Recommendation 1.0 Evidence Profile (Quantitative)

Research question 1a: What type of education should be recommended to address anti-Black racism in nursing?

Population: Nurses and nursing students
Intervention: Education strategies focused on addressing anti-Black racism in nursing
Comparison: No education or education that is not focused on addressing anti-Black racism in nursing
Outcomes: Psychological safety outcomes; representation outcomes; competency/educational outcomes; patient outcomes [not measured]
Settings: Health-care organizations and academic institutions

Recommendation 1.0: The expert panel suggests that health and social service organizations and academic institutions provide interactive education that includes and/or promotes dialogue and engagement and/or reflection to address anti-Black racism in nursing.

Note: *Due to a paucity of literature available to directly answer this research question, a search for indirect evidence was conducted. The population was broadened to search for education provided to all health providers and health profession students and the intervention was broadened to include education focused on addressing racism, rather than anti-Black racism specifically. Studies were included if they reported on outcomes that reflected the broad outcome categories prioritized by the panel. The indirectness of this evidence (when compared to the original PICO question) was taken into consideration when grading the evidence (see footnotes).*

After reviewing the retrieved studies, it became apparent that the studies all focused on providing interactive education. For the purposes of this guideline, interactive education is defined as education that promotes engagement and critical thinking. It involves the use of teaching methods that purposefully connect student/learners with the content, instructors and peers in teaching-learning environments. It is a dynamic approach that fosters active participation and exchange of ideas among educators, participants, and the lecture content.

Quality assessment							No. of participants		Effect	Certainty	Reference
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	Intervention	Control			
Psychological safety: Measured as workplace climate* ** Workplace climate is defined as behaviours within a workplace or learning environment, ranging from subtle to cumulative to dramatic, that can influence whether an individual feels personally safe, listened to, valued, and treated fairly and with respect.*											
1	Cluster RCT	Not serious [a]	Not serious	Serious [b]	Not serious	Undetected	N= 4,424 participants (1,526 attended the workshop)	N= 4,233 participants	Overall, the workshop had no effect on workplace climate. Among the 7 individual climate questions tested, only perceptions of respectful division meetings slightly increased (b = 0.072, 95% CI 0.0003 to 0.143).	⊕⊕◯◯ Low	(1)

Quality assessment							No. of participants		Effect	Certainty	Reference
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	Intervention	Control			
Representation: Measured as diversity in hiring											
1	Non-randomized study	Extremely serious [c]	Not serious	Serious [d]	Very serious [e]	Undetected	N= 179 workshop participants (making up 55 committees from February 2017 to March 2020)	N/A* * Historical data on diversity of applicants, interviewees, and hires over the 5-year period immediately preceding workshop implementation	There was an increase in the racial diversity of applicants for positions [$\chi 2$ (1) = 7.8, p = 0.005], but not interviews, [χ 2 = 0.9, p = 0.33] or offers, [χ 2 (1) = 0.8, p = 0.37] from pre to post workshop. The observed increase in applicants was a function of an increase in Black applicants and not Latinx applicants.	⊕◯◯◯ Very low	(2)
Competency/educational outcome: Empathetic feeling											
1	Non-randomized study	Extremely serious[f]	Not serious	Not serious	Not serious	Undetected	N= 538 participants	N= 303 participants	The intervention group's scores increased by an average of 0.11 points from baseline to follow up (SD = 0.49), while the control group's scores decreased by 0.02 points from baseline to follow up (SD = 0.480). Overall, the intervention improved empathy among nursing leaders for people from underrepresented racial groups.	⊕◯◯◯ Very low	(3)

Quality assessment							No. of participants		Effect	Certainty	Reference
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	Intervention	Control			
Competency/ educational outcome: Behaviour change											
1	Cluster RCT	Not serious [a]	Not serious	Serious [b]	Not serious	Undetected	N= 4,424 participants (1,526 attended the workshop)	N= 4,233 participants	Three months postworkshop, there was no difference in taking action to reduce bias among medical faculty in the intervention divisions (b = 0.113, 95% CI 0.007 to 0.219). Standard effect size was 0.10. is no effect	⊕⊕◯◯ Low	(1)
Competency/educational outcome: Knowledge/ awareness of racism and anti-racism concepts											
1	Cluster RCT	Not serious [a]	Not serious	Serious [b]	Not serious	Undetected	N= 4,424 participants (1,526 attended the workshop)	N= 4,233 participants	Three months postworkshop, there was no difference personal bias vulnerability among faculty in the intervention divisions (b = 0.190, 95% CI 0.031 to 0.349). Standard effect size was 0.11. Personal bias vulnerability is defined as the perceived vulnerability to personally engage in biased thoughts or actions.	⊕⊕◯◯ Low	(1)
Competency/ educational outcome: Confidence/ Self-efficacy speaking up or taking action											
10	Non-randomized single arm studies	Serious [g]	Not serious [h]	Serious [i]	Not serious	Undetected	N= 1349 who received the intervention	N/A	Compared to before education, all studies showed an increase in confidence to speak up or take action after participants received	⊕◯◯◯ Very low	(5–14)

Quality assessment							No. of participants		Effect	Certainty	Reference
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	Intervention	Control			
									education using interactive modalities [j]		
Competency/ educational outcome: Satisfaction with education											
6	Non-randomized single arm studies	Serious [k]	Not serious [h]	Serious [l]	Not serious	Undetected	N=1094 who received the intervention	N/A	All studies showed satisfaction among participants after they received education using interactive modalities. [j]	⊕◯◯◯ Very low	(2,5,12,15–17)
Patient outcomes (Not measured)											
N/A											

Acronyms

CI = confidence interval
RCT= randomized control trial
SD = standard deviation

Tools used to measure outcomes *(numbers correspond to studies in reference list)*
(1) Questions about workplace climate were derived from those in the Study of Faculty Worklife (a longitudinal study of faculty at the University of Wisconsin–Madison) and are based on research and interviews with faculty and staff. Scales ranged from 1-5 or 1-6. Questions about bias awareness and behavioural change were derived from research and themes derived from two focus groups. Response options ranged from 1-7.
(2) The study examined racial and gender diversity in applicants, interviewees, and those offered a position.
(3) The study measured empathetic feelings using a 6-point Likert scale (strongly disagree to strongly agree) in response to the statement: "I share the anger of those who face injustice because of their racial and ethnic background."
(5–14) Confidence or self-efficacy were measured in the studies using self-reported questionnaires and Likert-style scales.
(2,5,12,15–17) Satisfaction was measured in the studies after participants received the education intervention using Likert style scales. In one study, satisfaction was measured by asking participants if they would recommend the workshop to a colleague (yes, no or unsure).

Additional Table – Individual Study Details

Reference	Study Design	Country	Intervention Group Details	Control Group Details	Reported Effects/Outcomes
Psychological safety: Measured as workplace climate					
(1)	Cluster RCT	USA	3-hour implicit bias habit-reducing workshop (mostly focused on gender and racial bias) for internal medicine faculty. The workshop included an introduction and three modules on: (1) Implicit Bias as a Habit, (2) Becoming Bias Literate, and (3) Evidence-Based Strategies to Break the Bias Habit. Content was supported by illustrative research studies, interactive exercises and discussion. Memory aids were provided to encourage practice of bias-reducing strategies. N= 4,424 participants (1,526 attended the workshop)	The 'waitlist' control received the intervention at a later date. N= 4,233 participants	Overall, the workshop had no effect on workplace climate. Among the 7 individual climate questions tested, only perceptions of respectful division meetings slightly increased (b = 0.072, 95% CI 0.0003 to 0.143; P = .049). Respectful division meetings: Intervention mean (pre): 4.479 Intervention mean (post): 4.519 Control mean (pre): 4.466 Control mean (post): 4.461
Representation: Measured as diversity in hiring					
(2)	Non-randomized study	USA	Mandatory 2-h workshop on best practices in search processes and implicit bias training to increase diversity. The workshop was delivered to search committee participants within a school of medicine that included staff, faculty and community partners.	Historical data on diversity of job applicants, interviewees, and hires over the 5- year period immediately preceding workshop implementation were compared with	There was an increase in the racial diversity of applicants for positions [$\chi 2$ (1) = 7.8, p = 0.005], but not interviews, [χ 2 = 0.9, p = 0.33], or offers, [χ 2 (1) = 0.8, p = 0.37] from pre to post workshop. The observed increase in applicants was a function of an increase in Black applicants and not Latinx applicants. Diversity in Black faculty applicants: N (%) Pre: 77 (4.5%)

			Workshops were provided separately for each search committee, at the outset of the respective search. Workshops included content on: (1) How diversity fits into the vision, mission, and core values of the school (2) The relationship between diversity and excellence, including a review of data on how diversity enhances medical education (3) Implicit Bias Training (including experiential exercises and discussion of participants' implicit bias test results) (4) Methods to improve diversity at each stage of the search process N= 179 workshop participants	corresponding diversity data from the participant search committees for a 3-year period following implementation of the workshop.	Post: 53 (7.4%) x2 = 8.3, p = 0.004 Diversity in Black faculty interviewees: N (%) Pre: 20 (4.3%) Post: 10 (7%) x2 = 1.8, p = 0.186 Diversity in Black faculty offered a position: N (%) Pre: 5 (3.6%) Post: 4 (8%) x2 = 1.5, p = 0.219
Competency/educational outcome: Empathetic feeling					
(3)	Non-randomized study	USA	A virtual reality (VR) intervention combining rehearsal and embodiment was developed after consulting nursing staff with DEI education experience, many identifying as BIPOC. They shared lived experiences of workplace racial discrimination, which informed the design of four VR scenarios: two embodiment and two rehearsal experiences. Using a headset and hand controllers, users first embodied a young Black nurse facing patient bias (e.g., a white male patient refusing care). They clicked a button when hearing bias or discrimination. In the paired rehearsal scenario, users acted as themselves, practicing upstander responses and repeating as needed. After each pair of experiences, users removed the headset for a virtual group debrief on actions, feelings, and application to nurse leadership. N= 538	Control group participants eventually received the intervention as well but not at the same time. N=303	The intervention group's scores increased by an average of 0.11 points from baseline to follow up (SD = 0.49), while the control group's scores decreased by 0.02 points from baseline to follow up (SD = 0.48; p-value for group difference in mean change = 0.002). Overall, the intervention met its goal of improving empathy among nursing leaders for people from underrepresented racial groups. Intervention group mean (SD): Baseline: 4.88 (0.66) Follow-up: 5.00 (0.63) Change: 0.11 (0.49) Control group mean (SD): Baseline: 4.95 (0.65) Follow-up: 4.92 (0.59) Change: 0.02 (0.48)
Behaviour change: Measured as taking action to reduce bias					
(1)	Cluster RCT	USA	3-hour implicit bias habit-reducing workshop (mostly focused on gender and racial bias) for internal medicine faculty. The workshop included an introduction and three modules on: (1) Implicit Bias as a Habit, (2) Becoming Bias Literate, and (3) Evidence-Based	The 'waitlist' control received the intervention at a later date. N= 4,233 participants	Three months postworkshop, there was no difference in taking action to reduce bias among medical faculty in the intervention divisions (b = 0.113, 95% CI 0.007 to 0.219). Standard effect size was 0.10. Intervention mean (pre): 4.199 Intervention mean (post): 4.507

			Strategies to Break the Bias Habit. Content was supported by illustrative research studies, interactive exercises and discussion. Memory aids were provided to encourage practice of bias-reducing strategies. N= 4,424 participants (1,526 attended the workshop)		Control mean (pre): 4.157 Control mean (post): 4.293
Competency/educational outcome: Knowledge/ awareness					
(1)	Cluster RCT	USA	3-hour implicit bias habit-reducing workshop (mostly focused on gender and racial bias) for internal medicine faculty. The workshop included an introduction and three modules on: (1) Implicit Bias as a Habit, (2) Becoming Bias Literate, and (3) Evidence-Based Strategies to Break the Bias Habit. Content was supported by illustrative research studies, interactive exercises and discussion. Memory aids were provided to encourage practice of bias-reducing strategies. N= 4,424 participants (1,526 attended the workshop)	The 'waitlist' control received the intervention at a later date. N= 4,233 participants	Six groups of items were used to measure bias awareness (one group was called 'personal bias vulnerability'). Personal bias vulnerability is defined as the perceived vulnerability to personally engage in biased thoughts or actions. Three months postworkshop, there was no difference personal bias vulnerability among faculty in the intervention divisions (b = 0.190, 95% CI 0.031 to 0.349). Standard effect size was 0.11. <u>Intervention mean (pre)</u> Personal bias vulnerability: 4.200 <u>Intervention mean (post)</u> Personal bias vulnerability: 4.479 <u>Control mean (pre)</u> Personal bias vulnerability: 4.137 <u>Control mean (post)</u> Personal bias vulnerability: 4.243
Competency/ educational outcome: Confidence/ Self-efficacy speaking up or taking action					
(5)	Non-randomized single arm study	USA	Microaggression workshop focusing on skill development was delivered to perioperative medicine residents. The workshop was 2 hours and residents were presented with literature on microgagressions, tools for responding to microagressions, clinical case scenarios, opportunities to role play responses and self-reflective small group exercises. Participants discussed microagressions related to gender, race, ethnicity, LGBTQIA+ and other intersectionalities. Workshop was conducted virtually via Zoom due to pandemic. Ratio of 5 residents to 1 facilitator. N = 68 residents who participated in workshop	N/A	The workshop increased learners' self-reported tools for responding to microaggressions. The statement "I feel that I have the tools to address the microaggressions I witness" increased from a mean of 2.7 (SD = 1.1) to 4.6 (SD = 0.5; $p < .05$) The statement "I feel that I have the tools to address the microaggression at the time I receive it" increased from a mean of 2.6 (SD = 1.1) to 4.5 (SD = 0.6; $p < .05$) Assessed using 5-point Likert scale (1 = strongly disagree, 5 = strongly agree)
(6)	Non-randomized	Ireland	An anti-racism in medicine reading and discussion program was offered to medical students.	N/A	Median scores for all statements relating to 'confidence to advocate against racism' increased after students participated in the program.

	single arm study		Participants were assigned readings and videos exploring racial injustice in medicine and attended a 90 min. virtual small-group discussion facilitated by faculty and students N= 63 who were enrolled in the program		Median (95% CI): Statement 1: I feel comfortable talking about race with my friends and family Pre: 4 [4,4]; Post: 5 [5,5] Difference: 1, P< 0.0001 Statement 2: I feel comfortable talking about race in circles outside my friends and family. Pre: 3 [2,4]; Post: 5 [4,5] Difference: 2 p<0.0001 Statement 3: I feel capable of calling out racist behaviour that I witness/ experience in my day-to-day life. Pre: 4 [3,4]; Post: 4 [4,5] Difference: 0, p<0.0001 Statement 4: I feel comfortable questioning racist teachings in a school setting. Pre: 3 [3,4]; Post: 4 [4,5] Difference: 1, p<0.0001 Assessed using 5-point Likert scales (1= disagree, 5= agree)
(7)	Non-randomized single arm study	USA	A case-based curriculum was designed for medical students to practice communication responses to address racism, discrimination and microaggressions During the sessions, students reviewed a communication framework and practiced response strategies. N= 196 workshop participants	N/A	Pre- and post-session comparisons demonstrated an increase in students' confidence to address racism, discrimination and microaggressions (RDM). Confidence in applying communication strategies to deal with RDM in a clinical setting (presession mean = 3.1, post session mean = 4.4, p <.01). Comfort addressing RDM in the clinical environment directed toward others (presession mean= 3.3, post session mean = 4.3, p < .01) Comfort addressing RDM in the clinical environment directed toward themselves (presession mean = 3.1, post session mean = 4.1, p < .01) Comfort in addressing RDM students may have perpetrated themselves (presession mean= 3.6, post session mean = 4.3, p < .01) Assessed using 5-point Likert scales (1= strong disagree, 5= strongly agree)
(8)	Non-randomized single arm study	USA	An implicit bias awareness and action seminar program was provided to pharmacy residents and preceptors. Modules primarily focused on racial bias. There were 4 modules that were offered virtually or in person (depending on pandemic restrictions) at 2 different times (each module was approx. 1.5 hours). Topics were divided into 4 main categories:	N/A	A larger number of responses of strongly agree or agree was seen for all participants in the post-training survey when assessing participants' comfort and confidence in addressing personal biases, bringing marginalized people into a conversation, addressing biased situations, and intervening when bias is observed. The following questions were asked (5-point Likert scale was used):

			foundations, self-awareness, cultural humility, and skills and action. Activities included direct teaching, self-reflection, role play, and a skills practice component. N= 51 took the training		1: I am comfortable having a dialogue with my co-residents or colleagues about difficult issues of diversity and inclusion around race, class, sexual orientation, or gender 2: I am comfortable discussing my own personal biases with my co-residents or colleagues. 3: I am comfortable discussing my differences in opinion regarding race, class, sexual orientation, or gender with my preceptor or manager/director 4: I am comfortable bringing marginalized people to the center of a discussion, clinical topic, or activity. 5: I am confident identifying and addressing prejudicial or biased situations. 6: I am confident in my skills to intervene when hearing a colleague make offensive remarks of marginalized groups.
(9)	Non-randomized single arm study	USA	A 60-minute workshop designed to raise awareness of microaggressions encountered by medical students and pediatric trainees. The workshop consisted of a didactic presentation and multiple interactive exercises shared in small- and large-group formats. N= 176 who completed the workshop	N/A	Regarding comfort with initiating difficult conversations to counteract microaggressions committed by their peers or those in power, 46% of participants either strongly agreed or agreed about their ability to do so in the presurvey responses. After the workshop, this improved to 68% ($p < .001$).
(10)	Non-randomized single arm study	USA	An hour-long, interactive, case-based workshop was provided for medical students centered around the 3 D's response behavior framework: (1) direct, (2) distract, and (3) that taught medical students how to respond to incidents of bias or microaggressions. The workshop included a didactic review of the important terminology and relevant background data, instruction on the behavioral response framework, and a moderated, interactive review of three to four example cases of bias in the workplace N= 102 who received training	N/A	Respondents' confidence in addressing both personally experienced and witnessed incidents of bias and microaggressions improved both immediately after the workshop (2.36 vs. 2.99, $p < .05$) and at 8 months postworkshop (2.36 vs. 3.07, $p < .05$)
(11)	Non-randomized single arm study	USA	A simulation-based communication module focused on managing bias and racism was designed for surgical residents. The module opened with a panel of healthcare professionals describing experiences of workplace race-based discrimination, prompting others to share experiences as bystanders, victims, or perpetrators of such behavior. Tips were offered to respond to microaggressions and overt discrimination, and how to debrief. The residents then viewed a simulated video scenario, debriefed	N/A	Mean confidence scores increased for all target skills. Those self-identifying as "completely confident" increased for "determining whether to respond" ($p = 0.023$), "knowing how to ensure follow up" ($p = 0.041$), and "self-care following an event" ($p = 0.023$). <u>Confidence score and interquartile range:</u> 1. I can determine whether to respond to a paient/family member's microaggressions or discrimination at the bedside Pre: 4 [4-4], Post: 5 [4-5]

			the video and practiced role play in responding to the incident in the video before returning to the class room for final reflection. N= 16 residents who participated in the module		2. I have strategies to respond at the moment when a patient is exhibiting bias/discriminatory behaviour toward me or a colleague Pre: 4 [3-4], Post: 4 [4-5] 3. I can provide support to a colleague who has experienced microaggression or overt discrimination at work Pre: 4 [3-5], Post: 5 [4-5] 4. When I witness or experience discriminatory or abusive behaviour at bedside, I know when, how and whom to alert to ensure appropriate follow-up to address behaviours Pre: 3 [2-4], Post: 4 [4-5] 5. When witnessing/ experiencing bias/discriminatory behaviour, I check in with a colleague/ friend to reflect and take care of myself Pre: 4 [2-4], Post: 4.5 [3.75-5] Scale of 1-5 (1= no confidence, 6 = completely confident)
(12)	Non-randomized single arm study	USA	The workshop for nursing and medical faculty and students included a presentation discussing microaggression theory and seven cases describing microaggressions in the health professions education environment. The workshop was designed to provide case based and hands-on strategies to handle microaggressions using the Microaggressions Triangle Model framework. The learners broke into small groups to work through the cases. N= 190 who attended the workshop	N/A	Survey results comparing pre/post data for participants completing the training showed an improvement in participant's self-efficacy in responding to microaggressions. Prior to the training, the mean self-efficacy score for all participants was 2.74 (SD = 0.49), suggesting that on average, the participants did not agree that they felt confident in their ability to respond to microaggressions. Following the training, participants' confidence in their ability to respond to microaggressions increased by 24% (Mean = 3.41, SD = 0.53), showing higher overall confidence. Assessed on four-point scale (1 = strongly agree, 4 = strongly disagree)
(13)	Non-randomized single arm study	USA	The Responding to Bias Workshop used standardized patients to improve the skills of residents to respond to patients exhibiting discrimination towards members of the health care team. A 3-hour introductory didactic session including a communication skills framework was followed by simulated encounters with four standardized patients. Learners received feedback from a trained facilitator, peers, and the standardized patients. The facilitator led a structured debriefing session after each exercise. N=19 residents attended the workshop	N/A	The proportion of learners who reported being somewhat or very confident in their preparedness to respond to patients exhibiting discrimination increased from 74% before the workshop to 100% (p=0.07) after the workshop.

(14)	Non-randomized single arm study	USA	A curriculum for health care professionals (including nursing) and trainees was developed to help participants reflect upon and challenge unconscious biases through an anti-oppressive framework. The curriculum involved (1) an overview of unconscious bias, (2) an introduction to allyship, and (3) vignettes, in which participants used cases to practice skills. N= 468 workshop participants	N/A	Findings show that this curriculum based on an anti-oppression framework improves health professionals' overall confidence in addressing bias in health care through allyship. 1) I am confident in my understanding of the process of allyship. Pre: 3.13 Post:4.25; Cohen's d = 1.13; large effect size 2) am confident in my ability to be an ally to my colleagues. Pre: 3.67 Post:4.14; Cohen's d = 0.57 3) I am confident in my ability to be an ally to my patients Pre: 3.7 Post:4.16; Cohen's d = 0.60 4) I am confident in my ability to be an ally to team members/staff; Pre: 3.63 Post:4.15; Cohen's d =0.65; moderate effect size
Competency/ educational outcome: Satisfaction with education					
(2)	Non-randomized single arm study	USA	Mandatory 2-hour workshop on best practices in search processes and implicit bias training to increase diversity. The workshop was delivered to search committee participants within a school of medicine that included staff, faculty and community partners. Workshops were provided separately for each search committee, at the outset of the respective search. Workshops included content on: (1) How diversity fits into the vision, mission, and core values of the school (2) The relationship between diversity and excellence, including a review of data on how diversity enhances medical education (3) Implicit Bias Training (including experiential exercises and discussion of participants' implicit bias test results) (4) Methods to improve diversity at each stage of the search process	N/A	Social validity surveys indicated high ratings pertaining to the benefits of the workshop (means 3.82–4.39 out of 5).
(5)	Non-randomized single arm study	USA	Microaggression workshop focusing on skill development was delivered to perioperative medicine residents. The workshop was 2 hours and residents were presented with literature on microaggressions, tools	N/A	Responses regarding satisfaction with this workshop and its facilitators were overwhelmingly positive in the postsurvey. Mean of 4.6 (SD = 0.9) for "This microaggression workshop is important to my training"

			for responding to microaggressions, clinical case scenarios, opportunities to role play responses and self-reflective small group exercises. Participants discussed microaggressions related to gender, race, ethnicity, LGBTQIA+ and other intersectionalities. Workshop was conducted virtually via Zoom due to pandemic. Ratio of 5 residents to 1 facilitator. N = 68 residents who participated in workshop		Mean of 4.8 (SD = 0.7) for "I believe this microaggression workshop is relevant to my workplace" Mean of 4.8 (SD = 0.6) for "I would recommend this microaggression workshop to my peers." Assessed using 5-point Likert scale (1 = strongly disagree, 5 = strongly agree)
(12)	Non-randomized single arm study	USA	The workshop for nursing and medical faculty and students included a presentation discussing microaggression theory and seven cases describing microaggressions in the health professions education environment. The workshop was designed to provide case based and hands-on strategies to handle microaggressions using the Microaggressions Triangle Model framework. The learners broke into small groups to work through the cases. N= 190 who attended the workshop	N/A	Participants were highly satisfied with the training. Overall mean satisfaction was very high (Mean = 3.72, SD = 0.51).
(15)	Non-randomized single arm study	UK	Bystander Intervention Training (BiT), a simulation based small-group training program, was designed to teach medical students and physicians how to tackle discrimination. Participants worked with an actor to practice behavioural interventions. An important focus is placed within this training on using one's own privilege to act as an ally N= 569 participants completed both pre and post surveys (total number who received intervention is unclear)	N/A	72% of participants rated the likelihood of their recommending the program to a colleague as eight or higher. The overall mean score was 8.2 (out of 10). The majority of participants reported that the training session overall was 'Really Useful' (58%) or 'Quite Useful' (37%).
(16)	Non-randomized single arm study	UK	Senior nurses and midwives received unconscious racial bias training. Each training workshop was approximately 4hours long and included seven main activities that focused on activating stereotypes, exploring the difference between unconscious and implicit bias, defining key terms (affinity bias, halo effect, in/out-groups, stereotypes, confirmation bias and group attribution), discussing the development of bias and reflecting on experiences of prejudice, harassment and discrimination. After each activity, the trainers engaged in reflections, group discussions and question-and-answers. At	N/A	The training was evaluated positively, with the majority of participants responding 'agree' or 'strongly agree' to each item. <u>I felt comfortable participating in this training</u> Strongly agree: 65.3% agree: 32.7% Neither agree nor disagree: 2% <u>This training is relevant to me in my own work.</u> Strongly agree: 83.7% agree: 16.3% <u>I would recommend this training to other colleagues.</u> Strongly agree: 91.8%

			At the end of the training, participants were presented with key statistics regarding racial inequality from the NHS and completed a quiz to reinforce their learning. N= 49 practitioners who completed the workshop		agree:8.2% <u>I would recommend this training to senior management.</u> Strongly agree: 93.9% Agree: 6.1% <u>This training is useful:</u> Strongly agree: 89.8% Agree: 10.2%
(17)	Non-randomized single arm study	USA	An antibias, anti-racism communication curriculum composed of 3 hybrid (virtual and in-person) 60 -min workshops was provided for pediatric residents. The workshop introduced tools for addressing bias, presented video simulations, and led small-group debriefings with guided role-play. They also reviewed escalation pathways, reporting methods, and support systems. N= 39 participated in the training	N/A	96% of participants indicated they would recommend the workshops to colleagues agreeing they were better prepared to approach encounters with racism and discrimination in the workplace as a result of the curriculum.
Patient outcomes (Not measured)					

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Explanations associated with GRADE ratings

[a] The study was assessed using the risk-of-bias tool for cluster randomized trials (RoB 2 CRT). There were some concerns related to deviations from the intended interventions, measurement of outcomes and selection of reported results. We downgraded by 0.5.
[b] Although the study was conducted within a faculty of medicine, we do not expect a substantial difference in effect if the study was conducted with nursing students or nurses. The population was deemed to be sufficiently direct. However, the intervention focuses on education to broadly address racial bias rather than anti-Black racism. We downgraded by 1 for indirectness related to the intervention.
[c] The study was assessed using the ROBINS-I tool. There was critical risk of bias due to lack of control for confounding variables and insufficient information about measurement of the outcome and missing data. We downgraded by 3.
[d] Although study was conducted within a faculty of medicine, we do not expect a substantial difference in effect if the study was conducted within a faculty of nursing. The population was deemed to be sufficiently direct. However, the intervention focuses on education to broadly address implicit bias during the hiring process (including race and gender bias) rather than specifically anti-Black racism. We downgraded by 1 for indirectness related to the intervention.
[e] The total number of participants was far less than the optimal number of 800 (n= 179). We downgraded by 2.
[f] The study was assessed using the ROBINS-I tool. There was critical risk of bias due to lack of control for confounding variables, concerns related to selection of participants and deviations from intended interventions and insufficient information about measurement of the outcome and missing data. We downgraded by 3.
[g] The ten studies were assessed using the case series critical appraisal tool by Murad et al.(4) In six studies, it was unclear whether there were differences between the participants who completed the survey and those who did not. In five studies, alternative causes that may have explained the observation were not ruled out. We downgraded by 1.5
[h] All studies showed a positive direction of effect, however there were some differences in the way the outcome was measured. We downgraded by 0.5.
[i] Participants were nurses or nursing students in two of ten studies (and medical students, physicians or pharmacists in the remaining studies). The population was considered sufficiently direct though as we would not expect a substantial difference in effect based on the population. No studies focused on education to specifically address anti-Black racism though. And while all studies included educational content about addressing racial bias, microaggressions or racism broadly, in six studies, the content also focused on addressing bias and discrimination related to gender, sexual identity, weight, and religion. We downgraded by 1 due to indirectness related to the intervention.
[j] We were unable to statistically pool results due to differences in the way the outcome was measured among studies.
[k] The six studies were assessed using the case series tool by Murad et al. (4). In four studies, it was unclear whether there were differences between the participants who completed the survey and those who did not. In two studies, alternative causes that may have explained the observation were not ruled out. In two studies, the education intervention was not described in detail. We downgraded by 1.5.
[l] In one study, participants were nurses or midwives while in the remaining studies participants were medical students or physicians or interprofessional team members. The population was considered sufficiently direct though as we would not expect a substantial difference in the effect based on the population. No studies focused on education to specifically address anti-Black racism though. And while all studies provided education to address racial bias, microaggressions or racism more broadly, some studies also included content on addressing bias and discrimination related to gender, sexual identity, weight, and religion. We downgraded by 1 due to indirectness related to the intervention.