

Background:

- Racism is a public health crisis that operates via systems (e.g., structures, policies, interpersonal relations)
- Medical students and residents both at UK and across the nation are interested in how race affects one's experience within the healthcare system
- Race-based medical calculators questionably incorporate race as a factor in their algorithms

Purpose:

- To better expose learners to the effects of racism in medicine
- To identify and share learner perceptions about how racism affects medical decision-making
- To state factors that improve learner perception of didactic activities around racism in medicine

Methods:

Goal: To introduce an element of antiracism education and underscore the importance of health inequities in population health

- We developed a 60-minute interactive session for third year medical students in their family medicine clerkship.
- We adapted a didactic and discussion session for our family medicine residents as part of their health equity lecture series.
- Important content was delivered via a didactic and followed up by two break-out sessions plus a written reflection component.
- Discussion topics covered racial inequities in medicine and, specifically, the inclusion of race in medical calculators, the history of their use, and how they have led to the persistence of health inequities.
- Students were actively encouraged to share personal anecdotes of their own experiences and the experiences of their patients of color during their medical training.
- A post-pre survey with five Likert-scale questions and one free response was sent to participating learners to assess the impact of the session on their thoughts about race-based medical decisions.
- Statistical analysis was performed in Microsoft Excel using the paired t-test and an $\alpha = 0.05$ to determine significance.

Methods (cont.):

Please indicate the extent to which you agree that each statement below reflects you.

AFTER PARTICIPATING IN THE LECTURE:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
(a) Race does not have a biological definition, as it is a social construct.	<input type="radio"/>				
(b) My medical education has included teaching where race is used to diagnose and/or treat an illness.	<input type="radio"/>				
(c) I have been instructed to state a patient's race as part of medical presentations.	<input type="radio"/>				
(d) Calculators or diagnostic tools that incorporate race lead to more equal treatment.	<input type="radio"/>				
(e) Differences in health outcomes between races are due to social factors alone.	<input type="radio"/>				

BEFORE PARTICIPATING IN THE LECTURE:
[same 5 statements as above]

How did the information from this session impact your thinking about medical decision making?

Figure 1: The post-pre survey sent to session participants.

Results:

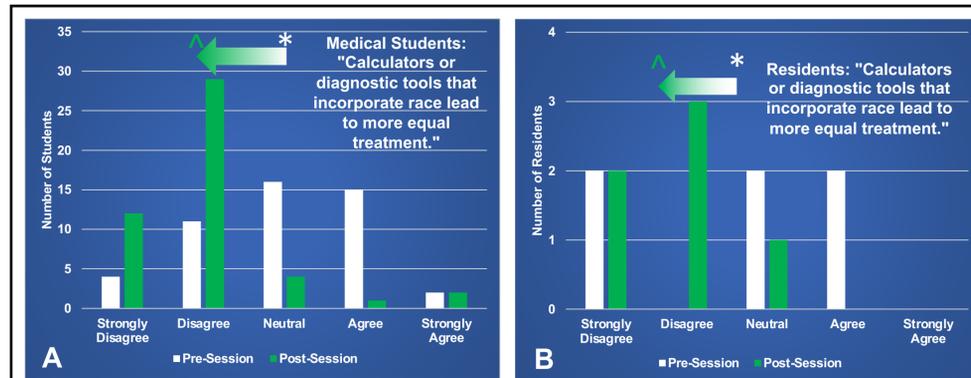


Figure 2: Medical student (A) and resident (B) responses to statement (d) in Fig 1. Arrows indicate direction in which the mean response changed before and after the session. Asterisk (*) represents pre-session mean and carrot (^) represents post-session mean.

	Pre-Session Mean \pm Std Dev	Post-Session Mean \pm Std Dev	Mean Difference \pm Std Dev	95% Confidence Interval	Paired t-test p-value	Pre- and Post-Session N
Medical Students	3.000 \pm 1.031	2.000 \pm 0.899	-1.000 \pm 1.238	-1.359 to -0.641	0.000001	48
Residents	2.667 \pm 1.366	1.833 \pm 0.753	-0.833 \pm 1.722	-2.641 to 0.9742	0.289	6

Figure 3: Data corresponding to graphs in Fig 2, displaying the responses to the statement: "Calculators or diagnostic tools that incorporate race lead to more equal treatment."

Results (cont.):

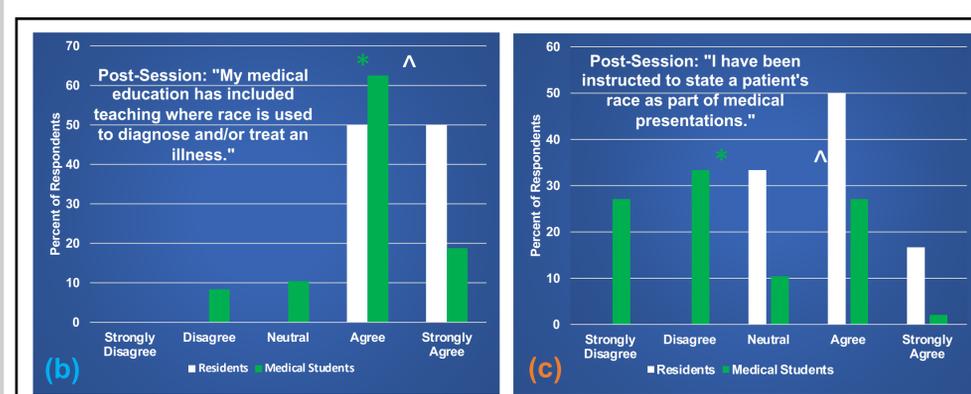


Figure 4: Post-session responses to statements (b) and (c) in Fig 1. Asterisk (*) represents medical student mean and carrot (^) represents resident mean.

"The session taught me how race is substituted for social factors in calculators, which may lead me to believe it is a biological factor."

"As a student, I'm ready to challenge what I've been conditioned to do in clinical practice with algorithms and quick calculators... asking 'why' when race is used as a shortcut for management."

This session "enforced shared decision-making and individuality of care for patients of all races."

Discussion:

- Sample size: total of 70 medical students and 10 residents offered survey; 48 and 6, respectively, answered all questions
- Responses to statements (a), (d), and (e) all showed a significant difference between pre- and post-session means for medical students
- This study has shown an effective and efficient means of introducing a component of antiracism teaching that can be adapted to other medical school and residency curricula
- Attitudinal change can be achieved with even a brief session on race-based decision-making

References:

1. Vyas DA, Eisenstein LG, Jones DS. Hidden in plain sight—reconsidering the use of race correction in clinical algorithms. *N Engl J Med* 2020;;383:9:875-882.
2. Gravlee CC. How race becomes biology: embodiment of social inequality. *Am J Phys Anthropol* 2009;139:47-57.
3. Doobay-Persaud A, Ngongo W, Whitfield S, Saffran L. Power and language in medical education. *J Healthcare Poor Underserved* 2020;31:120-127.

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