create awareness among faculty about the role implicit bias may play while writing MSPE letters or in the selection of AOA candidates.

**Engage in transdisciplinary perspectives and cross-epistemological boundaries**

CRT highlights the importance of context, history, the interpretation of the law, and implementation of policies. CRT also stresses the importance of exploring complexities of racism, which cannot be done using a single epistemological lens. The researchers can contemplate the use of multiple social and theoretical positions. For example, constructivism, feminism, and postmodernism can all be helpful as researchers try to interpret and communicate the social complexity of racism. Therefore, researchers in medical education need to consider collaborations with academic in other fields to highlight how national, regional, and institutional policies impede the growth of URMs. A research partnership which aims to highlight the impact of antiaffirmative action policies would be an example of transdisciplinary research.

**Critical Race Theory: The Future**

**Scholar activism**

While there is a need and value for learning from URM experiences, a review of critical race literature over the past 20 years revealed a failure to engage with larger legal policies to impact change. Ladson-Billings point out that: Critical race theorists use storytelling as a way to illustrate and underscore broad legal principles regarding race and racial/social justice. The point of storytelling is not to vent or rant or be an exhibitionist regarding one’s own racial struggle. Unfortunately, far too many would-be critical race theorists in education use the narrative or counter story in just that way.

Therefore, medical educators and researchers will need to connect CRT principles with effective critical pedagogy while drawing attention to policies that disadvantage URMs. They will need to take on the role of “scholar activists” contributing to larger empowerment projects realizing that they are using their academic privileges to create equity.

**QuantCrit**

When we discuss CRT, we often think about qualitative research approaches—the reliance on stories, the focus on individuals and their relationship with the researcher—but CRT is not limited to qualitative approaches to scholarship. CRT can be mobilized to explore phenomenon of interest across different data types; researchers can enact the principles of CRT across the spectrum of different data types (from qualitative to mixed to quantitative) to dismantle and reappropriate methods revered for assumed objective suppositions. Quantitative critical theory (i.e., QuantCrit) challenges the often assumed fact that statistics and quantitative approaches are value neutral. Quantitative critical theory emerged from the work of scholars at the interface of CRT and disability studies, and enact key tenets of CRT in a variety of ways. First, quantitative CRT approaches suggest that racism is complex, and race is not a stable “variable” nor natural category, rather race is a construction of social relationships. Second, a key principle in these approaches is a recognition that numbers are not neutral, nor color
blight—rather it places specific focus on how data are generated, gathered, or analyzed, and pushes back against how implicit assumptions in these data tasks may prioritize or reproduce Eurocentric Third. These, these approaches recognize that data interpretation is open to numerous and conflicting interpretations; therefore, there is a need to foreground the experiences and expertise of outsider groups (e.g., those marginalized by assumptions around race, gender, sexuality, dis/ability) to ensure appropriate data interpretation and inference. Fourth, it necessitates a reconsideration of epistemé as described earlier—a researcher orientation, grounded in social justice, to not privilege certain evidence types (here, numbers) over others.

Critical Race Spatial Analysis

Another area of growing research is critical race spatial analysis (CRSA), which uses maps and geographic information systems to help uncover racism.59 While maps have been used to document disease prevalence, they have also been used by educational researchers to critically analyze the role of racism, highlighting the impact of social and political forces on educational opportunities for communities of color. CRSA posits that map-making is an active process that analyzes how power dynamics construe and construct geographic and social spaces that then impact educational experiences.53

Conclusion

This year’s RIME foreword is a call to disrupt the epistémé moving from an enlightened epistemology to endarkened, and to attend to the history of racism and its influences in medical education policy and practices. As medical education scholars consider using the principles of CRT described, they should move from a problem-posing orientation to problem-solving orientation, meaning moving away from simply documenting inequities and, through the emancipatory focus of CRT, work toward providing solutions to documented inequities.53 CRT scholarship is an act of love, struggle, and hope dedicated toward gaining racial justice, a goal shared by the RIME committee and medical education community.

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