Racism and Racial Bias in Medicine

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Racism and Racial Bias in Medicine

• Evidence for Racism and Racial Bias in Medicine

• Impact on Patient Care

• Impact on Diversity of the Medical Profession

• Counteracting and Preventing Racism and Bias in Medicine
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A Role for Implicit Bias?
Physicians’ Implicit and Explicit Attitudes About Race by MD Race, Ethnicity, and Gender
Sabin, Nosek, Greenwald, Rivara

- “... Implicit preference for White Americans was strong among all MD groups except for African American MDs”
- “White MDs showed the strongest implicit preference for Whites”
- “African American MDs, on average, did not show an implicit preference for either White Americans or Black Americans”

Physician Implicit Racial Bias is One Thing …

But What About Physician Explicit Racial Bias (Racism)?

Black-White Race IAT also asks for self-reported explicit racial biases

White, Asian, and Hispanic physicians have self-reported having mild levels of explicit anti-black bias, or racism1,2.

Medical students self-report explicit negative attitudes toward Blacks3

1Sabin. J of Healthcare for Poor Underserved. 2009
2Capers. Academic Medicine. 2017
3Harrison. Proc Baylor U Med Ctr. 2019
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The Effects of Oncologist Implicit Racial Bias in Racially Discordant Oncology Interactions

- 18 Oncologists (non-Black) took the Black-White IAT
- Treatment of 112 Black pts several weeks later
- Office visits were recorded and “graded” by neutral observers
- Oncologists higher in implicit racial bias had shorter interactions
- Patients and observers rated these oncologists’ communication as less patient-centered

Penner. Journal of Clinical Oncology 34, no. 24 (August 2016)
Disparities in Cardiovascular Care: Physician Bias?


- 220 IM and EM residents from 4 programs in Boston and Atlanta completed web-based study

- Participants took “Implicit Association Test”: computer-based, psychological test to measure unconscious bias

- Participants were unaware of purpose of study

Disparities in Cardiovascular Care: Physician Bias?

- Clinical Vignette:
  - Mr. T is a 50 year old male smoker with HTN who presents to the ED having a heart attack.
  - Residents were less likely to treat the Black man with thrombolytic therapy (heart attack drug)
  - Biggest predictor of the decision to not treat the Black man: implicit negative bias about Blacks and implicit association of Black Man = “less cooperative”
I. AICD therapy in pts at risk for SCD

AICD Therapy in Patients at Risk for Cardiac Arrest

*Circ 2003 Jul 22; 108 (3):286-291*
6,000 Medicare patients after cardiac arrest
OR for Blacks (vs Whites) to receive AICD: 0.5

*Circ 2016 Aug 16;134(7):517-26*
21,000 pts with severely weakened heart muscle
Blacks and Hispanics less likely than Whites to get counseled re: ICD
II. Restoring Blood Flow to Blocked Leg Arteries

Which would you prefer?

Treating Poor Circulation

- Arch Surg 1995 Apr; 130 (4): 381-6
  19,236 Medicare pts with LE ischemia
  African Americans compared to Whites:
  More likely to undergo amputation
  Less likely to undergo revascularization

- J Racial Ethn Health Disparities. 2017
  African Americans 200% and Hispanics 50% more likely to have amputation than Whites
III. Rapid Treatment of Blocked Heart Arteries in Heart Attack Victims

Before stent, artery closed, no blood flow to heart

After stent, artery open, blood flow to heart restored

Cardiac Catheterization and Stent Placement: A Life-Saving Therapy for Heart Attack
The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization

“Men and whites were significantly more likely to be referred than women and blacks.”

Kevin Schulman, MD, et. al, NEJM, February, 1999

Temporal trends and predictors of time to coronary angiography following non-ST-elevation acute coronary syndrome in the USA

Muhammad Rashida,b, David L. Fischman1, Sara C. Martinez9, Quinn Capers IV10, Michael Savage1, Azfar Zaman11, Nick Curzen9, Joie Enso12, Jessica Potts9, Mohamed O. Mohameda,b, Chun Shing Kwoka,b, Tim Kinnairda, Rodrigo Bagura and Mamas Mamasa,b

- National US Inpatient Sample, 4.3 million NSTEMI/USA pts, 2004-2014
- 57% of pts received coronary angiography
- Endpoint: Early (within 24 hrs) vs Late (> 3d after admission) coronary angiography
Findings:
Independent predictors of LATE vs EARLY coronary angiography:

- Female gender
- African American race
- Weekend admission
- Lack of Private Insurance


Racial Disparities in Cardiovascular Care: A Review of Culprits and Potential Solutions

Quina Capers IV - Zarina Sharakaya

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Matriculants

**Figure 2.** U.S. medical school matriculants by race and ethnicity, 1978–2014.
From Emory University, Aug 5, 1959

“Dear Mr. ___________

I am sorry I must write you that we are not authorized to consider for Admission a member of the Negro Race.”

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**Implicit Racial Bias in Medical School Admissions**

Quinn Capen IV, MD, Daniel Clinchot, MD, Leon McDougle, MD, and Anthony G. Greenwald, PhD

**Abstract**

**Problem**
Implicit white race preference has been associated with discrimination in the education, criminal justice, and health care systems and could impede the entry of African Americans into the medical profession, where they and other minorities remain underrepresented. Little is known about implicit racial bias in medical school admissions committees.

**Approach**
To measure implicit racial bias, all 140 members of the Ohio State University College of Medicine (OSUCOM) admissions committee took the black-white implicit association test (IAT) prior to the 2012–2013 cycle. Results were collated by gender and student versus faculty status. To record their impressions of the impact of the IAT on the admissions process, members took a survey at the end of the cycle, which 100 (71.1%) completed.

**Outcomes**
All groups (men, women, students, faculty) displayed significant levels of implicit white preference; men (d = 0.697) and faculty (d = 0.820) had the largest bias measures (P < .001). Most survey respondents (67%) thought the IAT might be helpful in reducing bias; 48% were conscious of their individual results when interviewing candidates in the next cycle, and 21% reported knowledge of their IAT results impacted their admissions decisions in the subsequent cycle. This class that matriculated following the IAT exercise was the most diverse in OSUCOM’s history at that time.

**Next Steps**
Future directions include preceding and following the IAT with more robust reflection and education on unconscious bias. The authors join others in calling for an examination of bias at all levels of academic medicine.

*Academic Medicine*. March 2017
Implicit Bias Testing: White Preference
OSU COM Admissions Committee 2012

"White Preference" displayed on Implicit Bias Testing

Explicit-Women
Implicit-Women
Explicit-Men
Implicit-Men

Implicit Bias in Medical School Admissions
“An Exploration of Myths, Barriers, and Strategies for Improving Diversity Among STS Members”

- STS Task Force on Diversity and Inclusion surveyed 5,158 members with a response rate of 9.3% (n = 481 respondents). Questions:
  - What are some of the barriers to diversity and/or inclusion within cardiothoracic surgery?
  - If there is a barrier not included in the list above, please explain.
  - How can STS improve diversity and/or inclusion in cardiothoracic surgery and/or the Society?


“An Exploration of Myths, Barriers, and Strategies for Improving Diversity Among STS Members”

- “White males are currently being discriminated against in admission to college, med school and residency programs! CT [cardiothoracic] surgery should be a meritocracy.”

- “I do not believe barriers exist. This myth of the necessity of diversity and inclusiveness is political correctness on steroids. We need to worry about turning out well trained residents. . . .”

- “[The STS] doesn’t need to [address diversity] and this should not even be on the radar of things to be done.” (15% of respondents)

- “There are no barriers. None of the above are important!”

110 respondents (57% of US Cardiology Fellowship Programs represented)

55% Adult General Cardiology

45% Adult Subspecialty Cardiology

Q3 “Diversity is a driver of excellence in healthcare delivery,” in other words, the more diversity represented amongst your health care providers, the better the care delivered to patients. Do you believe this statement is true?

Answered: 110  Skipped: 0
1) 21%: We want to Increase Diversity in Our Program, But Don’t Know How to Do it

2) 18%: We want to Increase Diversity in Our Program, and Have a Plan to Do it

3) 61%: Our Program is Diverse Already So Diversity Does not Need to be Increased
Top 3 Considerations When Making Your Rank List?

“Cigar smoke-filled backroom”

Crowley. JAHA. 2020

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Crowley. JAHA. 2020
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2020: Racism/Racial Bias is a “Second Pandemic”

• Blacks, Hispanics:
  • Overrepresented in Patients Hospitalized for COVID
  • Overrepresented in Patients Dying From COVID
  • Overrepresented in those Dying From Fatal Police Encounters (While Unarmed)
  • Underrepresented in the Medical Profession
The Most Powerful Anti-Racism Statement That Medicine Can Make is …

- To Diversify Our Ranks!
Eliminate Bias and Racism

• Training. Rehearsing. Training Some More

• Direct Interventions

• Promote Anti-Racism Images/Role Models/Social Media

• Enhance Diversity in Medicine by Dismantling Bias/Racism in “Pipeline”
  • Deep Pipeline
  • Selection Strategies

Annual Implicit Bias/Holistic Review Training
OSU Faculty Screeners and Admissions Committee
How Clinicians and Educators Can Mitigate Implicit Bias in Patient Care and Candidate Selection in Medical Education

Quintus Capers IV

Abstract

An attempt to help mitigate the complex world, our unconscious minds make certain group assumptions on the basis of our experiences. Physicians are not immune to their implicit association. In the right, which can lead physicians in unconscious exercise certain stereotypes, which is dangerous, inappropriate, and lead to harmful. These biases can influence clinical decisions making in ways that potentially harm patients and may unfairly influence the medical school, residency, and fellowship application process for candidates. The study investigated the implicit bias of physician residents in medicine and surgery. The results show that physicians and surgeons with greater bias scores have worse bias scores than the group without bias scores. These results are consistent with previous research. This study is significant because it is the first to provide evidence that physician residents’ implicit bias scores predict their bias scores. This article discusses the potential impact of implicit bias in medical care and candidate selection and reviews current research trends in reducing implicit bias in interview instructions.

Keywords: Implicit bias; race; white, black, white.

You have all the data: the X-rays, computed tomography scans, radiographs, laboratory tests, and much of the clinical picture. You, however, still make the incorrect diagnosis. Why? You have not learned the different symptoms of the condition you are treating. You are also talking to the Electronic Health Record (EHR) that is not available to you at the time of the interview. Will your practice work?

WHAT IS IMPLICIT BIAS?

For this purpose of this study, implicit bias is defined as a set of attitudes and beliefs that are present in all humans and that operate unconsciously, often through automatic processes. These attitudes and beliefs are formed through various social experiences and have been shown to influence a wide range of behaviors and outcomes, including health care. Implicit bias can be measured using standardized implicit association tests (IATs), which can assess the strength of associations between different concepts (e.g., race and health care attitudes). IATs are useful for understanding the unconscious nature of implicit bias and for identifying potential areas for intervention.

1. REMOVE FIGURE FOCUS ON CASE APPLICATION

2. REMOVE ACADEMIC METRICS FROM APPLICATION

3. MANDATORY IMPLICIT BIAS TRAINING

4. IMPRINT AUGMENTATION WORKSHOP TEACHING

5. USE OF “CHEAT SHEET”

Strategies to Reduce/Neutralize Implicit Bias

1. Common identity formation. Ask interviewees questions about interests and activities that you share in common (focus on a shared, common identity between YOU and the interviewee).

2. Perspective taking. (Take the perspective of a member of the group against which you have the unconscious bias).

3. Consider the opposite. (When you seem to point to one conclusion, look for data supporting the opposite conclusion before making a final choice).

4. Counter-stereotypical exemplars. (Spend time with or focus on individuals from groups against which you have a bias).

Sources


2. Bell Academic Medicine, 2010; 85: 1405-1407.


Eliminate Bias and Racism

• Training. Rehearsing. Training Some More

• Direct Interventions

• Promote Anti-Racism Images/Role Models/Social Media

• Enhance Diversity in Medicine by Dismantling Bias/Racism in “Pipeline”
  • Deep Pipeline
  • Selection Strategies

New Idea:
Bias and Racism “M & M” Teaching Rounds
“Events” noted by attendings, housestaff, students, RNs
Collected and discussed in non-threatening way
Education and Prevention

How I Do It
Bias and Racism Teaching Rounds at an Academic Medical Center

Quinn Capers IV MD 1 ... Uday S. Nori MD 3
Show more ▼
https://doi.org/10.1016/j.chest.2020.08.2073
Get rights and content

Abstract
Racism and events of racial violence have dominated the US news in 2020 almost as much as the novel coronavirus pandemic. The resultant civil unrest and demands for racial justice have spawned a global call for change. As a subset of a society that struggles with racism and other societal injustices, we must

Capers. CHEST. 2020
American College of Cardiology Program Directors Summit

ACC Heart House 2019

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Twitter Campaign to Inspire and Encourage

#BlackMenInMedicine

(L-R: PGY6 ❤️ fellow; Anesthesia PGY1; EM PGY1; M3 student; IM PGY1)

#DiversityDrivesExcellence in Cardiac care @OSUWexMed

Quinn Capers, IV
@DrQuinnCapers4

With these CARDIOLOGISTS around, Heart Disease is in trouble. So is RACISM 🙅‍♀️

#Didn'tComeToPlay
The OSU African American Male Mentoring Roundtable

Eliminate Bias and Racism

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Ohio State University-Columbus City Schools K-12 Health Sciences Academy

“Growing Your Own Garden”
### Make “Ability to Enhance Diversity/Cultural Competency of Program” A Top Priority When Ranking GME Candidates

| Letters do not specifically cite diversity/cultural competency as a trait |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

#### Community outreach activities: From med school through cardiology fellowship. Activities such as volunteering at health fairs or free clinics?

<table>
<thead>
<tr>
<th>None</th>
<th>1 activity</th>
<th>2 or more separate activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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</tbody>
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#### Exposure to different cultures: From college through cardiology fellowship, separate from patient care duties, has candidate had longitudinal experiences with cultures different from their own? Examples: study abroad, overseas global health activity, longitudinal volunteering at free clinic; Hispanic clinic; clinic that targets underserved/disadvantaged populations

<table>
<thead>
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<th>No experience</th>
<th>1 experience</th>
<th>More than 1 experience</th>
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<tr>
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**Clinical Exposure:** From medical school through cardiology fellowship, did candidate train in a program that serves a large volume of underserved/disadvantaged patients, i.e., county hospitals, city hospitals, hospitals founded to provide charity care?

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### Diversity Drives Excellence … In the Cath Lab!

For 8 years in a row, an underrepresented minority Interventional Cardiology Fellow
Summary

- Bias and Racism in Medicine Exacerbate Healthcare Disparities
- Bias and Racism Contribute to the Lack of Diversity in Medicine
- Lack of Diversity in Medicine & Healthcare Disparities Put Patients at Risk
- There is a Global Call to End Racism
- Academic Medicine Must (and Can) Heed this Call