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Implicit Bias in Physical Therapy

Introduction

It is undeniable that implicit bias exists within physical therapy practice. Implicit bias is the unconscious judgment of diverse characteristics and unfortunately is present in society, healthcare, and every other industry. Healthcare workers and organizations should be prepared to recognize and respond to implicit biases based on thorough training on diversity and how it affects patient outcomes. Physical therapists and physical therapist assistants, as crucial healthcare workers, will learn in this course how to hold themselves and colleagues accountable for providing patient-centered care to all patients by eliminating their own implicit biases.

Implicit Bias Explained

Healthcare providers must know what implicit bias is and how it affects healthcare to recognize and respond to it. Although implicit bias spans humanity and exists within every industry, healthcare providers specifically must recognize their biases because they can directly affect patient's lives. Providers and healthcare organizations must improve their understanding of biases in the workplace to improve patient experience and even outcomes.

What is Implicit Bias? [1,2]

Implicit bias exists across the world in many capacities, and within every industry. Although the definition of implicit bias has existed since just 1995, it has roots in history. Implicit bias was first defined as a concept by the psychologists Mahzarin Banaji and Anthony Greenwald in 1995 as "social behavior being largely influenced by unconscious associations and judgments".[1] This bias is typically triggered by diverse characteristics from the person who has the bias. These include things like race, gender, age, and cultural differences. Prior to being known as implicit bias, this concept was called unconscious bias, and the two phrases are now synonymous.

The history of implicit bias goes back to slavery and the systemic inequalities that followed. Data from where the highest concentration of slavery present in America prior to the Civil War corresponds to proportionate levels of implicit bias today. Back in the 1800s, regions, and states that depended on slave labor developed their own set of laws and ideas that were passed on through generations and have permeated into modern times. Different states in the south passed "Black Codes" following defeat in the Civil

War which limited the freedom of Black citizens. Under these codes, black citizens were not able to buy certain properties and were forced to work if they committed a minor offense. After the Black Codes were overturned in 1868, “Jim Crow” laws took their place in the south (and in some northern states). These laws continued to restrict the rights of Black citizens through segregation of housing and all public buildings and prohibiting voting. The Civil Rights Act of 1964 and the Voting Rights Act of 1965 did overturn these notions and laws officially. Even laws that followed were equal among races still managed to put Black citizens at a disadvantage with matters like identification for voting and laws around drugs.

Slavery and the existence of laws that downgraded Black citizens are only recent history. This history is important to understand as it laid the foundation for implicit and explicit biases that exist in modern culture.

Explicit vs Implicit Bias

Implicit biases differ from explicit biases in a few distinct ways. While implicit biases are subconscious judgments, explicit biases are conscious thoughts. Explicit bias is traditional bias in the sense that people who possess it are aware of their thoughts and feelings towards groups who are different from them. Explicit bias in its worst form can elicit hateful actions, like hate speech, overt racism, and hate crimes. It can be more subtle as well, such as excluding people who are different. For example, a group of White children may exclude a new student from Japan from their social circles. Behavior such as this is intentional while behavior prompted by implicit bias is woven into the subconscious mind.

Causes of Implicit Bias [3]

Implicit biases are influenced by sources within and outside of oneself. When people meet, they often categorize their new acquaintance based on a similar person or group of people they had met before. This is stereotyping which also leads to implicit bias. Because there are a lot of factors at play, people from the same geographical area may have similar or different implicit biases based on their experiences. This section will detail suspected causes of implicit bias, although it is difficult to study based on subjectivity.

Historical Context [3]

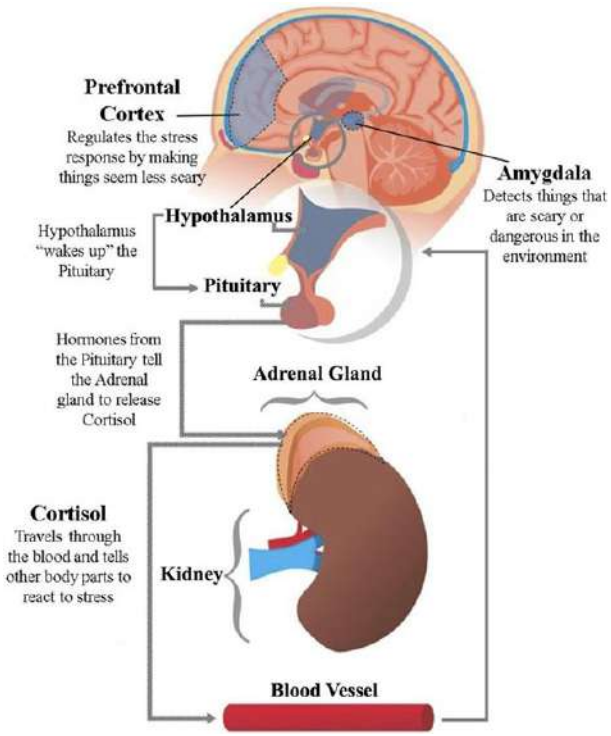
Historical events both affect the bias of people while they are happening and also retrospectively. It is clear that the historical context of slavery all over the world followed by systemic racism has shaped the beliefs of society. Events in other countries besides the United States develop into implicit biases of US citizens and across the world. These events then shape the views of US Citizens when people from other countries migrate to the United States. Things like political views, war, and media fuel biased thinking as people tend to stereotype events to people.

Early Experiences [3]

Implicit biases are based on foundational experiences as children while explicit biases are more likely based on recent experiences. Children raised by their mothers more than a paternal figure are more likely to demonstrate an implicit bias against men when it comes to stability and safety. If children preferred either gender for a parent (mother versus father), that develops into a bias to prefer that gender as an adult. For example, if a girl prefers her father as a parent, she may be more likely to have a bias towards trusting and befriending men over women as an adult. As far as race goes, children learn attitudes towards other races from their parent's beliefs. Parents can influence the beliefs of children until they are in late adolescence and begin to develop their own identities. Children are easily influenced by both parents and the world around them. This makes it crucial for children to have positive experiences around other races, so they do not develop only negative thoughts about diversity.

The Role of Neuroscience [4]

Another cause of implicit bias is the development of memories that are based on emotions, such as fear, and how the brain processes this in real time. There are specific parts of the brain that process fearful experiences including the amygdala, prefrontal cortex, the posterior cingulate, and the anterior temporal cortex. When someone experiences a threat or fear, their amygdala, responsible for the "fight or flight" response takes over. This causes the hypothalamic-pituitary-adrenal axis to release stress hormones such



https://kids.frontiersin.org/articles/10.3389/frym.2017.00071

as cortisol and epinephrine so the body can prepare to instinctually protect itself. After the immediate threat has passed, the prefrontal cortex allows rational thought and calms the body down, downregulating the stress hormone release. The posterior cingulate plays a role in linking the amygdala to the prefrontal cortex and the anterior temporal cortex commits these instances to semantic memory.

The human brain stores fear better than most memories and has an entire pathway to react to a threat. This is rooted in survival from human evolution in times when humans were risking their lives to hunt against predators.

This concept of fear and the response to it applies to implicit biases where people have a response to a difference (usually racial) and detect fear based on certain ingrained beliefs. People may or may not have firsthand experiences to develop this bias either. Things like sensationalized media which portrays more violent crimes involving nonwhite people and movies that portray nonwhite people as more dangerous can lead to the detection of nonwhite people as threatening.

Cultural Bias [3]

Cultural beliefs without a doubt shape biases. Groups at a high status economically or with resources will have more implicit biases about diverse groups than those with a lower socioeconomic status. The societal goals of being wealthy, physically attractive, going to college and many other factors can give high-achieving or high status a sense that they are better than other people who have not had these opportunities. This bias is proven to be true across the board with people who are part of any group, whether that involves socioeconomic status, religion, or education level. People part of any group have an implicit bias to prefer people that represent society's goals (highly educated, wealthy, etc.). In addition to this concept, people who feel like they are a crucial part of a group of any sort have a stronger negative bias towards people outside of the group. This means that groups of friends, colleagues, and people with the same religious beliefs stereotype or find other groups of people as inferior, or even dangerous.

Section 1 Key Words

Explicit Bias – negative thoughts, judgments, or speech that is processed on a conscious level

Black Codes – after slavery was abolished were laws that prohibited Black citizens from buying certain properties and easily incarcerated Black citizens

Section 1 Summary

Implicit bias is an unconscious bias that people have when thinking of differences from themselves. This differs from explicit bias in that it is processed on a conscious level. Implicit bias is caused by historical events and early experiences and can be explained by amygdala activation and neuroscience. People in any type of like-minded social group often have higher degrees of implicit biases than a person alone.

Diversity and the Effect of Implicit Bias

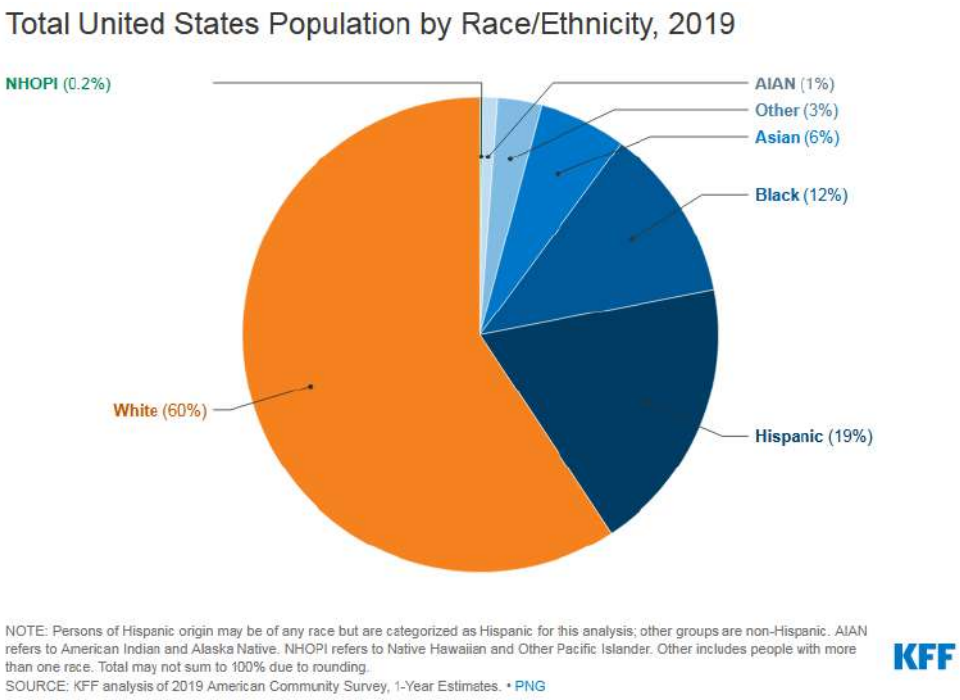
America is a diverse nation, with around just sixty percent of people being White, which makes implicit bias an unfortunate reality. Healthcare providers should attempt to understand the cultures of the populations they treat to bring awareness and provide care appropriately.

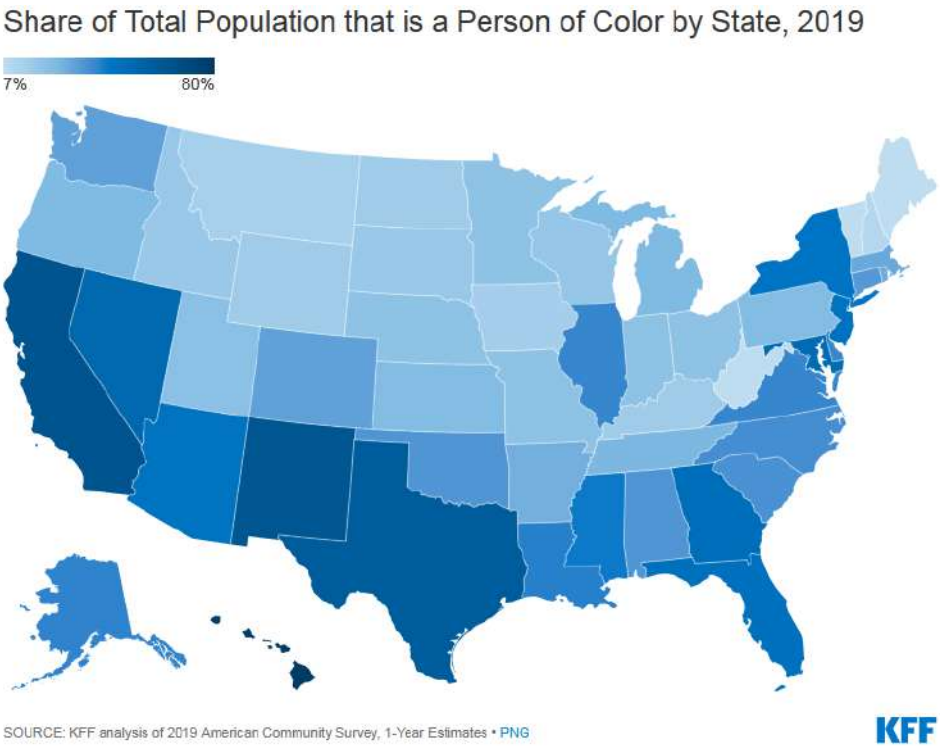
Cultural Competence [5–7]

The concept of cultural competence means that a person understands, respects, and communicates with people who have different beliefs or cultures. Culture includes language, beliefs, communication, customs, values, and social, racial, ethnic, and religious groups. To have cultural competence a person or an organization must self-assess their biases and adjust to the cultural beliefs of those around them beyond recognizing and respecting other cultures. This is a challenge in regional areas of America that are not diverse. Around sixty percent of Americans are white, twelve percent are African American, nineteen percent are Hispanic or Latino, six percent are Asian, and one percent are Native American. In addition to the majority of people in the United States being white, rural areas are much less diverse than cities. Urban areas have a white population of around 44 percent while rural areas have a white population of 80 percent. The geographical area of residence is one of the largest contributors to diversity in America. The South is more racially diverse than the North, as over half of the United States Black population lives in the south. Eighty percent of the United State's Hispanic population lives either in the West or the South.

The United States has one of the highest immigrant populations in the world. Around forty million of the United States population is an immigrant and people from nearly every country in the world reside in the United States. One-quarter of US immigrants come from Mexico, six percent come from China, six percent come from India and the

remainder from many other countries. Of the immigrant population in the United States, around half speak proficient English. These facts point to the need for healthcare workers in specific geographical areas to be aware of diversity and the cultural differences that this diversity brings in terms of language, healthcare experiences, and cultural identity. Healthcare providers are also patient advocates and need to be aware and change any bias against cultures to provide the best possible care.





Social Determinants and Barriers to Healthcare [8]

Social determinants are general factors that affect a person's ability to succeed in their environment. These include things like healthy foods, education and vocation opportunities, and resource availability. Social determinants of health are aspects of health that are impacted by one's social environment. These include financial stability, education, health/access to healthcare, neighborhood, and social connections. These key determinants are all affected by other nuances such as where someone grows up, live, their beliefs, their religious practices, recreation, and their age. Specifically, with healthcare, values and beliefs, access, and barriers play a huge role in experiences around healthcare. The domains around social determinants relate to each other immensely. For example, neighbors and social groups may believe certain ideals around health issues, be educated in the same manner, and be in a similar socioeconomic situation. Often people from the same community, financial stability, and educational level have similar views on health and healthcare. An example of this is someone not believing in the COVID-19 pandemic, vaccinations, and masking efforts because their family and church members do not believe in it.

Physical therapists must be aware of how social determinants of health and barriers to accessing healthcare affect patient care.

Age [9]

Ageism is widespread in American society and is the belief in certain qualities based on stereotypes around age. In healthcare, worse outcomes may occur if providers generalize their patients based on age. Ageism concerning health usually assumes that older adults are in worse health than younger patients and have unhealthy habits (smoking, drinking, poor diet). Providers may make more general recommendations and not aggressive treatments which may be more effective in their older patients. Explicit ageism is conscious and can be vocal whereas implicit ageism is like implicit bias in that it is on a subconscious level.

Even providers with good intentions may develop ageism as an implicit bias, which worsens outcomes for patients. Providers working with elders may speak in simple terms or with a tone that infantilizes patients. This is not only demeaning to some elders, but it can also make elders less willing to participate in healthcare treatment due to feeling misunderstood. Providers may also mistake patients who are elderly to be inactive and dependent on others. A study found that providers working with elders will spend less time with and communicate more simply with elders, making it more difficult for elders to feel supported compared to their younger counterparts. This was found to be true even among social workers speaking to elder adults about their cancer diagnosis.

Ageism can also affect young patients, such as children and adolescents, who may be perceived by providers as not having the ability to contribute to their care. In addition to that, providers may dismiss the concerns of younger adults due to the levels of health of typical young people. Society and healthcare providers expect that young people are healthy. For example, a young woman may state that she has worsening painful menstrual cycles and a provider may tell her that this is normal in young women without offering a further evaluation.

Financial [10]

It is no secret that healthcare is expensive in the United States and dependent upon employment for the best rates. People who are unable to obtain employer-based insurance must find their insurance on the insurance marketplace, where premiums are unaffordable for many. Financial barriers to seeking care mean that around 16 million Americans have not pursued or delayed healthcare because of cost. This increases costs

to the healthcare system overall by implementing more costly interventions that could have been treated with simple preventative interventions. Physical therapy services are often limited to a number of visits per year and are associated with high copays or coinsurance costs.

Older adults may not seek healthcare due to excessive costs, even when they are insured by Medicare. Out-of-pocket expenses are high for people insured on Medicare if they do not carry a supplemental plan. About fifteen percent of people younger than 65 years old are uninsured and delayed seeking care until an emergency due to excessive costs. A barrier to seeking care in the United States is cost, and this occurs with people who are elderly and younger than 65 due to the potential for poor insurance coverage. The cost and balance of healthcare expenses with other expenses such as rent, groceries, and transportation, is one of the largest barriers to accessing healthcare services.

Education [11]

Education around health contributes to better health and outcomes in seeking care. Health literacy is a concept illustrating the ability of a person to understand health concepts and make informed healthcare decisions. People who are educated at the level of college or beyond tend to be healthier. This is due to many factors including working jobs with more benefits such as paid time off and health insurance, higher wages, and more resources. People with higher wages and fewer working hours that are associated with college-educated jobs are able to spend more time exercising and shopping for and affording healthy foods. They also can afford convenient transportation rather than relying on others or public transportation for getting around. People of lower financial means will focus on making ends meet, such as finding housing, food, and paying for utilities rather than seeking good nutrition and preventative healthcare. People who are educated also have much lower unemployment rates than those without a high school diploma. Unemployment for a Bachelor's degree up to a graduate degree is less than 4.5 percent and this rate is about 12.5 percent for people without a high school diploma.

People with more education will typically have large social networks, have better coping strategies, and their lives are typically less prone to economical hardships. Having education enriches the rest of the social determinants of health including social support, financial resources, and access to employer-sponsored health plans. Physical therapists and other healthcare providers should keep in mind someone's educational level and employment status when providing care because it may explain someone's health

literacy. However, providers should never stereotype someone with little education as illiterate with health because that is unfair bias.

Race [12]

People who are Black, Native American, Alaska Native, Hispanic, or Pacific Islander receive consistently worse healthcare than white people in the United States according to the 2019 National Healthcare and Disparities Report. The attitude of healthcare providers leads to worse healthcare for people who are not white due to many factors. Providers may feel that people who are not white are automatically less educated, less able to pay for care, and less likely to follow up with recommendations. This means that these implicit biases lead to providers delaying important care or even selecting less effective treatment options. In physical therapy, this could look like a therapist not recommending certain exercises because the therapist doubts that his Black patient will not follow through with recommendations.

Sex [12]

Medical professionals also have attitudes about sex and gender that affect healthcare decisions for their patients. Women are dismissed more than men for issues like treatment for chronic pain. Providers, including physical therapists, consider pain in women to be more emotional, and pain among male patients to be more legitimate, along with the belief that men have a higher tolerance to pain. This may lead to physical therapists prescribing harder and more beneficial exercises to their male patients, allowing them to progress more quickly than their female counterparts.

Transgender people also are immensely affected by the beliefs of their healthcare providers and are among the most dismissed group of people seeking healthcare. Transgender people face blatant judgment from healthcare providers, which effectively causes a delay in their future desire to see healthcare professionals. This group has had to fight for the right for hormone replacement therapy and transition surgeries, often having to go to multiple providers to find one who will provide compassionate care. People who are homosexual also face barriers to care among the views of healthcare providers. Around 80 percent of medical students in a survey found an implicit bias against people who are homosexual. As a result, avoiding treatment is common in this community which contributes to higher rates of heart disease, substance abuse, obesity, suicide, and cancer.

Location [11]

A person's residence and work location play a role on healthcare barriers as well. People in low-income and less educated neighborhoods usually have a lack of resources that allow for good health. Many people in low-income neighborhoods do have access to government aid like food stamps but may not have healthy options to utilize them because they live in food deserts. A food desert is a geographical location where there is truly little access to affordable and nutrient dense food. This is typical in low-income neighborhoods because many residents would have to pay for public transportation which is costly and time consuming, to travel to a grocery store that has healthy food rather than the one within walking distance with poor nutrition.

In addition to poor food quality, lower income neighborhoods experience higher rates of violent crime and higher toxin levels such as pollution and industrial chemicals. Public schools in low-income areas do not fund schools well and therefore have a challenging time recruiting teachers at respectable salaries. Children who grow up in low-income neighborhoods are at substantial risk of behaving like the people they observe, which can include drug dealing and criminal activity. On the contrary, children who look up to their neighbor who is a lawyer may want to emulate that career choice. All of these factors in a neighborhood contribute to ideas around health and impact access to quality healthcare and healthy choices. Physical therapists should consider the social and residential situation of their patients as this impacts resources for completing exercises, access to healthy food which accelerates tissue healing, and access to gym equipment for general health and improving habits.

Religion [13]

Religious beliefs can be a health disparity if people of certain religions do not believe in seeking healthcare, or if they are uncomfortable doing so. People of the Islamic religion have difficulty finding providers who accommodate their beliefs. They seek same sex providers, avoid cesarean section, have negative attitudes towards birth control, and experience discomfort with gynecological care. Certain religions, including Islam, value placing their trust in their religion over healthcare providers even when seriously ill. Healthcare providers with medical training, believe that medical care is the best treatment but should never undermine the beliefs of their patients.

Disabilities [14]

Providers may have attitudes towards people with disabilities and potentially see them as less capable than others. Around 60 million Americans have a disability of some type. According to a survey among the opinions of physicians about people with disabilities, around 80 percent of physicians believe that people with disabilities have a mediocre quality of life, around forty percent thought they could give adequate care to people with disabilities, and about half of physicians felt comfortable treating someone with a disability. This is troubling because these beliefs will lead to decisions about care, such as not pursuing certain treatments because of disabilities or making assumptions that people with disabilities would be unable to follow up with recommendations.

Healthcare Attitudes [15]

Patients may have beliefs around health topics that oppose the beliefs of a provider. This was especially common with the COVID-19 pandemic around the relevance of vaccinations and masking procedures. The varying recommendations on vaccinations and the initial dissemination of such contributed to the varying opinions and concerns regarding the safety of COVID-19 vaccines. Recommending vaccination left many people fearful of being infected and opinionated on the safety of COVID-19 vaccines. There were ample information sources on the safety of vaccination and the necessity of masks and social distancing, but it was difficult to find trustworthy information sources. The same could be said regarding the safety of vaccination, necessity of masking and social distancing. Different groups of people within families, political groups, educational status, financial status, etc., flocked to certain information sources as a group. This led to not thinking individually on issues about the pandemic and the development of conspiracy theories. Due to this inconsistency of information, multiple conspiracy theories were developed Attitudes regarding vaccination have affected healthcare outcomes. Statistically, it has been shown that those who are unvaccinated have higher hospitalization rates due to the severity of their infections. Refusing to wear masks has prevented some patients from receiving medical care as most healthcare facilities require such. It has even prevented some patients from using healthcare at all because they refused to wear mandatory masks in healthcare facilities. The ability for physical therapists to achieve functional outcomes is dependent upon attendance. Physical therapists and other healthcare workers who worked with people with active COVID-19 infection may have had attitudes towards the pandemic themselves. Many providers also were unvaccinated and did not want to provide services to COVID-19 patients due

to fear of becoming infected themselves. This resulted in limited resources to treat patients with COVID-19 and burnout among healthcare providers.

The Effects of Implicit Bias [16–18]

As one can imagine, implicit bias has many deleterious effects in healthcare. Healthcare professionals have the same level of implicit bias as society at large and the stakes are high when providers are not able to recognize and improve upon their biases. As mentioned previously implicit biases may develop from differences such as race, gender, socioeconomic status, education level, sexual orientation, and religious beliefs. The biggest problem with implicit biases is judging a person on typically their outward appearance, and this permeates all industries and countries in the world.

Within healthcare, implicit bias has profound consequences for patients. In a large systematic review[16], results found that there was a correlation between higher levels of implicit bias and worse quality of care. Healthcare providers who have biases against certain populations of people will without a doubt treat those people with less compassion and less effort than those they do not have a bias against. The largest effect of implicit bias is on treatment decisions, treatment adherence, patient interactions, and health outcomes. One study found that physicians dominate conversations with their Black patients, not allowing them to participate in care decisions as much as their White patients, and Black patients rate their providers as having little respect for them in patient care. It is proven that people of color have higher rates of morbidity, mortality, health status, and premature death. Black, Hispanic and Indian Americans often rate their health as poor compared to White and Asian Americans who rate their health as good.

To illustrate disparities in insurance coverage, four percent more African Americans do not have health insurance compared to non-Hispanic whites. In addition, around 45 percent of African Americans have government health insurance rather than employer-sponsored insurance. In addition to this, people of color in the United States are sicker with chronic diseases than white people. Eighty percent of Black women are overweight or obese compared to sixty five percent of non-Hispanic white women. Black citizens of the US have hypertension at a rate of forty two percent compared to White adults at a rate of twenty-nine percent. African Americans experience mental health issues just as often as White people but receive mental health treatment at a rate of ten percent less than White adults. Black Americans have a higher death rate from cancer than any other ethnic group.

Hispanics in America have a rate of being uninsured at ten percent less than White adults and around forty percent of Hispanics have government-sponsored health insurance rather than employer based. Around eight percent more Hispanics compared to White people have diabetes and around one fourth have hypertension. Mental healthcare is less available for Hispanic people as around ten percent fewer Hispanic people receive mental healthcare compared to White people. Suicide rates are also forty percent higher among Hispanic females than White females.

Asian Americans are two times as likely to have chronic hepatitis B, are eight times more likely to die from hepatitis B than the White population, have forty percent higher rates of diabetes than the White population, and are eighty percent more likely to have end stage renal disease.

Knowing these disparities and conditions that different races suffer from is crucial to treating a diverse population. Physical therapists and other health practitioners should know that rates of disease are due to genetic components, environment, lifestyle, and access to healthcare.

Section 2 Key Words

Cultural Competence – the ability to comprehend and interact with people with cultural beliefs different from oneself

Ageism – implicit or explicit beliefs to act or think certain things about different age groups

Section 2 Summary

The effects of implicit bias impact millions of racial, age, and financial diversity in the United States. Social determinants of health, like financial means, healthcare access, social connections, neighborhood, etc., play an influential role in someone's experience in obtaining healthcare. Providers should strive to recognize this bias, become culturally competent, and provide the best possible patient care.

Responding to Implicit Bias

Implicit bias has deleterious effects on patient care as mentioned in prior sections. The only way to improve care for diverse populations is to recognize and respond to implicit

bias so that each individual receiving healthcare is treated with equity. Everyone deserves access to great healthcare and should never be denied certain care based on the biases of providers.

Recognizing Implicit Bias [16]

The first step to responding to implicit bias in healthcare is for providers to recognize they have implicit biases. Not many people want to have these unconscious biases, so it is difficult to admit when one could have biases. This points out the need for a test that detects implicit biases. The most widespread test out there is the Project Implicit Disability Attitudes Implicit Association Test.

Implicit Association Test [19]

Available at https://www.projectimplicit.net/, any organization or singular person can take an implicit association test which tests for biases against many diversities. These include weight, race, gender, religion, sexuality, transgender, and disability. The test associates words and diverse characteristics (for example dark versus light skinned images of people) with good and bad, requiring the test taker to quickly sort the words and images. The tests are free, give the participant instant percentages of their preferences of a control group and a test group of people, and collect data on biases from a questionnaire that also gathers demographic and geographic information of test takers. Rehabilitation professionals should take a few of these tests depending on which populations of people they treat. There are tests on races including Asian, Native American, Arab, Black, and skin tone, a test on weight, and a test on disabilities. These tests in particular would allow providers to determine their level of implicit bias so they can work to change this and provide more equal patient care.

In a systematic review examining the biases among healthcare professionals versus the general population, similar levels of implicit biases occurred in both groups. This means that healthcare professionals and the general population have low to medium levels of implicit bias against all people of color (most notably Hispanic and Black citizens) and categorize Black Americans with negative words compared to White Americans. It was evident in this review that healthcare providers associate Black citizens with poor cooperation, compliance, and responsibility with their health. Similar levels of moderate implicit bias occur in the general population and healthcare professions alike. Recruiters are another example of a profession with moderate levels of implicit bias which may

impact hiring processes. Knowing that similar levels of implicit bias occur in most professions, it is crucial to recognize this on a systematic level.

Eliminating Bias in Healthcare [20]

Once an organization or professional recognizes implicit bias, there are many steps to take to eliminate it. Typically, high success is achieved if organizations work to educate their staff on how to lessen implicit biases within their job duties. An example of bias training was completed at the University of Washington (UW) School of Medicine where health professionals took a course on implicit bias and the implications in healthcare. The course improved bias awareness on race and gender implicit biases no matter what capacity they worked in patient care. Several resources exist for organizations to adopt bias mitigating strategies. Ideally, a healthcare organization would require system wide Implicit Association Tests which would monitor implicit biases. Then, they would implement programs that create skills in recognizing and responding to implicit biases among themselves and colleagues. Excellent workplace diversity practices include education and reporting methods for observed bias. The UW School of Medicine has an example of an online reporting method for the observation of a biased incident, which gives the message to the Human Resources Department for action.

At the university level before students become medical providers, faculty should implement materials that portray diversity in medical staff and role models. They should also ensure that all course material contains inclusive language.

Active bystander training prepares clinicians to act when they observe implicit or explicit biases among coworkers. One who acts as an active bystander would point out things like negative word choice in documentation and patient interactions. Clinicians individually should practice conscious efforts to recognize and reform their thinking around implicit biases that they may have. For example, after taking an Implicit Association Test which associated Black people with negative words at a moderate level, a healthcare worker may practice associating positivity with all Black patients they interact with. Repeating word associations that point out positive aspects of the patient, like “intelligent”, “informed”, and “kind” will allow these thoughts to eventually permeate the unconscious mind if it becomes a practice. It is only with practices to eliminate bias in healthcare that providers will be able to give patient-centered care to all of their patients, regardless of race, disabilities, weight, and many other factors.

Resources [19,21,22]

As mentioned above, resources are available to manage diversity and implicit bias in healthcare organizations.

The National Institutes of Health has developed comprehensive healthcare training on how to build skills and the foundation for great workplace diversity and inclusion. This includes hiring procedures, education on bias mitigation, and a review of employee performance around implicit biases. These resources are available at https://diversity.nih.gov/.

An example of a tool that allows healthcare workers to report instances of observed bias is available at https://depts.washington.edu/hcequity/bias-reporting-tool/.

Project Implicit is the resource for free Implicit Association Tests that anyone can take prior to and months after a bias training to track improvements in their biases. These tests are available at https://www.projectimplicit.net/.

As organizations continue to respond to workplace implicit bias, more resources especially in the healthcare sector will be developed. There is no excuse for healthcare organizations to avoid implementing these trainings, especially in diverse areas of the country.

Section 3 Key Words

Implicit Association Test – used to determine associations and implicit biases between stereotypes and groups of diverse characteristics

Section 3 Summary

Recognizing and responding to implicit biases is important on both an individual and an organizational level in healthcare. If no one takes action to reduce implicit biases, patient-centered care is not possible due to unconscious negative associations between providers about their patients. Providers need to be trained to recognize and respond appropriately to their own and their colleagues' biases to improve this issue within healthcare.

Case Study

Angela is a physical therapist who just finished a treatment with a fifty-five-year-old Black woman who sustained a left middle cerebral cerebrovascular accident a few days ago which has left her with significant aphasia. Angela works in a hospital in Northern Minnesota with an 80% White population. Angela notices that there were no communication boards within the room, that the trash bins on the floor were full, and the patient did not have the remote control in reach for the TV and lights in the room. The call light had also been on for an extended period before Angela had entered, and Angela noticed this patient's Registered Nurse, Carol, was talking with coworkers about the weekend. No other call lights were on in the hallway.

Reflection Questions

1. What should Angela do in this situation to address concerns that her patient's needs were not being met by Carol?
2. If Carol states something like "At least she has a home and the ability to eat here", what could Carol be insinuating?
3. What should Angela do after hearing Carol state an explicit bias like this and what is the purpose of this action?

Responses

1. Angela should communicate with Carol, asking why there was a delay in answering her call light and the utility of communication boards to aid this patent's communication.
2. Carol could be implying that this patient must be homeless. This is a judgment based on her race because Carol has not tried to communicate with her patient in a couple of days. This is an explicit bias, accompanied by the likelihood of implicit biases around her patient living in a bad neighborhood and having little financial means.
3. Angela should follow her organization's protocol for reporting bias incidents, and if her organization does not have one, she should contact the nursing supervisor and Human Resources staff. This action is crucial in recognizing and responding to

implicit and explicit bias so that Black and other diverse patient populations can receive patient centered care and better health outcomes.

Conclusion

Implicit bias exists within healthcare on similar levels as society at large. However, physical therapists and other healthcare providers should be held to a higher standard in eliminating biases in treatment because it negatively affects patient outcomes and national health. All healthcare workers should take an Implicit Association Test and diversity and inclusion training to mitigate their implicit biases. Only through the detection and response to implicit biases in healthcare, patient outcomes in diverse populations may be equal to nondiverse populations in the United States.

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