Hindawi
Nursing Forum
Volume 2023, Article ID 3459527, 6 pages
https://doi.org/10.1155/2023/3459527

Review Article

Identifying and Addressing Bias in Nursing Teaching: A Creative Controversy Essay

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Received 4 February 2023; Revised 1 March 2023; Accepted 23 March 2023; Published 13 April 2023

Academic Editor: Meigan Robb

Nursing faculty all have some form of unconscious or implicit bias. This type of bias is not intentional, but negative enough that it can influence students and ultimately help to create healthcare disparities for students' future patients. These disparities are likely evident, for instance, in the anomalously high death rate of Black women with breast cancer, and in the hesitancy that transgender, lesbian, gay, and bisexual individuals often have to obtain medical help at crucial times. To help address a paradigm shift, is therefore, required in how faculty educate future nursing providers. This review paper has been written to encourage reflection about implicit bias and bias in teaching nursing students required to engender such a change. It also describes tools such as a bias checklist that can be used by faculty to help reflect on ways to minimize implicit bias in teaching materials.

1. Introduction

Unconscious (or implicit) bias in healthcare can ultimately lead to a patient's death. Everyone has unconscious bias; one key problem is that not everyone is ready to admit it, possibly because they are not yet able to recognize it. It is time for nurse educators to uncover and unpeel the layers of unconscious bias. Implicit bias can affect how a healthcare professional listens, communicates, and, in some cases, diagnoses a patient [1]. If this bias is passed on through college education, it may also permeate into the way nursing students treat patients down the road. Healthcare disparities, for example, women of color who have higher breast cancer death rates than Whites can grow out of bias [2]. Even with the same education or income levels, disparities can still exist. For example, women have been known to receive lower quality care then men in certain situations [3]. Nurse educators, therefore, have a duty to teach healthcare providers of the future about the possible role of implicit bias in developing healthcare disparities like this, and how this can potentially impact their patients. More education and guidance not only are required to help one to recognize one's own bias but also to help dismantle that bias. Healthcare facilities and organizations have racism and bias training, but we can legitimately ask why they are not taught in the classroom, before providers go out into the field.

It is time to consider the issue of unconscious bias from the perspective of the environment where nursing students are educated. The first step involves examining oneself and the instructional materials used for bias. It only takes a few minutes to review one's own teaching material, such as your lecture notes or case studies for bias. Does one of your PowerPoint slides include a picture that insinuates a stereotype? Does a case study about marriage only involve a man and a woman? Have you explored where you could add content on addressing bias in your department's program curriculum? It is suggested to keep an open mind reading this as one may feel uncomfortable. If one is not uncomfortable, one may not grow. Unconscious bias is in all of us [3, 4]. This article will highlight tools, such as checklists, to assist nurse educators in identifying potential areas of bias in their own teaching. The goal is to uncover and dismantle bias to contribute to a more inclusive learning environment in nursing, and subsequently, better patient care.

1.1. Background and definitions. Two types of bias relevant to this paper exist—implicit and explicit bias—and are defined below. Ways in which the brain forms connections and associations that can lead to bias are also reviewed in this section.

1.2. Implicit Bias. Implicit bias describes bias that one is usually not aware of and at times cannot control [5]. Implicit bias leads to a tendency to have a preference for one person or group of persons over another. This preference is based on modeled and other experiences, usually during childhood. Other variables contributing to forming bias consist, such as the media. The person may not realize that patterns form in their unconscious mind.

The term implicit bias was first introduced in 1995 by psychologists Mahzarin Banaji and Anthony Greenwald. They stated that unconscious associations and patterns can influence social behavior and lead to conclusions and judgements [6]. Everyone has some form of implicit bias, but most are not aware [3, 4] To be more cognizant of the prejudices and beliefs one holds at an unconscious level, steps exist that can be followed to help them surface consciously so they can be recognized and reflected on [3]. At this time, the individual can then make a choice about whether or not to act on them.

Healthcare providers have just as much implicit bias as the general population [1]. The interactions between a patient and healthcare provider are complex, and the multifaceted factors that influence them are challenging to untangle. Yet, implicit bias has been shown to have negative consequences for these interactions [1, 7], and thus is likely also to affect some patients' diagnoses and/or treatment. Categories under which implicit bias can manifest are race, sexuality, gender, and age [8].

1.3. Explicit Bias. Explicit bias is an outward bias against a population [4]. An example is verbalizing discontent to another person based on their characteristics such as sex, color, religion, or sexual preference. With explicit biases, one is aware of a preference on a conscious level and may act out or verbalize it [4]. While implicit bias is unconscious and not intentional, explicit bias toward a group is more direct but overall is on the decline [4].

1.4. The Brain Connection. The brain forms biases based on various associations that are stored in the unconscious [4]. The amygdala in the brain can be activated by a stimulus that leads to a quick evaluation that is automatic in a specific situation. The amygdala can categorize groups of people and store this information as an implicit bias in one's unconsciousness. Implicit biases like this can affect one's ability to listen properly, be nonjudgmental and communicate in an effective manner. While unintentional, some may refer to this as a bias blind spot [4].

1.5. System I and II Thinking. Kahneman [9] describes two types of thinking known as system 1 and system 2. System 1 is a quick unconscious thinking mode. This mode can be subject to error because little effort is required to think when using this system. Examples of where system 1 thinking is used include during cleaning, talking, and driving. System 2 is slower, more logical, and takes more reasoning than system 1. Implicit bias is an example of system 1 thinking and is not congruent to awareness or conscious belief [5]. One can, for example, verbalize positive sentiments towards a particular group but bias can still exist on a subconscious level. In this situation, one can even perform an action (or inaction) against that group, but not deliberately. Although system I is more intuitive and quicker, system II is more analytical and offers the time to think and use logic. This is useful when taking time to reflect on possible bias.

1.6. Denial or Unawareness. Some might argue that they simply do not display bias [10–12]. When examined, studies that have shown, for instance, that the majority of over 200 medical students were found to have an implicit preference for white individuals were surveyed to look at unconscious preferences [10] Nursing students were assessed for implicit race and skin tone biases, and found that preferences existed for light skin versus dark skin [11]. Some resistance about bias come from the individual feeling that these behaviors are already formed and cannot be altered [12]. This is understandable because implicit bias is a type of bias that is unconscious and not deliberate. Consciously, most persons believe they are not biased. Despite this belief, the benefit of an educator examining one's own biases and how they teach can be hugely beneficial for their students and the students' future patients.

2. Healthcare Disparities

2.1. Marginalized Groups. Not all people have the same opportunities to practice a healthy lifestyle and receive the same healthcare. The most educated and economically stable persons tend to have the best access to high-quality healthcare [13]. High-quality medical clinics are also most likely to be found in the wealthiest communities [13]. People in areas that have minimal access to produce are more likely to eat fast food regularly [13] Socioeconomic disparities were magnified by the COVID-19 pandemic. This is most aptly demonstrated by hospital admissions during this time, which were highest for racial and ethnic minorities in the United States [14]. Many other groups, such as transgender individuals, suffer as a result of disparities. Transgender, lesbian, gay, and bisexual individuals all face discrimination in healthcare [9]. Because of this discrimination, they can hesitate to obtain medical help at crucial times, such as screening and preventable services [15]. Slopnick et al. [16] points out that African Americans and Hispanics are more likely to present with a higher risk for penile cancer. Black babies die three times the rate as White babies do [17]. Disparities in healthcare are concerning, and while many factors are likely to contribute to their origin, it is important to focus on the role that implicit bias may play in creating them [3].

2.2. Bias Effect on Disparities in Healthcare. When bias exists, communication can be skewed and it can negatively impact on how the provider makes decisions about a patient's care [18]. Bias can also affect how the patient views the provider as preconceived notions about a nurse or doctor can further erode the patient-provider relationship [3]. Unconscious bias is thought to play a role in creating healthcare disparities [13]. This role is considered to play out mainly in the communication and steps that lead up to a clinical decision on a patient's diagnosis and treatment [3]. Stereotyping and discrimination can lead to negative outcomes. In the 2004, Institute of Medicine report by Smedley et al. [19] stated that implicit bias can affect the care of individuals in a specific group, and as a result the goals of care are fractured. Blair et al. [3] pointed out that a relationship exists between bias and healthcare disparities but that a need also exists to look further into the relationship between implicit bias and outcomes. When bias exists, communication can be skewed and it can negatively impact on how the provider makes decisions about a patient's care [18] Bias can also affect how the patient views the provider as preconceived notions about a nurse or doctor can further erode the patient-provider relationship [3].

Numerous studies have shown that implicit bias can influence a healthcare provider's approach to diagnosis and treatment of their patients [7]. For instance, a systemic review of research into healthcare professionals and bias by FitzGerald and Hurst [1] examined how unintentional bias can influence healthcare-professional decision making, and found that thirty-five out of the forty-two manuscripts reviewed report evidence for implicit bias in healthcare professionals across a broad range of categories (e.g., racial/ethnic, gender, age, weight, drug users, disability, and socioeconomic status). They also found that all the studies that examined and found that there was a significant positive relationship between the level of healthcare-professional implicit bias and negative effects on clinical interaction. While we currently lack strong evidence for a direct negative influence of implicit biases on clinical decision making, it seems unlikely that negative clinical interactions would not in some cases lead to worse treatment outcomes. FitzGerald and Hurst [1] highlight the need for more rigorous research in this area. The extent to which risk factors (so the increased chance of developing a disease) play in observed patient treatment outcomes also needs to be incorporated into these studies if the true impact of implicit bias on treatment outcomes is to be understood. Regardless, strong evidence exists that healthcare professionals exhibit at least the same levels of implicit bias as the wider population.

2.3. Health Equity. Health equity is equated to social justice in healthcare [13]. This means that everyone should have access to healthcare and should not be denied for being in a disadvantaged or vulnerable position. Health disparity is the metric used to measure progress toward achieving health equity. One of the goals of Healthy People 2030 is to eliminate health disparities that achieve health equity to improve the health of all. Social determinants of health include examining economic stability, healthcare access and quality, neighborhood and built environments, education access and quality, and healthcare access [13].

A call by the National Institute of Health (NIH) to eliminate health disparities should also be a priority [20]. Organizations like the NIH encourage healthcare professionals to think about how possible biases such as stereotypes and prejudice can contribute to disparities. The NIH call also encourages medical professionals to examine concepts from a patient's perspective and/or to avoid stereotyping them. Nursing faculty can help eliminate disparities from the outset of nurse training by reviewing their teaching materials and reflecting on their content.

2.4. Healthcare Education. Various U.S. organizations and accreditation bodies of healthcare education have recommended that implicit bias recognition should contribute to the equality of all in healthcare. The Joint Commission, for instance, recognizes that bias elimination should feature prominently in ongoing efforts to improve patient care [21]. Bias recognition and its elimination should not, though, be limited to the care setting and should also be weaved into the fabric of nursing education. The American Association of Colleges of Nursing [22] agrees and has called for racism, inequities, and the concepts of diversity and inclusion to be incorporated into the evolving landscape of nursing education in the United States. The growing groundswell of support for minimizing the influence of implicit bias in the U.S. nursing not only reinforces the idea that a paradigm shift in our underlying approach to nursing education is required but also that it is likely imminent.

2.5. Bias Legislation and Training. In the fall of 2021, the California Nurses Association added legislation that mandates. Educational training in implicit bias to be incorporated in the content curriculum for nursing students and graduates [23]. Michigan has similarly mandated implicit bias training for healthcare workers. Mandated healthcare training programs to address the effects of implicit bias also exist for some categories of healthcare professionals in Minnesota, Washington, and Maryland [24]. Many other states also have bills sat at various stages of the legislative process [24]. Although some notable U.S. states have not yet passed legislation like this (for instance, Florida and New York), their addition to the statue books of two U.S. states since 2021 is a welcomed first step in addressing healthcare disparities and how bias can create them.

To raise awareness of the role of implicit bias in nursing, Gatewood et al. [25] delivered implicit bias training to 110 nursing students (studying Bachelor of Science in Nursing = 13, Master of Science in Nursing = 33, and Doctor of Nursing Practice = 64) in four U.S. institutions using the Implicit Association Test (IAT) and a follow-up group discussion. Although this content addition is not legislatively required in most states and is not currently a mandatory part of nursing training in the United States, nursing educators may want to consider whether this type of tuition should be rolled out by their faculty.

2.5.1. Primary Prevention. Primary prevention is defined as an intervention designed to avoid a negative health effect before it happens. Examples include vaccinations, exercise, and healthy eating [26]. Training modules and other educational interventions are examples of how an institution can assist medical providers in learning about the implicit bias process and can strengthen cultural competence [18]. One way an educator can apply primary prevention to this scenario is to review and reflect on their own implicit bias. Initial tools one can use include the Harvard IAT [27].

2.5.2. Bias Test. The IAT, from Harvard University, is one way to be proactive about identifying one's own underlying bias and preferences [27]. The Harvard IAT has been used in hundreds of studies across various disciplines such as nursing, psychology, and political science by educators and researchers [27]. The subject undertaking this test is required to sort pictures or words into groups to form an association. The test measures the speed and strength of associations of various objects and people based on their striking of a keyboard. A performance report reveals bias with a particular group. Taking a bias test can lead to reflection about one's preferences and assist the educator to examine their own interactions and materials, and make necessary changes.

2.5.3. Bias Checklist. A check list can help an educator to identify those seeds by establishing how a faculty program might be accidently encouraging inequity through, e.g., exclusion or stereotyping. The bias checklist concept was developed by Dr. Amy Caruso Brown at Upstate Medical University in Syracuse, NY [8]. This checklist is free to use and is applicable to any healthcare teaching setting.

2.5.4. Purpose and Overview of the Upstate Bias Checklist. The Upstate Bias Checklist is intended to promote self-reflection on a specific type of content in nursing or other healthcare learning environments. Examples of content include case studies, PowerPoint slides, and test questions. The checklist uncovers possible bias in a faculty's educational materials. It provides the basis upon which a faculty can make changes or remove content that may engender bias or stereotyping in a student cohort. The checklist can be used at any level of nursing education or by other healthcare professions and can be adapted to the user and the setting in which they operate.

The bias checklist begins with a few general questions on the user's role, age, gender identity, and race. It then establishes the type of content being assessed and the program this content is presented in. Both implicit and explicit associations can exist between health and societal classifications, leading students to make assumptions that may impact care delivery [28]. The checklist can be used to identify if educational materials might lead to associations like this by encouraging stereotyping in nursing students when treating a patient.

2.5.5. Domains of the Upstate Bias Checklist. The Upstate Bias Checklist addresses thirteen domains that may show bias [28]. These include race, sexual orientation, stereotyping, mental health, substance abuse, poverty, and immigration status. Visual images/clinical vignettes are especially at risk for bias. False beliefs may turn into action against that specific type of person, based on race, religion, age, and sexual orientation. For example, when teaching about older adults, one can use a picture of a man or woman in bed, unable to get up, on oxygen, or using a cane. These images reveal that the educator may have made an assumption that function declines significantly when an individual gets older. Such beliefs may form stereotypes and prejudices about how we think about older adults when we care for them. When adding content on older adults to teaching material, I suggest the use of themes that promote them keeping active and not declining, with their functional status as this would be more appropriate for discouraging stereotyping of senior citizens by nursing students.

A similar argument can be made for the domain of sexual orientation. The Upstate Bias Checklist encourages a faculty to reflect on whether their teaching materials promote inequities if they mention sexuality and to review and revise content so that it includes a greater variety of sexual orientations. The checklist, therefore, advocates for more diversity in this domain by encouraging the use of teaching materials that promotes lesbian, same gender, or other diverse couples.

Overall, the Upstate Bias Checklist encourages reflection and recommends using racially and ethnically diverse pictures when depicting populations in teaching materials. Suggesting changes to be more inclusive is one of the main goals. Although the use of this checklist may not currently be mandatory at many U.S. institutions, faculty, and administrators in the United States interested in minimizing implicit bias in their curricula may want to use it to review their teaching materials.

3. Dissemination

Many healthcare institutions have mandatory training on racism and bias training in healthcare including webinars, surveys, and classes. Is it now the time to make this a part of the process of onboarding training or lecture prepping for faculty before they deliver their teaching content? The bias checklist can be applied to all levels of nursing education. It is never too late for continuous improvement and there are many ways to introduce a tool to help reveal bias in an academic setting. These include bringing the Upstate Bias Checklist to the table at a curriculum meeting for use or presenting it to colleagues in an informal brown bag lunch. It starts with learning the basics of examining teaching material for bias. Taking the checklist and applying it to one PowerPoint presentation, writing about it, and publishing your findings are other ideas. Alternatively, one could talk about how to decrease bias and ultimately racism at a conference. There is a plethora of ideas to share information and knowledge for a more inclusive and less biased environment.

4. Conclusion

Bias is a disproportionate factor for or against an idea or group of people; it is unfair and prejudicial. Individuals are unconsciously directed into patterns of bias for many reasons; one prominent example being by their education. In the case of the nursing profession, prejudices of this nature may have serious negative consequences for patient care, but often originate in the industry at an early state during a nurse's career and through their healthcare education. Talking about being biased is a taboo for some nursing educators as many do not believe they have bias, or they are unaware of their biases. Yet, if nurses review how unconscious bias is formed it will help their profession to reveal and dismantle it.

In this article, I have laid out the case for the problem of implicit bias and challenge my fellow U.S. nursing educators to help tackle this issue. I have also highlighted the Upstate Bias Checklist as a tool that healthcare educators could choose to help them to identify bias and formulate changes. Reviewing teaching materials for bias prior to teaching can also support an inclusive environment. The specific adjustments made are ultimately up to the nursing faculty member. Some may be in denial, and this can be viewed as a normal and natural initial reaction; but it is important to understand how implicit bias occurs so that one can understand why it is important to address and reflect upon it.

Everyone has a lens that they look through when viewing life, which is molded by the various experiences they encounter. Time limits in education and practice are both a potential barrier, and breeding ground, for bias. Yet, taking the time to reflect before and after interactions in practice and the classroom is a key to begin the process. Faculty must have a sense of humility to be able to take the steps necessary to uncover hidden biases. Engaging the broader community in this conversation will shine light on this salient topic.

The future calls for more proactive steps to prevent implicit bias. The ripple effect would be extraordinary since an educator's understanding of bias will permeate into practice and beyond. A chain reaction can start with a curriculum meeting, or a faculty member introducing this topic to their colleagues. The Upstate Bias Checklist can be used in any educational program about healthcare that involves people interacting with students and patients in various settings. Educators interested in minimizing implicit bias in faculty curricula (and especially those in leadership roles) may find it to be a useful tool to use as a routine part of the review of their teaching material prior to delivering content. In using it as such, both students and faculty can have a more trusting relationship and be open to the concerns of bias.

Data Availability

No data supporting this study were provided.

Disclosure

This paper is a creative controversy essay.

Conflicts of Interest

The author declares that they have no actual or potential conflicts of interest.

Acknowledgments

The author would like to thank Dr. Amy Caruso Brown for discussion about her bias checklist.

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