

## **Annotated Bibliography of Resources on Implicit Bias**

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### **Background on Implicit Bias and the IAT:**

Greenwald, A., T. Poehlman et al. (2009). Understanding the Implicit Association Test. *Journal of Personality and Social Psychology*, 97, No 1, 17-41.

*The seminal paper that first described the IAT as a tool to measure evaluative associations that underlie implicit attitudes.*

Rosin, H, Spiegel, A. (Hosts). (2017, June 8). Invisibilia: The Culture Inside [Audio podcast] [www.npr.org/podcasts/510307/invisibilia](http://www.npr.org/podcasts/510307/invisibilia)

*Hour long NPR podcast that provides overview of IAT, implicit bias, as well as how to combat the effects of bias.*

Ross, H. J. (2014) *Everyday Bias: Identifying and Navigating Unconscious Judgements in Our Daily Lives*. Lanham, MD: Rowan & Littlefield.

*Short book written by diversity consultant Howard Ross presenting research on implicit biases and uses major news stories – such as the shooting of Trayvon Martin --- as examples. He also discusses mitigation strategies in the last chapters of the book.*

Singal, Jesse (2017) *Psychology's Favorite Tool for Measuring Racism Isn't Up to the Job*. The Cut: January; [www.thecut.com/2017/01](http://www.thecut.com/2017/01)

*An in-depth article on the problems with the IAT, especially cautioning against its use to attempt to predict behavior in individuals.*

### **Implicit Bias in Medicine:**

Chapman, E. N., Kaatz, A., Carnes, M. (2013). Physicians and implicit bias: How doctors may unwittingly perpetuate health care disparities. *Journal of General Internal Medicine*, 28, 1504–1510.

*Perspective piece that discusses the importance of physicians acknowledging their own susceptibility to implicit bias, and the importance of taking part in mitigation strategies when providing patient care.*

Drwecki, B. B., Moore, C. F., Ward, S. E., Prkachin, K. M. (2011). Reducing racial disparities in pain treatment: The role of empathy and perspective taking. *Pain*, 152, 1001–1006.

*Undergraduates and nursing professionals were provided with videos of black and white patients' facial expressions of pain and rated their empathy for their pain and recommended treatment. There was significant bias towards more empathy for Whites, and the degree of empathy correlated with degree of treatment. Interventions geared towards improving empathy decreased the disparity in empathy and treatment between the two groups.*

FitzGerald, C. (2017) Implicit bias in healthcare professionals: A systematic review. BMC Medical Ethics 18:19.

*Systematic review which suggests that physicians are susceptible to implicit biases and that these biases, in turn, can influence diagnosis and treatment decisions. Forty two articles reviewed.*

Green, A. R., Carney, D. R., Pallin, D. J., Ngo, L. H., Raymond, K. L., Iezzoni, L. I., Banaji, M. R. (2007). Implicit bias among physicians and its prediction of thrombolysis decisions for Black and White patients. Journal of General Internal Medicine, 22, 1231–1238.

*Physicians were randomized to clinical vignettes with white or black patients and asked to make a decision whether thrombolysis was indicated for ACS. Physicians with more bias as tested by IAT were more likely to treat white patients with thrombolysis and not white patients.*

Oliver MN, Wells KM, Joy-Gaba JA, Hawkins CB, Nosek BA. (2014) Do physicians' implicit views of African Americans affect clinical decision making? Journal of the American Board of Family Medicine. Mar-Apr; 27:177-88.

*In this web-based study, physicians were given a scenario of black or white patient with refractory osteoarthritis. Physicians were administered measures of racial bias and asked to recommend treatment. Physicians were found to possess biases but these biases did not predict treatment recommendations.*

### **Bias Mitigation Strategies:**

Blair, I., Steiner, J. et al. (2011) Unconscious bias and health disparities: where do we go from here? The Permanente Journal, Spring Volume 15, No 2.

*Article provides a research roadmap that discusses mechanisms through which bias operates and interventions that may prevent or ameliorate its effects. Concrete suggestions offered for clinicians, researchers, policymakers.*

Burgess DJ, Beach MC, Saha S. (2017) Mindfulness practice: A promising approach to reducing the effects of clinician implicit bias on patients. Patient Educational Counseling. Feb;100(2):372-376.

*Article discusses evidence that suggests that mindfulness can reduce activation of biases, reduce cognitive load, as well as provide a non-judgmental approach.*

Stone, J., Moskowitz, G. B. (2011). Non-conscious bias in medical decision making: What can be done to reduce it? Medical Education, 45, 768–776.

*Discusses skills that can be used to mitigate bias, including “activating egalitarian goals, looking for common identities and taking the perspective of the minority group patient.*

## **Teaching Health Disparities to Medical Trainees:**

Kaiser Family Foundation. Disparities Policy. <http://www.kff.org/disparities-policy/>

*Non-partisan organization that focuses on national health issues and global health policy, and serves as source of information, analysis and journalism. Good source material for understanding health disparities as they relate to current events.*

Chokshi DA. (2010) Teaching about health disparities using a social determinants framework. *J Gen Intern Med.* May;25 Suppl 2:S182-5.

*Perspective piece on importance of structuring medical education around understanding social determinants of health.*

Lagu, T, Hannon, N.S., et al (2013). Access to Subspecialty Care for Patients with Mobility Impairment. *Annals of Internal Medicine*, 158, 441-446.

*Disparities continue to exist in the care of patients with mobility impairment, highlighting that disparities extend beyond race and national origin.*

Smith WR, Betancourt JR, Wynia MK, Bussey-Jones J, Stone VE, Phillips CO, Fernandez A, Jacobs E, Bowles J. (2007) Recommendations for teaching about racial and ethnic disparities in health and health care. *Ann Intern Med*;147:654–665.

*The Society of General Internal Medicine Health Disparities Task Force used a review and consensus process to develop specific recommendations and guidelines for curricula focusing on health disparities. They delineate learning objectives, content, methods of teaching and useful resources.*

## **Responding to Witnessed Bias**

Perdomo J, Tolliver D, Hsu H, et al. Health Equity Rounds: an interdisciplinary case conference to address implicit bias and structural racism for faculty and trainees. *MedEdPORTAL.* 2019;15:10858.

*Educational intervention to create program-wide awareness on the impact of structural racism and implicit bias on health inequities. Includes material for 6 interactive Health Equity Rounds to use in place of standard report or didactic time.*

Rakatansky H. Addressing patient biases toward physicians. *R I Med J* (2013). 2017;100(12):11-12.

*Perspective piece reflecting on the ethical and moral impact of patient bias toward healthcare workers (HCW). Provides background information on instances of patient bias toward HCWs, personal distress experienced by HCWs, and potential impact on quality of care delivered in these instances. Urges need for institutional policies to assist staff in dealing with instances of bias.*

Paul-Emile K, Smith AK, Lo B, Fernández A. Paul-Emile K, Smith AK, Lo B, Fernández A. Dealing with racist patients. *N Engl J Med.* 2016;374(8):708-711.

*Perspective piece that provides a framework for managing patient requests for a different physician based on race or ethnic background in an emergent medical setting. Authors review five ethical and practical factors: the patient's medical condition, decision-making capacity, options for responding to request, reasons for request, and effect on physician when determining whether to pursue negotiation, persuasion, or accommodation of these requests.*

Olayiwola JN. Racism in medicine: shifting the power. *Ann Fam Med.* 2016;14(3):267-269.

*A physician's reflection on their personal experience with racism in a clinical encounter.*

Daniel J. Wheeler, Josué Zapata, Denise Davis & Calvin Chou (2019) Twelve tips for responding to microaggressions and overt discrimination: When the patient offends the learner, *Medical Teacher*, 41:10, 1112-1117

*Authors present evidence of the attending physician role in witnessing discrimination toward medical trainees and offer a three phase approach and communication toolkit to responding to microaggressions and discrimination toward trainees.*

Whitgob, Emily E. MD, MEd; Blankenburg, Rebecca L. MD, MPH; Bogetz, Alyssa L. MSW The Discriminatory Patient and Family: Strategies to Address Discrimination Towards Trainees, *Academic Medicine*: November 2016 - Volume 91 - Issue 11 - p S64-S69

*Data on experience addressing discrimination toward medical trainees from a survey of pediatric faculty at a single institution. Themes from faculty approaches include assessment of illness acuity, cultivation of a therapeutic alliance, depersonalization strategies, ensure safe learning environment, and need for more training on debriefing and reflection of these events.*