THEME ISSUE: MOVING FROM INJUSTICE TO EQUITY

REVIEW

Antiracism Teaching in Pharmacy Education: Developing the “Upstreamist”

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Objective. To present antiracism teaching as a key modality and an “upstream” approach to addressing health disparities in pharmacy education. Relevant theoretical frameworks and pedagogical strategies utilized in other health disciplines will be reviewed to present how antiracism curricula can be integrated into pharmacy educational outcomes.

Findings. Various disciplines have incorporated antiracism pedagogy in their respective programs and accreditation standards. While challenges to implementation are acknowledged, structural racism continues to compromise health outcomes and should be centralized when addressing health disparities.

Conclusion. Pharmacy curricula has explored and implemented cultural competency as a means to address the social determinants of health. By intentionally addressing racism in the context of health disparities, student pharmacists will further acknowledge racism as a public health issue and a systemic barrier to patient centered care.

Keywords: antiracism, pedagogy, health disparities, educational outcomes

INTRODUCTION

The concept of race and the consequences of racism in the health care system can be a difficult topic to broach. Arguably, pharmacy and other disciplines often focus broadly on cultural competency or cultural humility in health disparities teaching. Some programs may offer content that challenges implicit bias, using terms such as “microaggressions” in order to define isolated instances of racism and discrimination. Implicit bias teaching, however, may not account for the ultimate outcomes that result from one’s beliefs/actions or explain the origins of such biases. By concentrating on the aforementioned topics, instructors could potentially overlook the historical and present-day intentionality of structural racism, including the deleterious health outcomes that can occur as a result.

While the participation of pharmacy programs in antiracism teaching is not nascent, literature surrounding pedagogical methods and the impact of such teachings on student views and behaviors does not presently exist. Although competencies and educational models in pharmacy education have helped shift teaching toward understanding racial discrimination, work still remains. The concept of race as a social determinant of health (SDOH) is presently inexplicit within these competencies, making it difficult for pharmacy educators to justify the incorporation of antiracism into required curriculum as a means of addressing critical public health issues. Given that racism is a compilation of macro-level and micro-level factors, it would be prudent to embed antiracism curricula into pharmacy educational outcomes to ensure student pharmacists grasp how People of Color experience racism.

The journey to being antiracist requires an in-depth understanding of the multiple levels and systemic effects of racism. While often challenged by the notion of being “not racist,” an antiracist rejects the seemingly neutral stance of being “colorblind” and supports policies and ideas that aggressively confronts and reduces racial inequity. As explained by Kendi, “antiracist” is not a permanent identity, but is a continuous strive and “radical choice” that requires ongoing self-criticism, self-awareness, and self-examination. Therefore, antiracism teaching - coupled with existing competencies - will require a reorientation to a more “upstream” mindset and approach to patient advocacy and teaching health disparities.

The “upstream” concept, often illustrated by an adapted parable by public health and health professionals, proposes a shift in addressing health disparities by identifying the “upstream” causes of concerns observed “downstream.” While understanding the importance of downstream interventions, an “Upstreamist” is a practitioner who is dedicated to the thorough assessment and treatment of SDOH, and an advocate for social justice. For example, the mindset of an “Upstreamist” may be geared towards targeted, macro-level interventions that address the disparities of COVID-19 testing sites and underlying conditions among People of Color, while the current health care system works to increase the supply of antiviral therapies used during the course of COVID-19 treatment in hospitals that serve their

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respective neighborhoods. An American Heart Association presidential advisory published in 2020 referred to addressing and dismantling structural racism as a “push further upstream,” which is a task that requires societal effort. Pharmacist, who have been recognized as one of the most accessible health care professionals in the United States, must accept the task at hand by recognizing structural racism as a historical and current threat to health equity and challenge any system which uphold its effects.

Throughout this review, antiracism teaching will be presented as an upstream approach to dismantling health disparities and fostering an “Upstreamist” mindset in student pharmacists. Relevant theoretical frameworks will be presented, with a focus on integrating critical race theory (CRT) into pharmacy educational outcomes (Center for the Advancement of Pharmacy Education [CAPE]) and the assessment of practice readiness (Entrustable Professional Activities [EPAs]). Institutional and pedagogical strategies utilized within various health disciplines will be reviewed to suggest future pathways for pharmacy educators to deliver effective antiracism curricula.

METHODS

A literature search was conducted to examine methods for antiracism teaching adopted by various disciplines. PubMed, Ovid/MEDLINE, and EBSCOhost were utilized to retrieve relevant articles using the following keywords: “antiracism” or derivatives of the term (eg, anti-racist, anti-racism), “education,” “teaching,” “pedagogy,” “academic,” and “curriculum.” Searches were completed in February 2021. Articles were included if published in the United States within the last 10 years. Articles published prior to 2011 were included if they discussed frameworks or defined concepts that were deemed relevant to current antiracism teaching based upon analysis by the authors. Articles published prior to 2011, those which did not include relevant key terms or topics, and those published outside of the United States were excluded from review. Subgroup analysis was then conducted to select articles which related to health science students; didactic, co-curricular, or experiential teaching in higher education; and models for mitigating racism within health care practice settings and/or research. Articles were reviewed, selected, and analyzed to support any perspectives put forth by the authors (Table 1). The authors worked collectively to provide future directions for antiracism teaching in pharmacy education based on their findings and experience/expertise.

FINDINGS

Theoretical Frameworks for Antiracism Teaching

As with other curricular content, pedagogical approaches for antiracism should be integrative. In pharmacy education, this involves development of basic knowledge, skills, and abilities. Though skills and abilities signify a learner, or future practitioner’s, capacity to combat racism within the health care system, knowledge provides the foundation for building such capacity. Theoretical frameworks combined with a basic understanding of related terminology (Table 2), represent important methods for building knowledge. They specifically “enhance awareness of racism using ideas and words to deliberately interrupt the norms supporting structural and institutional racism.” Though different in scope, each theory explains race and/or racism as a root cause for health disparities. Each should also be framed in a way that helps the learner to develop a commitment to eliminating inequities in health care.

The stereotype content model (SCM) is an explanatory model that describes behavioral manifestations of structural racism leading to imbalances in treatment within the health care system. SCM is predicated on two components: perceived competence (associated with group status in society) and perceived warmth (whether a person is seen as likely to be compliant). The degree to which a person’s associated group is perceived as either competent or warm influences the emotions, level of stress, and treatment by practitioners that he or she encounters in the health care setting. Undocumented immigrants and low-income Black patients, for example, are most often stereotyped as having low competence and warmth, generating disgust and mistrust from health practitioners. Consequently, they are at greater risk for medical harms ranging from neglect to physical or verbal abuse. Explored within the SCM are environmental pressures that dictate patient reactions and how they are reacted to when encountering the medical system. These same factors can increase a patient’s vulnerability and stress. Patients who are socially disadvantaged based upon race are more likely to receive less effective and less satisfying care. According to Blascovich and colleagues, their encounters are more likely to be characterized by vigilance, threat, attributional ambiguity, miscommunication, and mis-perception. In addition, they are more likely to display physical trauma responses which manifest in conditions such as heart disease.

The social psychological perspective centralizes racism and other forms of discrimination (eg, sexism, agism) as a root cause of health disparities. Theorists of this derived conflict theory further purport that the commodification of health care has led to crisis-level inequalities wherein the wealthy and privileged in society have significantly greater access to health coverage and optimal care. Consequently, marginalized groups, such as racial and ethnic minorities, are often shut out from access and bear the disproportionate burden of poor health. Groups that are more impacted by structural racism also lack social and economic power. An example is the patient/clinician relationship. Because of the
power differential between the patient and clinician, clinicians may derive significantly more social (eg, social status, peer recognition, career advancement) and economic (eg, profits and/or income) benefit from patient encounters than the patients themselves. Also common is racial discordance between the patient and the clinician. Racial discordance can lead to poor patient care in cases where the race of either party is devalued, or clinical decision-making is attached to harmful biases. van Ryn and colleagues describe how health care providers or insurers may justify limiting the treatment they recommend for Black patients relative to White patients based upon the stereotype that Blacks are not sufficiently motivated or capable of taking care of their health. These decisions produce health disparities and further perpetuate stereotypical perceptions of a group.

With origins in legal studies and social justice, critical race theory (CRT) has emerged as an important methodological tool for developing racial consciousness and challenging social structures that promote racial hierarchies in health care. CRT, as described by Ford and Airhihenbuwa, provides a methodology for helping clinicians combat racism when carrying out research, scholarship, and practice. This involves a transformative approach to health disparities in public health which encompasses four CRT features: 1) race consciousness, 2) contemporary orientation, 3) centering in the margins, and 4) praxis. Race consciousness improves recognition and understanding of racialized constructs and mechanisms. It also challenges the idea that “colorblindness” is a means of eliminating racial inequities. This also involves a more comprehensive understanding of the lived experience of marginalized racial groups by considering the cumulative effects of racism on health over the lifespan. Contemporary orientation enhances awareness about the varied ways in which racial minorities experience racism. Herein, internalized, institutional, and structural racism are more consequential to health than racism from individual interactions. This contemporary viewpoint provides justification for the third CRT domain, centering in the margins, which argues that discourse on racism should shift from the perspective of the majority group to marginalized groups within a society. Praxis involves teaching the importance of methods for community engagement and critical self-reflection to enrich research processes in marginalized populations. More importantly, it emphasizes community ownership of findings so data can be applied to their “ongoing efforts toward collective self-improvement.” Though CRT suggests focusing on the experiences of the those most impacted by racism in order to improve both clinical practice and research, it acknowledges the lack of tools available to properly analyze the contribution of race and racism to poor health – a barrier caused, in part, by the presumption that scientific research is inherently objective in nature. Though supportive literature does not currently exist within academic pharmacy, the public health discipline has created a pathway for all health professions programs to incorporate CRT principles. The resultant Public Health Critical Race Framework (PHCRF) provides a model that can be emulated by pharmacy and other health professions, as it fundamentally recognizes that eliminating racism will accelerate achievement of public health objectives.

Institutional and Pedagogical Strategies

In 2016, The Council on Education for Public Health published updated competencies, one of which centered around racism, structural bias, and social inequities. Prior to this update, the School of Public Health at the University of Washington developed a longitudinal curriculum to directly address the effects of racism. This update was devised after a two-day workshop on addressing individual and structural racism. Based upon the work plan developed by faculty, staff, and students, action items were developed to steer incorporation of antiracism into courses, schoolwide messaging, community-based efforts, and accountability measures (eg, course evaluations and performance reviews). Courses that addressed the adopted competency focused on racism as a social determinant of health, internalized racism, and health equity. They integrated skills-based assessments to demonstrate the capacity of learners to work across diverse populations. Racism analysis skills were incorporated into a number of graduate-level courses, both didactic and experiential, and validated tools to assess racial literacy were used by instructors to determine student learning outcomes.

DallaPiazza and colleagues implemented a mandatory health equity and social justice course with a designated three-hour session on racism and health for first year medical students. The course began with a lecture portion that provided racial history as it related to the location of the institution. Small-group case discussions were utilized after the lecture to further explore and emphasize material. Ten to twelve students reviewed five different focus areas alongside a peer facilitator, rather than a faculty member, to enhance student comfort levels. At course conclusion, participants were assessed using multiple-choice and short-answer questions. Findings revealed that students felt their knowledge and skills had increased, though they would have preferred spending more time learning how to define race and racism.

Davis and colleagues discussed the implementation of a multi-day educational co-curricular activity offered through the Office of Student Life at the University of Northern Colorado. The activity, “Catalyst for Growth,” involved discussions among students and faculty members of nursing, biological sciences, and psychology. Conversations addressed eight constructs of identity: race, gender, sexual orientation, age, religion or spirituality, national origin, ability, and social economic status. Participants took a confirmable, qualitative pre and post assessment of their knowledge on the
subject matter. While experiencing increased comfort discussing class, ability, national origin, race and ethnicity, students noted decreased levels of comfort when conversations regarding sexual orientation, gender identity and religion/spirituality surfaced. Although faculty participants reported personal growth, it was determined that there was a need for increased and ongoing education and interdisciplinary work, particularly regarding social identities.

Health equity rounds were developed as a longitudinal activity by Perdomo and colleagues. These one-hour conferences consisted of case presentations centered around implicit bias and structural racism. Interdisciplinary groups of faculty and students reviewed subject matter history, avenues for advocacy, and completed reflection exercises. Cases were selected from scenarios in which racism was identified as a factor in patient care. Over the span of two years, the format of the conferences evolved to include small group debriefs and coverage of a broad range of topics. Yet, the process of evaluating this program was noted as an ongoing challenge.

Integrating Critical Race Theory into Pharmacy Education

While the impact of socioeconomic status and other “upstream” factors on health have been documented, the systemic effects of racism across the lifespan of marginalized persons must be emphasized to address the ethnic and racial inequities in health care. Cultural competency (CC) and cultural humility (CH) models have been extensively explored, implemented, and assessed in pharmacy curricula. Underpinnings of CC have found their place in the Pharmacists’ Patient Care Process, which calls for the inclusion of cultural factors during patient assessment. While culturally responsive teaching should remain an important benchmark for pharmacy training programs, student pharmacists must fully comprehend racism as a barrier to achieving optimal health outcomes among minority populations. This involves the incorporation of CRT into pedagogical practice, and a move beyond CC and CH training which can inadvertently perpetuate ethnocentrism, stereotyping, and cultural (mis)attribution bias, or result in oversimplification of diversity. Furthermore, the significance of racism in society and health care could be unintentionally curtailed by the “multicultural umbrella,” leading to the perpetuation of “colorblindness” and the perception of a race-neutral health care system. By integrating CRT into pharmacy education, the “upstream” approach to health disparities is adopted by intentionally centralizing issues of racism as a root cause of health inequities. The utilization of select CRT principles defined by Ford and Airhihenbuwa can help build upon our existing efforts and enrich the approach to educational outcomes by pharmacy programs (Table 3).

“Building race consciousness.” CAPE Domains 1, 3 & 4; EPA Domains 1-6

Self-awareness and professionalism require the ongoing process of examining personal beliefs and biases that may hinder patient-centered care and the trust conferred as health care professionals. While this process includes intentionally seeking encounters with racially, ethnically, and culturally diverse patients, race consciousness enhances one’s self-awareness by encouraging acknowledgment of how racism shapes such beliefs. By perceiving the privileges and disadvantages allocated by race, student pharmacists can begin to understand how racialization undergirds health inequities. Personal acknowledgment of structural racism, however, could be hindered by lack of readiness, adopting a “colorblind” position, or deeming such discourse itself as “racist.” Acknowledging race as a social construct and how positions in social hierarchy determine privilege, power, and both health access and outcomes is key to establishing an “upstream” antiracist approach to achieving aspects of CAPE Domains 1, 3, and 4. This can be initiated by designing objectives, longitudinal assignments, and self-reflection activities specific to structural racism and privilege in courses with professionalism and cultural awareness components.

“Contemporary orientation.” CAPE Domain 2; EPA Domains 1 & 3

“Practice-ready” student pharmacists are trained to provide patient-centered care, acknowledge the influence of population-based health, and design strategies and interventions for chronic disease management and wellness. Learners should be guided to critically process how structural factors affect marginalized populations. Contemporary orientation challenges the narrative that incidences of racism are rare, blatant occurrences, and requires one to seek a greater understanding of modernized racialization within health care practices. Educational strategies should include challenging social hierarchies and emphasizing the subtle nature and consequences of structural racism. Learners will then begin to understand how certain upstream decisions made by those in power continue to sustain inequities by placing marginalized groups at a disadvantage. Because CAPE Domain 2 seeks concrete preparation of student pharmacists to be practice ready, this CRT principle may be achieved by approaching the Pharmacists’ Patient Care Process from an “anti-racist” position and incorporating issues of race in assessed entrustable professional activities (EPAs) during didactic, co-curricular, and experiential activities.

“Centering in the margins” and “praxis” (CAPE Standards 3; EPA Domains 1-2, 4-5) requires a shift in discourse to the perspective of marginalized populations to inform practice. For example, the discussion and concerns of low COVID-19 vaccinations among African Americans is often centered around the historical distrust stemming from the Tuskegee Experiment and other egregious unethical events in the medical and political history of the United States.
Mainstream attempts to address this concern through patient assurance that the health care system is mandated to “do no harm,” but the manifestations often contradict the lived experiences of many African Americans. By embracing the voice of marginalized patients, student pharmacists are equipped to tackle present-day racism, advocate for social justice and health equity, and explore new solutions for current issues. Pedagogical strategies should focus on intersectionality between race, gender, and other socioeconomic factors; embracing and advocating for a diverse health care workforce; and patient-centered thinking in order to integrate this CRT principle with CAPE Domains 1 and 3.

**Future Directions**

One central outcome for antiracism teaching is for student pharmacists to demonstrate agility in navigating the perspectives of diverse patient populations and exploring the impact of cultural values on patient care outcomes. Using a self-assessment tool that determines one's perceived level of cultural competence, Echeverri and Dise developed profiles for medicine and pharmacy students for the purposes of an integrated pilot curriculum. Scores on items related to understanding the impact of prejudices on health disparities were the highest among African American pharmacy students. When given the opportunity to provide feedback on the curriculum, some students expressed interest in additional training. Others, however, believed racism was no longer relevant because they were of the “new multicultural and global generation” or felt their time could be best spent on “more important” courses.

While SDOHs are lauded as a mainstay in addressing health inequities, they should be taught as “conditions to be challenged and changed” rather than “facts to be known.” Although racism is considered a determinant of health, discourse and education on racism in health care tend to be brief, if not sidelined. Therefore, antiracism curricula can be utilized as a means to uproot the perspective of biological inferiority of marginalized groups and contextualize health disparities through the lens of structural racism. Antiracism teaching should be a stepwise, longitudinal process that is implemented early in the didactic curriculum, includes co-curricular and interprofessional activities, and applied during advanced experiential requirements. Pharmacy programs should also explore innovative strategies to successfully integrate antiracism principles in objective structured clinical examinations (OSCEs) and flipped classrooms, which builds upon strategies outlined in Table 1. The development of pharmacy specific evaluation modalities are also necessary to best assess antiracism teaching throughout the curriculum. While faculty and administration can face resistance and significant barriers to adopting antiracism teaching in their programs, strategies utilized by Hagopian et al can serve as a framework for the holistic development and infusion of antiracism curricula.

In consideration of the aforementioned, pre-professional requirements may also be explored to ensure baseline exposure to antiracism principles prior to entering the Doctor of Pharmacy program. Metz et al describes the development of a pre-health major at Vanderbilt University that emphasized interprofessional learning of health and illness. Students engaged in discourse about racial and ethnic disparities as well as critical perspectives about the politics of health. Faculty-student colloquia and structural immersion assignments were used to assess the structural competency of learners. Upon graduation, students who progressed through the program were more prepared to recognize the correlation between health outcomes and structural factors.

To successful guide learners through antiracism curricula, pharmacy programs must incorporate required trainings and professional development opportunities for faculty. Facilitating and managing such conversations in throughout pharmacy curricula must begin with a level of awareness and personal commitment of faculty, while recognizing that such activities may be difficult. However, ongoing commitment to the delivery of antiracism curricula encompasses professional and personal benefits. As demonstrated by student feedback presented by Echeverri and Wise, faculty must be prepared to address the perspectives of all students and where points of view may diverge. It is also important to assist students with connecting their own experiences with those of the patients they will serve through exercises that develop empathy (Figure 1).

Faculty must encourage and create a “safe space” for antiracist discourse that involves open communication and input from all participants. However, this designated “space” requires a level of accountability, mindfulness, and independent learning of all participants to ensure minority students and faculty are not viewed as sole providers of information or representatives of their race or ethnic groups. Additionally, these spaces must recognize and validate feelings, control the process of the conversation rather than the content, and prevent discrimination and harassment. Furthermore, didactic and experiential training settings must empower student pharmacists to serve as champions for racial solidarity without fear of being “difficult” or racially paranoid.

**SUMMARY**

**Developing the Upstreamist**

Despite the continuous growth of racially and ethnically diverse populations within the U.S., health disparities persist and often occur in the context of both historical and contemporary inequality and discrimination. While the
Institute of Medicine considers such disparities “unacceptable” and has proposed recommendations in their landmark report, recent studies suggest that health care workers remain underprepared to confront health disparities and racism. COVID-19 has placed a microscope directly at the intersection of the various components of racism, and specifically revealed the impact of discrimination within the health care system. The rate of hospitalizations and mortality due to COVID-19 among African Americans and Hispanics is remarkably higher in proportion to the overall population. In the continued exploration of the “upstream” approach of antiracism teaching in pharmacy education, all programs must deliberately critique where they are in this effort, the potential challenges based on institutional infrastructure, and how to effectively implement antiracism teaching (Figure 2). The oath of the pharmacist includes improving the well-being for all. In the name of remaining true to the pharmacist’s role as patient advocates, following the lead of colleagues in public health, medicine, nursing, and social work, will be essential in ensuring student pharmacists are equipped to become antiracist practitioners. Racial disparities in health care are even present when insurance status and disease severity are comparable. By intentionally addressing racism in the context of health disparities, pharmacy students can begin to envision what it means to be an “Upstreamist” who is committed to health equity (Figure 1).

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REFERENCES

1. Assemi M, Cullander C, Hudmon KS. Implementation and evaluation of cultural competency training for pharmacy students. Ann Pharmacother. 2004;38(5):781-786. doi: aph.1D402 [pii].
2. Muzumdar JM, Holiday-Goodman M, Black C, Powers M. Cultural competence knowledge and confidence after classroom activities. Am J Pharm Educ. 2010;74(8):150. doi: 150.
3. Hawala-Druy S, Hill MH. Interdisciplinary: Cultural competency and culturally congruent education for millennials in health professions. Nurse Educ Today. 2012;32(7):772-778. doi: 10.1016/j.nedt.2012.05.002.
4. Beck B, Scheel MH, De Oliveira K, Hopp J. Integrating cultural competency throughout a first-year physician assistant curriculum steadily improves cultural awareness. J Physician Assist Educ. 2013;24(2):28-31. doi: 10.1097/01367895-201324020-00007.
5. Bauer K, Bai Y. Using a model to design activity-based educational experiences to improve cultural competency among graduate students. Pharmacy (Basel). 2018;6(2):48. doi: 10.3390/pharmacy6020048. doi: 10.3390/pharmacy6020048.
6. Echeverri M, Dise T. Racial dynamics and cultural competence training in medical and pharmacy education. J Health Care Poor Underserved. 2017;28(1):266-278. doi: 10.1353/hpu.2017.0023.
7. Sue DW, Capodilupo CM, Torino GC, et al. Racial microaggressions in everyday life: Implications for clinical practice. Am Psychol. 2007;62(4):271-286. doi: 2007-07130-001 [pii].
8. Torres MB, Salles A, Cochran A. Recognizing and reacting to microaggressions in medicine and surgery. JAMA Surg. 2019;154(9):868-872. doi: 10.1001/jamasurg.2019.1648.
9. Wheeler DJ, Zapata J, Davis D, Chou C. Twelve tips for responding to microaggressions and overt discrimination: When the patient offends the learner. Med Teach. 2019;41(10):1112-1117. doi: 10.1080/0142159X.2018.1506097.
10. Jowsey T. Three zones of cultural competency: Surface competency, bias twilight, and the confronting midnight zone. BMC Medical Education. 2019;19(1):306. doi: 10.1186/s12909-019-1746-0.
11. Williams DR, Lawrence JA, Davis BA. Racism and health: Evidence and needed research. Annu Rev Public Health. 2019;40:105-125. https://pubmed.ncbi.nlm.nih.gov/30601726 doi: 10.1146/annurev-publhealth-040218-043750.
12. Brooks J. Working definitions: Race, ethnic studies, and early american literature. Early American Literature. 2006;41(2):313-320. http://www.jstor.org/stable/25057448.
13. Jones CP. Levels of racism: A theoretic framework and a gardener’s tale. Am J Public Health. 2000;90(8):1212-1215. doi: 10.2105/ajph.90.8.1212
14. Kendi IX. How to be an Antiracist. New York, NY: Random House; 2019.
15. McKinlay JB. A case for refocusing upstream: The political economy of illness. Patients, physicians and illness: A sourcebook in behavioral science and health. 1979:9-25.
16. Manchanda R, Hochman M. Improvement happens: Impacting health at its roots: An interview with rishi manchanda. J Gen Intern Med. 2014;29(11):1552-1556. doi: 10.1007/s11606-014-2902-1.
17. Churchwell K, Elkind MSV, Benjamin RM, et al. Call to action: Structural racism as a fundamental driver of health disparities: A presidential advisory from the american heart association. *Circulation.* 2020;142(24):e454-e468. doi: 10.1161/CIR.0000000000000936.

18. American Pharmacists Association. Pharmacy organization's joint policy recommendations to combat the COVID-19 pandemic. June 2020. https://www.ashp.org/-/media/assets/pharmacy-practice/resource-centers/Coronavirus/docs/Pharmacist-frontline-COVID19.ashx?la=en&hash=1A5827F821D22FD7C75DDEEF815326BDA88469FF. Accessed May 19, 2021.

19. Strand MA, Bratberg J, Eukel H, Hardy M, Williams C. Community pharmacists’ contributions to disease management during the COVID-19 pandemic. *Preventing chronic disease.* 2020;17:E69. https://pubmed.ncbi.nlm.nih.gov/32701431. doi: 10.5888/pcd17.200317.

20. Pearson ML, Hubball HT. Curricular integration in pharmacy education. *Am J Pharm Educ.* 2012;76(10):204. doi: 10.5688/ajpe7610204.

21. South EC, Butler PD, Merchant RM. Toward an equitable society: Building a culture of antiracism in health care. *J Clin Invest.* 2020;130(10):5039-5041. doi: 141675 [pii].

22. Smith WR, Betancourt JR, Wynia MK, et al. Recommendations for teaching about racial and ethnic disparities in health and health care. *Ann Intern Med.* 2007;147(9):654-665. doi: 147/9/654 [pii].

23. Major B, Mendes WB, Dovidio JF. Intergroup relations and health disparities: A social psychological perspective. *Health Psychol.* 2013;32(5):514-524. doi: 10.1037/a0030358 [doi].

24. Dovidio JF, Gaertner SL. Aversive racism. In: Zanna MP, editor. *The lived experience of race and its health consequences.* Multidisciplinary, multiracial conversations informed by public health critical race praxis (PHCRP). *Health Psychol.* 2013;28:271-278. https://pubmed.ncbi.nlm.nih.gov/30116098. doi: 10.2105/AJPH.2015.302903.

25. Dovidio JF, Fiske ST. Under the radar: How unexamined biases in decision-making processes in clinical interactions can contribute to health care disparities. *Am J Public Health.* 2012;102(5):945-952. doi: 10.2105/AJPH.2011.300601.

26. Blascovich J, Mendes WB. Social psychophysiology and embodiment. In: Fiske ST, Gilbert DT, Lindzey G, editors. *Handbook of social psychology.* 5. Vol. 1. Hoboken, NJ: Wiley; 2010. pp. 194-227.

27. Parsons T. *The Social System.* Glencoe, Ill.: Free Press; 1951.

28. van Ryn M, Burgess DJ, Dovidio JF, et al. The impact of racism on clinician cognition, behavior, and clinical decision making. *Du Bois Rev.* 2011;8(1):199-218. doi: 10.1017/S1742058X11000191.

29. Ford CL, Airhihenbuwa CO. Critical race theory, race equity, and public health: Toward antiracism praxis. *Am J Public Health.* 2010;100 Suppl 1(Suppl 1):30. doi: 10.2105/AJPH.2009.171058.

30. Hagopian A, West KM, Ornelas JJ, Hart AN, Hagedorn J, Spigner C. Adopting an anti-racism public health curriculum competency: The university of Washington experience. *Public Health Rep.* 2018;133(4):507-513. doi: 10.1177/0033354918774791.

31. Hall WJ, Chapman MV, Lee KM, et al. Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: A systematic review. *Am J Public Health.* 2015;105(12):60. doi: 10.2105/AJPH.2015.302903.

32. Hagopian A, West KM, Ornelas JJ, Hart AN, Hagedorn J, Spigner C. Adopting an anti-racism public health education. *Public Health Rep.* 2018;133(4):507-513. doi: 10.1177/0033354918774791.

33. DallaPiazza M, Padilla-Register M, Dwarkanath M, Obameda E, Hill J, Soto-Greene ML. Exploring racism and health: An intensive interactive session for medical students. *MedEdPORTAL.* 2018;14:10783-8265.10783. doi: 10.15766/mep_2374-8265.10783.

34. Davis JN, Sullivan K, Guzman A. Catalyst for growth: The implications of co-curricular experiences for nursing education. *J Nurs Educ.* 2018;57(2):110-114. doi: 141675 [pii].

35. Perdomo J, Tolleriv D, Hsu H, et al. Health equity rounds: An interdisciplinary case conference to address implicit bias and structural racism for faculty and trainees. *MedEdPORTAL.* 2019;15:10858-8265.10858. doi: 10.15766/mep-2374-8265.10858.

36. Rockich-Winston N, Wyatt TR. The case for culturally responsive teaching in pharmacy curricula. *Am J Pharm Educ.* 2019;83(8):7425. doi: 10.5688/ajpe7425.

37. American College of Clinical Pharmacy, O’Connell MB, Korner EJ, Rickles NM, Sias JJ. Cultural competence in health care and its implications for pharmacy. part 1. overview of key concepts in multicultural health care. *Pharmacotherapy.* 2007;27(7):1062-1079. doi: 10.1592/phco.27.7.1062 [doi].

38. Joint Commission of Pharmacy Practitioners. Pharmacists’ Patient Care Process. May 29, 2014.
2. Available at: https://jcpp.net/wp-content/uploads/2016/03/PatientCareProcess-with-supporting-organizations.pdf. Accessed November 1, 2020.

39. Capell J, Dean E, Veenstra G. The relationship between cultural competence and ethnocentrism of health care professionals. J Transcult Nurs. 2008;19(2):121-125. doi: 10.1177/1043659607312970.

40. Causadias JM, Vitriol JA, Atkin AL. Do we overemphasize the role of culture in the behavior of racial/ethnic minorities? evidence of a cultural (mis)attribution bias in american psychology. Am Psychol. 2018;73(3):243-255. doi: 10.1037/amp0000999.

41. Diaz-Cruz ES. If cultural sensitivity is not enough to reduce health disparities, what will pharmacy education do next? Curr Pharm Teach Learn. 2019;11(5):538-540. doi: S1877-1297(18)30189-8 [pii].

42. Abrams LS, Moio JA. Critical race theory and the cultural competence dilemma in social work education. Journal of social work education. 2009;45(2):245-261. doi: 10.5175/JSWE.2009.200700109.

43. Accreditation Council for Pharmacy Education. 2016. Accreditation standards and key elements for the professional program in pharmacy leading to the doctor of pharmacy degree. https://www.acpeaccredit.org/pdf/Standards2016FINAL.pdf. Accessed November 1, 2020.

44. Coleman T. Anti-racism in nursing education: Recommendations for racial justice praxis. J Nurs Educ. 2020;59(11):642-645. doi: 10.3928/01484834-20201020-08 [pii].

45. Bajaj SS, Stanford FC. Beyond Tuskegee - vaccine distrust and everyday racism. N Engl J Med. 2021;384(5):e12. doi: 10.1056/NEJMpv2035827.

46. Crenshaw, Kimberlé W.; Gotanda, Neil; Peller, Gary; and Thomas, Kendall, "Critical Race Theory: The Key Writings That Formed the Movement" (1995). New York, NY: The New Press; 1996

47. Metzl JM, Petty J, Olowojoba OV. Using a structural competency framework to teach structural racism in pre-health education. Soc Sci Med. 2018;199:189-201. doi: S0277-9536(17)30398-2 [pii].

48. Sue DW. Race talk: The psychology of racial dialogues. Am Psychol. 2013;68(8):663-672. doi: 10.1037/a0033681.

49. Nelson A. Unequal treatment: Confronting racial and ethnic disparities in health care. J Natl Med Assoc. 2002;94(8):666-668 https://pubmed.ncbi.nlm.nih.gov/12152921 .

50. Egede LE, Walker RJ. Structural racism, social risk factors, and covid-19 — A dangerous convergence for black americans. N Engl J Med. 2020;383(12):e77. doi: 10.1056/NEJMp2023616.

51. Pittenger AL, Copeland DA, Lacroix MM, et al. Report of the 2016-17 academic affairs standing committee: Entrustable professional activities implementation roadmap. Am J Pharm Educ. 2017;81(5):S4. https://pubmed.ncbi.nlm.nih.gov/28720927 doi: 10.5688/ajpe815S4.
Figure 1. Student Perspective on Antiracism Teaching in Pharmacy

My Perspective:

America was battling two pandemics in 2020: COVID-19 and racism. Both, of which forced the nation to take off the bandage that covered the deep wound of injustices that have plagued our country for centuries. I witnessed firsthand as COVID-19 disproportionately impacted minority communities due to pre-existing health conditions brought on by systemic racism and the inequality in healthcare access. I watched Dr. Susan Moore’s Facebook video which clearly depicted medical racism. She relentlessly asked for medication and proper treatment from physicians who did not seem to take her complications seriously. As a fourth-year student pharmacist who is soon to enter the workforce, I believe it is imperative for healthcare professionals to have a level of compassion, respect, and understanding for all races and cultures.

Pharmacists are gatekeepers to the greater healthcare system, as we are often the first point of contact to address patient questions and concerns. With the vaccination rollout plan underway, pharmacists are best positioned to not only distribute the vaccines but also address issues such as vaccine hesitancy, especially in marginalized or historically disaffected communities. Addressing structural (eg, medical) racism in pharmacy curricula is an important first step.

Recommendations for the Future:

Longitudinal education on racism and inequality can be addressed through open discussions with diverse peers and communities, workshops, community projects, and diversity among leadership and students. Furthermore, self-reflection is required to unravel learned biases and identify the internal work required to truly provide patient-centered care. The hard work starts from within, and it cannot be accomplished until every level of healthcare buys in to the antiracism approach. History cannot be rewritten, but commitment and ownership can forward the change that this country so desperately needs.

~Chanae Brown, Fourth-year Doctor of Pharmacy Candidate, Howard University College of Pharmacy
Figure 2. Comparison of Upstream, Midstream, and Downstream Approaches to Health Disparities Teaching

**Upstream**
- Embed antiracism curricula in accreditation standards, educational outcomes, and assessment (e.g., CAPE, EPAs)
- Institutional commitment to antiracism (e.g., policies, training, financial support, programmatic efforts)
- Explicitly address structural racism to contextualize health disparities
- Required faculty development to deliver antiracism curricula
- Early and longitudinal implementation of antiracism curricula

**Midstream**
- College/school commitment to antiracism curricula
- Required longitudinal cultural humility training
- Standalone courses (e.g., power and privilege; history of medical racism; social justice and cultural humility)

**Downstream**
- Cultural competency and SDOH lectures
- Cultural competency volunteering opportunities
- Elective courses on historical/present-day racism, power, and privilege
- Exposure to "underserved" communities during experiential opportunities
Table 1. Institutional and Pedagogical Strategies in Literature

| Curricular development | Skills-based assessment | Pre-professional course | Co-Curricular, multi-day retreat | Health equity rounds | Interdisciplinary lectures | Art-based small groups | Mandatory health equity and social justice course | Lecture and small group discussions | Case discussions & flipped classroom | Mandatory “Race and Medicine” workshop | Race reading group |
|------------------------|-------------------------|------------------------|-------------------------------|---------------------|---------------------------|------------------------|---------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------|
| a Hagopian A, West KM, Ornelas IJ, Hart AN, Hagedorn J, Spigner C. Adopting an Anti-Racism Public Health Curriculum Competency: The University of Washington Experience. *Public Health Rep.* 2018;133(4):507-513. doi:10.1177/0033354918774791 |
| b Metzl JM, Petty J, Olowojoba OV. Using a structural competency framework to teach structural racism in pre-health education. *Soc Sci Med.* 2018;199:189-201. doi:10.1016/j.socscimed.2017.06.029 |
| c Davis JN, Sullivan K, Guzman A. Catalyst for Growth: The Implications of Co-Curricular Experiences for Nursing Education. *J Nurs Educ.* 2018;57(2):110-114. doi:10.3928/01484834-20180123-09 |
| d Hardeman RR, Burgess D, Murphy K, et al. Developing a Medical School Curriculum on Racism: Multidisciplinary, Multiracial Conversations Informed by Public Health Critical Race Praxis (PHCRP). *Ethn Dis.* 2018;28(Suppl 1):271-278. Published 2018 Aug 9. doi:10.18865/ed.28.S1.271 |
| e Medlock M, Weissman A, Wong SS, et al. Racism as a Unique Social Determinant of Mental Health: Development of a Didactic Curriculum for Psychiatry Residents. *MedEdPORTAL.* 2017;13:10618. doi:10.15766/mep_2374-8265.10618 |
| f Perdomo J, Tolliver D, Hsu H, et al. Health Equity Rounds: An Interdisciplinary Case Conference to Address Implicit Bias and Structural Racism for Faculty and Trainees. *MedEdPORTAL.* 2019;15:10858. Published 2019 Nov 22. doi:10.15766/mep_2374-8265.10858 |
| g Godley BA, Dayal D, Manekin E, Estroff SE. Toward an Anti-Racist Curriculum: Incorporating Art into Medical Education to Improve Empathy and Structural Competency. *J Med Educ Curric Dev.* 2020;7:2382120520965246. Published 2020 Oct 29. doi:10.1177/2382120520965246 |
| h DallaPiazza M, Padilla-Register M, Dwarkanath M, Obamedo E, Hill J, Soto-Greene ML. Exploring Racism and Health: An Intensive Interactive Session for Medical Students. *MedEdPORTAL.* 2018;14:10783. Published 2018 Dec 14. doi:10.15766/mep_2374-8265.10783 |
| i Ona FF, Amutah-Onukagha NN, Asemamaw R, Schlaff AL. Struggles and Tensions in Anti-Racism Education in Medical School: Lessons Learned [published online ahead of print, 2020 Sep 1]. *Acad Med.* 2020;10.1097/ACM.0000000000003696. doi:10.1097/ACM.0000000000003696 |
| j Guh J, Harris CR, Martinez P, Chen FM, Gianutsos LP. Antiracism in Residency: A Multimethod Intervention to Increase Racial Diversity in a Community-Based Residency Program. *Fam Med.* 2019;51(1):37-40. doi:10.22454/FamMed.2019.987621 |
| Terminology/Subcategories | Definition |
|---------------------------|------------|
| Racism^{ab}               | “The state-sanctioned and/or legal production and exploitation of group-differentiated vulnerabilities to premature death, in distinct yet densely interconnected political geographies” “A marriage of racist policies and racist ideas that produce and normalize racial inequities” |
| Types of Racism           |            |
| Cultural racism^{c}       | Those aspects of society that overtly and covertly attribute value and normality to white people and Whiteness, and devalue, stereotype, and label People of Color as “other,” different, less than, or render them invisible. |
| Structural racism^{d}     | A system of structuring opportunity and assigning value based on the social interpretation of how one looks (“race”), that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources. |
| Institutional^{e}         | The ways that institutional practices, policies, and procedures create disparate outcomes for different racial groups, namely, the advantages experienced by people classified as white and the disadvantages experienced by people classified as non-white. |
| Personally mediated^{e}   | Defined as prejudice and discrimination, where prejudice means differential assumptions about the abilities, motives, and intentions of others according to their race, and discrimination means differential actions toward others according to their race. |
| Internalized^{e}          | The acceptance, by marginalized racial populations, of the negative societal beliefs and stereotypes about themselves. |

{^a} Brooks J. Working definitions: Race, Ethnic Studies, and Early American Literature. *Early American Literature*. 2006;41(2):313-320. http://www.jstor.org/stable/25057448.

{^b} Kendi IX. *How to be an Antiracist*. New York, NY: Random House; 2019.

{^c} Adams, Maurianne., Bell, Lee Anne., Griffin, Pat... *Teaching for Diversity and Social Justice: A Sourcebook*. New York, NY: Routledge; 1997.

{^d} Jones CP. Toward the Science and Practice of Anti-Racism: Launching a National Campaign Against Racism. *Ethn Dis*. 2018;28(Suppl 1):231-234. Published 2018 Aug 9. doi:10.18865/ed.28.S1.231

{^e} Jones CP. Levels of racism: a theoretic framework and a gardener’s tale. *Am J Public Health*. 2000;90(8):1212-1215. doi:10.2105/ajph.90.8.1212

{^f} Health Disparities. Centers for Disease Control and Prevention. https://www.cdc.gov/aging/disparities/index.htm. Published January 31, 2017. Accessed February 3, 2021.
Table 3: Integrating Critical Race Theory in Pharmacy Education

| Critical Race Theory | CAPE Domain & Subdomains | EPA Domains & Statements |
|----------------------|--------------------------|--------------------------|
| Centering in the margins Praxis | Domain 1: Foundational Knowledge | 1.1 Learner  
-Foundational sciences  
-Patient-centered care  
-Population-based care | Domain 1: Patient Care Provider |
| Contemporary orientation | Domain 2: Essentials for Practice & Care | 2.1 Caregiver  
-Patient-centered care  
2.3 Promoter  
-Health and wellness  
2.4 Provider  
-Population-based & patient-centered care | Domain 1: Patient Care Provider  
Domain 3: Population Health Promoter |
| Centering in the margins Praxis | Domain 3: Approach to Practice & Care | 3.1 Problem-solver  
-Viable solutions  
3.3 Patient advocacy  
-Patient empowerment  
3.4 Collaborator  
-Interprofessional care  
3.5 Includer  
-Cultural sensitivity  
-SDOH  
3.6 Communicator  
-Communication, rapport, empathy | Domain 1: Patient Care Provider  
Domain 2: Interprofessional Team Member  
Domain 4: Information Master  
Domain 5: Practice Manager |
| Race consciousness | Domain 1: Foundational Knowledge  
Domain 3: Approach to Practice & Care  
Domain 4: Personal & Professional Development | 1.1 Learner  
-Foundational sciences  
-Patient-centered care  
-Population-based care  
3.2 Educator  
-Impart information  
4.1 Self-awareness  
-Personal and professional growth  
4.2 Leader  
-Creating and achieving goals  
4.4 Professional  
-Building and upholding trust | Domain 1: Patient Care Provider  
Domain 2: Interprofessional Team Member  
Domain 3: Population Health Promoter  
Domain 4: Information Master  
Domain 5: Practice Manager  
Domain 6: Self-developer |

Adapted from Pittenger, Copeland, Lacroix et al. 61