

Servant Leadership Meets Health Equity: Examining the Causal Comparative Impact of Black Health Disparities and the United States in the First States to Mandate Implicit Bias Training

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Abstract: *The racial health disparities gap is widening in the United States. This analysis employs a non-experimental, quantitative, causal-comparative approach to support the study's findings. The rates and percentages of Black and National variables were compared to highlight devastating and disproportionate Black health disparities. The data focuses on statistics from some of the first states to require healthcare professionals to take implicit bias training. The health disparities chosen are the most prominent ones plaguing the Black community. Additionally, the article will examine how improving organisational behaviour through the implementation of servant leadership can help reduce Black health disparities. The research will highlight Black health disparities, implicit bias, organizational behavior, and servant leadership. The study shows that healthcare professionals can become aware of their implicit bias and lead ethically by shifting the organisational behavioural approach toward servant leadership. It also revealed that servant leadership provided a more compassionate, caring, empathetic, selfless, and nurturing form of care that will build trust amongst Black patients and patient-provider relationships, lessening Black health disparities stemming from subconscious implicit decisions. The researcher tested the methodology and found that the data provided a comparative analysis between variables, revealing the prevalence of Black health disparities in the United States; however, the study did not establish causal inference or a cause-and-effect relationship.*

Keywords: *Servant Leadership, Implicit Bias, Black Health Disparities, Health Equity, Organizational Behavior, Medical Ethics.*

I. INTRODUCTION

According to the National Census Bureau, African Americans make up just 12.4% (41 million) of the population of the United States but suffer from health disparities at disproportionate rates [40]. Additionally, Black women are alarmingly 2-3 times more likely than white women to tragically die from preventable complications during childbirth, highlighting a critical maternal health crisis that demands immediate attention [15].

Manuscript received on 14 February 2024 | Revised Manuscript received on 26 February 2024 | Manuscript Accepted on 15 March 2024 | Manuscript published on 30 March 2024.

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According to Siden et al. (2021, 10% of Black mothers report suffering mistreatment in hospitals due to their race, far surpassing the mere 3% of White mothers who experience similar issues [32]. One factor that fundamentally contributes to disparities is implicit bias, an attitude that unconsciously affects our emotions, understanding, and decisions. Furthermore, Nanney et al., 2019 suggest that reducing racial inequality and eliminating avoidable deaths means approximately 475 to 812 lives saved annually, translating into \$1.2 billion to \$2.9 billion per year in economic savings [28]. The basis of this non-experimental quantitative causal comparative study stems from the first states (California, Maryland, Michigan, Minnesota, and Washington) that recently passed legislation mandating implicit bias training for healthcare professionals [13].

A. Statement of the Problem

According to the CDC, racism in healthcare, both interpersonally and structurally, negatively affects millions of individuals [9]. This racism prevents individuals from attaining higher levels of healthcare and consequently affects the overall health of the United States [9]. Tucker et al. (2014) found that the cultural competency of healthcare providers is a demonstrably effective best practice for reducing chronic disease disparities, which can positively impact provider-patient interactions, patient engagement, and adherence to treatment plans [36]. Additionally, African American women are nearly 50% more likely to have high blood pressure than non-Hispanic white women [41]. Black women are also 40% more likely to die from breast cancer, and Black men and women are 30% less likely to receive revascularization in coronary angioplasty [19]. Revascularization refers to medical treatments that restore blood flow to parts of the heart when the flow is limited or blocked [8]. Due to increasing concerns about healthcare disparities, promoting physician cultural competence has become a priority [27]. Research shows that Black people have significantly higher rates of diabetes, heart disease, and hypertension than other groups; in addition to this, Black children have an asthma death rate that is 500% higher than white children [43]. Moreover, according to Gordon (2022), it is estimated that these health inequities will cost approximately 1 trillion dollars by 2040 if left unaddressed [18]. However, despite these findings, limited research draws reference to Black health disparities and implicit bias.



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Given this information, the researcher will conduct a comparative analysis of Black health disparities in the first states that require implicit bias training for healthcare professionals, alongside health disparity statistics for the United States.

B. Purpose and Significance of the Study

This study aims to fill the knowledge gap by providing research on Black health disparity statistics in the first states that require implicit bias training for healthcare professionals, compared to national statistics in the United States. This research audience comprises professionals in healthcare, medicine, organisational management within healthcare systems, organisational behaviour, healthcare finance, health equity, healthcare management, and medical ethics boards. Furthermore, this research offers valuable insights for other states that wish to and need to implement implicit bias training within the healthcare industry.

II. RESEARCH QUESTION AND HYPOTHESIS

A. The Research Question of the Study is as Follows:

To what extent does the prevalence of implicit bias among healthcare providers in the first states to require implicit bias training contribute to increased Black health disparity mortality rates in those states, compared to the rest of the United States, independent of other socioeconomic and demographic factors?

B. The Hypothesis of the Study is as Follows:

H0: Black Americans experience higher health disparity mortality rates across the first states to require implicit bias training compared to the rest of the United States, and implicit bias among healthcare professionals significantly contributes to these disparities, independent of other socioeconomic and demographic factors.

H1: Black Americans do not experience higher health disparity mortality rates across the first states to require implicit bias training compared to the United States, and implicit bias among healthcare professionals does not significantly contribute to these disparities, independent of other socioeconomic and demographic factors.

III. ASSUMPTIONS AND LIMITATIONS

The assumptions and limitations of the research include transparency, human error, and statistics [43]. The transparency of healthcare providers and employees may not be fully transparent and may be influenced by their biases and subjectivity. The limitation of human error is unavoidable and exists in many research studies due to the subjectivity and bias inherent in every human being, whether they are aware of it or not. The data from this research originates from secondary sources, including state, government, national, and nonprofit entities; some statistical information may vary depending on the data collection method (i.e., rates, percentages, and years). Additionally, due to the nature of the analysis, the data cannot prove conclusive causal inference.

A. Definitions

Below are some terms and descriptions used throughout this research:

- Black Health Disparity – Systemic differences and structural barriers, encompassing factors such as adverse environmental exposures, elevated chronic disease burden, increased violence risk, compromised maternal and child health outcomes, limited access to healthcare and insurance, heightened mortality rates, and reduced life expectancy, disproportionately burdening the Black community [1].
- Health Disparities- Preventable unjust gaps in health outcomes plague disadvantaged communities, leading to higher burdens of disease, injuries, and violence and hindering their ability to thrive [12].
- Health Inequities- A systematic difference in the health status of different population groups [44].
- Implicit Association Test (IAT)- an online computer-based test that measures differences in response latency to reveal implicit bias [6]. During this test, participants are given stimuli such as pictures, words, or labels and must categorize them into opposing classifications as quickly as possible [3].
- Implicit Bias- Unconscious attitudes and beliefs that impact behaviors like body language, tone of voice, receptivity, or decision-making—affect treatment decisions and outcomes [32].
- Organizational Behavior- Focuses on understanding how people behave in corporate work environments. O.B. covers three primary levels of analysis: micro (individuals), meso (groups), and macro (the organization) [4].
- Servant Leadership- Crafted by Robert Greenleaf, servant leaders embody characteristics such as empathy and compassion, persuading the people who follow them to adopt the same characteristics to care for others in the same way [21].
- Structural Racism- Structural racism weaves a web of inequitable systems, from housing segregation to biased algorithms, that disproportionately burden communities of colour. This web reinforces discriminatory beliefs and resource distribution, perpetuating a historical legacy of injustice [2].

IV. THEORETICAL FRAMEWORK

This study will examine the theoretical design and framework of the Servant Leadership Theory. Robert Greenleaf first crafted servant leadership in the early 1970s, but a definition was not developed until later in the decade [21]. Servant Leadership happens when the leader's primary goal and responsibility is to serve their people [35]. Servant Leadership's behavioral characteristics of empathy, compassion, and a commitment to healing create a ripple effect, fostering a healthy and well-connected workforce while building trust, collaboration, and sustainable relationships with their community [24]. Additionally, a servant leader focuses on the people directly below them rather than the company. This type of leader ensures that the followers grow in all areas — their profession, knowledge, autonomy, and health and physical development [35].



Servant Leadership Theory has not been a prevalent topic since its inception in the 1970s. More recently, servant leadership has generated significant attention in literature for its comprehensive approach to leading [23]. According to Mezu-Ndubuisi (2021), servant leaders hold one another accountable for promoting equity and diversity and put their employees' priorities first [25]. They are doing so by helping them grow as individuals to become healthier, wiser, more accessible, more autonomous, and more likely to serve others [25].

In addition to diversity and inclusion initiatives, leaders of medical institutions should examine existing structures, policies, procedures, and workplace cultures to identify and address hidden or inherent systemic inequities. Organizations should also work to initiate more inclusive and equitable remedies that confer value to every staff member, regardless of sex, race, or ethnicity [25]. Since there are numerous positive benefits, servant leadership is reflected by many as the best leadership model to address the difficulties facing the healthcare industry [33], [34], [31].

Since data shows structural racism is the leading cause of Black health disparities, servant leadership is vital for healthcare managers and providers to focus on empathy, compassion, integrity, trust, helpfulness, respect for others, and empowerment. Mezu-Ndubuisi (2021) emphasizes that authentic servant leadership is not authority but the philosophy of leadership in which the leaders aim to serve the people working for them [25]. Servant leadership holds individuals accountable for promoting equity and diversity. Medical leaders and institutions must investigate existing structures, policies, and workplace cultures to expose these inherent systemic inequities [25]. Additionally, diversity strengthens and determines the productivity and success of all institutions [25].

V. LITERATURE REVIEW

A. Servant Leadership

Mezu-Ndubuisi (2021) states that as medical institutions acknowledge the effects of social determinants of health on racial/ethnic minority populations, leadership should also address the impact of systemic racism and unconscious bias on their staff [25]. Authentic leadership is not authority but humble service—servant leadership [25]. Humanely treated employees are more likely to allow themselves to gravitate toward their moral conscience, independent of religion, culture, geography, nationality, race, and sexual orientation [25]. The article exemplifies the need for servant leadership in healthcare institutions and presents the moral and ethical principles they wish to promote in their organization [25]. (Tucker et al. (2011) explain that culturally competent healthcare systems are a powerful tool for tackling chronic disease disparities, empowering patients, improving patient-provider interactions, and fostering equitable health [36].

Since servant leadership also strives to increase a safe space for staff to express themselves, it is imperative that healthcare institutions also take responsibility and provide safe spaces where bias and microaggressions can be reported [25]. Additionally, servant leaders prioritize creating an environment where employees can develop their strengths, knowledge, and well-being. These characteristics

enable them to make autonomous decisions, contribute meaningfully, and positively impact others [25]. Frederick (2021) provides additional context on what providers look at when returning patients home after discharge [17]. The article provided a better understanding of patients expressing the need for continued care and getting discharged against their will [18]. Frederick's research suggests that there is room to build upon and add to their study, allowing the researcher to provide knowledge on how to fill the existing research gaps.

B. Implicit Bias in Healthcare

Studies conducted by FitzGerald & Hurst (2017) showed a significant correlation between high levels of physician implicit bias against Black patients on the IAT scores and interactions that were negatively rated by Black patients and, in one study, negatively rated by external observers [16]. A subsequent study using clinical vignettes confirmed a significant correlation between IAT scores and doctors with higher pro-white implicit bias; they were more likely to recommend preferred treatment options for white patients [16]. Additionally, twenty out of twenty-five assumptions studies found that some type of bias existed in either the diagnosis, treatment recommendations, number of questions asked of the patient, the number of tests ordered, and other responses that indicate discrimination against the patients examined [16].

Blair et al. (2011) provide a clinical example of how implicit provider bias harms Black patients. For example, imagine a doctor unknowingly influenced by unconscious bias against an elderly Black male patient with uncontrolled blood pressure. Though unaware, the doctor perceives the patient as uncooperative, even wrongly remembering they can't afford medication; this leads to not intensifying treatment, leaving the patient's health at risk [6]. Another example would be a Black mother who is already facing the immense physical and emotional stress of childbirth, being denied proper pain management because of harmful stereotypes. Picture her pleas for relief ignored, her pain dismissed, and the joy of childbirth overshadowed by unnecessary suffering. This type of treatment is the devastating reality faced by many Black mothers due to implicit bias in healthcare. A study conducted by Penner et al. (2016) revealed a concerning link between 112 Black cancer patients and the IAT results (Implicit Association Test) of 18 non-Black oncologists. The study found that patients seen by doctors with higher implicit bias scores reported difficulty recalling information and perceived a lack of patient-centred care during their appointments, suggesting a potential link between implicit bias, less time interacting with patients, and communication challenges [30]. Another analysis by Cooper et al. (2012) indicated that clinicians associated Black patients with being less cooperative with treatment in comparison with white patients and that Black patients experienced less patient-centred care and more significant implicit bias [13]. While those positioned in power might be oblivious, systemic racism imposes barriers and burdens on marginalized communities, often undetected by its very targets, individuals who are privileged by it [14].



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One reason is that it does not require the conscious prejudice of individuals and groups; for an institution to be racist, it need not state racist policies [14]. Very seldom will you find institutions with overt guidelines that explicitly show racism; hence, healthcare systems are perceived as a catalyst for institutional racism if left unaddressed. A prime example is African American patients receiving inadequate healthcare compared to white patients who seek medical care. In Green et al. (2007) research, physicians show no explicit preference for white versus Black patients or difference in perceived cooperativeness; however, the IAT (Implicit Association Test) revealed implicit preference favouring white Americans and implicit stereotypes of Black Americans as less cooperative with medical procedures and generally less cooperative [20].

VI. RESEARCH METHODOLOGY

The research methodology for this analysis will be a non-experimental, quantitative, causal-comparative analysis, comparing variables related to Black health disparities in states that have implemented implicit bias training with those in the rest of the United States. The researcher employed a causal-comparative design to demonstrate the significant difference between the two variables. Also implied is that the implicit bias that Black people face in healthcare systems affects their overall health and causes elevated health disparities in the Black community [42]. This design utilises secondary data and acknowledges the ethical and logistical challenges of implicit bias in a setting where variables are not manipulated. The methodology is derived from statistical health disparity information from several government, state, and nonprofit research organisations in some of the first states to enact laws requiring Implicit Bias Training for healthcare professionals, including California, Maryland, Minnesota, Michigan, and Washington. The charts display some of the most prevalent Black health disparities, which include asthma, diabetes mellitus, heart disease mortality, hypertension, maternal mortality, infant mortality, and overall life expectancy.

VII. RESEARCH DESIGN

The study reflects the sample size and population of the United States, which comprises approximately 334.9 billion, with the Black population accounting for 13.6% of that total [40]. As far as the states are concerned, California has a population of roughly 39 million with a Black population of 6.5%, Maryland 6.1 million with a Black population of 31.7%, Michigan 10 million with a Black population of 14.1%, Minnesota 5.7 million with a Black population of 7.7%, and Washington 7.8 million with a Black population of 4.6% [39]. The researcher gathered statistics from state and government databases from 2017 to 2023. These statistics were the most recent rates and percentages available. Aliments such as asthma, diabetes, hypertension, maternal mortality, and life expectancy reflect the number of deaths per 100,000 individuals in the population. Meanwhile, the number of deaths per 1,000 individuals serves as an indicator of infant mortality.

To better understand the severity of these disparities, the researcher conducted a non-experimental, quantitative, causal-comparative analysis of Black health disparities in the first states to implement implicit bias training requirements

compared to the health disparities of the United States population.

VIII. DATA ANALYSIS AND RESULTS

California

California			
Health Disparity by Ailment	Black/African American	United States	Black Rate /Percentage Above/Below National Statistics
Asthma	21.5	7.7 / 8%	13.8
Diabetes Mellitus	17.50%	10.90%	6.6
Heart Disease	197.3	161.5	35.8
Mortality			
Hypertension	39.70%	48.10%	-8.4*
Maternal Mortality	45.8	32.9	12.9
Infant Mortality	8.5	2.4	6.1
Life Expectancy	75.1	76.1	-1*

Table 1. Data collected from the Agency for Healthcare Research and Quality- ahrq.gov, American Heart Association- heart.org, American Lung Association- lung.org, Center of Disease Control – cdc.gov, National Healthcare Quality and Disparities Report, National Institute of Health- nih.gov, National Institute on Minority Health and Health Disparities – nimhd.nih.gov, The Office of Minority Health – hhs.gov
*Percentage or rate below the United States average

Maryland

Maryland			
Health Disparity by Ailment	Black/African American	United States	Black Rate /Percentage Above/Below National Statistics
Asthma	16.2	7.7 / 8%	8.5
Diabetes Mellitus	12.60%	10.90%	1.70%
Heart Disease	190	161.5	28.5
Mortality			
Hypertension	42.80%	48.10%	-5.30%*
Maternal Mortality	44.1	32.9	11.2
Infant Mortality	10.2	2.4	7.8
Life Expectancy	70.8	76.4	-5.6*

Table 2. Data collected from: Agency for Healthcare Research and Quality- ahrq.gov, American Heart Association- heart.org, American Lung Association- lung.org, Centres for Disease Control and Prevention – cdc.gov, National Institute of Health- nih.gov, National Institute on Minority Health and Health Disparities- nimhd.nih.gov, The Office of Minority Health - hhs.gov

*Percentage or rate below the United States average

Michigan

Michigan			
Health Disparity by Ailment	Black/African American	United States	Black Rate /Percentage Above National Statistics
Asthma	17.3	7.7 / 8%	9.6
Diabetes Mellitus	16.60%	10.90%	5.70%
Heart Disease	271.7	161.5	110.2
Mortality			
Hypertension	42.60%	48.10%	-5.5
Maternal Mortality	69.9	32.9	37
Infant Mortality	13.3	2.4	10.9
Life Expectancy	74.1	78.2	-4.1*

Table 3. Data collected from: Agency for Healthcare Research and Quality- ahrq.gov, American Heart Association- heart.org, American Lung Association- lung.org, Centres for Disease Control and Prevention – cdc.gov, National Institute of Health- nih.gov, National Institute on Minority Health and Health Disparities- nimhd.nih.gov,



The Office of Minority Health -hhs.gov *Percentage or rate below the United States average

Minnesota

Minnesota			
Health Disparity by Ailment	Black/ African American	United States	Black Rate /Percentage Above National Statistics
Asthma	16.2	7.7 / 8%	7.7
Diabetes mellitus	10.10%	10.90%	-0.8*
Heart Disease	279.5	161.5	118
Mortality			
Hypertension	56%	48.10%	7.9
Maternal Mortality	40.5	32.9	7.6
Infant Mortality	8.5	2.4	6.1
Life Expectancy	74.2	76.1	-1.9*

Table 4. Data collected from: the Agency for Healthcare Research and Quality- ahrq.gov, American Heart Association- heart.org, American Lung Association- lung.org, Center of Disease Control – cdc.gov, National Institute of Health- nih.gov, National Institute on Minority Health and Health Disparities- nimhd.nih.gov, The Office of Minority Health -hhs.gov, www.health.state.mn.us, <https://www.health.state.mn.us/news/pressrel/2022/maternal080322.html>

*Percentage or rate below the United States average

Washington

Washington			
Health Disparity by Ailment	Black/African American	United States	Black Rate /Percentage Above National Statistics
Asthma	15.60%	7.7 / 8%	7.60%
Diabetes Mellitus	14.30%	10.90%	3.4
Heart Disease	325	161.5	163.5
Mortality			
Hypertension	44.30%	48.10%	-3.8*
Maternal Mortality	78	32.9	45.1
Infant Mortality	9.6	2.4	7.2
Life Expectancy	70.8	76.1	-5.3*

Table 5. Data collected from: Agency for Healthcare Research and Quality- ahrq.gov, American Heart Association- heart.org, American Lung Association- lung.org, Centres for Disease Control and Prevention – cdc.gov, National Institute of Health- nih.gov, National Institute on Minority Health and Health Disparities- nimhd.nih.gov, The Office of Minority Health -hhs.gov

*Percentage or rate below the United States average

United States

United States			
Health Disparity by Ailment	Black/ African American	United States	Rate /Percentage Above National Statistics
Asthma	10.40%	7.7 / 8%	2.70%
Diabetes Mellitus	15.50%	10.90%	4.60%
Heart Disease	203.3	161.5	41.8
Mortality			
Hypertension	50.60%	48.10%	2.50%
Maternal Mortality	69.9	32.9	37
Infant Mortality	10.4	2.4	8
Life Expectancy	72.7	76.1	-3.4*

Table 6. Data collected from Agency for Healthcare Research and Quality- ahrq.gov, American Heart Association- heart.org, American Lung Association- lung.org, Centres for Disease Control and Prevention – cdc.gov, <https://www.cdc.gov/nchs/data/hsus/2020-2021/SlctMort.pdf>, National Institute of Health- nih.gov, National Institute on Minority Health and Health Disparities- nimhd.nih.gov, The Office of Minority Health -hhs.gov

*Percentage or rate below the United States average

The data shows that Black health disparities are disproportionately higher compared to the entire United States. The data collected was from several state, government, and nonprofit organisations that specialise in gathering statistical health information. By analyzing the charts, data illustrate a concerning gap in health disparities for Black communities compared to national figures. For example, Maryland's Black infant mortality rate is 10.2, considerably more elevated and more than four times the national rate of 2.4 (Table 2). California also has a high Black infant mortality rate of 8.5, a rate of 6.1 above the national rate of 2.4 (Table 1).

This unfortunate pattern is also prevalent in Michigan, Minnesota, Washington State, and the rest of the United States (Tables 1, 4, 5, and 6). Additionally, Black birthing mothers in Minnesota make up 13% of the population; however, they disproportionately suffer 23% of their pregnancy-related deaths [26]. One of Minnesota's primary goals for preventing future deaths is to address bias within the systems that create and increase disparities in the birthing population by acknowledging the historical trauma and racism that impact Black mothers [26]. As mentioned, in the United States, "Black women are three times more likely to die from a pregnancy-related cause than white women" [10]. This statistically translates to a national Black maternal mortality rate of 69.9 and a national maternal mortality rate of 32.9 (Table 6). The aforementioned is a rate difference of 37 more than the national rate. Many factors contribute to these disparities, including variations in quality of healthcare, underlying chronic conditions, structural racism, and implicit bias [10]. However, research throughout these states suggests that implicit bias is a common denominator in the high rates of Black health disparities. Even in the states where disparities are not as alarming, it is more likely due to the low population of Black individuals in that state.

Taking a closer look at the analysis, statistics from the state of California showed that Black people feared worse in all ailments except when compared to the national hypertension statistic. Very few instances reveal Black disparities that are statistically less than the national average. The research for California showed that all Black health ailments, except for one, surpassed the national rate and percentage. These findings are devastating, considering that Black people only make up approximately 6.5% of the population in California. Furthermore, the chart shows that maternal mortality and infant mortality rates are just as disturbing.

Nationally, Black women are three times more likely to die from pregnancy-related complications than white women [10]. Maternal mortality affects Black mothers at a much higher rate than any other race; it is also a particular disparity that involves a more specific demographic: women. California's Black maternal mortality disparity is an alarming 45.8, and the infant mortality rate is at a shocking 8.5, compared to the national rate of 2.4 (Table 1).

The state of Maryland has a similar outcome, with Black health disparities disproportionately more prominent in the Black community.

However, the research revealed a national hypertension rate of 48.1%, slightly higher than the



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Black state hypertension rate of 42.80% (Table 2). Similarly, this is also a disproportionate rate, considering the Black population in Maryland is only 31.7 % (Table 2) [37].

According to the data collected, heart disease mortality, hypertension, maternal mortality, and infant asthma mortality show the most devastating disparities in Maryland. Moreover, the state of Michigan shows a prevalence of ailments such as heart disease, mortality, hypertension, diabetes mellitus, asthma, infant mortality, and life expectancy, all above the national statistics. Black people represent roughly 14.3% of the population of Michigan, but suffer the most health disparities (Table 3) [38]. Subsequently, research paints a grim picture, revealing pervasive Black health disparity mortality exceeding national rates and percentages.

Comparably, in Minnesota, Black individuals only account for 7.6% of the population; however, they suffer significant disparities [39]. More specifically, the contrast between diabetes mellitus of Black people at 10.10% compared to the national rate of 10.90% is a difference of -0.8% (Table 4). Even though this statistical comparison does not show a noticeable disparity, in retrospect, the Black population makes up only 7.6% of the state population, but suffers at a similar rate as the whole nation. The charts display that even though a few Black health disparities in this research are slightly below the national average, they can still be unfavourable toward the Black population. According to the analysis, heart disease mortality illustrates one of the most prominent disparities in Minnesota. Black people suffer at a rate of 279.5 and a national rate of 161.5, a Black and national rate difference of 118 (Table 4). Comparably, Washington has an equally high heart disease mortality rate of 325 for the Black population and 161.5 for the national rate (Table 5). Additionally, the maternal mortality rate in Washington continues to reveal an unsettling pattern of four times the national rate (Table 5).

Overall, Black people have a lower life expectancy rate of 72.7 years compared to the national life expectancy rate of 76.1 years (Table 6). Parallel to the other states, the mortality disparities, such as heart disease mortality, maternal mortality, and infant mortality rates, also show disproportionate statistics in some associations and are far above the national average. For instance, the national Black infant mortality rate is 10.4, and the national infant mortality rate is 2.4 (Table 6). This comparison shows that on a national level, Black infants die four times more than the national rate.

IX. CONCLUSION

Implicit bias is a significant contributor to Black health disparities. However, little research compares servant leadership as an organisational behavioural approach to addressing implicit biases in Black health disparities. The data for these disparities is derived from the most recent statistical information, spanning the years 2017 to 2023. Additionally, Minnesota disclosed that in 2022, it released its first-ever Minnesota Maternal Mortality Report, which examines maternal deaths for one year, 2017-2018 [26]. Healthcare disparities are a severe problem in the United States, and research shows that some disparities are more prevalent than others. Given the results of the non-experimental quantitative causal-comparative analysis, the

findings suggest a potential association between the healthcare professional's implicit bias and the devastating statistics of Black health disparities compared to those in the United States. Furthermore, the data provide a comparative analysis of variables and reveal the prevalence of health disparities among Blacks in the United States; however, the study does not establish causal inference or cause-and-effect relationships. While the study acknowledges association, researchers can explore further mechanisms to show cause and effect between healthcare professionals implicit bias and the increase of Black health disparities compared to the United States.

It is essential to acknowledge that these disparities are genuine and should not be overlooked. The fact that some disparities are more prevalent than others suggests that underlying factors drive these disparities. It is essential to identify and address these factors to reduce healthcare disparities and improve the health of all Americans. Research suggests that a servant leadership approach can help to combat these disparities by fostering an organizational culture of empathy, integrity, selflessness, compassion, and humility. While healthcare systems are primarily focused on providing patient care, servant leadership is the most dominant model in healthcare infrastructures. Servant leaders possess qualities such as empathy, awareness, foresight, stewardship, healing, moral core, building community, and commitment to the growth of people [34]. These traits and characteristics are ideal for addressing Black health disparities because they embody a certain level of patient care, and individuals are more likely to lead ethically and morally. Subsequently, the researcher believes this is just the beginning of solving a critical problem in healthcare. Understanding Black health disparities is crucial to the growth and development of healthcare systems, the health of Black people, and the advancement of health equity.

The first step in addressing such disparities is to acknowledge their existence and take the necessary measures to eliminate them. There is a significant gap in the research about Black health disparities and ways to address them, which is why healthcare researchers have emphasised the need to investigate this topic further. Moreover, recent studies indicate that healthcare providers hold unconscious bias through an Implicit Association Test (IAT) [3]. However, the states mentioned have taken a proactive approach, and, by law, implicit bias training is mandatory for most licensed healthcare professionals in their respective states.

Hence, the findings in this study support the need for implementing servant leadership throughout all healthcare infrastructures. Moreover, research has proven that servant leadership is the most effective leadership style in healthcare organisations. This leadership style can positively impact and reduce Black health disparities, making a significant contribution to health equity. Since data suggest that implicit and explicit bias are the root causes of these disparities, the researcher recommends that each state conduct a similar analysis and examine the differences between these disparities and those of Black and national averages. Only then will healthcare institutions be able to statistically see the pattern of Black people dying or experiencing poor quality of care in preventable situations.

According to the California legislature, the United States shows that most people have an



implicit bias that disfavors African Americans and favours Caucasian Americans, which results from a long history of subjugation and exploitation of people of African descent [7].

Furthermore, research also shows that we can minimize their negative influence on our interactions and decisions by acknowledging unconscious biases and actively challenging them through self-reflection, education, and conscious decision-making [8]. Black health disparities are a devastating pattern amongst many health ailments across several states (California, Maryland, Michigan, Minnesota, and Washington State); research suggests that a servant leadership approach is beneficial for healthcare professionals to help combat Black health disparities. Since there is no one-size-fits-all approach to reducing these disparities, it is up to the state to determine which training methods are most effective for their specific needs.

A study by Oliver et al. (2014) reveals that participants acknowledged the influence of unconscious bias and embraced the opportunity to learn, recognizing the potential to improve patient care through increased awareness and self-reflection [29]. For these reasons, healthcare organisations should adopt the organisational behavioural approach to enhance leadership by implementing servant leadership. This approach enables providers and medical personnel to lead with empathy, integrity, selflessness, compassion, and humility, thereby attending to patients' needs and contributing to the reduction of implicit bias. Austin et al. (2021) state that healthcare systems need to be more transparent in reporting these disparities as a part of their quality matrix [5]. Acknowledging these biases brings forth mechanisms to hold healthcare systems accountable for their patients. Transparency offers building blocks of trust to people of colour and other marginalized populations, providing an avenue towards healing from a history of ethical medical abuse and medical mistreatment [5].

Implicit biases saturate healthcare systems and affect patients via patient-clinician communication, clinical decision-making, and institutionalized practices [42]. Servant leadership is the best model for healthcare organizations mainly because it focuses on the team's strength, building trust, and serving the needs of its patients [34]. Healthcare servant leaders may be the best equipped to make changes in organizations and build provider-patient relationships that improve patient care [34]. Also, Servant leadership's ethical and moral aspects encourage providers to look for the patient's physical, emotional, and financial needs first [34].

Moreover, the research question and hypothesis are positively associated with servant leadership improving organisational behaviour in addressing Black health disparities. However, there is room for further alternative explanations through experimental designs. The positive effects of servant leadership play a significant role in understanding cultural competence, caring for patients, and displaying compassion and empathy. This analysis of Servant Leadership and Black health disparities was excellent in connecting the devastatingly high rates and percentages of Black health disparities throughout several states. It was proven that these disparities exist at alarming rates and percentages. Hence, the states mentioned require mandatory implicit bias training for licensed healthcare professionals. Additionally, the findings of Trastek et al. (2014) show that

when applying servant leadership, management becomes more mindful and focused on the team's strength, developing trust, and serving the needs of patients [34]. As servant leaders, healthcare providers are best positioned to implement changes within the organisation and the provider-patient relationship, thereby enhancing the value of care for patients.

The CDC (2021c) states, "To build a healthier America for all, we must confront the systems and policies that have resulted in the generational injustice that has given rise to racial and ethnic health inequities" [11]. At the CDC, "we want to lead in this effort—both in the work we do on behalf of the nation's health and the work we do internally as an organization" [11]. Healthcare institutions can use this as a learning tool to help understand how important it is to combat biases at all levels of healthcare institutions. Training your workforce to practice servant leadership will help reduce disparities in care for Black patients, improve the quality of care, and ultimately save lives. The researcher also believes that if we solve the most complex healthcare issues, that format and template can tackle similar areas of bias to improve health outcomes for all. If providers and management have control of how they treat their Black patients and the health of these Black patients is continuously being compromised, that's a level of human error inflicted on Black patients, ultimately causing adverse health outcomes. Thus, it concludes that biased providers, clinicians, and management contribute to Black health disparities.

In conclusion, considering the findings of the analysis, recommendations for future research, annual progress reports, and continued qualitative and quantitative analysis, as well as any research that contributes to reducing health disparities in the Black community, can help save lives.

Servant leadership, implicit bias training, cultural competency, and sensitivity training need to be part of the organisational behavioural framework that governs healthcare institutions. Mindfulness training is also beneficial because if individuals are missing red flags in caring for Black patients, something in them needs to be ignited and understood as to why practitioners make suboptimal decisions when caring for Black patients. Additionally, Healthcare systems should actively integrate thoughtful training to address racism, reduce biases, and increase patient-centred care, making it accessible to all community members [22].

Lastly, professionals should continually strive to develop equitable and inclusive healthcare for all. "Of all the forms of inequality, injustice in health care is the most shocking and inhumane."—Martin Luther King, 1966

DECLARATION STATEMENT

Authors must include a declaration of accountability in the article, counting review-type articles, that stipulates the involvement of each author. The level of detail differs; some subjects yield articles that consist of isolated efforts that are easily detailed, while other areas function as group efforts at all stages.



Servant Leadership Meets Health Equity: Examining the Causal Comparative Impact of Black Health Disparities and the United States in the First States to Mandate Implicit Bias Training

Funding	No, I did not receive.
Conflicts of Interest	No conflicts of interest to the best of our knowledge.
Ethical Approval and Consent to Participate	No, the article does not require ethical approval or consent to participate, as it presents evidence that is not subject to interpretation.
Availability of Data and Material/ Data Access Statement	Not relevant.
Authors Contributions	I am the sole author of the article. cle

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<https://doi.org/10.1002/aet2.10124>

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