

# Bias In the Eyes of Resident Physicians

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# Outline

- Introduction
- Physician bias and health disparity
- Objective of the study
- Method and Result
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# Introduction



“forgot the timing”

“nonadherent”

# Bias

- ...is the negative evaluation of one group and its members relative to another.
- Explicit Bias:
  - A person is aware of his/her evaluation of a group,...and has the time and motivation to act on it in the current situation.
  - Explicit bias toward ethnic/racial groups has declined significantly...and is now considered unacceptable in general society.
- Implicit Bias:
  - Does not require the perceiver to endorse it or devote attention to its expression.
  - Can be activated quickly and unknowingly by situational cues (eg, a person's skin color or accent).
  - Develops early in life from repeated reinforcement of social stereotypes.

# The problem: Physician bias and disparity

- Studies have documented widespread inequalities in medical care.
- IOM notes these disparities result from multiple factors, but “bias, stereotyping...on the part of health care providers” play a role.
- Physician bias and healthcare disparity evidence:
  - Care for cardiovascular risk factors ranging from hypertension to sleep disorders.
  - Cancer screening, prevention, treatment and symptom management.

# Clinical Decision Making

- Inherent vulnerability
  - Collecting, analyzing patient characteristics can allow a healthcare provider to arrive at a diagnosis or decide on a treatment option, however, the subjective nature of patient characterization can negatively affect patient care.
- Comparing patterns:
  - Unable to estimate the desired probabilities explicitly, physicians recast the problem into a form that uses one of their most effective mental skills — that of comparing patterns.

Eddy D & Clanton C, NEJM 1982 The Art of Diagnosis — Solving the Clinicopathological Exercise

# Objective

- **Purpose:**

- To contribute to improvement in quality of inpatient healthcare and patient satisfaction by identifying factors that provokes implicit bias during an inpatient service provision.

- **Objectives:**

- To assess internal medicine residents awareness of bias
- To identify biases that affect patient satisfaction at Aurora Sinai Medical Centre
- *To identify themes that stand out for patient satisfaction*

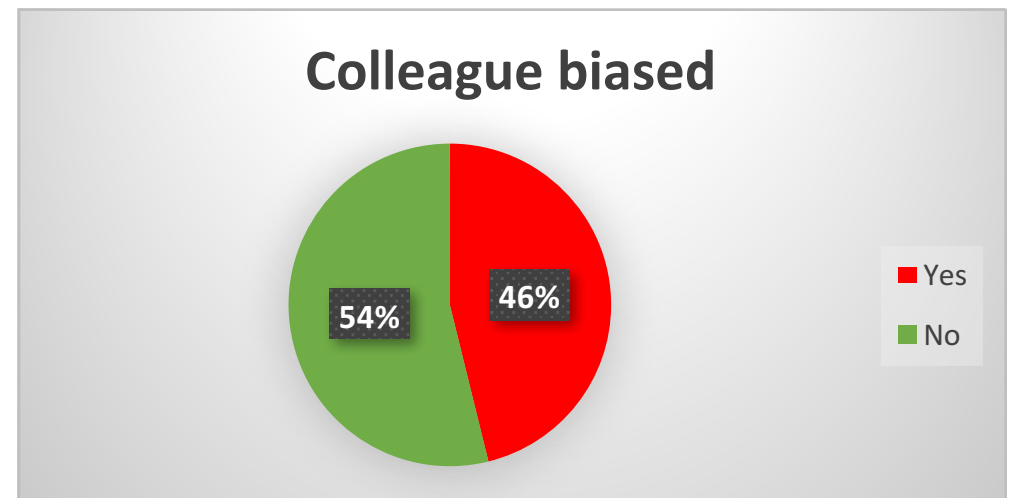
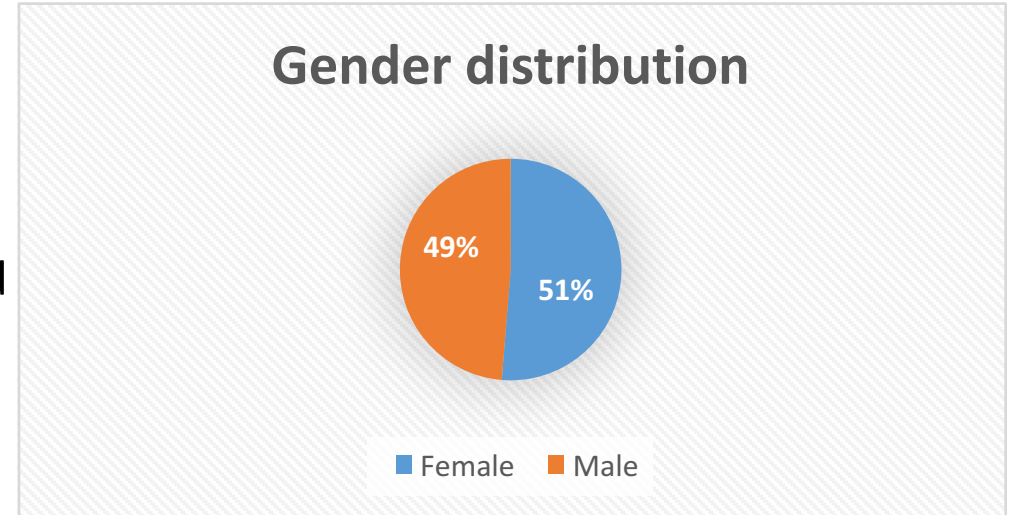
# Methods

- Part 1:
  - Survey of Internal Medicine Residents
  - Indirectly assessed recognition of bias among resident physicians by asking their opinion in an anonymous manner about their fellow residents.
- A two step question
  - “Have you observed a colleague of yours SAY, PORTRAY, or ACT in a biased manner towards a patient while providing inpatient service?”
  - If the answer was yes, we subsequently asked them to elaborate on the bias.
- *Part 2:*
  - *Hospitalized patients’ recognition of provider bias*



# Result

- The survey was sent to 39 postgraduate (PG) internal medicine residents, in their 1st to 3<sup>rd</sup> year of training.
  - 100% response rate
- 46% (18/39) reported observing their colleague(s) being biased toward patients.
- Of those who reported bias, 77.8% (14/18), reported one or more examples about the content of the perceived bias.



# Result cont'd

- The largest category, 42.8% (9/21)... bias towards patients with past or current “drug/substance abuse” or “narcotic seeking” behavior.
  - “He is drug abuser, chest pain is definitely due to cocaine”
- 14.3% (3/21) indicated providers not wanting to care for patients who were perceived to be “difficult”
  - “Not wanting to see/follow-up in outpatient clinic”
- 9.5% (2/21) related to race/ethnicity
  - “Advanced heart failure treatment options seems to be offered less to poor/African American patients”

# Resident and implicit bias

- Green et al 2007 in their seminal paper on implicit bias among resident physicians found:
  - No explicit preference for whites vs black patients or no differences in cooperativeness
  - However, Implicit Association Tests (IATs) revealed implicit preference favoring white Americans and implicit stereotyping of black Americans as less cooperative
- Van Ryan et al 2015 medical student CHANGE study
  - 3547 medical students from 49 medical schools in US
  - having completed the Black-White IAT during medical school remained a statistically significant predictor of decreased implicit racial bias.
  - Having heard negative comments from attending physicians or residents about African American patients were statistically significant predictors of increased implicit racial bias.

# The challenge

- Most physicians have genuinely egalitarian conscious beliefs and want to provide excellent care to all of their patients.
- Physicians often find it difficult to accept that unconscious biases may affect the care they provide because the notion is so inconsistent with their explicit (conscious) attitudes, motivations and intentions.
- There is evidence that awareness of implicit bias contributes to improved IATs.

# Conclusion

- About half of the residents are conscious of their colleagues bias towards patients.
- The biases relate to patient characteristics that are often used to make clinical decisions.
- Effort to educate residents about implicit bias during their training needs to be explored.

# References

- Nelson A. Unequal treatment: confronting racial and ethnic disparities in health care. *J Natl Med Assoc.* 2002;94(8):666–8.
- Eddy DM, Clanton CH. The Art of Diagnosis – Solving the Clinicopathological Exercise. *N Engl J Med.* 1982;306:1263–8.
- Chapman E, Kaatz A, Carnes M. Physicians and implicit bias: how doctors may unwittingly perpetuate health care disparities. *J Gen Intern Med.* 2013;28(11):1504–1510.
- van Ryn M, Hardeman R, Phelan SM, et al. Medical school experiences associated with change in implicit racial bias among 3547 students: a medical student CHANGES study report. *J Gen Intern Med.* 2015;30(12):1748–1756
- Green AR, Carney DR, Pallin DJ, Ngo LH, Raymond KL, Iezzoni LI, Banaji MR. Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *Journal of General Internal Medicine.* 2007;22(9):1231–1238.

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