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Multi-institutional exploration of pediatric residents' perspectives on anti-racism curricula: a qualitative study

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ABSTRACT

Background: Anti-racism curricula are increasingly being recognized as an integral component of medical education. To our knowledge, there has not yet been a publication exploring resident perspectives from multiple institutions and explicitly representing both underrepresented in medicine (UIM) and non-UIM perspectives.

Objective: To explore and compare UIM and non-UIM pediatric residents' perspectives on the content and qualities of meaningful anti-racism curricula.

Methods: We performed an IRB-approved multi-institutional, qualitative study that incorporated Sotto-Santiago et al's conceptual framework for anti-racism education. Between February and May 2021, we conducted focus groups of UIM and non-UIM pediatric residents at three large residency programs in the United States. We developed focus group guides using literature review, expert consensus, feedback from study team racial equity experts, and piloting. Focus groups were conducted virtually, audio-recorded, and transcribed verbatim. We employed thematic analysis to code transcripts, create categories, and develop themes until we reached thematic sufficiency. We completed member checking to ensure trustworthiness of themes.

Results: Forty residents participated (19 UIM and 21 non-UIM) in a total of six focus groups. We identified 7 themes, summarized as: 1) racism in medicine is pervasive, therefore (2) anti-racism education is critical to the development of competent physicians, and 3) education should extend to all healthcare providers. 4) Residents desired education focused on action-oriented strategies to advance anti-racism, 5) taught by those with both learned and lived experiences with racism, 6) in a psychologically safe space for UIM residents, and 7) with adequate time and financial resources for successful implementation and engagement.

Conclusion: Our multi-institutional study affirms the need for pediatric resident anti-racism education, promotes co-creation as a method to affect culture change, and provides practical strategies for curricular design and implementation.

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Background

Racism is a public health crisis and a root cause of significant health inequities [1–6]. In the setting of national attention to the COVID-19 pandemic exacerbating health inequities and murder of numerous unarmed Black people in 2020, the medical community advocated for their institutions and associations to acknowledge their role in perpetuating racism and actions to dismantle it. In response, the Association of American Medical Colleges (AAMC) established competencies for diversity, equity, and inclusion (DEI) to guide curricular design [7], and the Canadian Medical Association published a list of recommendations to work towards greater equity and diversity in medicine, including implementation of provider training on implicit bias, allyship, and cultural competence [8]. The American Board of Pediatrics also published an entrustable professional activity on 'structural racism, discrimination, and social determinants of health and their inequities' [9]. Despite these guidelines, residency program directors reported feeling under-equipped, under-resourced, and lacking best practices to affect change [10].

Medical educators have developed a variety of anti-racism curricula covering several topics including education on the three levels of racism as described in Camara Phyllis Jones' theoretical framework (institutionalized, personally mediated, and internalized) [11], but typically the education is focused on personally mediated implicit biases and microaggressions [12–15]. Sotto-Santiago et al. published an anti-racism education in healthcare

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conceptual framework, incorporating Critical Race Theory among additional non-medical anti-racism education work, that provides a blueprint for curricular design [16,17]. It includes four key concepts: foundational awareness (insight into one's privilege and bias), foundational knowledge (interpretation of anti-racism theories), embedding of anti-racism into practice (implementing antiracist actions into clinical practice), and dismantling of oppressive structures (actively working to dismantle system barriers to equitable care in medicine).

Co-creation, or learner engagement in the creation and implementation of anti-racism curricula, can increase learner satisfaction, identify institutional bias and discrepancies between theory and practice-based learning, and potentially help transform institutional culture [18–21]. Additionally, with respect to addressing institutional racism, it is critical that residency programs take into account the perspectives of residents who may experience or witness both personalized and internalized racism. Gilliam et al. explored pediatric resident experiences after participation in their institution's DEI curriculum and highlighted the need for institutional DEI education, an understanding of the unique experiences of UIM learners, and systemic barriers to equitable care, however, pediatric residents did not participate in the needs assessment for this curriculum [22]. Karvonen et al. described a UIM resident-led effort to advance DEI and anti-racism in a pediatric residency program, including didactics, standardized simulations on interrupting microaggressions, racial affinity groups, and optional social justice discussion clubs [23]. However, no details of the assessment process were provided and no conceptual model discussed. Jindal et al and Szoko et al also developed anti-racism curricula for their programs, however resident perspectives are not described in the development [24,25]. Despite these benefits, pediatric resident perspectives on anti-racism curricular design, content, and implementation are lacking. Though there have been single institution needs assessments of pediatric residents' perspectives on learning about anti-racism, residents' perspectives from multiple institutions and explicitly representing both underrepresented in medicine (UIM) and non-UIM perspectives have not been published. Therefore, we sought to explore and compare UIM and non-UIM pediatric residents' perspectives on the content and qualities of a meaningful anti-racism curriculum at three large residency programs across the United States with the goal of transferable findings that could be incorporated into anti-racism curriculum design and implementation.

Methods

Study design

We conducted a multi-institutional qualitative study to explore and compare UIM and non-UIM pediatrics residents' perspectives on the content and qualities of a meaningful anti-racism curriculum from February – May 2021. We reviewed the COREQ when designing our study to enhance our rigor [26]. We utilized focus groups to give residents the opportunity to engage with their peers in richer discussions which could not occur with one-on-one interviews or surveys. We developed focus group questions (Appendix) through literature review and revised them based on feedback from our author group which included UIM and non-UIM residents, medical education leaders and scholars, and racial equity experts (AB, BF, LY, NU). We piloted the guide with 8 Stanford pediatrics residents (including both UIM and non-UIM residents) who did not participate in the study and refined the guide based on their feedback. Our study was approved by each site's Institutional Review Board.

Setting and participants

We recruited pediatric residents from three large (>70 residents total) pediatric residency programs from different geographic locations across the United States: Stanford Children's Health (Palo Alto, CA), Cincinnati Children's Hospital Medical Center (Cincinnati, OH), and Children's National Hospital (Washington, DC). We emailed every resident in each program, invited them to participate in a 2-hour focus group, and offered a $10 gift card incentive. Participants provided informed consent which included mental health resources at their respective programs if they wanted to discuss issues further. We planned for at least 2 focus groups at each institution: one for residents who self-identified as UIM, defined by AAMC as 'those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population' [27], and one for residents who self-identified as non-UIM. To improve psychological safety and minimize social desirability bias, we designed separate focus groups for UIM and non-UIM residents, and UIM resident authors led the UIM focus groups (SG, JH, CE); non-UIM resident authors led the non-UIM focus groups (RJ, JM, MQ, MJ) [28]. We chose peer-led focus group facilitation because of the established relationship of trust and increased likelihood to engage in open and honest conversation especially with sensitive topics that this approach has previously demonstrated [29]. Focus groups were conducted virtually, recorded, transcribed verbatim, and de-identified.

Data analysis

We employed inductive thematic analysis, manually coding within Microsoft Word (Microsoft Office, Redmond, WA) and making iterative adjustments to our codebook and themes until we reached theoretical sufficiency [30]. Each coding group consisted of 3 research team members, including one of the first

two authors and intentionally at least one UIM member, and met to review coded transcripts. We created a code book from analysis of the first two transcripts, recorded from one UIM focus group and one non-UIM focus group. Authors applied this code book thereon, adding and adapting codes while analyzing remaining transcripts. The research team then met to create categories and themes through a series of virtual meetings where those responsible for coding the same transcripts discussed categories and, at times, themes and then where the larger research team discussed and refined themes. We sought to build data trustworthiness through multi-person coding, meetings to discuss findings, and member checking with participants via email to verify themes. We used descriptive statistics to analyze demographics.

Reflexivity

Our team consisted of a diverse group of UIM and non-UIM residents, medical education leaders and scholars, and racial equity experts (AB, BF, LY, NU). Authors identified as Non-Hispanic Black/African American (AB, BF, CE, JH, LY, NU) and Non-Hispanic White (JM, MJ, MQ, RB, RJ, SH). We met regularly and reflected on our own identities, experiences, medical training positionality, and perceptions about qualities of the ideal anti-racism curriculum to center our participants' voices.

Results

Forty pediatrics residents (19 UIM, 21 non-UIM) participated in the study (Table 1) through a total of 6 focus groups (3 UIM, 3 non-UIM). Thirty-eight (95%) responded to our demographic survey. Fifty-three percent of respondents identified as Non-Hispanic White; 87% were female. We identified 7 themes from our analysis. Below we summarize each theme with one representative quote. See Table 2 for additional participant quotes.

Theme 1: experiences with racism during residency training are pervasive

UIM participants described instances where they both experienced and observed racism, while non-UIM participants described experiences where they observed racism. Experiences spanned the provider-provider level (e.g., a provider assuming another provider was custodial staff because of skin color) and provider-patient level (e.g., a patient assuming the White provider on the team was in charge). One UIM resident stated 'A lot of times when I walk into a room, and it might be for any number of reasons, people often don't assume that I'm the physician, even though I sometimes will say, "Hi, I'm Dr. ___." I introduced myself with doctor as my title and people just still don't really connect with it.'

Theme 2: Anti-racism education is critical to residents' development as competent physicians and community members

All participants, both UIM and non-UIM, felt that, as frontline medical providers, they needed anti-racism education. Specifically, they desired education about operationalizing antiracist practices and recognizing and responding to acts of racism. Participants identified benefits of anti-racism education beyond hospital

Table 1. Demographics of participants.*

Institution	Stanford No. (%)	Cincinnati Children's No. (%)	Children's National No. (%)	Total No. (%)
Race/Ethnicity**				
American Indian or Alaska Native	0	1 (3)	0	1 (3)
Asian or Asian American	2 (5)	0	0	2 (5)
Black or African American	3 (8)	3 (8)	4 (11)	10 (27)
Hispanic, Latino, or of Spanish origin	0	1 (3)	2 (5)	3 (8)
Native Hawaiian or other Pacific Islander	0	0	0	0
Non-Hispanic White	6 (16)	7 (18)	7 (18)	20 (52)
Prefer to Self-Describe	0	1 (3)	0	1 (3)
Prefer Not to Answer	0	0	0	0
Did Not Answer	0	0	1 (3)	1 (3)
Gender				
Man	2 (5)	2 (5)	1 (3)	5 (13)
Woman	9 (24)	11 (29)	13 (34)	33 (87)
Non-Binary/Third Gender	0	0	0	0
Prefer to Self-Describe	0	0	0	0
Prefer Not to Answer	0	0	0	0
PGY Level				
PGY-1	1 (3)	2 (5)	0	3 (8)
PGY-2	8 (21)	6 (16)	3 (8)	17 (45)
PGY-3	2 (5)	5 (13)	11 (29)	18 (47)
Total	11 (29)	13 (34)	14 (37)	38 (100)

*Thirty-eight of 40 focus group participants completed the survey. One non-respondent was a UIM focus group participant at Cincinnati Children's; the other was a UIM focus group participant at Children's National.
**Participants could select multiple options; each participant selected one.

Table 2. UIM and Non-uim residents' perspectives on anti-racism curricula.

Themes	Quotes
Experiences with racism during residency training are pervasive	'Sometimes it's things that are overtly racist, and there's that, but I've just seen a lot more instances where people just don't realize the cultural implications of things that they are doing or saying. And sometimes it comes from a place of ignorance, but as the [Ibram Kendi] quote said, the opposite of racist is not not racist, right? Just because something's not not racist doesn't mean that it is antiracist.'– UIM Resident 'I would love for antiracism to be more prevalent in our daily conversation, just acknowledging racism, acknowledging when someone is actively antiracist, just those things because they happen so often and it's just not talked about enough.' – Non-UIM Resident 'A lot of times when I walk into a room, and it might be for any number of reasons, but people often don't assume that I'm the physician, even though I sometimes will say hi, I'm Dr. ___. I introduced myself with doctor as my title and people just still don't really connect with it. And to me, it's not really necessarily a matter of not recognizing a role, but just the fact that there are so few people who look like me and that's, to me, a much broader systems issue and is fundamentally at its root because of racism. And because of the structural inequities that exist, that people aren't able to get to certain positions.' - UIM Resident
Antiracism education is critical to residents' development as competent physicians and community members	'I think the medical community has a role to play in creating a more antiracist world at large and country at large. And particularly as a person who identifies as Black, I think I have a role to play in expressing how I think that should look, or at least my experience in some form or fashion and being part of that solution.' - UIM Resident 'I don't feel that you can treat our populations properly without having a good amount of antiracism education. You will literally hurt people without "how-to" antiracism education.' - UIM Resident 'There is a lot of background knowledge that goes into anti-racist work … implicit bias training is really helpful for your clinical practice when you're trying to engage in that kind of thinking on a day-to-day basis.' -Non-UIM Resident
All healthcare providers should participate in antiracism education	'So much of the culture in medicine comes from the top down. So I think it could be a barrier if we have attendings or fellows or people in the upper level who are not receiving this training … ' – Non-UIM Resident 'I feel like if [education is] focused on residents … it may also feel like something else that is up to the residents or on the resident's shoulders to change the culture of the hospital, which we all know is a huge challenge.' - Non-UIM Resident 'Even if I don't know anything about this going into it, I see [antiracism] being modeled, my attendings making a very clear and valiant effort to learn about it alongside me.' – UIM Resident
Residents strongly desired a curriculum focused on knowledge acquisition and action-oriented strategies to advance antiracist patient care and institutional culture	'When you identify bias … here's how you intervene as a bystander and provide role-play scenarios for that. And now you have a tangible skill set to be able to apply … setting an expectation from the head of the team on down that when those situations occur, somebody is stepping in, and if someone's not stepping in, we're breaking that down with a debrief just as we would [with] any medical error that occurred.' – UIM Resident 'I think to be antiracist in this field requires active learning, active thinking, and action that is supported by evidence-based education instruction.' – Non-UIM Resident
Residents preferred educators with both lived and learned experiences with racism in medicine and value learning from people outside of medicine	'I do think there was an important place for allyship even at, sometimes in the absence of lived experience, because I think so many of, so many of the people in medicine who want to learn more about antiracism or want to be more involved, do identify as allies and don't necessarily have as much lived experiences.'- UIM Resident 'I just think it would be really powerful if we actually had families share their stories or their child's stories, and tell us how they were directly impacted by these things … I just feel like those are really powerful messages and things to hear directly from people themselves that we take care of.' – Non-UIM Resident
There is a tension between creating psychological safety for UIM residents while also promoting discussion between UIM and non-UIM residents learning from one another	'I think a lot of laying the groundwork sometimes should definitely happen with everyone. But I think also sometimes can have more protected spaces for people who are underrepresented or even sometimes when we think about scenarios, just because: 1) They can be really triggering, and then 2) It can be really upsetting in a way to realize that sometimes people have zero familiar, or not zero familiar, we all know about racism and medicine, but just have so little familiarity with it when others experience it on such a regular basis that it can be really upsetting having to learn those things alongside someone where you're like, 'Do we live in the same world?" – UIM Resident 'When we're thinking about antiracism in medicine … I do think that people will react differently based on the variety of backgrounds that we all have, which is amazing and leads to a lot of rich discussion. So that's also important to have cross dialogue between everyone.' - UIM Resident 'With this education comes facilitating conversations about antiracism, which I would hate to separate myself from UIM individuals and not have their input. I just think they have a lot to tell us outside of just the educator that's there.' – Non-UIM Resident
Institutions need to invest in antiracism education by providing protected educational time and financial resources	'I think it's important to create a safe space where we can discuss and learn. It can be such a triggering topic that if we aren't able to create a space where everyone feels free to be able to discuss and have conversation about it, I think it can be difficult to learn.' – Non-UIM Resident 'There are people who create this sort of program and or have these backgrounds, more in depth backgrounds, and can offer specifics in a more subspecialized manner. So I think it's really important for programs to be willing to spend the money and to bring those folks in to do that. And then that can supplement the things that we can also offer as individuals.' - UIM Resident

walls. As physicians, participants were aware of their voice, power and influence in their communities. One UIM resident shared 'the medical community has a role to play in creating a more antiracist world and country at large … particularly as a person who identifies as Black, I think I have a role to play in expressing how I think that should look, or at least my experience in some form or fashion and being part of that solution.'

Theme 3: all healthcare providers should participate in anti-racism education

All participants, both UIM and non-UIM, felt the entire medical team (e.g., not only physicians but also nurses, social workers, etc.) played an important role in creating and upholding an antiracist medical culture. Given the medical hierarchy, participants felt it was inappropriate for team members to rely on residents alone to call out racist actions without ensuring necessary institutional and medical team support. As a non-UIM resident stated, 'I feel like if [education is] focused just on the residents, it may also feel like something else that is up to the residents or on the resident's shoulders to change the culture of the hospital, which we all know is a huge challenge.'

Participants felt that extending anti-racism education to all health care providers not only encourages optimal resident support but provides learners with examples on providing competent care. As a UIM resident stated, 'even if I don't know anything about this going into it, I see [anti-racism] being modeled, my attendings making a very clear and valiant effort to learn about it alongside me.'

Theme 4: residents strongly desired a curriculum focused on knowledge acquisition and action-oriented strategies to advance antiracist patient care and institutional culture

Knowledge

Both UIM and non-UIM participants believed education should support active learning and content should include social determinants of health, history of racism in the United States, and the role of racism in medical practice. Participants expressed their need to understand the impact of racism on our patients' experience to develop antiracist patient care skills. UIM participants desired to learn about advocating for their local communities. Non-UIM residents wished to learn about addressing implicit biases and understanding UIM residents' perspectives.

Behavior change

Both UIM and non-UIM participants desired action-oriented education focused on skill-building, including upstander training to address microaggressions, naming/acknowledging racist and antiracist actions, de-escalation of racist situations, and debriefing.

Methods and timing of education

Both UIM and non-UIM participants expressed interest in role playing, case-based discussions, workshops, and simulations, woven longitudinally throughout residency training, as well as the need for education before and after residency. Additionally, residents noted that morning report or noon conference style curricula were insufficient, desiring a culture change – for education 'to be more prevalent in our daily conversations,' encouraging active, antiracist thoughts and practice.

Theme 5: residents preferred educators with both lived and learned experiences with racism in medicine and valued learning from people outside of medicine

All participants, both UIM and non-UIM, suggested that experts within the field have a role in designing antiracism curricula and authority to determine content. When discussing ideal educators, participants suggested both those with *lived* experiences, or those with first-hand experience with racism in medicine, and those with *learned* experiences, or those who have learned about racism in medicine through the experience of others and with expertise in the field. UIM participants supported the idea of having non-UIM educators with learned experiences leading educational activities, but specifically stated that leadership should ensure they are thoughtfully educated on content. While all participants expressed concern about inequitable pressure on UIM residents to create anti-racism curricula, UIM participants expressed specific concern regarding the minority tax [31], or the expectation others placed on them to create curricula and the burden and/or trauma of educating non-UIM members. A UIM resident stated 'A lot of laying the groundwork should definitely happen with everyone.'

Participants also expressed a desire to learn from and alongside diverse educators (race, ethnicity, medical roles). UIM participants stressed the importance of faculty role modeling antiracist behavior and education through interactive institutional-level sessions such as Grand Rounds. They desired faculty participation in debriefings and reflection on how bias may have impacted patient care or team member interactions. While participants valued physician participation in their education, they also valued non-physician participation, including patients and families, who may have more in-depth knowledge and perspective. A non-UIM participant stated 'It would be really powerful if we actually had families share their [own] or their child's stories, and tell us how they were directly impacted by

these things [...] Those are really powerful messages and things to hear directly from people themselves that we take care of.'

Theme 6: there is a tension between creating psychological safety for UIM residents while also promoting discussion between UIM and non-uim residents to learn from one another

For planned educational sessions, both UIM and non-UIM participants expressed tension between the importance of psychological safety (e.g., whether and how to group learners based on identities, lived experiences) and cross-dialogue between those with lived and learned experiences. A UIM resident stated '[We should] have more protected spaces for people who are underrepresented, or even sometimes when we think about scenarios, just because: 1) They can be really triggering, and, 2) It can be really upsetting in a way to realize that sometimes people. . .just have so little familiarity with [racism] when others experience it on such a regular basis that it can be really upsetting having to learn those things alongside someone where you're like, "Do we live in the same world?"' UIM participants stated, although they may have been triggered when realizing how little their colleagues knew, they valued discussion with non-UIM residents of varying knowledge and comfort levels to promote awareness and growth. A UIM resident said 'when we're thinking about antiracism in medicine [...] I do think that people will react differently based on the variety of backgrounds that we all have, which is amazing and leads to a lot of rich discussion. So that's also important to have cross dialogue between everyone.'

Non-UIM residents also saw benefit to both scenarios; they stated non-UIM residents may benefit from discussion with UIM residents, while recognizing the potential to retraumatize UIM residents in combined groups. However, they described the risk of 'othering' and creating tension if groups are separated. If groups are kept separate, participants suggested cross-group debrief afterward for transparency. A non-UIM resident stated 'with this education comes facilitating conversations about antiracism ... I would hate to separate myself from UIM individuals and not have their input. I just think they have a lot to tell us outside of just the educator that's there.'

Theme 7: institutions need to invest in anti-racism education by providing protected educational time and financial resources

All participants, both UIM and non-UIM, believed institutions must commit resources to achieving an antiracist culture. They felt that protected curricular space and time was imperative for effective learning. One UIM resident stated 'protected time is antiracist.'

Participants noted that antiracism work has often been extracurricular yet needs to be embedded within their day-to-day curriculum. Both UIM and non-UIM residents stated that a lack of time and processing space contribute to a poor learning environment. Both groups shared they risk worsening burnout if curricular development and implementation is placed solely on residents. UIM residents specifically stressed the importance of financially supporting both this education and the educators developing and teaching the curriculum.

Discussion

Our study explicitly explores and compares both UIM and non-UIM pediatric residents' perspectives on desired content and qualities of anti-racism curricula in three large geographically diverse residency programs in the United States while emphasizing the importance of co-creation with those learning from the curriculum. Three unique findings include: 1) there should be protected time and resources dedicated to anti-racism education, embedded within the longitudinal curriculum, and extended to all healthcare providers, 2) anti-racism educators should be diverse, including those with both lived and learned experiences with racism in medicine and those with experiences outside of the medical field, and 3) there is tension between creating psychological safety for UIM residents while promoting discussion between UIM and non-UIM residents learning from one another.

Our study highlights that there should be protected time and resources dedicated to embed anti-racism education within the longitudinal curriculum and all healthcare providers should learn about anti-racism. As one UIM resident stated: 'protected time is antiracist.' These findings are consistent with existing recommendations to actualize racial equity and justice and also Sotto-Santiago's conceptual framework for anti-racism education in healthcare [16]. Both UIM and non-UIM residents identified the importance of foundational awareness and desired foundational knowledge focused on action-oriented education (e.g., upstander training, via role playing, etc.). This finding in particular stands out when considering the current sociopolitical climate in the United States, as initiatives focusing on DEI are actively being dismantled. Many DEI roles are in jeopardy due to recent legislation, and learners of all levels will potentially see downstream effects that could make it more difficult to integrate anti-racism education into the residency curriculum. It is important to consider, against the background of this anti-DEI legislation, that residents actively want their

institutions to commit to anti-racism and consider this type of education to be integral to their development as competent physicians.

To be effective for learners, integrated, dynamic, and engaging training is recommended, including use of debriefing and discussion groups. One example is Wang et al.'s '5-Minute Moment for Racial Justice' for teaching in the clinical environment [32]. Residents wanted education integrated across the entirety of their medical training, engaging topic experts, and goals aimed at increasing confidence in addressing microaggressions, understanding learner's experiences and needs, and promoting diversity in both educators and teaching strategies [13–22]. Our study adds to the Sotto-Santiago conceptual framework by highlighting the need for protected curricular time and resources, ideal educators, and emphasis on creating a psychologically safe space for UIM learners.

Both UIM and non-UIM residents highlighted the need for faculty with both lived and learned experiences. Faculty and staff development is a key piece in this strategy [16]. Examples of existing development include: 1) Falusi et al's racial health equity curriculum for faculty for education geared towards teachers [33, 2] Stanford Pediatrics Advancing Anti-Racism Coalition's (SPAARC) departmental model that included resident curricular co-creation and anti-racism training for all faculty, staff, and learners [34,35]; and 3) anti-oppression training for all education leaders and mentorship opportunities for Black faculty, as described at Temerty Medicine in Toronto, Canada [36]. Key structural interventions facilitated SPAARC's anti-racism curriculum integration and align with our study's themes. The first was to ensure that educators represented diverse backgrounds. In our study, residents indicated that these should include those with both learned and lived experience. This approach strengthens institutional capacity and provides an opportunity to integrate the communities we serve through partnerships with patients and families as educators. The second structural intervention was a paid faculty or staff role to oversee the education, an example of institutional investment in anti-racism education through financial resources and protected time, a previously identified barrier to training [18]. Although UIM pediatric residents in a national study reported DEI and anti-racism education as a needed intervention to promote their belonging [37], program leaders should be mindful of the balance in co-creation with not perpetuating the minority tax on UIM residents as noted in Karvonen et al.'s study [23]. The final key structural interventions included longitudinal embedding of concepts and opportunities for residents to have an ongoing voice in creating antiracist policies, such as on hospital-wide committees [34].

In our study, UIM and non-UIM participants described tension between the importance of learning with and from each other with the need to ensure a protected space for UIM residents that is not traumatizing [35,38]. These perspectives overlap with recommended antiracist health care system best practices [18,39]. Racial affinity caucusing has been employed in work and educational environments, but not as readily in medical education until recently with the proliferation of antiracism training after the public killings of unarmed Black people. In an article sharing their experience implementing caucuses in undergraduate and graduate medical antiracism education with 3 groups (Black, people of color, White), Lewis et al. found caucuses provided UIM learners with an improved sense of belonging and safe space for healing [28]. Gilliam et al. described use of racial affinity groups within pediatric residency microaggressions training using different groups than Lewis, highlighting the consideration of individualized approaches on the local level [22]. Approaches to racial affinity group caucusing should be informed by individual program context and co-creation with residents including considerations for if/when caucusing should be used and racial affinity group options, depending on program population. Implications of our study for medical educators are summarized in Table 3.

Our study had several limitations. This study was only in pediatrics, which may limit the transferability of the findings. Participants were recruited from three large pediatric residency programs in the United States, and their perspectives may represent residencies with more resources available. The focus

Table 3. Implications of study findings for medical educators.

(1) Include learners in curriculum design and implementation
(2) Use a curricular framework
(3) Consider key educational strategies

- (1) Integrate curriculum across educational experiences
- (2) Employ educators with both lived and learned experiences with racism
- (3) Use dynamic teaching methods with the opportunity for reflection, small and large group discussions (consideration for UIM-only portions), and skill development
- (4) Promote UIM resident psychological safety through use of racial affinity groups

(4) Advocate for time and resources

groups were conducted virtually rather than in-person, which can reduce interpersonal engagement and limit non-verbal cues; as a result, it is possible that the discussions may have been less robust than if residents had been able to meet in person. There also may have been a self-selection bias – residents who agreed to participate in this study may have had stronger opinions about anti-racism curricula than residents who did not participate. Only three resident participants identified as Hispanic, Latino, or of Spanish origin, and future studies should further explore these perspectives. Of the thirty-eight participants who completed the survey, only five identified as male, which is not reflective of the national pediatric resident population. We did not include a focus on positionality or intersectionality which are also areas for future study. Participants may have experienced social desirability bias. Strategies we utilized to minimize social desirability bias included: indirect questioning, probing, requesting examples, and prefacing the question [40]. We utilized Sotto-Santiago's framework, yet there are additional frameworks and resources to assist educators in teaching and facilitating antiracist change [41–43].

Conclusion

Our multi-institutional study affirms the need for resident anti-racism education, promotes co-creation as a method to affect culture change, and provides practical strategies for curricular design and implementation. It also highlights the tension between the importance of learning with and from both UIM and non-UIM residents with the need to ensure a protected, safe learning environment for UIM residents. Our findings serve as a call to action for residency programs to continue to promote anti-racism education as a critical means of shaping physicians who provide equitable health care to all patients, despite likely future challenges to this type of work. Future areas of study include additional UIM resident perspectives representative of the population, rigorous anti-racism curriculum evaluation, and exploration of how best to promote learner psychological safety and cross-dialogue.

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Appendix

Focus Group Questions

(1) Why did you sign up for this focus group?
(2) What does anti-racism in medicine mean to you?
   a. *After they share their definition*: "I would like to share a definition for anti-racism that we will be using going forward. Ibram X Kendi defines racism as supporting antiracist policy through actions or expressing antiracist ideas. Furthermore, he states that the opposite of racist isn't 'not racist.' It is 'antiracist.'One endorses either the idea of racial hierarchy as a racist, or racial equality as an antiracist. One either believes problems are rooted in groups of people, as a racist, or locates the roots of problems in power and policies, as an antiracist. One either allows racial inequities to persevere, as a racist, or confronts racial inequalities, as an antiracist. There is no in-between safe space of 'not racist.'
   b. Does the definition resonate with you? Is the definition missing anything?
(3) Can you share an experience with racism in medicine (eg, patient encounter, educational experience) that has been influential for you? Why was this experience impactful for you?
(4) What, if any, experience with anti-racism in medicine has been influential and why?
(5) Why, if at all, do you think anti-racism education is important?
(6) How should anti-racism education be incorporated into residency training?
   a. Would you like to learn through structured lectures, workshops, roleplays, experiences, and/or another way?
   b. What content and/or topics would you like covered?
(7) Describe factors that positively impact the quality of anti-racism education
(8) Describe factors that negatively impact the quality of anti-racism education
(9) Describe desired characteristics of educators teaching or facilitating conversations about anti-racism. Is personal and/or professional experience or content expertise essential? Is allyship enough?
   a. Would you like to learn from physicians? Non-physicians?
(10) We have heard some reports that UIM and non-UIM residents have different experiences with anti-racism education. How should anti-racism education be similar or different for UIM versus non-UIM residents?
   a. When taking part in educational sessions/conversations about racism in medicine with your peers and colleagues, what is the experience like for you? What was done well? What could have been improved?
(11) How can we teach this material in a way that is action-oriented, enabling you to utilize what is taught on a day-to-day basis?
   a. Tell me about a teaching experience that inspired you to change your practice, or at least be more aware of how your practice may impact your patients?
   b. What impact would you like to see in the community
(12) (*Optional): Will provide participants with a copy of their respective institution's anti-racism curriculum outline ± conceptual frameworks to inform the discussion)* – Please take a few minutes to review this copy of your residency program's anti-racism curriculum outline. What recommendations do you have? Please be specific.
   a. Follow up: What content would you add, adjust, or remove?
(13) What else would you like to share? What have we missed?

Anti-Racism Focus Group Facilitator Script

Good Evening. My name is _____, and I am a PGY- __ at LPCH (insert institution name here). Thank you all so much for coming. I know you all have very busy schedules, and we truly appreciate you taking the time out of your day to help us with our study.

Purpose

The purpose of this study is to elicit pediatric resident perspectives on how best to learn about anti-racism and explore the differences in response to the current education between UIM and non-UIM residents. You are being asked to participate in this research study because you are a pediatric resident and we would like to hear your perspectives. Moreover, there is a lack of learners perspectives on this topic in the literature, and we are hoping to change that, starting with all of you.

Informed Consent

Before we begin, we will review the information sheet that all of you should have received. By participating in this focus group, you consent to participate in this study. However, your participation in this study is completely voluntary. You are welcome to withdraw at any time tonight or in the coming months should you wish to do so, and you may contact us to do this. There will be no penalty if you withdraw.

We are audio-recording tonight's Zoom meeting. We will not ask you to share your names once all of you have introduced yourselves. Your name and any identifying information will not be linked to anything you say tonight or to any summaries of the data that are shared during dissemination. Outside the confines of this small group, your responses will be completely anonymous. Within the confines of this small group, please remember that this research is designed to be as anonymous as possible. Please refrain from discussing the content of this focus group outside this group setting in any way that might identify your fellow participants.

Before we begin, does anyone have any questions?

Process

During the next 2 hours, we will be asking a series of questions. We will go around the room and ask everyone to answer the first question posed. Subsequent questions will be directed to the group as a whole and anyone is welcome to respond. We may ask you to comment on ideas or topics because I want to hear your opinion. We may also ask follow-up or clarifying questions to elicit specific

examples or to make sure we understand you correctly.

There are no 'correct' or 'best' answers to any of the questions we ask. Our goal is to learn from your experiences and insight, so we hope you will feel comfortable answering openly and honestly.

After the focus group questions end, we will ask you to complete a brief demographic questionnaire. This should take approximately 1–2 minutes to complete.

Confidentiality

The information discussed in this group and shared on your survey is confidential and anonymous. By participating in this focus group, you are agreeing to let us use your comments to guide our research. That means your comments may be used in published research, although they will not be attributed to you by name.

Finally, this study has been reviewed and approved by IRB Protocol:

Before we begin, we would like to go around the room and have everyone introduce themselves.

Start with facilitators

BEGIN RECORDING

Focus Group Questions

Some questions may feel like they overlap and you may have similar answers. Feel free to repeat portions of your previous answers as we may examine each question and their answers separately.

(14) Why did you sign up for this focus group?
(15) What does anti-racism in medicine mean to you?
   c. *After they share their definition, put in chat*: "I would like to share a definition for anti-racism that we will be using going forward. Ibram X Kendi defines anti-racism as supporting antiracist policy through actions or expressing antiracist ideas. Furthermore, he states that the opposite of racist isn't 'not racist.' It is 'antiracist.'One endorses either the idea of racial hierarchy as a racist, or racial equality as an antiracist. One either believes problems are rooted in groups of people, as a racist, or locates the roots of problems in power and policies, as an antiracist. One either allows racial inequities to persevere, as a racist, or confronts racial inequalities, as an antiracist. There is no in-between safe space of 'not racist.'
   d. How does this definition resonate with you? Is the definition missing anything?

(16) What, if any, experience with racism in medicine has been influential and why?
   a. *If needed, prompt with examples (patient encounter, educational experience)*

(17) What, if any, experience with anti-racism in medicine has been influential and why?
(18) Why, if at all, do you think anti-racism education is important?
(19) How should anti-racism education be incorporated into residency training?

   a. What content and/or topics would you like covered?
   b. Would you like to learn through structured lectures, workshops, roleplays/simulations, and/or another way?

(20) Describe desired characteristics of educators teaching or facilitating conversations about anti-racism.
   a. Is personal and/or professional experience or content expertise essential? Is allyship enough?
   b. Would you like to learn from physicians? Non-physicians?

(21) Describe factors that positively impact the quality of anti-racism education.
(22) Describe factors that negatively impact the quality of anti-racism education.

   a. How is resident burnout a barrier to effective anti-racism education?

(23) We have heard some reports that UIM and non-UIM residents have different experiences with anti-racism education. How should anti-racism education be similar or different for UIM versus non-UIM residents?
   a. When taking part in educational sessions/conversations about racism in medicine with your peers and colleagues, what is the experience like for you? What was done well? What could have been improved?
   b. How should groups be broken up – self-identity, background, shared experiences, comfort with topic?
   c. How do we create a safe space? What does this training look like and how do we make it safe? How does the curriculum
(24) How can we teach this material in a way that is action-oriented, enabling you to utilize what is taught on a day-to-day basis?
   a. Tell me about a teaching experience that inspired you to change your practice, or at least be more aware of how your practice may impact your patients?
   b. What impact would you like to see in the community?
(25) What else would you like to share? What have we missed?
(26) *Optional (if curriculum is available)*: (Will provide participants with a copy of their respective institution's anti-racism curriculum outline ± conceptual frameworks to inform the discussion) – Please take a few minutes to review this copy of your residency program's anti-racism curriculum outline. What recommendations do you have? Please be specific.
   a. Follow up: What content would you add, adjust, or remove?

Ask participants to open their email for demographic survey.

Thank you all so much for your participation. We know that these discussions can bring up a lot of different emotions, and we greatly appreciate your open and honest conversations. We would like to remind you about mental health resources that Stanford provides, including WellConnect. They are able to be reached at 650-724-1395 or via email at wellconnect@stanford.edu.