Understanding Unconscious Bias in the Health Professions and How to Mitigate It

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Learning Objectives

- Understanding the filters through which one views and interprets oneself and others;
- Identifying patterns in ourselves for evaluating, assessing, and working with other people; and
- Mitigating bias to improve individual and collective decision-making abilities by recognizing when bias may be playing a negative role.
Terminology and Research
What is Unconscious/Implicit Bias?

Unconscious bias, also known as implicit bias, refers to attitudes or stereotypes that are outside our awareness but nonetheless affect our understanding, our interactions, and our decisions.

What is Explicit Bias?

Explicit bias is the traditional conceptualization of bias. With explicit bias, individuals are aware of their prejudices and attitudes toward certain groups. Positive or negative preferences for a particular group are conscious.

Biases Appear in Many Decision-making Processes

- Recruitment
- Hiring
- Performance evaluations
- Promotion
- Consideration for leadership positions
E-mail Response Times
Temporal Distance and Discrimination: an Audit Study in Academia (2012)

- 6,548 professors contacted.
- Prospective doctoral students seeking to schedule a meeting either that day or in 1 week.
- Perceived White males were granted access to faculty members 26% more often than perceived women and minorities (Black, Hispanic, Indian, or Chinese).

Interview Opportunities

- Boston and Chicago job postings.
- White names received 50% more callbacks.
- Uniform discrimination across occupations and industries.

Interviewer and Interviewee Behavior
The Role of Interviewers’ and Applicants’ Implicit and Explicit Stereotypes in Predicting Women’s Job Interview Outcomes (2015)

- Female applicants’ higher implicit bias predicted lower performance.
- Male interviewers’ implicit bias impaired female applicants’ performance through lower evaluations by the interviewer.

Pain Assessment
Racial Bias in Pain Assessment (2016)

- Blacks age more slowly than whites.
- Blacks’ nerve endings are less sensitive than whites.
- Black people’s blood coagulates more quickly than whites.
- Whites have larger brains than blacks.
- Blacks’ skin is thicker than whites.
- Whites have a more efficient respiratory system than blacks.
- Black couples are significantly more fertile than white couples.
- Blacks have stronger immune systems than whites.

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.”

Significant Health Disparities Exist In…

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

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Diversity and Inclusion = Innovation and Productivity

Identity diversity among intelligent people on a team contributes more to effective problem-solving than a team comprised of the best-performing, intelligent people without identity diversity.

Studies have shown that companies that achieve diversity in their management and on their corporate boards attain better financial results, on average, than other companies.
As you look at each slide, note the feelings, judgments, and reactions that emerge.
As you looked at these images, what came to mind?
What patterns do you notice?

- Gender
- Skin tone
- Ethnicity
- Setting
- Body posture
- Clothing
- Age
- Facial expression
- Body type
John Fetterman

- Mayor of Braddock, PA (a suburb of Pittsburgh) – the tattoo on his arm is the zip code!
- Has a Master’s degree in Public Policy from Harvard
- Served in the AmeriCorps
- Received international media attention for the economic revitalization programming he started in his community
Harold Shipman MD

- General Practitioner
- Britain’s most prolific serial killer.
Oxana Federova, PhD

- Miss Universe 2002
- Russian police captain and fashion model
- PhD in civil law
Mae Jemison, MD

- Physician
- Professor
- U.S. Astronaut
Which biases are ours?

- Height
- Appearance
- Sexual Orientation
- Race
- Name
- Education
- Gender
- Hand Dominance
- Religion
- Age
- Disability
- Accent
- Skin Tone
- Weight
- Communication Style
Diving Deeper: The Origin and Science of Bias
What is Unconscious Bias?

Mental associations without:

- Awareness
- Intention
- Control

These often conflict with our conscious attitudes, behaviors, and intentions.
What Function Does Bias Serve?

- Ensures our survival
- Part of automatic survival tendency
- Natural tendency to feel comfortable with people like us
Seeing Our Social Lens
What We See…

Fun
Exciting
Exhilarating

Scary
Nauseating
Dangerous
What is Really There...

Welded steel

Bright paint

Nuts and Bolts

Curved design
What We See…

Well Groomed
Intelligent
Expressive
Stoic

One of “those people”
Socially Inept
Rebellious
Unfriendly
What is Really There…

- Hair
- Glasses
- Earrings
- Neutral Expression
Catalyzing person or circumstance

Background

Fast (Emotional) Brain

Slow (Thinking) Brain
Perceptions

Interpretations

Preferences

Selective Attention

11 million pieces of information at any one time

40-50 pieces of information get absorbed

“...being excluded from a group triggers activity in the same regions of the brain associated with physical pain.”

Kipling D. Williams, Purdue University
Internalized Bias


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The Priming Effect

Medical school applicants interviewed on rainy days received scores equivalent to a 10% lower mark on the MCAT than those interviewed on sunny days.
What is there...

Members, Society of Black Academic Surgeons
Bias Mitigation
Process to Mitigate Biases

1. Recognize and accept that you have bias
2. Develop the capacity to use a flashlight on yourself
3. Practice “Constructive Uncertainty”
4. Engage with people you consider “others” and expose yourself to positive role models in that group
5. Get feedback
6. Explore awkwardness, and discomfort

Mitigating Bias in Decision Making

- Use a process
- Use a rubric/criteria
- Inject objectivity (masking names, pictures, etc.)
- Get diverse perspectives
- Avoid the “Good Feeling”
- Encourage dissent – avoid groupthink!
Decision-Making Biases to Avoid

- Anchoring bias
- Availability heuristic
- Bandwagon effect
- Blind-spot bias
- Choice-supportive bias
- Clustering illusion
- Confirmation bias
- Conservatism bias
- Information bias
- Ostrich effect
- Outcome bias
- Overconfidence
- Placebo effect
- Pro-innovation bias
- Recency
- Salience
- Selective Perception
- Stereotyping

http://mentalfloss.com/article/68705/20-cognitive-biases-affect-your-decisions
Other Factors to Consider

- Disability
- Competence/Warmth
- Location
- Accent
- “Good Feeling”
- Introversion
- Extroversion
- Weight
- Name
- Gender Identity
- Gender Expression
- Unique Mannerisms
- Performance vs Potential
- Distracting Visual Content
Unconscious Bias in Academic Medicine

Chapter 1
Medical School Admissions

Chapter 2
Undergraduate Medical Education

Chapter 3
Resident Recruitment and Selection

Chapter 4
Faculty Recruitment, Selection, and Hiring

Chapter 5
Faculty Mentoring

Chapter 6
Faculty Advancement, Promotion, and Tenure

Chapter 7
Patient Care

Chapter 8
Unconscious Bias Interventions

www.aamc.org/publications
Implicit Association Test (IAT)

- Age
- Asian
- Weight
- Native
- Race
- Presidents
- Gender-Career
- Sexuality
- Skin-tone
- Disability
- Arab-Muslim
- Gender-Science
- Weapons

https://implicit.harvard.edu/implicit/
On-Demand AAMC Resources

Unconscious Bias:
What To Do About It in the Search and Recruitment Process

A Research Presentation for Search Committees in Academic Medicine

The Hidden Curriculum in Academic Medicine

Part 1:
Understanding the Hidden Curriculum
Also an NPR podcast!
Questions?

Thank you!

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