

2023

Implicit Racial Bias in Healthcare: A Concept Analysis and Call to Action

Rachel Ferguson

Follow this and additional works at: <https://digitalcommons.assumption.edu/honorstheses>



Part of the [Medicine and Health Commons](#), [Nursing Commons](#), and the [Race and Ethnicity Commons](#)

Implicit Racial Bias in Healthcare: A Concept Analysis and Call to Action

Rachel Ferguson

Faculty Supervisor: Dean Caitlin M. Stover, PhD, RN

Froelich School of Nursing

A Thesis Submitted to Fulfill the Requirements of the Honors Program at Assumption University

Introduction

Implicit bias is an unconscious process that affects an individuals' behavior, judgement, or action. This concept is found throughout daily life in America, including higher education (Heath, 2020). For students pursuing a nursing degree, exposure to implicit bias during their educational program is as concerning as the lack of training to acknowledge and conquer the development of implicit bias. Both facets can root negative attitudes and behaviors in the student nurse that will be carried into their practice throughout the healthcare system. It is a professional obligation for the registered nurse to be aware of implicit bias and understand its strong connection to increased risk of mortality, health complications, and other adverse health outcomes, especially in racial minority patient populations (Maina et al., 2018). This thesis contains a concept analysis of implicit racial bias, using the method described by Walker and Avant (2005). The definition of implicit racial bias, including its attributes and characteristics will be examined. Example cases are provided to further clarify the concept and a comprehensive review of the Implicit Associate Test [IAT] (Moon, 2011) is explored as a means for providing an operational definition and empirical referent. Understanding how implicit racial bias negatively affects interactions across the healthcare continuum is emphasized, with a concluding recommendation for nursing education to take necessary steps in the effort to prevent implicit racial bias attitudes and behaviors in the nursing profession.

Background and Significance

Implicit bias in healthcare occurs when an individual interacts with a healthcare provider for health-related services. Implicit racial bias is an unconscious stereotype and/or bias that is

associated to the color of another person's skin and is generally negative in connotation. Zhang et al. (2020), reported that patients of ethnic minority populations are more likely to experience poor health outcomes, adverse events related to care, re-hospitalizations, complications, and decreased patient satisfaction that can be attributed to health care provider bias. A systematic review found that healthcare providers' implicit bias towards Black patients is shown to have an association with patient reports of unsatisfied clinical interactions (Hall, 2015) including underdiagnosing, poor communication, and undertreatment of pain (Fitzgerald and Hurst, 2017). Cooper et al. (2012) found that in a sample of Black patients, there was a significant difference in patient-centered communication compared to the White patient sample. The most prominent difference included provider verbal dominance. Hamed et al., (2022) also found a greater incidence of minority individuals being described as "aggressive" or "difficult" compared to non-minority patients.

Research data gathered using results from the Harvard University's IAT attests to the fact that implicit bias is present in nurses. It was reported that bachelor-prepared nurses, at any subsequent level of training, harbor significant implicit anti-black bias ranging from mild to strong and that these attitudes contribute to poor patient-nurse interactions (Maina et al., 2018). A spokesperson from the California Nurses Association (2022) proclaimed that "long-term racial disparities in health care access and treatment continue to be a deplorable stain on our nation... and biases, whether intentional or unconscious, directly contribute to those disparities."

Most research asserts that a limited number of healthcare providers have malicious intentions when caring for patients of minority groups, but unconsciously and unwillingly

possess some degree of racial bias (Heath, 2020). However, implicit biases, especially racial bias, are present in a low to moderate level across many research samples (Hall, 2015).

Professional registered nurses find themselves in a unique position to address the outcomes associated with implicit racial bias. Specifically, Provision Eight (8) of the Code of Ethics for Nurses (American Nurses Association, 2015) explicitly directs the profession to lead the initiative in reducing minority health disparities by “collaborate[ing] to create a moral milieu that is sensitive to diverse cultural values and practice” (p. 139). The nurse has an ethical duty to uphold this provision, however, this will require specialized training targeting the prevention and/or revision of discriminatory attitudes and behaviors. This responsibility begins with institutes of higher education, who are challenged with yet another important topic for nurse educators to include throughout their curriculum. To begin tackling the problem, it is important to understand the concept of implicit racial bias in its entirety so that appropriately targeted interventions can be successfully implemented.

Definitions and Uses of the Concept

The Oxford English Dictionary (2022) defines the act of bias: “to exert an influence on (a person or thing), often unduly or unfairly.” Synonyms of bias include “favor, nonobjectivity, one-sidedness, partiality, and prejudice” (Miriam-Webster, 2022). Furthermore, bias can be segmented into explicit versus implicit. As explained by Blair, Steiner, and Havranek (2011), when an individual is consciously aware of their attitudes towards a person/group, believes those attitudes to be true and uses them as a motivation to act in association with the target person/group, explicit bias is demonstrated. On the contrary, when the same individual

acts without intent or without the conscious recognition of the attitude(s) attributed to the given person/group (Blair et al., 2011), their understanding, actions, and decisions are defined as implicit (Bruster et al., 2018).

Brownstein (2019) defines implicit bias as the presence of unconscious prejudice or stereotyping in an individual's beliefs or attitudes towards others. According to Brownstein's (2019) research theory, implicit bias can affect the individual's affect, behavior, and cognitive processes in situations in which they are faced with conflict or simply making decisions. The unconscious nature of implicit racial bias, as told by Brownstein, contributes to the pervasiveness and impact of it. When a healthcare provider acts with implicit racial bias, the provider is contributing to the inequity of healthcare delivery, access to healthcare, and poor health outcomes (Hamed et. al, 2022).

Critical Attributes

According to Walker and Avant (2005), defining attributes are the critical characteristics of a concept that provide clarity and differentiate it from related concepts. According to the literature, the critical attributes of implicit racial bias are “unintentional,” “pervasiveness,” and “modifiable.”

Unintentional

A hallmark attribute of implicit racial bias is the unintentional judgment and action based on a subconscious reaction to another individual's skin color (Heath, 2020). Like the idea of a Freudian slip, the automatic and unconscious interpretation of incoming data results in a lack of awareness and preventative action (Chafota, 2020).

Pervasive

Implicit racial bias is shown to be incredibly pervasive. The Oxford English Dictionary defines pervasive as, “existing in all parts of a place or thing; spreading gradually to affect all parts of a place or thing.” Unconscious racial assumptions, although generally not ill-intentioned, pervade everyday life (Edgoose et al., 2022). Implicit racial bias is, and has always been, embedded deep in society; it is indoctrinated into laws, institutions, and socialization; it is deep-reaching and trickles down into every aspect of health care. Effects are found in schools, incarceration, and employment (Chafota, 2020). It is pervasive in that every individual possesses some form or degree of bias, even those who live by impartiality such as judges (Cantu-Pawlik, 2019). A study into the criminal justice system shows that individuals from African American backgrounds are almost three times more likely than White people to be stopped and frisked by law enforcement, and for every 100 White women sentenced to time in prison for drug-related crimes, 227 Black women are incarcerated for the same offenses (Chafota, 2020).

Modifiable

The most notable critical attribute of implicit racial bias is that it is *modifiable*. The complex thoughts, preferences, and associations that the brain forms are typically hard-wired (Cantu-Pawlik). However, biases can be unlearned. According to Edgoose et al. (2022) of the American Academy of Family Physicians, recognizing and correcting our own biases in patient care is possible and can lead to increased health equity. “Unlearning” strategies such as education on how cognitive processes can affect clinical decision making, mindfulness, counter-stereotype exposure, and practicing individuation can all be effective when used in conjunction

to explore and address our internal biases (Edgoose et al. 2019). Furthermore, a systematic approach to understanding implicit bias, through education and exposure, is a crucial step for care providers to contribute to health equity practice (Edgoose et al., 2019). According to Handelsman and Sakraney (2017), a recent memo from the Obama White House Archives highlighted that modifying our awareness and self-accountability for bias begins with a national dialogue about implicit bias. This dialogue will help reduce the barriers encountered by the workforce and promote a strength-based evaluation of others.

Antecedents

Antecedents are items that must occur before every occurrence of the concept in all situations and contexts (Walker & Avant, 2005). The major antecedent of implicit racial bias is the general existence of racial stereotypes (Blair et al., 2011) in that implicit racial bias cannot exist without them. Stereotypes are unfounded preconceived notions about a particular group of people, typically rooted in prejudice (Merriam-Webster, 2022). According to Brownstein (2019), the unconscious stereotyping of specific groups of people is the basis of implicit bias, meaning that there are no grounds for the formation of these attitudes, implicit or not. To be biased against those groups, a person must have a fixed and oversimplified idea of what an individual in this category is *supposed to* or *must* be like (Brownstein, 2019). Negative stereotypes often associated with African American individuals include demographic descriptors of aggression and “difficult” personalities (Hamed et al., 2017). Even unconsciously, the mechanism through which biases are formed is the exposure to negative stereotypes targeting any certain group (Blair et al., 2011). Studies show that white individuals with an increased exposure to positive

stereotypes of African Americans are likely to have decreased levels of implicit bias targeting African American individuals (Blair et al., 2011).

Consequences

Consequences are defined as those events or incidents that always occur in response to a concept (Walker & Avant, 2005). The overarching consequences of implicit racial bias are an increase in racial health disparities and poor patient outcomes. Since these consequences are multi-factorial, it is more important to recognize the tangible adverse outcomes (Fitzgerald & Hurst, 2017; Hall et al., 2015) and dissatisfaction with the healthcare system and patient-provider relationships (Hall et al., 2015). These barriers contribute to inequity with evidence that racial and ethnic minority samples were target of both implicit and explicit bias which contributed to comparably worse outcomes (Hamed et al., 2022). These data held true when access to care barriers such as insurance and family income were controlled (DeAngelis, 2019). Additionally, implicit anti-black bias in care providers had a positive correlation with reports of decreased patient satisfaction with provider interactions (Hall, 2015) due to underdiagnosing, poor communication, and inadequate treatment of pain (Fitzgerald & Hurst, 2017). Patients on the receiving end of a healthcare provider's implicit anti-black bias reported increased pain, poor advance directive planning, and were found to have increased re-hospitalizations (Estrada et al., 2021). Research also cites an increase in mortality rates (Brooks et al., 2021) and lower rates of return to post-hospitalization functional recovery (Horner et al., 2003). The body of literature exploring the consequences of implicit racial bias clearly demonstrates the negative pattern of poor patient outcomes.

Operational Definition

A synthesis of the research leads to the following definition of implicit racial bias: it is the “pervasive,” yet “unintentional” and “malleable” mental process of racial prejudice or stereotype towards another individual. The result of this unconscious bias is generally negative.

Empirical Referents

Many concepts regarding bias are abstract phenomenon that are difficult to measure. This holds true for a concept such as implicit racial bias since the definition outlines that the process is subconscious and unintentional. Walker and Avant (2005) use the empirical referent as a measurable way to show the concept's occurrence.

Implicit Association Test (IAT)

The Implicit Association Test (IAT), created by Harvard University’s Project Implicit, can be used to identify the presence and severity of implicit bias. The Implicit Association Test (<https://implicit.harvard.edu/implicit/selectatest.html>) is a survey that measures response time and error frequency of the participant to develop an individualized measure of implicit bias towards different ethnic populations and skin tones (Moon, 2011). This test provides quantitative data regarding levels of implicit bias. There is a disclosure included with Harvard’s IAT that informs the participant of possible sensitivity to results [especially in those whose results do not align with their values and beliefs] (Moon, 2011). This experiment is relatively non-invasive, and all data collected is anonymous. Measures of implicit bias based on skin tone and skin color can range anywhere from mild to severe (Maina et al., 2018). Attitudes that are implicit “are much less accessible to our conscious awareness and/or control” (Moon, 2011). Therefore, the goal of

administering the IAT is to expose individuals to their subconscious actions using quantifying measures (Moon, 2011). For example, when completing the Skin-tone (Light Skin – Dark Skin) IAT the respondent will associate light skin faces and dark skin faces to several characteristics of good and bad which will reveal personal preference that is often unknown by the individual being tested (Moon, 2011). The latency in response time and error frequency indicates the strength of specific biases for the participant (Maina et al., 2018). In another example using the Race ('Black - White' IAT), if the participant pairs positive attributes with White faces more quickly and accurately than with Black faces, this is a sign of implicit pro-White bias (Maina et al., 2018).

The IAT is useful across various disciplines and according to Project Implicit, over 90 manuscripts/books using an IAT scale have been published or are in press since 2014 (Moon, 2011). Using the IAT as an empirical referent to measure levels of implicit racial bias provides a valuable tool for quantifying an abstract concept, giving numbers to a once-invisible issue.

Model Case

A model case contains all critical attributes of the concept. A 20-year-old individual is walking down a dark street in a neighborhood known for violence and crime. The individual spots a black man wearing dark colored clothing and a knit cap about 50 feet up the sidewalk. The individual quickly places their keychain in the palm of their hand in a manner that allows the largest key to be used as a weapon. The individual crosses the street to the other sidewalk prior to passing the black man. It is not until the black man passes on the opposite side of the street and walks ahead about 100 yards that the individual unclenches the hand grasping the keychain

and calmly slows their respiratory rate. In this situation, the individual's implicit racial bias causes them to perceive black men in dark clothing as a threat.

This example shows all three critical attributes of implicit racial bias. It exemplifies an unconscious psychological process that leads to a physical response. The biased individual is unintentionally making a pre-judgment of someone because of their skin tone, leading to an automatic process to ensure safety. This case also includes the pervasiveness of implicit racial bias because it affects entire populations of people. In this case, African American and other dark-skinned individuals alike experience negative judgment based on their skin tone which White populations typically do not. Lastly, the attribute of modifiability is present; although this may be an unintentional judgment and reaction, it can be modified. The first step towards modifying one's negative biases is acknowledging them and making room for improvement (Cantu-Pawlik, 2019). Because it is an unconscious process, the biased individual in this case may not be aware of the possibility to change their thought process and will continue to pre-judge based on skin color (Cantu-Pawlik, 2019). Dedicating an effort to acknowledge, explore, and address such cognitive behaviors through education, reflection, and discussion can modify misconceptions such as these long-term (Blair et al., 2011).

Borderline Case

A borderline case that involves most but not all critical attributes of the concept is in a situation with conscious racism. For example, if a knowingly racist nurse is assigned to an African American patient, that nurse will reflect her prejudices in patient care (Hall et al., 2015).

This could mean inferior quality patient-provider interactions, treatment decisions, and patient adherence, and poor patient outcomes overall for racial minority groups (Hall et al., 2015).

This is conscious, meaning that the nurse knowingly stereotypes and discriminates against racial minorities and is aware of their ability to determine patient outcomes (Kim & Roberson et al., 2021). This individual is likely to cover up her judgment to make it less obvious because they know it is wrong but internally retains their racial bias. This incidence of racism is also pervasive- the impact of it trickles down and affects all aspects of care including overall outcomes for entire groups of people (Hall et al., 2015). Any black individual who is in the care of this nurse is highly likely to experience biased care (Kim & Roberson). This racial bias in healthcare may or may not be malleable (Law, 2021). Some attitudes, especially when they are ingrained since childhood, can be difficult to modify (Law, 2021). The major factor affecting the malleability of racial bias is one's own desire to change (Kim & Roberson et al., 2021); with an intentional bias such as in this case, there is a lack of desire to change.

Related Case

In some situations, certain attributes are not present, but not all. Jane is a 21-year-old African American female who grew up in a major city that is predominantly African American. Jane's father works as a physician at the local hospital. Her mother brings her to the emergency department there for severe abdominal pain. The hospital is staffed with primarily White staff. Jane is seen within 10 minutes of her arrival and is diagnosed with appendicitis and rushed into surgery before 30 minutes have passed. Jane's friend from childhood, Jodie, presents with the same issue. She remains in the waiting room with her mother, who emigrated from Ghana before

Jodie was born, for over 40 minutes before she is seen and is not admitted into surgery for another 30 minutes. Before Jodie's appendix can be removed, it bursts. Both women went to the same hospital with the same diagnosis and acuity, yet the speed of emergency care differed.

This is an example of a situation in which implicit racial bias is not pervasive- although both patients are similar, their privilege and perception are different. Subsequently, Jodie's care is not as efficient as Jane's. In this case, implicit racial bias does not affect Jane as it does Jodie. Belonging to the same racial group is not as important as the differences in socioeconomic class. They chose to prioritize other patients who are easier to understand and that they can empathize with more, such as Jane whose family is more affluent and familiar. This case shows implicit yet retroactively conscious racial bias. The staff reflect on their failure to provide the best possible care for all patients regardless of race and socioeconomic status, and have a team meeting to discuss interventions to improve health equity in the ED. The team vows to work on their unacceptable deficits and prevent this situation from recurring.

Contrary Case

With every gold standard example case, there is a contrary case (Walker & Avant, 2005). A contrary case is a situation where none of the concept's critical attributes are present, but the concept itself is. Trent is a 32-year-old African American businessperson who is furniture shopping with his brother, Marcus, a construction worker. Marcus has been looking for a new bedroom set. When Trent and Marcus arrive, they split up to look in different sections. Susanne, a furniture salesperson, visualizes both Trent and Marcus. She decides to go over and assist Trent rather than Marcus. Her reasoning is that Trent is wealthier because he is clean, well-dressed,

and seems confident. Although Marcus is also a black male, he looks dirty from work today and still dressed in his work clothes. She reasons that she would be more likely to close a sale with Trent, rather than giving Marcus assistance, because he does not seem to be able to afford a big purchase, not knowing that he is the one who is looking to make a purchase.

By intentionally choosing his wealthier-looking brother, she discriminates against one individual of a population and not the other. In this way, her thought process is not racially pervasive because she is favoring one black man over another for a reason other than race. Although employer-mandated implicit bias training is provided to her annually, her bias is unable to be modified because she is unwilling to change her thought process due to the idea that she is profiting financially from it. In this situation, Susanne shows a non-pervasive, intentional, and unmodifiable form of implicit racial bias. Even though this prejudice does not actually increase her sales commissions in any way, she continues with these behaviors with future clients.

Concept Clarity

It is indisputable that implicit bias is increasingly prevalent in health care professionals, including nurses, and impacts minority patients' care. Utilizing the IAT to identify and measure personal bias in nurses is an important first step towards modifying behavior. The systemic, institutionalized racism and discrimination that is present in nursing education will not disassemble on its own (Chae, 2021). Structured and consistent evidence-based interventions must be implemented to slowly change behavior that is unrecognized by so many individuals.

The lack of evidence-based educational interventions presents an obstacle in moving forward with changing behavior in nurses. However, the urgency in which the nursing profession must intervene is real. Nurses need to contribute to the evidence base by conducting and participating in research studies that examine educational efforts to raise awareness and minimize implicit racial bias. Meanwhile, educators are encouraged to provide nursing students with clinical experiences and exposure to individuals of minority populations, provide cultural awareness and inclusivity training, and mandate the inclusion of implicit bias in course content (Chae, 2021). Including course content about the importance of culture considerations in healthcare and the influence on health outcomes can improve healthcare globally (Chae, 2021).

Discussion

There are two types of interventions that are gaining momentum across the country to raise awareness of implicit bias and its determinantal effects, nursing education course requirements and policy change.

Nursing Education

A recent meta-analysis of various implicit bias trainings showed a significantly higher level of knowledge and awareness of implicit prejudicial associations and their effects in participants (Herbert, 2021). Success has also been seen in the form of an increase in individuals recognizing discrete biased actions that they can do differently to reduce the number of biased decisions, attitudes, and incidents (Herbert, 2021). Implicit bias training for a pharmaceutical company demonstrated positive effects six weeks post intervention when participants reported increased feelings of inclusion, decreased incidences of bias and prejudice, and greater

participation in organizational change commitments than those who did not attend the training (Gino & Koffman, 2021).

Johns Hopkins Nursing (JHN) is a nursing program striving to decrease the impact of implicit racial bias in healthcare. JHN requires nursing students to complete a course on implicit bias and microaggressions prior to licensure to fulfill graduation requirements for students graduating after 4/1/2022 (Wilson, 2022). The description of the course is to “...increase awareness of unconscious bias and microaggressions, provide participants with strategies for responding to microaggressions, and mitigate bias in everyday life, the workplace, and clinical care to reduce health and health care disparities and promote health equity” (Wilson, 2022). The implementation of this mandatory course acknowledges the existence and effects of implicit racial bias in healthcare professionals and strives to increase awareness as well as decrease the impacts of this bias in their nursing students and subsequently, a fraction of the nursing workforce (Wilson, 2022). Overall, the implementation of implicit bias and microaggression training in nursing school is linked to decreased implicit bias (or increased awareness of such bias) (Maina et al., 2018), increased interest in participation in health care for minority populations (Isaacs et al., 2016), and improved care outcomes for ethnic minority patients (Alan et al., 2013; Maina et al., 2018).

Policy Change

The California Nurses Association encouraged the signing and implementation of AB 1407, a bill mandating implicit bias education and training for nursing students and new graduate nurses in California (Werezak, 2021). California led the advocacy effort and soon after the state

of Michigan also mandated implicit bias training as part of licensure requirements for new graduate registered nurses (Thompson et al., 2022). As of November 2022, at least five states including California, Maryland, Michigan, Minnesota, and Washington, have adopted policies mandating implicit bias training for nursing students and/or new graduate Registered Nurses (Ollove, 2022). Additionally, these policies have been introduced in legislatures in as many as eight additional states including Indiana, New York, Nebraska, South Carolina, Oklahoma, Tennessee, Vermont, and Illinois (Ollove, 2022). Even without mandating legislature, many nursing and medical programs as well as health institutions have chosen to offer implicit bias training as a requirement for graduation or employment (Ollove, 2022).

Next Steps

The United States has the most technologically advanced healthcare system out of comparably industrialized countries; however, it is also among the frontrunners for the most negative health outcomes (Tikkanen & Abrams, 2020). One method of addressing health disparities and poor healthcare outcomes is for healthcare providers to become aware of contributing factors, including the role of implicit bias during clinical encounters.

According to the American Association of Colleges of Nursing, as the U.S. population demographics shift and racial health disparities persist, preparing student nurses with the ability to address, examine, and propose solutions to implicit bias and systemic racism in healthcare is more important than ever (AACN, 2021). Inspiring a comfortable confidence in nursing students to be aware of, recognize, and address implicit bias is key to improving pervasive inequities in healthcare across populations (AACN, 2021).

The remaining 45 states without a mandate for implicit bias training need to continue the momentum. This includes Massachusetts. The first step towards making a change is to spread awareness of the issue of implicit bias in healthcare and the impact of it on overall health outcomes, procuring interest and support from Massachusetts citizens. It is vital to proactively include potential stakeholders in the proposition of a bill to foster trust and connections, as well as secure support for the initiative(s) at hand (Sedmak, 2021). Stakeholders in healthcare include patients, physicians, insurance companies, government, and employers (Sedmak, 2021). From here we bring the finalized, polished evidence-based research to our state legislators and representatives, via Massachusetts' "right of free petition" (Russo et al., 2002). After bringing this concern to state leaders, the petition will be addressed and voted on by committees at public hearings (Russo et al., 2002). From here, if the committee chooses to favorably report the proposed bill "out of committee," the petition takes off (Russo et al., 2002). By working to introduce a petition suggesting the implementation of mandatory implicit bias training as a graduation requirement in nursing education, we are becoming a part of the change that will improve patient safety indefinitely.

Conclusion

With the most technologically advanced healthcare in the world, the U.S. has all the potential to become the most efficient and equitable healthcare system in the world, but this cannot happen without first identifying our shortcomings and subsequently attacking racial health disparities at their source. It is a professional obligation for every healthcare provider to seek out educational opportunities on what implicit racial bias is and how it affects the delivery

of care, creating health disparities and overall poor patient outcomes. The nursing profession can be leading advocates in this initiative by requiring all pre-licensure nursing students to complete implicit bias training. Mandates on nursing curriculum are governed by the State's Board of Registration in Nursing. Therefore, the call to action targets the Massachusetts Board of Registration in Nursing to consider relevant stakeholders and lead the initiate of legislative change.

References

- Allen et al. (2013). Development and evaluation of a teaching and learning approach in cross-cultural care and antidiscrimination in university nursing students. *Nurse Education Today*, 33(12), 1592-1598.
[10.1016/j.nedt.2012.12.006](https://doi.org/10.1016/j.nedt.2012.12.006)
- American Association of Colleges of Nursing. (2019). *The Essentials: Core Competencies for Professional Nursing Education*.
- Beach et al. (2006). Improving health care quality for racial/ethnic minorities: systematic review of the best evidence regarding provider and organization interventions. *BMC Public Health*, 6(104).
<https://doi.org/10.1186/1471-2458-6-104>
- Brooks et al. (2021). Better Nurse Staffing Is Associated with Survival for Black Patients and Diminishes Racial Disparities in Survival After In-Hospital Cardiac Arrests. *Medical care*, 59(2), 169–176.
<https://doi.org/10.1097/MLR.0000000000001464>
- Brownstone, M. (2019). Stanford Encyclopedia of Philosophy: Implicit Bias. *Stanford University*.
<https://plato.stanford.edu/entries/implicit-bias/>
- Bruster et al. (2018). Challenging implicit bias: preparing students to practice with African American families. *Social Work Education: The International Journal*, 38(5), 654-665.
<https://www.tandfonline.com/doi/abs/10.1080/02615479.2019.1594753>

Byers et al. (2021). Giving while grieving: Racism-related stress and psychological resilience in Black/African American registered nurses. *Nursing Outlook*, 69(6), 1039-1048.

<https://doi.org/10.1016/j.outlook.2021.05.010>

Byrne, D. (2020). Evaluating Cultural Competence in Undergraduate Nursing Students using Standardized Patients. *Teaching and Learning in Nursing*, 15(1), 57-60.

<https://doi.org/10.1016/j.teln.2019.08.010>

Cantu-Pawlik. (2019). What is Implicit Bias and Why Should You Care? *Institute for Health Promotion Research (IHDR) at UT Health San Antonio*.

<https://salud-america.org/what-is-implicit-bias-and-why-should-you-care/>

Chae et al. (2021). Effectiveness of Virtual Simulation to Enhance Cultural Competence in Pre-licensure and Licensed Health Professionals: A Systematic Review. *Clinical Simulation in Nursing*, 56, 137-154.

<https://doi.org/10.1016/j.ecns.2021.04.013>

Chafota. (2020). Unconscious Bias: How Might It Affect Social Work? *Gloucestershire County Council*. <https://www.gloucestershire.gov.uk/media/2104016/unconscious-bias.pdf>

Chou et al. (2007). Gender and Racial Disparities in the Management of Diabetes Mellitus Among Medicare Patients. *Women's Health Issues*, 17(3), 150-161.

<https://doi.org/10.1016/j.whi.2007.03.003>

Du, Y. & Xu, Q. (2016). Health Disparities and Delayed Health care among Older Adults in California: A Perspective from Race, Ethnicity, and Immigration. *Public Health Nursing*, 33(5), 383-394.

<https://doi.org/10.1111/phn.12260>

Edgoose et al. (2019). How to Identify, Understand, and Unlearn Implicit Bias in Patient Care.

American Academy of Family Physicians, 26(4), 29-33.

PMID: 31287266.

Estrada et al., (2021). Racial/Ethnic Disparities in Nursing Home End-of-Life Care: A

Systematic Review. *Journal of the American Medical Directors Association*, 22(2), 279-290.

<https://doi.org/10.1016/j.jamda.2020.12.005>

Handelsman & Sakraney. (2017). Implicit Bias. *White House Office of Science and Technology Policy*.

https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/bias_9-14-15_final.pdf

Heath et al. (2020). What is Implicit Bias, How Does it Affect Healthcare? *Xtelligent Healthcare*

Media.

<https://patientengagementhit.com/news/what-is-implicit-bias-how-does-it-affect-healthcare>

Herbert, F. (2021). Is unconscious bias training still worthwhile? *LSE Business Review*.

<https://blogs.lse.ac.uk/businessreview/2021/03/24/is-unconscious-bias-training-still-worthwhile/>

Horner et al. (2003). Effects of Race and Poverty on the Process and Outcome of Inpatient Rehabilitation Services Among Stroke Patients. *American Heart Association*.

<https://doi.org/10.1161/01.STR.0000060028.60365.5D>

Iheduru-Anderson, K.C., (2021). The White/Black hierarchy institutionalizes White supremacy in nursing and nursing leadership in the United States. *Journal of Professional Nursing*, 37(2), 411-421.

<https://doi.org/10.1016/j.profnurs.2020.05.005>

Isaacs et al. (2016). Cultural desire need not improve with cultural knowledge: A cross-sectional study of student nurses. *Nurse Education in Practice*, 19, 91-96.

<https://doi.org/10.1016/j.nepr.2016.05.009>

Laditka et al., (2003). Hospital utilization for ambulatory care sensitive conditions: health outcome disparities associated with race and ethnicity. *Social Science & Medicine*, 57(8), 1429-1441.

[https://doi.org/10.1016/S0277-9536\(02\)00539-7](https://doi.org/10.1016/S0277-9536(02)00539-7)

Li et al. (2011). Association of Race and Sites of Care with Pressure Ulcers in High-Risk Nursing Home Residents. *JAMA*, 306(2), 179-186.

doi:10.1001/jama.2011.942

Maina et al. (2018). A decade of studying implicit racial/ethnic bias in healthcare providers using the implicit association test. *Social Science & Medicine*, 199, 219-229.

<https://doi.org/10.1016/j.socscimed.2017.05.009>

Moon, T. (2011). Project Implicit. Implicit Association Test: Take a Test. *University of Virginia*.

<https://implicit.harvard.edu/implicit/takeatest.html>

Morgan, L.L. (2022). ‘Implicit Bias’ Training Cost Me My Nursing Job. *Wall Street Journal Opinion*.

[https://www.wsj.com/articles/fired-from-my-nursing-job-for-refusing-to-say-im-racist-kentucky-michigan-implicit-bias-training-healthcare-fairness-11664551932?](https://www.wsj.com/articles/fired-from-my-nursing-job-for-refusing-to-say-im-racist-kentucky-michigan-implicit-bias-training-healthcare-fairness-11664551932?reflink=share_mobilewebshare&fbclid=IwAR3OMnxL_4iyKLpCU-EM_cn92pkshwPKZgtNwpiZQatZ0OP6mL6FIpSdG00)

[reflink=share_mobilewebshare&fbclid=IwAR3OMnxL_4iyKLpCU-](https://www.wsj.com/articles/fired-from-my-nursing-job-for-refusing-to-say-im-racist-kentucky-michigan-implicit-bias-training-healthcare-fairness-11664551932?reflink=share_mobilewebshare&fbclid=IwAR3OMnxL_4iyKLpCU-EM_cn92pkshwPKZgtNwpiZQatZ0OP6mL6FIpSdG00)

[EM_cn92pkshwPKZgtNwpiZQatZ0OP6mL6FIpSdG00](https://www.wsj.com/articles/fired-from-my-nursing-job-for-refusing-to-say-im-racist-kentucky-michigan-implicit-bias-training-healthcare-fairness-11664551932?reflink=share_mobilewebshare&fbclid=IwAR3OMnxL_4iyKLpCU-EM_cn92pkshwPKZgtNwpiZQatZ0OP6mL6FIpSdG00)

O’Brien et al. (2021). Intercultural readiness of nursing students: An integrative review of evidence examining cultural competence educational interventions. *Nurse Education in Practice, 50*.

<https://doi.org/10.1016/j.nepr.2021.102966>

Ollove, M. (2022). With Implicit Bias Hurting Patients, Some States Train Doctors. *Stateline*.

<https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2022/04/21/with-implicit-bias-hurting-patients-some-states-train-doctors>

Osmanovic et al. (2021). Psychometric properties of instruments used to measure the cultural competence of nurses: A systematic review. *International Journal of Nursing Studies, 113*.

<https://doi.org/10.1016/j.ijnurstu.2020.103789>

Pinheiro et al. (2021). Racial Disparities in Preventable Adverse Events Attributed to Poor Care Coordination Reported in a National Study of Older US Adults. *Medical Care: October 2021, 59(10)*, 901-906.

doi:10.1097/MLR.0000000000001623

Press et al. (2012). Interventions to Improve Outcomes for Minority Adults with Asthma: A Systematic Review. *Journal of General Internal Medicine, 27*, 1001-1015.

<https://doi.org/10.1007/s11606-012-2058-9>

Schnakers et al., (2022). Sociodemographic, geographic, and clinical factors associated with functional outcome and discharge location in US inpatient rehabilitation settings. *Taylor Francis Online, Brain Injury*.

<https://doi.org/10.1080/02699052.2022.2033838>

Thompson et al. (2022). Michigan Implicit Bias Training for all Health Care Professions. *Michigan Implicit Bias Training*.

<https://michigan-implicit-bias-training.com/course/627598b69f79a7b86fd0c037>

Tikkanen & Abrams. (2020). U.S. Health Care from a Global Perspective, 2019. *The Commonwealth Fund*.

<https://www.commonwealthfund.org/publications/issue-briefs/2020/jan/us-health-care-global-perspective-2019>

Tosun. B. (2021). Addressing the effects of transcultural nursing education on nursing students' cultural competence: A systematic review. *Nurse Education in Practice, 55*.

<https://doi.org/10.1016/j.nepr.2021.103171>

Werezak, L. (2021). Nursing Programs Use Implicit Bias Training to Address Racial Disparities in Healthcare. *California Nurses' Association*.

<https://nurse.org/education/implicit-bias-racial-disparities-healthcare/>

Wilson, C. (2022). Introduction to Unconscious Bias and Microaggressions. *John's Hopkins Nursing*.

<https://www.ijhn-education.org/node/19412#group-tabs-node-course-default1>

Winona State University Library, (2022). Research Hub: Evidence Based Practice Toolkit: Levels of Evidence.

<https://libguides.winona.edu/ebptoolkit/Levels-Evidence>

Zhang et al. (2020). Trends of Racial/Ethnic Differences in Emergency Department Care Outcomes Among Adults in the United States From 2005 to 2016. *Frontiers in Medicine, Family Medicine and Primary Care*.

<https://doi.org/10.3389/fmed.2020.00300>