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Teaching the Teachers: Development and Evaluation of a Racial Health Equity Curriculum for Faculty

Olanrewaju Falusi, MD, MEd*, Lin Chun-Seeley, MA, Desiree de la Torre, MBA, MPH, Danielle G. Dooley, MD, MPhil, Melissa Baiyewu, MHA, CHES, Theiline T. Gborkorquellie, MD, MHS, Chaya T. Merrill, DrPH, Elizabeth Davis, MHA, Maranda C. Ward, EdD, MPH

*Corresponding author: oofalusi@childrensnational.org

Abstract

Introduction: Faculty are increasingly expected to teach about the impact of racism on health and to model the principles of health equity. However, they often feel ill-equipped to do so, and there is limited literature on faculty development on these topics. We developed a curriculum for faculty education on racism and actions to advance racial health equity. **Methods:** The curriculum design was based on a literature review and needs assessments. Implementation consisted of four live virtual 1-hour sessions incorporating interactive didactics, cases, reflection, goal setting, and discussion offered to a multidisciplinary group of pediatric faculty at a children's hospital. Topics included the history of racism, racism in health care, interacting with trainees and colleagues, and racial equity in policy. Evaluation consisted of pre- and postsurveys at the beginning and end of the curriculum and a survey after each session. **Results:** A mean of 78 faculty members attended each session (range: 66-94). Participants reported high satisfaction and increased knowledge at the end of each session. Qualitative themes included self-reflection on personal biases, application of health equity frameworks and tools, becoming disruptors of racism, and the importance of systemic change and policy. **Discussion:** This curriculum is an effective method for increasing faculty knowledge and comfort. The materials can be adapted for various audiences.

Keywords

Bias, Case-Based Learning, Faculty Development, Health Equity, Systems-Based Practice, Anti-racism, Diversity, Equity, Inclusion

Educational Objectives

By the end of this multisession curriculum, learners will be able to:

1. Define race, racism, implicit bias, anti-racism, health equity, and related concepts (session 1).
2. Describe the history of how race came to be defined in the United States and the resulting structural implications (policies, laws, culture, health care practices, etc.) both nationally and locally (session 1).
3. Reflect upon their own implicit and explicit attitudes and biases regarding race and how these are shaped by lived experiences and cultural norms (session 1).
4. Describe the significance of racial socialization in patients and families (session 2).
5. Identify how implicit bias and race-based medicine fuel health disparities (session 2).
6. Explain the impact of cultural humility on shaping health outcomes (session 2).
7. Apply strategies to mitigate implicit bias and promote positive racial identities (session 2).
8. Identify ways to create inclusive work environments, including disrupting racism on interpersonal and systemic levels (session 3).
9. Identify how to use appropriate, equity-minded language in their clinical and academic work (session 3).
10. Construct a plan to modify their interactions with trainees and colleagues to promote equity and anti-racism (session 3).
11. Describe the process of creating legislative and institutional policies (session 4).
12. Apply a racial equity tool to the assessment of institutional and legislative policies (session 4).
13. Develop a plan to address racial health equity in their practice (clinical, advocacy, research, and/or education) utilizing a structural framework (session 4).

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Introduction

In a 2019 policy statement, the American Academy of Pediatrics (AAP) described racism as a social determinant of health that significantly impacts the health of children and adolescents.[1] Research shows that experiencing racism is correlated with adverse outcomes, including preterm birth, low birth weight, and mental and behavioral challenges.[2] It is critical that these gaps are closed in order to advance racial health equity, defined as the condition that would be achieved if one's racial identity no longer predicted, in a statistical sense, how one fares.... This includes elimination of policies, practices, attitudes, and cultural messages that reinforce differential outcomes by race or that fail to eliminate them.[3]

The AAP policy statement urged workforce development in racism and health.[1] As medical schools and residency programs expand training in this realm, the need for robust faculty development is clear. In a position of relative power within the hierarchy of academic medicine, faculty are expected to treat learners and patients equitably. However, many faculty completed training before anti-racism education became more common in medical education. Despite these needs, there is limited literature on faculty development related to racial equity. A literature review of *MedEdPORTAL* and PubMed noted several published curricula on racism and implicit bias, although most focus on trainees as learners.[4-9] One study[9] consisted solely of practitioners in family medicine, but as a onetime 1.5-hour workshop at a national conference; another[10] incorporated a longitudinal approach with two to three sessions, but its evaluation was limited to awareness and attitude changes.

Furthermore, there are gaps in the content and design of published trainings. Most of the cited curricula focus on the interpersonal level of racism, such as microaggressions, but not all adequately address structural racism. In addition, we did not find published curricula on racism explicitly describing community engagement in the design or implementation, whether directly or through incorporation of academic health center (AHC) community-derived data. Alberti and colleagues recommended that AHCs incorporate their local Community Health Needs Assessment into curricula to "increase the likelihood that an AHC's collaborative efforts to promote justice and equity are effective."[11] To address the need for generalizable training in anti-racism, the AAP in 2021 released an online video course and accompanying material on anti-racism for practicing physicians.[12] Yet there remains a lack of training material for academic practitioners on how to teach trainees about racial health equity and incorporate a structural framework in health equity efforts.

Thus, the focus of this curriculum is faculty education on racism, the impact of racism on health, and the structural factors that impact racial health equity—a unique and valuable addition to the literature.

We utilized two frameworks for determining the content and format of the curriculum. First, we examined potential topics and teaching formats through the structural competency framework, which emphasizes the need for health professionals to focus beyond the individual/patient level and to recognize that "social and economic determinants, biases, inequities, and blind spots shape health and illness long before doctors or patients enter examination rooms."[13] At least one curriculum has utilized this framework in the context of medical education.[6] We were also guided by the systematic review by Reed and colleagues,[14] which recommended teaching strategies based on adult learners' premises, such as problem-solving activities and cases, suggesting ways that new ideas can be used in real life, and providing opportunities for collaborative learning.

Methods

An interdisciplinary group of pediatric faculty, public health faculty, and advocacy leaders developed the curriculum. The diversity of the group was a major strength, as we drew from our cumulative expertise in adult learning, clinical care, community engagement, data analysis, and anti-racism to ensure that the curriculum would be relevant to learners and responsive to community needs. Kern's six steps of curriculum development[15] guided the creation of the workshops:

1. Problem identification and general needs assessment: Through a comprehensive review of the medical education and faculty development literature, we identified the problem of racial inequity in health care—and lack of faculty knowledge, confidence, and skills to address the problem—as the central issue.
2. Targeted needs assessment: We reviewed (a) our local Community Health Needs Assessment[16] to ensure that we approached equity in a way that was responsive to our community's priorities; (b) our institution's diversity, equity, and inclusion strategy to align our objectives with the institution's principles; and (c) a needs assessment survey on racial health equity completed by a subset of faculty members who later participated in the curriculum.
3. Goals and objectives: We iteratively reviewed the needs assessment findings and determined four main topics, each with three to four learning objectives.
4. Educational strategies: We used a variety of educational strategies, including traditional didactic teaching, small-

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and large-group discussion, written and oral reflection, case-based activities, and goal-setting exercises.

5. Implementation: Due to the COVID-19 pandemic and the need for social distancing, the four 60-minute sessions were held virtually. One main facilitator (joined by cofacilitators) conducted the trainings over 4 months at prescheduled monthly staff meetings. The facilitators constituted an interdisciplinary group: three physicians actively involved in health equity; four public health experts with backgrounds in policy, community engagement, and data; and one faculty member leading the anti-racism training in our partner medical school. The learners were pediatric primary care faculty joined by an interdisciplinary group (including primary care and subspecialty physicians, nursing faculty, and psychologists) who were affiliate faculty members of our institution's Child Health Advocacy Institute. Recognizing that faculty had varied experiences in health equity, the curriculum included introductory concepts, such as definitions and history, and more complex activities, such as assessing the racial impact of institutional and legislative policies.

Curriculum effectiveness (the sixth step) was evaluated with two surveys: (1) a pre/post survey sent via email 2 weeks prior to the first session and administered again after the final session and (2) a session-specific survey administered at the end of each session. The New World Kirkpatrick Model[17] provided the structure for the curriculum evaluation.

We evaluated Kirkpatrick level 1 (reaction) by tracking participation and attendee satisfaction. Participants also answered open-ended questions about their most important learnings.

We evaluated Kirkpatrick level 2 (learning) by assessing change in knowledge at the end of each session, completed as a retrospective pretest (or post-then-pretest), which asked participants at the end of the session to rate their ability to meet a learning objective both in retrospect and at the current time.[18,19] The overall pre/post surveys at the beginning and end of the curriculum also included questions on knowledge, skills, and attitudes, as well as comfort with discussing racism.

We assessed Kirkpatrick level 3 (behavior) via self-report in the overall pre/post survey utilizing the Anti-racism Behavioral Inventory (ARBI),[20] the only validated assessment of anti-racism behaviors we found in the literature. Learners also set goals for behavior change between sessions and at the end of the final session.

Curriculum Outline and Materials

Prior to the first session, a presurvey (Appendix A) was sent via email as a REDCap[21] survey of baseline knowledge and comfort. We utilized PowerPoint slides, facilitator guides, breakout group activities, and session evaluations for sessions 1 (Appendices B-E), 2 (Appendices F-I), 3 (Appendices J-M), and 4 (Appendices N-Q). Participants completed a postsurvey for the overall curriculum (Appendix R) at the final session.

Session 1. Historical and Personal Perspectives: The didactic presentation (Appendix B) included introductory content on the definitions and history of racism. Using the Zoom breakout group feature, we divided participants into groups of six to eight for the breakout group activity (Appendix D) involving scores on the Child Opportunity Index,[22] a nationally recognized tool for examining disparities. Participants then returned to the main room for a large-group discussion.

Session 2. Racism in Health Care: As prework, participants were instructed to complete the Implicit Association Test[23] on race and/or skin tone 2 weeks before the session. During the session, facilitators presented the slides (Appendix F) and then divided the participants into groups of six to eight for the breakout group activity (Appendix H). Half of the groups were assigned to case 1 and half to case 2, both of which related to physician bias in clinical settings. Groups presented their key points in the large-group discussion. The facilitator guided participants to set a goal of trying at least one strategy to mitigate implicit biases and/or promote positive racial identity.

Session 3. Interactions With Trainees and Colleagues: One week prior, we emailed participants a brief survey asking that they reflect on progress toward their stated goal between sessions 2 and 3 (questions in Appendix K). During the session presentation (Appendix J), deidentified responses were shared to increase the motivation to trial the strategies presented in the previous session. The slides included case examples on the DISRUPT (determine, impact, state, reflect, understand, power, take) model[24] for addressing systemic racism and the OWTFD (observe, why, think, feel, desire) model[25] for addressing microaggressions. Participants were divided into groups of two for a pair-share activity (Appendix L) to discuss specific ways to disrupt microaggressions or overt racism and set a new goal for the month.

Session 4. Policy and Racial Equity: Similarly to session 3, participants completed a brief survey 1 week before the session (Appendix O). Deidentified responses were shared during the presentation (Appendix N), along with didactics and a practice

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case on assessing the equity impact of a policy. In groups of six to eight, participants utilized an adapted version of the Institute for Public Health Innovation Equity Impact Review Tool[26] to assess a typical clinical policy (Appendix P). Groups were asked to share their key points, and participants set a final goal for change.

Data Analysis and Research Ethics

Project data were collected and managed using REDCap, a secure, web-based application. Descriptive statistics were reported as means and standard deviations. To compare post- to prescores, a paired *t* test was used. We used Pearson correlation coefficients to compare two continuous measures. One-way analysis of variance was used to compare race categories, and independent-sample *t* tests were used for gender comparisons. Four authors (Olanrewaju Falusi, Lin Chun-Seeley, Danielle G. Dooley, and Desiree de la Torre) manually performed inductive coding of the free-text survey responses, first developing codes and clusters independently and then meeting to iteratively refine the themes. To increase trustworthiness, we utilized triangulation of data by asking the same questions of the diverse group of faculty, collecting data at several sessions, having multiple researchers involved in the initial coding, and peer debriefing with two authors (Melissa Baiyewu and Maranda C. Ward). We coded manually without using a specific software other than Excel to compile our clusters. Although we did not calculate intercoder reliability numerically, we did note a high level of agreement among our four clusters during our meetings. Our hospital's Institutional Review Board accepted this project as exempt.

Results

Quantitative Results

A mean of 78 faculty members attended each session (range: 66-94). The majority of participants, as reported in the presurvey ($n = 73$), were 30-49 years of age ($n = 60$, 83%), female ($n = 62$, 85%), and either Black ($n = 16$, 22%) or White ($n = 40$, 55%; Table 1).

Table 1. Participant Demographics ($n = 73$)

Variable	No. (%)
Gender	
Female	62 (85)
Male	11 (15)
Race	
Asian or Pacific Islander	10 (14)
Black or African American	16 (22)
Hispanic or Latino/Latina/Latinx	2 (3)
White	40 (55)
A race/ethnicity not listed here	1 (1)[a]
Prefer not to answer	4 (6)
Age	
30-39 years	34 (4)
40-49 years	26 (36)
50-59 years	9 (12)
60-69 years	2 (3)
70+ years	2 (3)
Length of time working at our institution	
0-4 years	22 (30)
5-9 years	25 (34)
10-14 years	10 (14)
15-19 years	9 (12)
20+ years	7 (10)

[a]Participant specified "Middle Eastern."

Reaction: Within each of the four sessions, the mean survey completion rate was 51% (range: 36%-59%), with the lowest completion rate occurring in the final session. Only 16 participants completed both the initial presurvey and the postsurvey that included questions about comfort, behavior, and the ARBI. The mean satisfaction rating for all sessions was 4.5 (range: 4.4-4.6) on a 5-point scale (1 = *unsatisfactory,* 2 = *below average,* 3 = *average,* 4 = *above average,* 5 = *excellent*).

Learning: In all learning objectives, participants reported a statistically significant increase in their knowledge at the end of each session ($p < .001$ for each question; Table 2). However, when asked to rate their current knowledge about health equity in the overall pre- and postsurveys, participants self-rated fairly highly as between moderately and very knowledgeable in both the presurvey ($M = 3.4$, $SD = 0.5$) and the postsurvey ($M = 3.6$, $SD = 0.6$); there was no statistical difference between these ratings ($p = .19$; 95% CI, −0.1 to 0.5). At the end of the curriculum, participants reported increased comfort with discussing racism with colleagues, trainees, and hospital leadership ($p < .05$ for each), although comfort discussing racism with patients did not change significantly ($p = .43$; 95% CI, −0.2 to 0.5; Table 3). Changes in knowledge or comfort did not differ by participant race, age, or gender.

Behavior: Overall ARBI scores did not change significantly from pre- to postsurvey, but participants were more likely to report discussing racism when interacting with colleagues and trainees after the curriculum. The detailed results regarding behavior and the ARBI will be presented elsewhere.

Qualitative Results

After each session, participants were asked, "What is the most important thing you learned from this session?" Five themes emerged (Table 4). Participants were also asked at the end of each session, "What would have made this session more effective?" Three themes emerged:

1. More time in breakout groups: While participants expressed a desire for more time overall, they specifically

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Table 2. Participants' Self-Rated Change in Learning at Each Session

	Before Session		After Session				
Learning Objective	**No.**	***M* (*SD*)[a]**	**No.**	***M* (*SD*)[a]**	**Difference *M* (*SD*)**	***p***	**95% CI**
Session 1							
1	51	4.1 (0.7)	51	4.6 (0.6)	0.5 (0.7)	<.001	0.3-0.7
2	51	3.7 (1.0)	51	4.5 (0.6)	0.8 (0.9)	<.001	0.6-1.1
3	51	4.1 (0.7)	51	4.5 (0.6)	0.4 (0.6)	<.001	0.2-0.6
Session 2							
1	44	3.3 (1.0)	44	4.3 (0.6)	1.1 (0.9)	<.001	0.8-1.3
2	44	3.9 (0.7)	44	4.5 (0.6)	0.6 (0.8)	<.001	0.3-0.8
3	44	3.6 (0.8)	44	4.2 (0.6)	0.6 (0.8)	<.001	0.4-0.9
4	44	3.2 (0.8)	44	4.4 (0.6)	1.1 (0.9)	<.001	0.9-1.4
Session 3							
1	41	3.2 (0.7)	41	4.2 (0.7)	1.0 (0.9)	<.001	0.7-1.2
2	41	3.3 (0.9)	41	4.3 (0.7)	1.0 (0.9)	<.001	0.7-1.3
3	41	3.1 (0.1)	41	4.2 (0.7)	1.1 (0.9)	<.001	0.8-1.4
Session 4							
1	24	3.2 (1.0)	24	4.2 (0.6)	0.2 (1.0)	<.001	0.6-1.4
2	24	2.7 (1.3)	24	4.3 (0.8)	1.6 (1.0)	<.001	1.2-2.0
3	24	2.9 (1.0)	24	4.2 (0.5)	1.3 (0.2)	<.001	0.9-1.7

[a]Based on a 5-point Likert scale (1 = *completely disagree*, 2 = *somewhat disagree*, 3 = *neutral*, 4 = *somewhat agree*, 5 = *completely agree*).

wanted to extend the time in the breakout groups. Participants suggested having a facilitator in the breakout groups.

2. More action steps: Participants wanted more action steps on addressing racism. This was expressed the most after the first session, which was geared towards outlining the problem. Fewer participants commented on this need in the later sessions that provided concrete frameworks and tools.
3. Content summaries: Some participants wanted the information summarized in a simple one-pager. In addition to the slides, we have included a condensed Key Action Steps document (Appendix S).

Discussion

This faculty-focused racial health equity curriculum met the goals of high learner satisfaction; increased participant knowledge, comfort, and self-reflection; and an increased focus on systemic racism beyond the interpersonal level. Based on participant feedback, we believe these positive outcomes were brought about by our focus on the history and current impact of racism, opportunities for small-group learning and feedback, and provision of action-oriented tools. This is consistent with the literature on faculty development, which suggests that faculty learn best from an evidence-informed educational design, relevant content, practice opportunities, reflection, and collaboration.[27,28] To our knowledge, there has not been another published study of a longitudinal racial health equity curriculum for health professions faculty with a similarly robust evaluation. The multimodal nature of the curriculum is also unique, as the didactics, multimedia, small-group activities, prework, and reflection appeal to a variety of learning styles. The curriculum design is also supported by scholarship published after the curriculum's implementation, including the revised American Board of Pediatrics Entrustable Professional Activity 14, which defines activities that a general or subspecialty pediatrician should be able to perform routinely to address health disparities.[29] Sotto-Santiago and colleagues' framework for creating an anti-racist educator also supports our aim to move participants from awareness to knowledge and further

Table 3. Participants' Self-Rated Change in Knowledge and Comfort at the Completion of the Curriculum (n = 16)

Variable	**Precurriculum *M* (*SD*)**	**Postcurriculum *M* (*SD*)**	**Difference *M* (*SD*)**	***p***	**95% CI**
Current knowledge of health equity[a]	3.4 (0.5)	3.6 (0.6)	0.2 (0.5)	.19	−0.1 to 0.5
Comfort discussing racism with colleagues[b]	3.1 (1.2)	3.8 (0.7)	0.6 (0.8)	.01	0.2 to 1.1
Comfort discussing racism with leadership[b]	2.6 (0.7)	3.2 (0.7)	0.6 (1.1)	.04	0.1 to 1.2
Comfort discussing racism with trainees[b]	3.0 (1.0)	3.6 (1.0)	0.6 (0.9)	.01	0.2 to 1.1
Comfort discussing racism with patients[b]	3.1 (0.9)	3.2 (0.9)	0.1 (0.6)	.43	−0.2 to 0.5

[a]Based on a 5-point Likert scale (1 = *not at all knowledgeable*, 2 = *slightly knowledgeable*, 3 = *moderately knowledgeable*, 4 = *very knowledgeable*, 5 = *extremely knowledgeable*).
[b]Based on a 5-point Likert scale (1 = *not at all comfortable*, 2 = *slightly comfortable*, 3 = *moderately comfortable*, 4 = *very comfortable*, 5 = *extremely comfortable*).

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Table 4. Qualitative Themes and Representative Quotes Based on the Question "What Is the Most Important Thing You Learned From This Session?"

Theme	Description and Sample Quotes
1. Definition and history of racism in the U.S.	Participants indicated that the concepts and definitions presented were new to them. Several reported being unaware of the history of racism and said that they had learned more about race, how it is socialized within the U.S., and the impact it has on others and society. • "Race is a social construct." • "I really appreciated the focus on history of [Washington,] DC and examples of discriminatory housing practices leading up to the segregated housing that we see today." • "I liked the overview of how race is wrongly integrated in health care decision making (e.g., spirometry, UTI metrics, etc.) and the strategies to look out for that."
2. Self-reflection on personal biases	Participants reflected on their own personal identities and how their biases play a role as a health care provider and when teaching trainees. • "It expanded my understanding of implicit bias to include not just personal assumptions and experiences of races and groups, but the assumptions that multiply through teaching, modeling, and pseudo-science." • "Everyone has racial biases and work environmental factors and exacerbate or reinforce them." • "That language matters, not just for those hearing it but for disrupting my own implicit biases and thought processes."
3. Personal application of health equity frameworks and tools	Participants valued learning about the frameworks and tools to create a more equitable environment for their patients, staff, and practice. The tools addressed communicating with families, disrupting racism, and assessing equity in policies. • "Ways to promote positive racial identity in my everyday encounter with kids/families." • "Tools to start implementing but it will take practice to make them seamless." • "It was important to hear the actual feedback from families about the bill about youth being vaccinated. It supported the conceptual piece of today's lecture with real-world data."
4. Becoming disruptors of racism	Many identified the need for advancing their actions beyond being an ally and valued learning how to move from being a passive bystander to being an active disruptor of racism. • "Address microaggression and become an interrupter not a bystander." • "Racism is deeply rooted in the fabric of America and it will take a lot of work to disrupt it." • "Techniques for being a disruptor in a positive way."
5. Systemic change and policy	Moving past the personal level, individuals also highlighted their new understanding of using the tools to impact systemic change particularly through developing and evaluating policies that impact equity. • "Strategies to impact bias are at both personal and systemic levels, e.g., being aware of our own stress but making sure clinic workflow doesn't add to that stress." • "How to think systematically through a problem that at first glance might not appear to affect equity." • "Breaking down institutional policies to identify the potential barriers to equity."

Abbreviation: UTI, urinary tract infection.

along to taking ownership of creating an anti-racist learning environment.[30]

As others subsequently implement this curriculum, there are considerations to note. The curriculum designers were subject matter experts and skilled facilitators. While the facilitator guides and slide notes provide ample didactic content and discussion prompts, we advise that those with experience in effectively leading value-laden discussions take the lead on facilitating the group discussions. This content and facilitation expertise is especially important for managing the sessions' limited 60-minute training time. Preparation for presenting the curriculum should include review of the materials, buy-in from leadership, integrating the training into ongoing efforts, and, if possible, compiling a small team of motivated faculty to colead the sessions. We recommend maximizing time in the small-group activities and reflection segments, as our participants found these to be of high value. The virtual format enhanced participation, as faculty across multiple clinical sites were able to join. However, in-person sessions may enhance the ability to converse more naturally. To replicate our findings, we advise that the curriculum be replicated with fidelity. Although any of the sessions can be presented in isolation, we recommend presenting them in order if the full curriculum is offered. One future direction for our group is to create an even more robust train-the-trainer curriculum, including guidance on trauma-informed facilitation.

This project had some limitations. We did not include a control or comparison group due to what was felt to be the urgent need to present this curriculum to the primary care faculty group as part of the hospital's diversity, equity, and inclusion efforts. Participation and survey completion decreased at the end of the four-part series, likely due to the expected attrition in longitudinal studies and the timing of the year, with the final two sessions occurring during the summer. Preserving time at the end of each session for completion of the evaluations could mitigate this problem. Additionally, self-reported assessments limited our ability to objectively describe changes in knowledge. A future iteration could include more objective assessments. We did not find a change in knowledge of or comfort with anti-racism regarding interacting with patients. Although this aspect was covered in the curriculum, those wanting more in-depth clinical training may choose to supplement the curriculum with activities such as role-playing. Finally, participants' self-reported knowledge about racial health equity did not increase significantly from the overall pre- to postsurveys. However,

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we note that the mean rating for this question (moderately to very knowledgeable) was high at baseline, suggesting a ceiling effect. This may have been due to selection bias in determining the learners, as the group picked to pilot the curriculum was composed of those choosing to work in a setting where advocacy and health equity are part of the mission of the department and institution. Another explanation for why self-rated knowledge did not change is that participants may have overestimated how much they knew before the training but could better gauge their level of comprehension of key concepts after completing it. To that end, after the four-part curriculum, ongoing reinforcement is critical for significant knowledge gains on this complex topic. Future implementations could include additional brief but frequent check-ins to reinforce the key learning points.

After the racial reckoning in summer 2020, many institutions publicly reflected on their role in identifying and disrupting the effects of racism. As many training programs build and enhance their health equity curricula, a faculty racial equity curriculum such as this one is a valuable addition to ensure that our teachers are appropriately educating and modeling the principles we aim to impart to trainees. The materials in this curriculum contain sufficient guidance for any faculty member to lead the sessions effectively and assess the outcomes in their own institution.

Appendices

A. Presurvey.docx

B. Session 1 Slides.pptx

C. Session 1 Facilitator Guide.docx

D. Session 1 Breakout Group Activity.docx

E. Session 1 Evaluation.docx

F. Session 2 Slides.pptx

G. Session 2 Facilitator Guide.docx

H. Session 2 Breakout Group Activity.docx

I. Session 2 Evaluation.docx

J. Session 3 Slides.pptx

K. Session 3 Facilitator Guide.docx

L. Session 3 Breakout Group Activity.docx

M. Session 3 Evaluation.docx

N. Session 4 Slides.pptx

O. Session 4 Facilitator Guide.docx

P. Session 4 Breakout Group Activity.docx

Q. Session 4 Evaluation.docx

R. Postsurvey.docx

S. Key Action Steps.pptx

All appendices are peer reviewed as integral parts of the Original Publication.

Olanrewaju Falusi, MD, MEd: Assistant Professor, Department of Pediatrics, The George Washington University School of Medicine and Health Sciences; Associate Program Director, Pediatric Residency Program, Children's National Hospital; Medical Director of Advocacy Education, Child Health Advocacy Institute, Children's National Hospital; ORCID: https://orcid.org/0000-0002-0406-5034

Lin Chun-Seeley, MA: Program Lead, Advocacy Education and Community Affairs, Pediatric Resident Health Equity Education, Child Health Advocacy Institute, Children's National Hospital

Desiree de la Torre, MBA, MPH: Director, Community Affairs and Population Health Improvement, Child Health Advocacy Institute, Children's National Hospital

Danielle G. Dooley, MD, MPhil: Assistant Professor, Department of Pediatrics, The George Washington University School of Medicine and Health Sciences; Medical Director of Community Affairs, Child Health Advocacy Institute, Children's National Hospital

Melissa Baiyewu, MHA, CHES: Program Manager, Health Promotion and Disease Prevention Programs, Child Health Advocacy Institute, Children's National Hospital

Theiline T. Gborkorquellie, MD, MHS: Assistant Professor, Department of Pediatrics, The George Washington University School of Medicine and Health Sciences; Assistant Director of Health Equity Education, Pediatric Residency Program, Children's National Hospital; Affiliate Faculty, Child Health Advocacy Institute, Children's National Hospital

Chaya T. Merrill, DrPH: Assistant Professor, Department of Pediatrics, The George Washington University School of Medicine and Health Sciences; Director, Child Health Data Lab, Child Health Advocacy Institute, Children's National Hospital

Elizabeth Davis, MHA: Manager, Government Affairs, Child Health Advocacy Institute, Children's National Hospital

Maranda C. Ward, EdD, MPH: Assistant Professor and Director of Equity, Department of Clinical Research and Leadership, The George Washington University School of Medicine and Health Sciences

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Disclosures

None to report.

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Ethical Approval
The Children's National Hospital Institutional Review Board deemed further review of this project not necessary.

References

1. Trent M, Dooley DG, Dougé J; AAP Section on Adolescent Health, AAP Council on Community Pediatrics, AAP Committee on Adolescence. The impact of racism on child and adolescent health. *Pediatrics*. 2019;144(2):e20191765. https://doi.org/10.1542/peds.2019-1765
2. Pachter LM, Coll CG. Racism and child health: a review of the literature and future directions. *J Dev Behav Pediatr*. 2009; 30(3):255-263. https://doi.org/10.1097/DBP.0b013e3181a7ed5a
3. Racial Equity Tools glossary. Racial Equity Tools. July 2022. Accessed January 12, 2023. https://www.racialequitytools.org/glossary
4. Jacobs EA, Kohrman C, Lemon M, Vickers DL. Teaching physicians-in-training to address racial disparities in health: a hospital-community partnership. *Public Health Rep*. 2003;118(4):349-356. https://doi.org/10.1093/phr/118.4.349
5. Krajewski A, Rader C, Voytovich A, Longo WE, Kozol RA, Chandawarkar RY. Improving surgical residents' performance on written assessments of cultural competency. *J Surg Educ*. 2008;65(4):263-269. https://doi.org/10.1016/j.jsurg.2008.05.004
6. Neff J, Holmes SM, Knight KR, et al. Structural competency: curriculum for medical students, residents, and interprofessional teams on the structural factors that produce health disparities. *MedEdPORTAL*. 2020;16:10888. https://doi.org/10.15766/mep_2374-8265.10888
7. Nelson SC, Prasad S, Hackman HW. Training providers on issues of race and racism improve health care equity. *Pediatr Blood Cancer*. 2015;62(5):915-917. https://doi.org/10.1002/pbc.25448
8. 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. https://doi.org/10.15766/mep_2374-8265.10858
9. White-Davis T, Edgoose J, Brown Speights JS, et al. Addressing racism in medical education: an interactive training module. *Fam Med*. 2018;50(5):364-368. https://doi.org/10.22454/FamMed.2018.875510
10. Corsino L, Railey K, Brooks K, et al. The impact of racial bias in patient care and medical education: let's focus on the educator. *MedEdPORTAL*. 2021;17:11183. https://doi.org/10.15766/mep_2374-8265.11183
11. Alberti PM, Sutton KM, Cooper LA, Lane WG, Stephens S, Gourdine MA. Communities, social justice, and academic health centers. *Acad Med*. 2018;93(1):20-24. https://doi.org/10.1097/ACM.0000000000001678
12. Trent M, Johnson T, Marbin J, Boyd R. Fighting racism to advance child health equity. American Academy of Pediatrics online course. April 15, 2021. Accessed January 6, 2023. https://shop.aap.org/fighting-racism-to-advance-child-health-equity/
13. Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. *Soc Sci Med*. 2014;103:126-133. https://doi.org/10.1016/j.socscimed.2013.06.032
14. Reed S, Shell R, Kassis K, et al. Applying adult learning practices in medical education. *Curr Probl Pediatr Adolesc Health Care*. 2014;44(6):170-181. https://doi.org/10.1016/j.cppeds.2014.01.008
15. Thomas PA, Kern DE, Hughes MT, Chen BY, eds. *Curriculum Development for Medical Education: A Six-Step Approach*. 3rd ed. Johns Hopkins University Press; 2016.
16. *Community Health Needs Assessment: District of Columbia, 2019*. DC Health Matters Collaborative; 2019. Accessed January 12, 2023. https://www.dchealthmatters.org/content/sites/washingtondc/2019_DC_CHNA_FINAL.pdf
17. Kirkpatrick JD, Kirkpatrick WK. *Kirkpatrick's Four Levels of Training Evaluation*. ATD Press; 2016.
18. Howard GS. Response-shift bias: a problem in evaluating interventions with pre/post self-reports. *Eval Rev*. 1980;4(1): 93-106. https://doi.org/10.1177/0193841X8000400105
19. Schiekirka S, Anders S, Raupach T. Assessment of two different types of bias affecting the results of outcome-based evaluation in undergraduate medical education. *BMC Med Educ*. 2014;14:149. https://doi.org/10.1186/1472-6920-14-149
20. Pieterse AL, Utsey SO, Miller MJ. Development and initial validation of the Anti-racism Behavioral Inventory (ARBI). *Couns Psychol Q*. 2016;29(4):356-381. https://doi.org/10.1080/09515070.2015.1101534
21. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform*. 2009;42(2): 377-381. https://doi.org/10.1016/j.jbi.2008.08.010
22. Child opportunity map. diversitydatakids.org. Accessed March 30, 2021. https://www.diversitydatakids.org/maps/
23. Take a test: preliminary information. Project Implicit. Accessed February 8, 2021. https://implicit.harvard.edu/implicit/takeatest.html
24. Ward MC, Falusi LO. Moving beyond bystanding … to disrupting racism. The George Washington School of Medicine and Health Sciences online course. March 1, 2021. Accessed January 6, 2023. https://cme.smhs.gwu.edu/gw-anti-racism-coalition/content/moving-beyond-bystandingto-disrupting-racism
25. Sotto-Santiago S, Mac J, Duncan F, Smith J. "I didn't know what to say": responding to racism, discrimination, and

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microaggressions with the OWTFD approach. *MedEdPORTAL*. 2020;16:10971. https://doi.org/10.15766/mep_2374-8265.10971

26. *Equity Impact Review Tool.* Institute for Public Health Innovation; 2020.
27. Steinert Y, Mann K, Anderson B, et al. A systematic review of faculty development initiatives designed to enhance teaching effectiveness: a 10-year update: BEME Guide no. 40. *Med Teach*. 2016;38(8):769-786. https://doi.org/10.1080/0142159X.2016.1181851
28. Elliott RW. Faculty development curriculum: what informs it? *J Fac Dev*. 2014;28(3):35-45.
29. Unaka NI, Winn A, Spinks-Franklin A, et al. An entrustable professional activity addressing racism and pediatric health inequities. *Pediatrics*. 2022;149(2):e2021054604. https://doi.org/10.1542/peds.2021-054604
30. Sotto-Santiago S, Poll-Hunter N, Trice T, et al. A framework for developing antiracist medical educators and practitioner–scholars. *Acad Med*. 2022;97(1):41-47. https://doi.org/10.1097/ACM.0000000000004385

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