Building Structural Empathy to Marshal Critical Education into Compassionate Practice: Evaluation of a Medical School Critical Race Theory Course

Jennifer Tsai

Keywords: Critical Race Theory, Medical Education, Biologic Essentialism, Structural Racism, Structural Empathy

Abstract: Ideas of racial genetic determinism, though unsupported by scientific evidence and atavistic, are common and readily apparent in American medical education. These theories of biologic essentialism have documented negative effects in learners, including increased measures of racial prejudice.

Biologic Essentialism and the Need for Educational Reform

A professional and ethical medical education should equip trainees with the knowledge and skills necessary to advance health equity. While American medical schools have increased implementation of Social Determinants of Health (SDOH) teaching, few of these curricula critically engage with the social injustices that engineer institutional inequities.[1] For example, students learn that patients of color have poorer diets, causing disparities in chronic disease. They, however, are not taught the unjust realities of neighborhood segregation, food deserts, and urban design that limit nutrition, economic mobility, healthcare access, and housing.[2] SDOH models focus students' attention on the behavioral, biological, educational, and financial impoverishment of marginalized populations, without asking learners to consider what social powers marginalize them.[3] Students leave the classroom without robust understanding of race or inequity, and therefore advance in training unable to articulate and challenge the causes of unequal conditions at a time when racial inequity is rampant in society.[4]

Notions of genetic racial determinism in medicine and science continue to imply the existence of inborn racial differences and characteristics.[5] These concepts of Bio-Essentialism — such as ideas that Black skin is thicker, and that the efficiency of respiratory or renal systems differ by race[6] — are inaccurate[7] and harmful.[8] Such essentialist thinking correlates with greater dehumanization and discrimination against ethnic out-groups.[9] They also engender apathy towards injustice and decrease support for interventions that seek to redress inequity.[10]

Of great concern then, is the fact that medical students are frequently confronted with teaching that mobilize misconceptions of racial biology.[11] Because

Jennifer Tsai M.D. M.Ed., *teaches in the Department of Emergency Medicine at Yale University School of Medicine.*

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)
DOI: https://doi.org/10.1017/jme.2021.31

biomedicine continually reifies genetic notions of race, medical trainees are particularly and constantly exposed to bio-essentialist teaching.[12] This leaves students with less ability to humanize patients, control implicit biases, and challenge social inequities.[13]

The emphasis on genetic race, rather than institutional racism, is at the heart of the matter. If the major detriments of bio-essentialism reside in its incorrect maintenance that racial inequalities can be explained by physiologic difference and its talent at casting people of color as unworthy of compassion and support, then the replacement pedagogy offered as a solution should reverse these faculties explicitly. Instruction that is rigorously attentive to the depths of racial inequity, dedicated to structural competency, and able to inspire action and allegiance to health equity is needed.[14] Critical Race Theory (CRT) is necessary for moral medical education.[15]

The emphasis on genetic race, rather than institutional racism, is at the heart of the matter. If the major detriments of bio-essentialism reside in its incorrect maintenance that racial inequalities can be explained by physiologic difference and its talent at casting people of color as unworthy of compassion and support, then the replacement pedagogy offered as a solution should reverse these faculties explicitly. Instruction that is rigorously attentive to the depths of racial inequity, dedicated to structural competency, and able to inspire action and allegiance to health equity is needed. Critical Race Theory (CRT) is necessary for moral medical education.

Critical Race Theory

Critical Race Theory (CRT) is a theoretical framework built from legal scholarship that interrogates relationships between racial identity, power, and racial inequity.[16] In direct opposition to bio-essentialist theory, CRT teaches that race is not a genetic variable, but a political construction that directs power and resources towards some and away from others.[17] In part by rejecting ahistoricism, CRT argues that racial categorization is enforced to support racial hierarchy and identifies how racism operates within major institutions. When applied to the medical field, it helps learners locate and address racial inequities embedded in healthcare, physician education, and medical research.[18]

CRT's iterative methodology questions power dynamics embedded in social and institutional relationships, which is important because learners cannot comprehend racial inequity or pursue sustainable health justice interventions without understanding racial privilege.[19] Though traditional medical education may erase this reflexivity by opining identity is irrelevant to medicine, CRT unequivocally names reflexivity and critical consciousness as crucial to the ability to humanize patients, care for communities, and challenge health inequities.[20] Additionally, CRT emphasizes the narratives and epistemologies of those most harmed by inequity to direct attention towards the experiences of patients who have historically been excluded from machines of knowledge production.[21] This allows a whole-patient view that expands empathy and circumvents the dehumanization biological racism engenders.[22] Lastly, while bio-essentialism diminishes support for measures that redress health inequity, CRT requires active commitment to social justice.[23] Thus, because CRT develops in learners action-oriented praxis, understanding of social structures of oppression, and reflexivity that can cultivate greater empathy, it is a pedagogical intervention uniquely equipped to improve current pitfalls of medical education.[24]

Application and Design of a Critical Race Theory-Based Course

Students at the Warren Alpert Medical School of Brown University designed and implemented a "Health Systems of Oppression" (née Healthcare for the Underserved) elective to challenge deterministic notions of racial biology and address the lack of structurally-competent medical education. As many scholars before, course leaders identified a need to teach student-doctors accurate conceptions of race and prepare them to intervene at the level of institutions where health inequity originates.[25] Though the course sought to address Health Systems of Oppres-

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

https://doi.org/10.1017/jme.2021.31 Published online by Cambridge University Press

sion broadly, for the purposes and scope of this paper I focus on its relevance to racial injustice.

1. *Active Student Participation*
Classic didactic methods of preclinical medical education involve hours of PowerPoint-driven lectures and multiple-choice assessments.[26] In these instances, instructors are cast as bearers of knowledge. By implication, students are not permitted to challenge or question knowledge production.[27] In juxtaposition, contemporary educational theory documents the importance of active student participation in promoting critical perspectives.[28] Since bio-essentialist notions are already accepted in standardized clinical teaching,[29] and because conversations on racism and identity often entail conflict, emotions, and opinions, course leaders believed it was necessary to pursue pedagogical models that addressed power dynamics inherent to formal lecture-based learning.[30] To allow for genuine and energetic discussion, we sought to create a non-hierarchical, "flat" learning environment where the contestation disavowed in didactics was welcome.

Critical thinking skills requires content and practice, so course leaders integrated interactive workshops, reflective exercises, and activities into each session.[31] Instead of relying on passive educational "banking," the course intentionally encouraged debate and dialogic learning by actively critiquing perspectives mobilized by teachers and students.[32] Following constructivist educational theory, students were responsible for generating course content.[33] They were asked to learn and present material on health inequity to their peers, moderate discussions, and formulate individual arguments on controversies relating to race and racism.

2. Multidisciplinary Contextualization and Diversity of Perspective
To vigorously contextualize racial health inequities with a diversity of insights, course leaders drew from pertinent history, legal rulings, patient narratives, and public policy in addition to biomedical knowledge.[34] Scholarly work regarding the built neighborhood, colonialism, global trade politics, gender studies, and environmental justice, for example, were included to support a multidisciplinary approach to understanding racial inequity.

Following CRT tenets of "Centering" and "Counterstorytelling," course leaders also made an explicit commitment to look beyond traditional medical authorities. Building critical consciousness requires learners to listen carefully to people who have been barred from creating biomedical scholarship, as well as acknowledge humility that physicians are not the experts on the experiences of patients.[35] The course syllabus included the testimonies of marginalized people and personal illness narratives.

CRT celebrates mutual aid, not charity. The medical field's approach to vulnerable groups has historically been paternalistic: researchers from elite institutions insert themselves into communities to conduct studies and often fail to listen to effected stakeholders during the delivery of services.[36] Course leaders sought to disrupt the elitist model by physically taking the class to community organizing spaces.[37] Additionally, course leaders invited local activists and compensated them for their time. These included advocates from anti-racist organizations, housing and incarceration initiatives, and a domestic violence and sex workers' rights group. These leaders were invited in concordance with Black radical traditions of the Black Panther Party, wherein community organizers are explicitly recognized as knowledge producers and experts.[38] These instructors were able to define the particular wishes and experiences of their communities, as well as guide medical students in constructing sustainable and equitable partnerships between local populations and medical systems.

3. Action-Oriented Work
Given CRT's requirement that leaners actively seek to further health equity, a CRT-based health justice course would be incomplete without tangible action.[39] Course time was spent practicing verbal and writing skills required for advocacy outside the classroom. Students practiced articulating evidence and arguing on health justice topics, including role-plays of difficult situations that might arise on the wards. Students were tasked with creating phrases that would help them maximize engagement and efficacy during health justice discussions with peers, superiors, as well as family. Time was also dedicated to coordinating institutional activism. Students organized and wrote a comprehensive, ten-year Diversity and Inclusion Plan for the medical school. As a final assignment, students were tasked with proposing a possible solution for a self-identified health inequity.

Course Evaluation

Quantitative and qualitative methods were employed to evaluate course impact on learners. As course leaders were unable to identify existing validated instruments that measured student knowledge, attitudes, and commitment regarding health equity, a cross-sectional survey was designed in accordance with rec-

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

ommendations published by the Society of General Internal Medicine (SGIM) Health Disparities Task Force.[40] Feedback from content experts in health disparities research was solicited and incorporated, and the survey was piloted among a convenience sample of medical students (n=5) to ensure readability and comprehension. Students who opted to enroll in the CRT-based elective after it was advertised to first-year medical students completed pre-course (n=15) and post-course (n=9) surveys. These results were compared to data garnered from a control group of first year medical students who completed pre-course (n=39) and post-course (n=23) surveys at the same time points (September 2015, and February 2016,

Table 1
Survey Data Results

	Intervention				Control			
	Pre (n=15)		Post (n=9)		Pre (n=39)		Post (n=23)	
	n	%	n	%	n	%	n	%
1. I am comfortable discussing issues of identity, privilege, and health justice with patients and colleagues.								
Strongly Disagree/Disagree/ Neither Agree or Disagree	5	33.3%	0	0.0%	14	35.9%	12	52.2%
Agree/Strongly Agree	10	66.7%	9	100.0%	25	64.1%	11	47.8%
2. I am equipped with the language and vocabulary to discuss issues of identity, privilege, and health justice with patients and colleagues.								
Strongly Disagree/Disagree/ Neither Agree or Disagree	5	33.3%	1	11.1%	21	53.8%	17	73.9%
Agree/Strongly Agree	10	66.7%	8	88.9%	18	46.2%	6	26.1%
3. I have biases that have the potential to impact how I interact with patients, and I have methods at my disposal to address these biases in myself.								
Strongly Disagree/Disagree/ Neither Agree or Disagree	5	33.3%	1	11.1%	11	28.2%	7	30.4%
Agree/Strongly Agree	10	66.7%	8	88.9%	28	71.8%	16	69.6%
4. I feel equipped to critically analyze issues of health justice (e.g. treatment of incarcerated individuals, community violence, medication access), and to develop action plans to address these issues.								
Strongly Disagree/Disagree/ Neither Agree or Disagree	9	60.0%	0	0.0%	22	56.4%	17	17
Agree/Strongly Agree	6	40.0%	9	100.0%	17	43.6%	6	6
5. I possess the knowledge and skills needed to effectively advocate for medically underserved populations within the medical system and outside hospital walls.								
Strongly Disagree/Disagree/ Neither Agree or Disagree	10	66.7%	4	44.4%	24	61.5%	15	65.2%
Agree/Strongly Agree	5	33.3%	5	55.6%	15	38.5%	8	34.8%
6. I am aware of various career paths I can take as a future physician working for social justice and would like to incorporate social justice work into my future career.								
Strongly Disagree/Disagree/ Neither Agree or Disagree	7	46.7%	1	11.1%	14	35.9%	12	52.2%
Agree/Strongly Agree	8	53.3%	8	88.9%	25	64.1%	11	47.8%

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

respectively) but did not attend any sessions of the CRT-based course. These students were recruited by emailing an online survey link to the first-year medical student listserv, with survey reminders emailed weekly with a cap of data collection at one month. Demographic information was not collected to protect anonymity and encourage involvement. The Brown University Institutional Review Board deemed this study exempt from review.

Course-enrolled students (n=12) also participated in 45-minute, semi-structured, post-course group interviews wherein course leaders solicited feedback and sought to learn how students' perspectives and goals were influenced throughout the course. The four course-leaders (three men and one woman), who were second-year medical students at the same institution at the time of data collection, randomly divided course enrollees into groups of four for an in-person, group interview conducted without any other faculty or unenrolled medical students present. These interviews were recorded, transcribed, and analyzed using grounded theory methodology to identify themes expressed by students.[41]

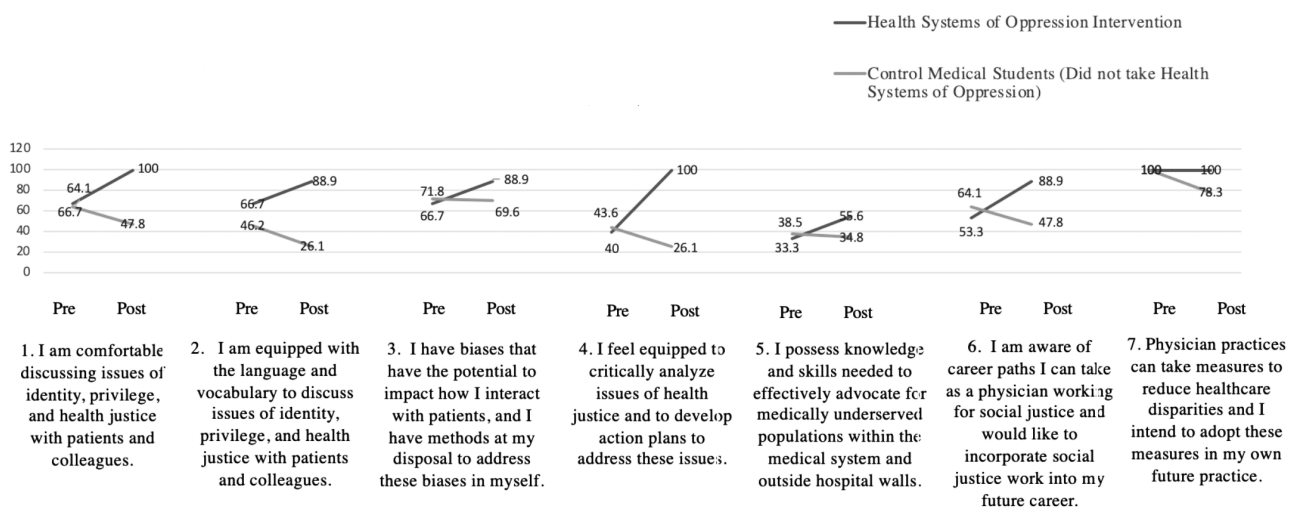
Results of Quantitative Data

Students who enrolled in the course reported a perceived increase in knowledge and skills relevant to health equity after engaging in the course (**Table 1**). As seen in **Figure 1**, there were significant increases in the percentage of students who chose "Agree" or "Strongly Agree" to a number of statements, including comfort discussing issues of health inequity (67 to 100%), ability to articulate issues of health inequity (67 to 89%), ability to critically analyze and address issues of health justice (40 to 100%), and ability to advocate for medically underserved populations (33 to 56%). Learners also conveyed an increased recognition of and ability to address implicit biases (67 to 89%) and commitment to social justice work (53 to 89%).

Though course leaders were pleased to find positive metrics in students enrolled in the course, perhaps more concerning and deserving of analysis were the survey results obtained from medical students who did *not* enroll in the course. For this control group, reported comfort in discussion of health inequity fell from 64 to 48%, ability to articulate issues of health inequity fell from 46 to 26%, and ability to analyze and address issues of health justice fell from 44 to 26%. At the beginning of their first year of medical school, 100% of surveyed students agreed with the statement, "Physicians can take measures to reduce healthcare disparities and I intend to adopt these measures in my own future practice." Approximately six months later in the post-survey, a 100% of course enrollees confirmed continued agreement, while only 78% of control group students did. (**Figure 1.**) While the reasons for this decreased commitment cannot be ascertained, this leads us to question what *negative* impacts standard medical education has on the commitment, skills, and capacity of medical students with regards to health justice.

Figure 1

Percent of Medical Students who "Agree" or "Strongly Agree" with Statements Regarding Perceived Skills and Career Intentions at the Beginning and End of First Year of Medical School (Pre and Post Intervention)



The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

https://doi.org/10.1017/jme.2021.31 Published online by Cambridge University Press

Results of Qualitative Data

From post-course focus groups, course leaders derived seven common themes that are discussed below. Themes, with representative student quotations, can be found in **Figure 2.**

Advantages of a Peer-Led Format

In *Pedagogy of the Oppressed,* Paolo Freire writes: "Only dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue, there is no communication, and without communication, there can be no true education."[42] If a significant part of developing critical consciousness is the ability to create dialogue, and dialogue is suppressed in hierarchical learning environments, we believe this course was successful in large part due to a peer-led class structure that helped create an open, equitable learning environment. In comparison to professor-led settings, students endorsed that the peer-peer structure of the course allowed them to share personal narratives, as well as challenge opinions and explore disagreement more directly and confidently. Students expressed that this structure generated more complex and candid discussions in comparison to previous medical school experiences.

Community Building, Leadership, Role-Modeling

Students expressed the importance of seeing senior medical students and practicing physicians care deeply about health justice. This engendered a sense of hope, support, validation, and inspiration. Learning about the history of physician activism and having models for ethical community partnerships provided reassurance that social justice is integral to medical professionalism.

Critical Framework Filled a Gap in Medical Education on Race and Health Inequity

Students felt the course's interdisciplinary perspectives added to their ability to critically appraise issues of race and racial inequality, as well as understand why genetic notions of race are problematic. Multiple students referenced how the course offered important historical background on race-specific clinical adjustments — like those used in equations for calculating kidney function or algorithms recommending treatment for high blood pressure — which had been presented in required lectures without further contextualization.[43] As another example, students noted how class discussions that situated ideas of "healthy choices" within histories of redlining, food access, and highway construction helped shift culpability away from patients. Many students felt that such critical analysis was absent from standard curricula, and that the elective offered space, content, and instruction necessary for them to reach better comprehension about race and racism. Students felt that their peers would benefit from similar education, and that aspects of the CRT-based course should be required in physician training.

Increased Ability to Advocate and Engage in Activism

In both quantitative and qualitative data analysis, students who enrolled in the elective endorsed feeling more equipped to articulate issues and arguments about health justice, not only for themselves, but to peers and faculty members. They felt class content helped solidify concepts and evidence that they could draw on in future discussions and initiatives for social change. Students also expressed greater willingness and confidence to engage in health justice discussions, even in situations where they had to "talk up" the professional hierarchy scale. Of note, the writing of a cohesive Diversity and Inclusion Plan for the medical school led to collaboration with the University President and University Provost, and resulted in new faculty hiring and the establishment of a paid Office of Diversity and Multicultural Affairs (ODMA) fellowship to legitimize and support continued student labor. These represent further evidence that CRT-guided curricula leads to action. Students maintained that the class offered meaningful, energizing, and productive lessons on knowledge production, curricular reform, bi-directional community outreach, and concrete verbal and written advocacy skills.

Reflexivity on Identity and Privilege Makes Students Better Doctors

Learners start to build "Critical Consciousness" about racial identity when they become aware of the power dynamics they inherit personally and professionally. In a class activity, students were asked to write personal descriptors that limited their access to privilege, as well as ways their identities were implicated in the oppression of others. Students wrote about the ability "to ignore the plight of others who are oppressed by the social structures that give me privilege," the chance and confidence to "speak for others, and potentially over others," and the power to use service to frame "people as problems to fix, not people to respect." Students expressed that recognizing these power dynamics equipped them to be better physicians.

Personal Accountability Leads to Actionable Empowerment

Students reported that by engaging with reflexivity and the pervasiveness of racism, they were more able to implicate themselves as *part of the structures of oppression they were striving to dismantle.* Sev-

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

Figure 2

Common Themes from Qualitative Data Analysis

1. Advantages of a peer-led format	
	"I feel like a faculty member couldn't express [discussions] the way students [could] … with something this sensitive I felt like … [faculty] weren't adequately able to handle the discussion."
2. Community Building, Leadership, Role-Modeling	
	"Knowing that there are students who are in the year above us who still care about [racial inequity] … [is] definitely valuable … [it] helps build [a] sense of community."
3. Critical framework filled a gap in medical education on race & health inequity	
	"It should be mandatory." *"It was like really nice to have alternative frameworks and to be very critical … Our regular curriculum is just like here's the stuff; here's the stats; don't question them; just learn them … It's very important that we set some sort of critical lens … we need to be able to develop some sort of toolkit to be able to like be thoughtful about [how power structures influence medical knowledge.]"*
4. Increased ability to advocate and engage in activism	
	"It's really motivating. I feel like it's going to be very tangible tools for the future, so I'm thrilled." *"Better ability to communicate with peers and professionals"* *"Syllabus will be a resource for a long time"* *"[In other SDOH courses] we keep talking about the same problems over and over, but nobody is proposing solutions. I think that component of [this] class is great."*
5. Reflexivity on identity and privilege makes students better doctors	
	"The course talks a lot about positionality … It's made me think about what it means to be a White provider if I'm working in communities of color, what it means to be a college-educated person in communities that may not have a lot of college education … It really made me think about what it means to have those identities in the space as an MD." *"We learned that we should try to work with people where they're at and listen to their priorities instead of coming up with priorities ourselves."*
6. Personal accountability leads to actionable empowerment	
	"I think that's really important to … implicate all of us in these structures and [learn] we can do something to change [inequity] whereas the conclusion that I drew from [our required policy course] was everybody has bias and we can't do anything about it" *"[Required class] veers too much towards the idea that this is just the way the world is … it allows people to think that they just don't have any skin in the game … [This course] forces you to think about what could be done … [and] actually address the issues"*
7. Increased empathy for marginalized patients made vulnerable by health injustice	
	"I definitely feel like I've become more empathetic … I now think more about how important it is to get a really detailed social history and how much that could actually affect … the way you speak to your patient and how you … [decide] their treatment." *"Can you imagine being a patient with no information, trying to navigate a system biased against you? I have a lot more empathy for what it's like to deal with this system."*

eral students stated that they felt more cognizant of the ways contemporary medical practices — including their own trained behaviors — contribute to health inequities. By learning about their complicity in *creating* inequity, students verbalized coming to understand that they could help *undo* inequity by recognizing and adapting these problematic behaviors. Learners reported this helped combat feelings of powerlessness and hopelessness. Indeed, acknowledgement of their complicity left them feeling more compelled, empowered, and equipped to act. Students reported that the elective increased feelings of agency and responsibility, and added to their perception that they were capable of creating positive change.

Increased Empathy for Marginalized Patients Made Vulnerable by Health Injustice

For students, discovering personal accountability required engaging critically with patient-centered frameworks and deconstructing paternalistic medical authority. Many verbalized intentional changes in language — such as striking "noncompliant" from their

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

vocabularies — and concomitantly a greater ability and willingness to empathize with the social situations that patients face in pursuing health. Students found that discussions of racial inequity that meaningfully addressed structures of oppression — such as those caused by racial segregation and limited food access — were effective as departures from explanations often-mobilized in SDOH curricula that attributed racial disparities to racialized distrust of the medical system or poor dietary choices predicated on "cultural norms." Students reported that this granted them greater access to compassion and empathy.

Limitations

Course leaders are aware that there are shortcomings in collected qualitative and quantitative data that makes these data less easily generalizable. This study evaluated one student-led CRT course and utilized a convenience sample of first-year medical students from the same medical school. As such, the study population may not be representative of the preclinical medical student population as a whole. The course enrollment was small and self-selecting; on average, 9 to 12 students attended class sessions and it is likely these students had a pre-existing awareness and/or interest in health inequities. Second, the measures used in the present study were not psychometrically validated; thus, we cannot comment on their reliability, validity, or internal consistency. Note, the decision to develop our own survey measures was driven by the dearth of publicly available, standardized measures in this area. Third, since this is a cross-sectional study, we are unable to assess how medical students' knowledge, attitudes, and commitment to health equity change over the course of a four-year medical education — a key piece of information that is critical to curriculum development efforts. Additionally, while students expressed a greater commitment to combating health inequity, there is no assessment on the impact these knowledge and attitudes might have on patient care and outcomes. This is an area ripe for future research. Fourth, that these data were self-reported makes them subject to social desirability bias. However, the decision to administer the survey online and collect limited identifying information was made to minimize this and other response biases (e.g., interviewer bias). Finally, the survey consisted of only closed-ended questions; use of open-ended questions or interviews may have permitted a more nuanced understanding of student perceptions. Nonetheless, whereas open-ended interviews can provide useful data, such approaches, by definition, are unable to offer the kind of standardized information provided here. Our study focuses on a topic that is highly relevant to physician research and practice — namely, the identification that critical and ethical medical education can heighten the commitment and skillset needed to enhance health justice.

Discussion

Contemporary Medical Education: Not Only a Path to Nowhere

Ideas that racial groups reflect different biological "types" of humans contradict scientific consensus and engender miscomprehension by attributing racial health disparities to internal racial deficits in physiology.[44] Because ideas of genetic determinism are entrenched in medical research and practice, associated harms will continue to propagate unless lessons on bio-essentialism are actively disrupted.[45] In order to advance moral science and clinical care, medical education requires an intervention that can contest and critically examine notions of genetic race and racial inequity respectively.

In 2018, Sharma et al. argued that because US medical schools engage superficially with SDOH and neglect critical concepts of health inequity, they are on "a path to nowhere."[46] Since survey data showed *reductions* rather than static levels of skill and commitment to health equity, however, the concern for current curricula is heightened. Not only might they plot a "road to nowhere" — not only are they ineffective interventions that fail to elicit progress — but contemporary medical education may actually reinforce unethical and oppressive ideologies that directly *undermine* health justice. Indeed, current physician training could be characterized as an intervention that *reduces* the dedication, skills, and capacity of students to empathize with patients of color and pursue measures of racial equity. This is supported by existing scholarship that demonstrates that trainees graduate medical school with reduced empathy, respect for patient consent, and compassion for homeless patients.[47] Medicine has the power to undermine equity or support social justice in its training ground. It must be careful to do the right thing.

Looking Forward: Critical Race Theory and Structural Empathy as a Bridge to Somewhere

"I feel like it also motivates me to ask more questions about social background … now I understand really why we're asking and feel more motivated to take all of that seriously**. Yeah I think that's empathy, a different kind of empathy**."

Racial essentialism robs patients of agency, humanity, and story. By ignoring contexts of structural injustice when discussing racial health inequities, race-based medicine interprets bodies of color as immutably

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

deficient or abnormal, which also adds to the burden of racist stigma.[48] Students are left with less ability to humanize patients, control implicit biases, and challenge social inequities.[49]

Educators can improve medical pedagogy and advance health justice in the 21st century by following the tenets of Critical Race Theory, which articulate to physician trainees that the root causes of racial inequality stem not from genetic difference, but structural oppression. This necessarily implicates the prominence of historical power systems, which facilitate the reflexivity required for critical consciousness.[50] These perspectives transfer culpability and causation of health inequities from individual behaviors and biology to unequal systems. Furthermore, it leads to empathy and empowerment, inspires comprehension of personal and professional accountability in machinations that support everyday inequity, and produces learners who are motivated and able to combat health injustice. These results mirror the successful consciousness-building other CRT-based courses have been found to provide to learners, albeit previous analyses on CRT have been conducted in arenas outside of medical education.[51]

To add to the existing discussion on Structural Competency,[52] I propose that CRT pedagogy in medical education also promotes the development of *Structural Empathy* — a principle I seek to frame as not only the compassionate understanding that disease, risk, safety and inequity are constructed within larger socio-medico-historical contexts of power, but the further *mobilization* of this knowledge in clinical interactions to humanize patient experiences and promote health justice at large. By concentrating on the genes and choices of vulnerable populations, standard medical and SDOH curricula can unwittingly teach students to blame marginalized patients for adverse health outcomes, which may fail to engender empathy — or even discourage empathy — for those facing structural violence.[53] As anyone who has faced burnout in the medical field knows, it is so much harder for a physician to find kindness and generosity for patients when they are frustrated at the situation — when they blame people for "doing it to themselves" or for being "non-compliant," or "frequent-flyers."

Doctors shouldn't be angry at patients for being sick. They should be furious at the health injustices that make their patients ill. This empathy and indignation can empower physicians to act, but it won't spark if medical professionals are blind to how institutional inequities contribute to systemic disease. In accordance, and in juxtaposition to existing medical curricula, CRT offers a critical education that helps generate not only the knowledge required to *understand* injustice, but the empathy needed to *commit* to health justice, as well as the skills and community relationships to *push back* against inequity firmly and effectively. All three are important. After all, it doesn't matter if a trainee has comprehension without the ability to enact change, nor do knowledge and skill matter if a student doesn't care enough to use them. I believe that Structural Empathy is an important bridge between theory and praxis, as it represents the ability to marshal critical, conscious, and caring medical education into justice-oriented medical practice.

Conclusion

Ideas of bio-essentialism run rampant in medical education, and they work to reduce and dehumanize people of color in a healthcare system that already produces unequal treatment.[54] Critical Race Theory-based pedagogy — and the Structural Empathy it can engender — is a balm that both disrupts and soothes current problems in physician training. More research, on the implementation of CRT curricula in physician training, as well as its effect on patient outcomes, is ultimately needed. However, evidence demonstrates that CRT contextualizes medicine using critical interdisciplinary perspectives, forces trainees to think reflexively to intensify the humanity of their patients, and allows the field to access and grow Structural Empathy. This is what inspires and equips physicians to act for health justice. We urge medical training institutions, educators, and students to mobilize higher engagement with the tenets of CRT in order to advance the equity, care, and health of racial and ethnic minorities in the 21st century.

Note

The author has no conflicts to disclose.

Acknowledgements

Many thanks to my course co-leaders, Josh Johnson, Bryan Leyva, Alexandre Boulos, and Joseph Rabatin, as well as course leaders for the Health Systems of Oppression elective, new and old. This manuscript benefited from the generous comments and advice of Professors Osagie Obasogie, Lundy Braun, Steve Rougas, and Paul George, as well as my brilliant colleagues Cameron Donald, Ria Pal, and Radhika Rajan. The Warren Alpert Medical School's Office of Medical Education supported the implementation of this course and the ensuing investigation. Lastly, I wish to express great and sincere gratitude to the activists who continue to labor — often thanklessly — in order to make medicine a better place for trainees and patients alike.

References

1. M. Sharma, A. D. Pinto, and A.K. Kumagai, "Teaching the Social Determinants of Health: A Path to Equity or a Road to Nowhere?" *Academic Medicine* 93, no. 1 (2018): 25-30.
2. S. Cummins and S. Macintyre, "Food Environments and Obesity — Neighbourhood or Nation?" *International Journal of Epidemiology* 35, no. 1 (2006): 100-104; D. R. Williams and

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

https://doi.org/10.1017/jme.2021.31 Published online by Cambridge University Press

P. B. Jackson, "Social Sources of Racial Disparities in Health," *Health Affairs* 24, no. 2 (2005): 325-334.

3. Sharma et al., *supra* note 1; M. J. Simis, H. Madden, M. A. Cacciatore, and S. K. Yeo, "The Lure of Rationality: Why Does the Deficit Model Persist in Science Communication?" *Public Understanding of Science* 25, no. 4 (2016): 400-414; D. G. Solorzano and T. J. Yosso, "From Racial Stereotyping and Deficit Discourse Toward a Critical Race Theory in Teacher Education," *Multicultural Education* 9, no. 1 (2001): 2.
4. Sharma et al., *supra* note 1.
5. D. A. Vyas, L. G. Eisenstein, and D. S. Jones, "Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms," *New England Journal of Medicine* 383 (2020): 874-882; T. Duster, *Backdoor to Eugenics,* 2nd ed. (New York: Routledge; 2003); J. Tsai, J. Cerdeña, and Khazanchi R, et al., "There is No 'African American Physiology': The Fallacy of Racial Essentialism," *Journal of Internal Medicine* 288, no. 3 (2020): 368-370; J. P. Cerdena, M.V. Plaisime, and J. Tsai, "From Race-Based to Race-Conscious Medicine: How Anti-Racist Uprisings Call us to Act," *Lancet* 396, no. 10257 (2020): 1125-1128.
6. M. van Ryn, R. Hardeman, and S. M. Phelan, et al., "Medical School Experiences Associated with Change in Implicit Racial Bias Among 3547 Students: A Medical Student CHANGES Study Report," *Journal of General Internal Medicine* 30, no. 12 (2015): 1748-1756.
7. A. Fuentes, R. R. Ackermann, and S. Athreya, et al., "AAPA Statement on Race and Racism," *American Journal of Physical Anthropology* 169, no. 3 (2019): 400-402; L. Braun and B. Saunders, "Avoiding Racial Essentialism in Medical Science Curricula," *AMA Journal of Ethics* 19, no. 6 (2017): 518-527.
8. M. R. Andreychik and M. J. Gill, "Do Natural Kind Beliefs about Social Groups Contribute to Prejudice? Distinguishing Bio-Somatic Essentialism from Bio-Behavioral Essentialism, and Both of These From Entitativity," *Group Processes & Intergroup Relations* 18, no. 4 (2015): 454-474.
9. J. E. Plaks, L. W. Malahy, M. Sedlins, and Y. Shoda, "Folk Beliefs about Human Genetic Variation Predict Discrete Versus Continuous Racial Categorization and Evaluative Bias," *Social Psychological and Personality Science* 3, no. 1 (2012): 31-39; S. K. Kang, J. E. Plaks, and J. D. Remedios, "Folk Beliefs About Genetic Variation Predict Avoidance of Biracial Individuals," *Frontiers in Psychology* 6 (2015): 357; B. Bastian and N. Haslam, "Psychological Essentialism and Stereotype Endorsement," *Journal of Experimental Social Psychology* 42, no. 2 (2006): 228-235; M. M. Chao, Y.-Y. Hong, and C.-Y. Chiu, "Essentializing Race: Its Implications on Racial Categorization," *Journal of Personality and Social Psychology* 104, no. 4 (2013): 619; N. Haslam, B. Bastian, P. Bain, and Y. Kashima, "Psychological Essentialism, Implicit Theories, and Intergroup Relations," *Group Processes & Intergroup Relations* 9, no. 1 (2006): 63-76; A. Roets and A. Van Hiel, "The Role of Need for Closure in Essentialist Entitativity Beliefs and Prejudice: An Epistemic Needs Approach to Racial Categorization," *British Journal of Social Psychology* 50, no. 1 (2011): 52-73; K. Pauker, N. Ambady N, and E. P. Apfelbaum, "Race Salience and Essentialist Thinking in Racial Stereotype Development," *Child Development* 81, no. 6 (2010): 1799-1813; U. Rangel and J. Keller, "Essentialism Goes Social: Belief in Social Determinism as a Component of Psychological Essentialism," *Journal of Personality and Social Psychology,"* 100, no. 6 (2011): 1056.
10. M. J. Williams and J. L. Eberhardt, "Biological Conceptions of Race and the Motivation to Cross Racial Boundaries," *Journal of Personality and Social Psychology* 94, no. 6 (2008): 1033; A. Rattan, K. Savani, N. Naidu, and C. S. Dweck, "Can Everyone Become Highly Intelligent? Cultural Differences in and Societal Consequences of Beliefs About the Universal Potential for Intelligence," *Journal of Personality and Social Psychology* 103, no. 5 (2012): 787; H. Brueckner, A. Morning, and A. Nelson, "The Expression of Biological Concepts of Race," paper presented at Annual Meeting of the American Sociological Association, Philadelphia, PA (2005), *available at* <http://www.tessexperiments.org/sup/brueckner275_genetics.pdf> (last visited May 5, 2021).
11. Vyas et al., *supra* note 5; Braun and Sanders, *supra* note 7; L. Braun, *Breathing Race Into the Machine: The Surprising Career of the Spirometer from Plantation to Genetics* (Minneapolis: University of Minnesota Press, 2014); L. Braun, "Theorizing Race and Racism: Preliminary Reflections on the Medical Curriculum," *American Journal of Law & Medicine* 43, no. 2&3 (2017): 239-256; J. Tsai, L. Ucik, N. Baldwin, C. Hasslinger, and P. George, "Race Matters? Examining and Rethinking Race Portrayal in Preclinical Medical Education," *Academic Medicine* 91, no. 7 (2016): 916-920.
12. Braun and Sanders, *supra* note 7; B. M. Donovan, "Playing With Fire? The Impact of the Hidden Curriculum in School Genetics on Essentialist Conceptions of Race," *Journal of Research in Science Teaching* 51, no. 4 (2014): 462-496; L. Lieberman, R. E. Hampton, A. Littlefield, and G. Hallead, "Race in Biology and Anthropology: A Study of College Texts and Professors," *Journal of Research in Science Teaching* 29, no. 3 (1992): 301-321; J. C. Phelan, B. G. Link, and N. M. Feldman, "The Genomic Revolution and Beliefs about Essential Racial Differences: A Backdoor to Eugenics?" *American Sociological Review* 78, no. 2 (2013): 167-191.
13. B. M. Donovan, "Framing the Genetics Curriculum for Social Justice: An Experimental Exploration of How the Biology Curriculum Influences Beliefs about Racial Difference," *Science Education* 100, no. 3 (2016): 586-616; C. M. Condit et al., "Exploration of the Impact of Messages about Genes and Race on Lay Attitudes," *Clinical Genetics* 66, no. 5 (2004): 402-408; J. T. Jost et al., "Political Conservatism as Motivated Social Cognition," *Psychological Bulletin* 129, no. 3 (2003): 339; V. Yzerbyt, O. Corneille, and C. Estrada, "The Interplay of Subjective Essentialism and Entitativity in the Formation of Stereotypes," *Personality and Social Psychology Review* 5, no. 2 (2001): 141-155; L. M. DeBruine, "Facial Resemblance Enhances Trust," *Proceedings of the Royal Society of London, Series B: Biological Sciences* 269, no. 1498 (2002): 1307-1312; W. D. Hamilton, "The Genetical Evolution of Social Behaviour, II, *Journal of Theoretical Biology* 7, no. 1 (1964): 17-52; D. J. Kruger, "Evolution and Altruism: Combining Psychological Mediators with Naturally Selected Tendencies," *Evolution and Human Behavior* 24, no. 2 (2003): 118-125; R. O'Gorman, D. S. Wilson, and R. R. Miller, "Altruistic Punishing and Helping Differ in Sensitivity to Relatedness, Friendship, and Future Interactions," *Evolution and Human Behavior* 26, no. 5 (2005): 375-387.
14. J. M. Metzl and H. Hansen, "Structural Competency: Theorizing a New Medical Engagement with Stigma and Inequality," *Social Science & Medicine* 103 (2014): 126-133.
15. J. Tsai and A. Crawford-Roberts, "A Call for Critical Race Theory in Medical Education," *Academic Medicine* 92, no. 8 (2017): 1072-1073.
16. K. M. Bridges, *Critical Race Theory: A Primer* (St. Paul: West Academic, 2018).
17. *Id.*; R. Delgado and J. Stefancic, *Critical Race Theory: An Introduction* (New York: NYU Press, 2017).
18. Bridges, *supra* note 16; A. R. Hatch, "Critical Race Theory," *The Blackwell Encyclopedia of Sociology* (London: Wiley-Blackwell, 2007); M. J. Matsuda, *Words that Wound: Critical Race Theory, Assaultive Speech, and the First Amendment* (Boulder: Boulder, 1993); E. Lindo, B. Williams, and M-T Gonzalez, "Uncompromising Hunger for Justice: Resistance, Sacrifice, and LatCrit Theory," *Seattle Journal of Social Justice* 16 (2017): 727.
19. Sharma, *supra* note 1; A. K. Kumagai and M. L. Lypson, "Beyond Cultural Competence: Critical Consciousness, Social Justice, and Multicultural Education," *Academic Medicine* 84, no. 6 (2009): 782-787; P. Verdonk, "When I Say... Reflexivity," *Medical Education* 49, no. 2 (2015): 147-148.
20. M. Sharma, "Applying Feminist Theory to Medical Education," *The Lancet* 393, no. 10171 (2019): 570-578; S. DasGupta, et al., "Medical Education for Social Justice: Paulo Freire

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)

Revisited," *Journal of Medical Humanities* 27, no. 4 (2006): 245-251; D. Wear, "Professional Development of Medical Students: Problems and Promises," *Academic Medicine: Journal of the Association of American Medical Colleges* 72, no. 12 (1997): 1056-1062; R. K. Tsevat, et al., "Bringing Home the Health Humanities: Narrative Humility, Structural Competency, and Engaged Pedagogy," *Academic Medicine* 90, no. 11 (2015): 1462-1465.

21. Solorzano, *supra* note 3; Delgado, *supra* note 17.
22. Lindo, *supra* note 18.
23. C. L. Ford and C.O. Airhihenbuwa, "Critical Race Theory, Race Equity, and Public Health: Toward Antiracism Praxis," *American Journal of Public Health* 100, no. S1 (2010): S30-S35; B. D. Hodges, "When I Say… Critical Theory," *Medical Education* 48, no. 11 (2014): 1043-1044.
24. Tsai, *supra* note 15; B. Hooks, *Teaching Critical Thinking: Practical Wisdom* (New York: Routledge; 2010).
25. Metzl, *supra* note 14; M. Westerhaus et al., "The Necessity of Social Medicine in Medical Education," *Academic Medicine* 90, no. 5 (2015): 565-568.
26. L. Braun, "Theorizing Race and Racism: Preliminary Reflections on the Medical Curriculum," *supra* note 11; D. C. Tosteson, "New Pathways in General Medical Education," *New England Journal of Medicine* 322, no. 4 (1990): 234-238.
27. P. Freire, *Pedagogy of the Oppressed* (New York: Bloomsbury Publishing USA, 2018).
28. D. Kiraly, *A Social Constructivist Approach to Translator Education: Empowerment from Theory to Practice* (New York; Routledge, 2014); F. C. Lunenburg, "Critical Thinking and Constructivism Techniques for Improving Student Achievement," paper presented at National Forum of Teacher Education Journal (2011); H. W. Hackman, "Five Essential Components for Social Justice Education," *Equity & Excellence in Education* 38, no. 2 (2005): 103-109.
29. Vyas, *supra* note 5.
30. S. L. Boatright-Horowitz and S. Soeung, "Teaching White Privilege to White Students Can Mean Saying Good-Bye to Positive Student Evaluations," *American Psychologist* 64, no. 6 (2009): 574–575, *available at* <https://doi.org/10.1037/a0016593> (last visited May 5, 2021).
31. Hackman, *supra* note 28; D. T. Willingham, "Critical Thinking: Why is it So Hard to Teach?" *Arts Education Policy Review* 109, no. 4 (2008): 21-32.
32. Freire, *supra* note 27; A. K. Kumagai et al., "Dialogues on the Threshold: Dialogical Learning for Humanism and Justice," *Academic Medicine* 93, no. 12 (2018): 1778-1783.
33. A. W. Astin, "Student Involvement: A Developmental Theory for Higher Education," *Journal of College Student Personnel* 25, no. 4 (1984): 297-308; C. Bovill, A. Cook-Sather, and P. Felten, "Students as Co-Creators of Teaching Approaches, Course Design, and Curricula: Implications for Academic Developers," *International Journal for Academic Development* 16, no. 2 (2011): 133-145.
34. Metzl, *supra* note 14.
35. Ford and Airhihenbuwa, *supra* note 23; B. M. J. Brayboy, "Toward A Tribal Critical Race Theory in Education," *The Urban Review* 37, no. 5 (2005): 425-446.
36. B. A. Israel, A. J. Schulz, and E. A. Parker, et al., "Critical Issues in Developing and Following CBPR Principles," *Community-Based Participatory Research for Health: Advancing Social and Health Equity* 3 (2017): 32-35.
37. M. Diversi and S. Finley, "Poverty Pimps in the Academy: A Dialogue About Subjectivity, Reflexivity, and Power in Decolonizing Production of Knowledge," *Cultural Studies? Critical Methodologies* 10, no. 1 (2010): 14-17.
38. A. Nelson, *Body and Soul: The Black Panther Party and the Fight Against Medical Discrimination* (St. Paul: University of Minnesota Press; 2011).
39. Sharma, Pinto, and Kumagai, *supra* note 1.
40. W. R. Smith, J. R. Betancourt, and M. K. Wynia, et al., "Recommendations for Teaching About Racial and Ethnic Disparities in Health and Health Care," *Annals of Internal Medicine* 147, no. 9 (2007): 654-665.
41. A. Strauss and J. Corbin, "Grounded Theory Methodology," *Handbook of Qualitative Research* 17 (1994): 273-285.
42. Freire, *supra* note 27.
43. Vyas, Eisenstein, and Jones, *supra* note 5; Cerdena, Plaisime, and Tsai, *supra* note 5.
44. Fuentes, Ackermann, and Athreya, et al., *supra* note 7; Braun and Saunders, *supra* note 7; Tsai, Ucik, Baldwin, Hasslinger, and George, *supra* note 11; J. K. Shim, *Heart-Sick: The Politics of Risk, Inequality, and Heart Disease* (New York: NYU Press, 2014).
45. Donovan, *supra* note 12.
46. Sharma, Pinto, and Kumagai, *supra* note 1.
47. P. A. Ubel, C. Jepson, and A. Silver-Isenstadt, "Don't Ask, Don't Tell: A Change in Medical Student Attitudes after Obstetrics/gynecology Clerkships Toward Seeking Consent for Pelvic Examinations on an Anesthetized Patient," *American Journal of Obstetrics and Gynecology* 188, no. 2 (2003): 575-579; N. Masson and H. Lester, "The Attitudes of Medical Students Towards Homeless People: Does Medical School Make a Difference?" *Medical Education* 37, no. 10 (2003): 869-872.
48. Simis et al., *supra* note 3; Solorzano and T. J. Yosso, *supra* note 3; T. Martin "The Color of Kidneys," *American Journal of Kidney Disiese* 58, no. 5 (2011): xxvii-xxviii; N. Ehlers and L. R. Hinkson, *Subprime Health: Debt and Race in US Medicine* (St. Paul: University of Minnesota Press, 2017).
49. See the articles referenced in note 13; C. M. Condit et al., "The Role of 'Genetics' in Popular Understandings of Race in the United States," *Public Understanding of Science* 13, no. 3 (2004): 249-272; J. T. Jost and M. R. Banaji, "The Role of Stereotyping in System-Justification and the Production of False Consciousness," *British Journal of Social Psychology* 33, no. 1 (1994): 1-27.
50. Sharma, Pinto, and Kumagai, *supra* note 1.
51. Bridges, *supra* note 16; C. L. Ford, "Public Health Critical Race Praxis: An Introduction, An Intervention, and Three Points for Consideration," *Wisconsin Law Review* 3 (2016): 477-491; L. Graham et al., "Critical Race Theory as Theoretical Framework and Analysis Tool for Population Health Research," *Critical Public Health* 21, no. 1 (2011): 81-93; A. J. Lee et al., "The Value of Teaching Critical Race Theory in Prison Spaces: Centering Students' Voices in Pedagogy," *Humanities* 9, no. 2 (2020): 41; L. Ortiz and J. Jani, "Critical Race Theory: A Transformational Model for Teaching Diversity," *Journal of Social Work Education* 46, no. 2 (2010): 175-193; D. G. Solorzano, "Images and Words that Wound: Critical Race Theory, Racial Stereotyping, and Teacher Education," *Teacher Education Quarterly* 24, no. 3 (1997): 5-19.
52. Metzl and Hansen, *supra* note 14.
53. D. A. Stone, "Causal Stories and the Formation of Policy Agendas," *Political Science Quarterly* 104, no. 2 (1989): 281-300.
54. J. R. Betancourt and R. K. King, "Unequal Treatment: The Institute of Medicine Report and its Public Health Implications," *Public Health Reports* 118, no. 4 (2003): 287.

The Journal of Law, Medicine & Ethics, 49 (2021): 211-221. © 2021 The Author(s)