An Analysis of Professional Education for Future Physicians to Address Implicit Racial Bias in Black Maternal Health

Jasmine Butler

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AN ANALYSIS OF PROFESSIONAL EDUCATION FOR FUTURE PHYSICIANS TO ADDRESS IMPLICIT RACIAL BIAS IN BLACK MATERNAL HEALTH

By

Jasmine Butler

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

Oxford
May 2024

Approved by:

_________________________________
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_________________________________
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_________________________________
Reader: Dr. Jamiko Deleveaux
DEDICATION

This thesis is dedicated to every black mother.

I see you and I hear you.

Never forget that your experience and life is a gift to this world.
ACKNOWLEDGEMENTS

I would first like to thank my gracious and amazing advisor, Dr. Ashley White Jones. You have guided me along this journey and have only fostered my academic achievements. The advice and guidance you have given me has been priceless and my gratitude towards you will never be enough. Thank you for everything.

I would like to thank the Sally McDonnel Barksdale Honors College for the opportunity to explore my interests outside of my expected realm of study. The knowledge and experience I have gained not only has further my journey to my career but made my dedication to serve my community even greater.
ABSTRACT

The history of medicine in the United States is littered with incidences of racism and exploitation of Black Americans. The extensive history of medical racism has continued to be perpetuated in healthcare today. Within the field of maternal health, the dark history of medicine shows its face with the treatment of black mothers. Black maternal health is a current public health crisis currently being exacerbated through discrimination in the form of implicit bias. Implicit bias is a current issue in our healthcare system that needs to be addressed through adequate training of both medical students and physicians. This qualitative research study explored how medical schools are structuring their curricula to address implicit bias. Data was collected from two participants with 5 overarching themes discovered through thematic analysis: (1) a ranging definition of implicit bias and how it manifests, (2) how medical school curricula is not structured in regards to addressing implicit bias and race, (3) a noticeable need for diverse training in medical schools, (4) the effect student experiences can have on bias, and (5) current controversy and discussions regarding race and D.E.I in higher institutions of learning. Through this study and analysis, it is evident that the current medical education urgently needs mandated courses regarding bias, race, and cultural competence.
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INTRODUCTION

The modern day American healthcare system has advanced through the contributions of African Americans. American healthcare began with experimentation on enslaved African Americans then developed and flourished through continued exploitation and experimentation on African Americans (Prather et al., 2018). During slavery, procedures performed on enslaved people without their consent led to various advancements in medicine and medical practices. Experimentation on African Americans persisted well past the end of slavery with instances like the Tuskegee Syphilis Experiment (Prather et al., 2018). Although we are more than a century removed from slavery, African Americans still feel the effects of slavery in the healthcare system. Despite their ancestors' contributions to medicine, Black Americans still often face continuous discrimination and bias in healthcare (Hoffman et al., 2016).

One of the most vulnerable healthcare populations in the United States are Black women. Not only do they face discrimination in basic healthcare, Black women endure discrimination during some of the most pivotal points in their lives: pregnancy and motherhood. A study surveying pregnant Black women found they were 3 times more likely to think they experienced discrimination during pregnancy compared to their white counterparts (Nouri et al., 2020). Any woman’s journey to motherhood should be met with support not clouded with judgment and hatred. The continued history of discrimination against Black women is not only highlighted through the feelings of the patients but can be seen in the outcomes. A pregnant Black woman in the United States is 3 to 4 times more likely to die from childbirth or childbirth related complications than a white woman with a similar background (Owens & Fett, 2019). Even when
accounting for socioeconomic status, Black women still have the highest mortality rate of any group despite Black women only accounting for 13.6% of the female population in the United States (Swanson et al., 2021). During their pregnancies some Black women do not receive appropriate prenatal care and when giving birth often face complications that are often overlooked by healthcare workers. The discrepancy in the quality of their care is a major contributor to higher maternal mortality and postpartum morbidities.

Many factors play a part in the stark differences in pregnancy outcomes for Black and white women in the United States bias from healthcare professionals is one of them. Bias, particularly implicit bias, contributes to the long list of factors negatively impacting a Black woman’s pregnancy that are out of the mother’s control. Implicit bias is defined as an attitude that unconsciously influences people’s perceptions, actions, and decisions. It can lead to unequal treatment of groups based on characteristics and stereotypes (Shah & Bohlen, 2023). With the fast paced nature that medicine can entail, healthcare providers can unconsciously make decisions regarding patient care through the lens of a preconceived notion about them or the group they are a part of. In the American healthcare system, implicit bias highlights a hidden but prevalent issue among healthcare workers. The bias of healthcare workers potentially affects the health of millions of Americans especially minority patients who are disproportionately affected.

To combat the growing disparities in both maternal health and primary care, we have to start at the root: medical schools and healthcare training. Healthcare worker bias cannot be corrected without professionals acknowledging the problem and understanding how it affects patient care. Training for any field in healthcare is often prided in producing competent and caring healthcare professionals, so why is bias not addressed? The healthcare training curriculum should be integrating courses that assist future professionals in learning about their biases and
how to address bias and correct it. In addition to ensuring bias training is included in their curricula, medical schools and training for healthcare professionals should address the history of healthcare in America with its origins pertaining to race and how that impacts the current healthcare system. By addressing both the history of healthcare within America, medical schools can highlight particular biases as some have their origins in slavery. Through effective training and education of future healthcare professionals, we can start to shift and bridge the gap of racial healthcare disparities in America.

**Background & Literature Review**

**History of Medical Racism**

In the United States, the healthcare system was built and advanced through unethical experimentation on African Americans and enslaved people. Enslaved people were often subjugated to experiments often without anesthesia because physicians at the time regarded Black people as not perceiving pain to the extent of white people. Modern gynecology as we know it would not exist today without Black enslaved women. J. Marion Sims, often quoted as the father of gynecology, performed the first obstetric fistula repair on an enslaved woman (Owens & Fett, 2019). The Black woman’s body was constantly degraded as they were constantly forced to give birth to produce more enslaved people. The first cesarean section (C-section), a now common birthing procedure, was also performed on an enslaved woman. As procedures like the C-section were perfected, enslaved women did not receive any anesthetic and were often held down as these procedures were performed against their will. After perfecting these procedures on enslaved women without anesthesia or consent, the procedures were offered to white women with anesthesia and seen as a greater good disregarding the suffering that was
caused to achieve it. Even after death, enslaved people could not escape experimentation and mutilation as they were often dug up from their graves and used as cadavers for medical schools (Nuriddin, Mooney, & White, 2020). All the procedures and experiments on enslaved people during this time forms the origins of the myth and belief that African Americans experience pain less than their white counterparts. The concept of Black people having “thicker skin” and higher pain tolerances was used as justification for these horrific experimental practices (Hoffman et al., 2016). To this day, the continuation of ideas like this are perpetuated in the healthcare system and highlights where biases in healthcare professionals prevail with a study showing that half of the white medical students surveyed held the belief that black patients had thicker skin than their white counterparts (Hoffman et al., 2016).

After slavery ended, African Americans continued to face discrimination in the healthcare system. With the publication of the Flexner Report in 1910, a report that revolutionized healthcare in America eventually leading to creation of our modern day healthcare system, African Americans were still affected negatively. After the Flexner report was published, 5 out of the 7 Black medical schools were closed as result due to the report indicating that they were not up to par to keep operating. In the report, Flexner stated that Black physicians, although trained, needed white physician overseers for situations he deemed could affect the white majority. Black patients were only meant to be treated for diseases that could spread outside their communities therefore no surgeries were performed on Black patients (Flexner, 1910). Although Flexner helped to establish the modern healthcare system in America, it was at the cost of many Black patients and physicians who were affected by the racist policies and ideologies implemented and perpetuated from the report.
Even as we move toward modern times, African Americans have been subjected to racism and discrimination in healthcare. Despite being generations removed from slavery, Black people were still subjected to the same experimentation as their ancestors. The Tuskegee Syphilis Experiment is a prime example where Black people were seen just as a test subject and not human beings. In the experiment, Black men were exposed to syphilis without their consent causing them to spread the disease to their families and many eventually dying (Prather et al., 2018). The Tuskegee Syphilis Experiment helped to create protections for human participants in studies including informed consent. Although protections and laws were implemented after the study, apprehension in Black communities towards medicine and medical practices exploded. The effects of that apprehension can still be seen today with many older members still not trusting medicine and the lack of African Americans participation in research studies. Moderate distrust of the healthcare system can be especially detrimental to maternal health as addressing concerns and issues are crucial to ensure the safety of both the baby and mother (Kozhimannil et al., 2017).

**Racial Discrimination in Maternal Health**

In an industrialized country, pregnancy for any woman in an should be a smooth journey and if issues arise fixed quickly. In the United States that is often not the case despite being one of the most technologically advanced countries in the world. Despite all the advancements, the United States has the highest maternal mortality rate of any industrialized nation at 32.9 per 100,000 births (Owens & Fett, 2019; Hoyert, 2023). Within the United States, the maternal mortality rates differ greatly between race and ethnicity. In 2021, maternal mortality for non-hispanic white women was 26.6 per 100,000 births compared to non-hispanic Black women with a rate of 69.9 deaths per 100,000 births, which was almost 3 times higher (Hoyert, 2023). If you
are a minority woman in this country, every time you are pregnant you are putting your life at risk. In addition to the rates of mortality being remarkably high, Black women face higher cases of morbidity, unexpected consequences of pregnancy that can have short or long term effects (Noursi et al. 2020). In the United States, the high cases of maternal mortality and morbidity is a multi-faceted problem that includes access to healthcare, quality of care, and discrimination.

Maternal mortality refers to the amount of deaths that occur during pregnancy or pregnancy related conditions within 40 days of birth (Noursi et al., 2020). With the substantial differences in mortality rates between white and Black mothers, it calls to question what the cause of the disparity is. The mortality rates still have a large gap even when researchers account for socioeconomic status which is known to impact a person’s healthcare (Noursi et al. 2020). One problem that impacts maternal mortality is access to healthcare. Many Black women live in areas deemed maternal care deserts where access to healthcare consistently throughout pregnancy is hard to access due to distance, a lack of providers, or a combination of the two. Even within healthcare deserts where white women make up the majority of the population, 1 in 5 Black women did not receive adequate prenatal care as compared to 1 in 10 white women. (Brigance et al., 2022). With this decreased access to prenatal care, it leads to higher complications later in the pregnancy. It is important to also recognize that Black women during pregnancy are a very vulnerable group as they are both more likely to experience severe maternal morbidities (SMM), conditions brought on by pregnancy. With Black women being an already vulnerable population during pregnancy, discrimination and bias only exacerbates these issues.

In 2003, the Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare was published, it was one of the first journals that addressed and highlighted racial discrimination in the healthcare system. It started to show implicit bias and in some cases blatant
racism and discrimination regarding minorities in healthcare. The publication of the journal also showed how maternal outcomes between white women and minority groups have a considerably noticeable gap in the outcomes like maternal mortality. With this issue being highlighted more just within the last 20 years, it is crucial that healthcare starts to combat these injustices that have occurred to patients longer than it has been discussed. Healthcare providers need to be more proactive to combat their bias and how this affects their patient interactions.

**Implicit Bias**

Implicit bias can be defined as unconscious thoughts and decisions based on stereotypes (Saluja & Bryant, 2021; Shah & Bohlen, 2023). Implicit bias develops over time through a person’s interactions and experiences. Implicit racial bias is unconsciously performing actions and judging others based on their race. The difference between explicit bias and implicit bias is that a person is actively aware and pursuing their bias when it's explicit compared to implicit where a person might not even notice how it's affecting their decisions (Shah & Bohlen, 2023). In the American healthcare system, implicit bias occurs mainly towards minority groups with Black Americans being a prime victim due to healthcare’s relationship to race.

In regards to maternal health, implicit racial bias and discrimination impacts maternal health drastically for Black women. The effects of implicit bias are displayed in multiple areas of maternal healthcare including postpartum care and pain management. Black women are 10% less likely to receive epidurals during labor compared to white women (Montalamant & Ettinger, 2023). In combination with inconsistent pain management, Black women are more likely to procure pregnancy related comorbidities like preeclampsia and other cardiovascular conditions that could lead to end-organ damage. Perceived bias and discrimination by pregnant Black women can impact the trajectory of their pregnancy as it can cause lack of communication and
facilitate distrust with their healthcare provider leading to an ineffective patient-provider relationship. All these conditions converge to create the increasingly disparaging maternal mortality rates in Black women compared to their white counterparts (Montalamant & Ettinger, 2023). With implicit bias playing such a distinct role in Black maternal health outcomes, it is crucial that healthcare providers understand their biases on patients and help to bridge these large gaps in patient care.

With healthcare providers, it can be hard to define exact implicit biases as bias can come from a combination of factors including lack of cultural competency and education of how race plays into a patient's decisions. As described by Black mothers, cultural competence is defined as their providers understanding and recognizing issues that impact them both emotionally and physically as well as its prevalence within their communities (Montalamant & Ettinger, 2023). Cultural competence also includes no premature judgements of the patient and assumptions about their backgrounds and socioeconomic status. In order for patient providers to develop the level of cultural competence needed to be effective, healthcare providers must be trained to know and understand their patient populations. A physician regardless of race should be providing compassionate and competent care; training is the first step to remedy that. One issue that affects the education of healthcare providers is just healthcare providers lack of awareness on how bias can have an effect on their patients. A survey of 2700 healthcare providers found that while 83% of providers believed that disparities impact their practice only 29% thought that implicit bias had any effect on patient care (Montalamant & Ettinger, 2023). With many healthcare providers not even willing to acknowledge that implicit bias can lead to affected practice highlights why bias training and competency training should be implemented to bring awareness to these issues,
and by addressing these issues early in providers training helps to prevent them from being prolonged through their practice.

**How to Combat Implicit Bias through Medical School Curricula and Training**

Implicit bias training is a great first step for medical training to decrease the widening gap in Black and white maternal outcomes. After formal training on implicit bias, medical students were observed to have a decrease in bias towards specific races compared to their initial Harvard Implicit Association Test (IAT) results (van Ryn et al., 2015). Through training on bias, healthcare providers can be more aware of their biases and provide better care for every patient. With medical students rounding the hospital during their clinical years, training sets them up with a good base as they start their first interactions with patients.

Implicit bias can be tested with the Harvard Implicit Association Test (IAT). The IAT has been tested and proven to be effective in the detection of implicit bias in individuals. In an analysis of IAT to investigate implicit racial bias in medical students and physicians, it was found that medical students had higher accounts of implicit racial bias than physicians (Ahadinezhad et al., 2021). With such a high prevalence of medical students with implicit bias, the use of implicit bias training will be beneficial if implemented actively into the core curriculum of medical schools. It was found that medical students when provided with implicit bias training courses their scores from the test decreased from their initial test and it had long lasting effects (Gill et al., 2022). Without the presence of the implicit bias training, students' biases would have continued as they move forward into graduate level medical education, i.e. residency and fellowship programs, where they are directly involved in patient care and decisions.
Medical school implementation of implicit bias training into curricula would greatly impact the healthcare outcomes of numerous patients. With medical students matriculating into their particular fields, they carry their knowledge throughout their course of being physicians, understanding the impact their unconscious bias can have on the course of a patient’s life. The benefits towards patient care and health equity should outweigh any costs. Especially in the specialty of maternal health, implicit bias training for medical students who will encounter pregnant women at some point in their medical training. The world of obstetrics and gynecology will start to transform through implicit bias training and black mothers will start to know a pregnancy without the fear that they will become a part of the over 60% likelihood of maternal mortality (Hoyert 2023; Brigance et. al 2022).

Methods

Study Design

This is a qualitative study exploring the Black maternal health crisis in the United States. The purpose of this study is to examine how medical school curriculums address bias to reduce implicit bias in future medical professionals.

In this study, medical schools in the Southeastern United States were interviewed about their current curriculum and how their curriculum addresses bias. In addition to questions about curriculum, questions regarding diversity, equity, and inclusion (DEI) at their institution. For interviewees, faculty were selected based on their leadership roles at the medical school and were actively involved in the curriculum and academic affairs of the institution. To identify faculty to interview, keywords used included: leadership of medical institutions, deans of medical institutions, academic dean, associate deans. With the approval of the IRB, a criteria
created of interview questions to assess how medical schools address implicit bias in their curriculum and their efforts to promote diversity and equity.

**Study Population**

Potential participants received an email recruiting them to participate in the study. The email included information regarding the study and contact information to determine their eligibility. After recruitment, if participants agree, a time was scheduled to obtain consent before beginning the study. An approved consent form was explained to the participant to ensure he/she understood the nature of the study and agreed to participate. Interviews were conducted virtually using Zoom lasting approximately 1 hour. *Individual follow-up interviews were conducted as needed to provide clarity on responses. The interview took place in a private area on the premises of choice of the participant. Participants were contacted by the PI after all interview data had been transcribed. Participants were allowed to edit data to ensure the information captured during the study is accurate and reflects what was said. Arrangements were made by the PI to send individual responses to participants.

**Institutional Review Board**

An application was submitted to the University of Mississippi’s Institutional Review Board (IRB) and approved before data collection. The IRB approval letter is included in the Appendix.

**Data Collection and Analysis**

A semi-structured interview guide was developed to explore the following topics: implicit bias curriculum implementation and institution DEI efforts as detailed in Table 1. Each
interview was transcribed removing any identifying information. Upon completion of the interviews, the audio and video recordings of the interviews were downloaded. When the download was completed, the audio recordings of the interviews were then sent to Otter.ai for transcription. Once the transcripts were received, they were cleaned by the principal investigator, using the uploaded audio files for accuracy. Written memos were recorded during all the interviews, and non-verbal data was captured to inform the investigators of the context in which answers were provided throughout the interview process. Quotes included in results are verbatim from interviews and unaltered to provide participants exact opinions.

After each interview was transcribed, a thematic analysis was performed creating a conceptual model of the interviews using line by line coding (Naeem et al., 2023). Through this approach, themes emerged, and results were organized to reflect consistent emergent themes across the interviews.

Table 1. Guiding Questions for Interviews

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<td><strong>Introduction</strong></td>
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<tr>
<td>1. Tell me about yourself and your position and job at the medical school</td>
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<td>2. How would you define implicit bias?</td>
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<td>a. Would you consider it a current issue in medicine?</td>
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<tr>
<td><strong>Implicit Bias Curriculum Implementation</strong></td>
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<td>3. How is your curriculum structured?</td>
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<td>a. How does your curriculum address implicit bias?</td>
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<tr>
<td>b. What is the timeline?</td>
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<tr>
<td>i. Are they held before or after clinical rotations?</td>
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<td>4. Does your curriculum address the history of medicine?</td>
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<tr>
<td>a. Describe how your curriculum addresses the respectable and harmful history of medical practices.</td>
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<tr>
<td>b. Is the history of medicine a large part of the curriculum, such as 1 course or are seminars held to discuss these issues?</td>
</tr>
<tr>
<td>5. How does your school promote a diverse and inclusive curriculum?</td>
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6. How does your institution address or promote health equity?
   a. How are students allowed to address and reflect on their own biases to improve patient interactions?
   b. How does your institution measure its effectiveness in addressing these issues in the curriculum?

Institution DEI Efforts

7. What opportunities are there for students to learn about and work with diverse populations?
8. What is the demographic of your faculty and staff?
   a. Are there staff that directly work with issues regarding diversity and inclusion?
9. How would you describe interactions between faculty and students?
10. How often do you update curriculum to match current policies and standards regarding diversity, equity, and inclusion?

Results

Sample Description

Overall, 24 medical schools were contacted in the Southeastern United States as shown in dark red in (Figure 1. Geographic Location of Medical Schools in the Southeastern United States). After the initial contact 4 additional faculty were recruited through snowball sampling. In total, 28 medical schools were contacted. The participation rate of this study was 7.1% with only 2 faculty completing interviews. Both participants were faculty involved directly in the education of medical students. One participant worked with medical students during just their pre-clinical courses while the other participant worked with medical students during both their pre-clinical and clinical courses.
Medical Schools Role in Combating Implicit Bias

Five themes emerged during the interviews: defining implicit bias and how it manifests, lack of structure in medical school curricula, need for diverse training in medical schools, student experiences and bias, and current DEI controversy. The first theme to emerge from the interviews was a ranging definition of implicit bias and how it manifests. Each definition slightly differs from the earlier definition, but each definition had similar elements with all participants saying that implicit bias is based on life experiences. The most relevant element when defining implicit bias is the ability for implicit bias to affect a person’s decisions and outlooks regarding society.
“... based on mainly your lived experience, this influences how you think and how you view the world, which is potentially jading your view of how other people move, bodies move throughout society.” (P1)

All participants stated that implicit bias is a current issue currently in healthcare. With all participants stating that implicit bias has the ability to affect a person’s decision making regarding other people especially in healthcare is very concerning.

The second emergent theme was how medical school curricula is not structured in regards to addressing implicit bias and race. All participants discussed how the medical curriculum is divided into two halves with the first two years dedicated to pure coursework and the last two years dedicated to clinical work and experience. Both participants described the curriculum as “not really structured” (P2) and “they don’t touch on implicit bias in the way that the curriculum is designed” (P1). Faculty and professors seemingly incorporate elements in their particular courses and interactions with students as they teach material but it is not explicitly stated in the curriculum. Without it being explicitly taught, students are expected to learn and correct their bias outside of the classroom. With students being expected to learn about and think introspectively about their own implicit biases outside the classroom, it is put on medical students to take the initiative outside of their core curriculum despite their large course load.

When discussing the curriculum, the third theme emerged with a noticeable need for diverse training in medical schools. After the discussion of the lack of structure in the curriculum all participants made the effort to say that more training that involves the topics of race, bias, and diversity should be included in the mandatory core curriculum. It is important to them for students to have the exposure to these topics so that they can apply it in a clinical setting after
their training. If faculty and professors who are actively engaged with the students are suggesting that students would benefit from additional courses and training in the curriculum surrounding the concepts of race, bias, and cultural competency, why are medical schools not trying to actively adjust and reshape the curriculum to allow for students to learn about how bias can affect patients and how understanding your patient populations cannot just make the students better physicians but allow for better patient outcomes. One comment from the interview was noticeable by saying “They never warned me about this, because I did it. I told you about it. Now, whether you chose to listen and take it in and that's when you know, but we definitely had a discussion about it. And some people are ready, some people are not ready.” (P1). The implementation of cultural competency courses and implicit bias training allows for students who are willing to learn and correct themselves to fix it during their and the students who are not ready to address their issues to still have the arsenal of information to come back to so they understand how to combat the issues that can impact their patients.

“ And there's a lot that needs to be done curriculum wise to address those issues. And I mean, formal curriculum, as well as the hidden curriculum that we have. Within our professional organizations or professions, in general, and healthcare. There needs to be a lot of starting with just broadly cultural competency training step one, and then getting specifically into implicit bias into anti racism.” (P1)

“...what many times we need to think in terms of providing is helping them to understand, well, yeah, this is the social determinants of health. And I think in that course curriculum, they're really getting more, they're getting didactics there, and then they're seeing the
application in the clinical setting. But what's missing is, if you talk about the history of race in medicine, and require it, we can't we can't do that.” (P2)

The fourth theme to emerge was the effect student experiences can have on bias. With both interviewees definitions including how implicit bias is based on experiences, it was evident that medical students' experience with patients and faculty is important for their progress towards being physicians. I observed throughout the remainder of the interview how experiences during the clinical curriculum could have an impact on student’s perception of patients and their own internal bias. Both institutions of the interviewees had mandatory away rotations as a part of their curricula. It is one of the ways students learn to adjust to the everyday patient they will have as physicians. One of the professors interviewed described the benefit students have by interacting with a range of communities through both in school rotations and away rotations by saying “...we fail to appreciate the cultural differences or cultural outcomes, may mishap provide some missteps in how we evaluate patients. So these are more I'd say on the job sort of approaches within the different rotations. (P2)” The same professor made another great point in that because every student is different they might not understand every patient or be aware of how their viewpoints can affect them until they are actually in a tangible patient interaction highlighting how students should be exposed to the concept potentially earlier than the first time they come face to face with patients.

While discussing the curriculum of students, one topic that was approached multiple times was the current controversy and discussions regarding race and D.E.I in higher institutions of learning, which was the fifth and final theme revealed. With the current political climate DEI has been a topic of constant debate particularly the race aspect but as one interviewee stated
“technically, rural programs are part of the DEI initiative but DEI broadly unfortunately people have politicized that and made it almost exclusively about race.” (P1). DEI is not about making equitable opportunities for people of different races but its for people who are underrepresented in spaces and helps to minimize the gap in the development of underrepresented groups. With the wave of controversy surrounding DEI and race, it can be hard for medical schools and similar institutions to address push for training in regards to DEI and race because it could potentially affect funding. “We cannot obligate learners per se to take implicit bias training. Who we used to do that then we were because of a lot of push from the legislation? It? It's a no no, because? Well, I mean, you know, it's a no, no. And so we make it available.” (P2) Due to legislative pushes, students are not able to experience a well-rounded education that allows them to be well-rounded and culturally competent physicians as they enter the field of medicine.

“So they get exposed, I would like them to be exposed to even more though, so that's my concern is like, we're doing our due diligence, but we can still do more in terms of even further diversifying who they see and what they see what experiences they have” (P1)” “But some people see equity now, for whatever reason. Now that's just a trigger. And it's become a controversial statement to say equity or diversity inclusion. And you have to change your language altogether to essentially do the same thing ...” (P1).

“Now with the senior Supreme Court decision last year, with respect to admissions and recruitment, that has affected some of the efforts. However, still, we are expanding our reach and when you expand your reach, you cast a broader net, you're going to have a diverse pool.” (P2).
Discussion

The comments and observations of the curriculum of medical schools from faculty and professors actively involved in the education of America's future physicians highlights a hole in the structure to the development of well-rounded physicians. With the lack of structure or plan in regards to the teaching of implicit bias and cultural competency, it makes it difficult for medical students to even know what they are gaining from learning about the concepts. The students often are given optional opportunities to learn more when the first introduction to the concepts of bias and cultural competency are already limited. With the already overwhelming schedules of medical students, how are they to become full well-rounded physicians when a key part of being a competent physician is understanding how your outlook on a patient can affect their outcomes greatly.

It is unwise to let the students first interact by combating their bias and perceptions when they are well involved in their clinical rotations. Students are experiencing how a patient's overall background plays an enormous role in their health outcomes. Students should learn and know concepts such as social determinants of health and implicit bias before they even step foot into a patient’s room. Unfortunately the push to make the necessary changes to improve the healthcare system and medical education is met with backlash and controversy. Legislators along with others outside of medicine and academia are implementing bills and laws that combat the development of competent and compassionate physicians through the destruction of DEI initiatives. The concept of DEI has been misconstrued to only mean race in regards to the decisions that it makes but DEI is a broad concept that includes any minority group including gender, sexual orientation, religion, or even the case of people living in rural areas. The controversy surrounding DEI has led medical institutions to back away from addressing any DEI
related issue which will lead to even more growing problems in a healthcare system where minority groups are already disproportionately affected.

**Limitations & Future Studies**

Some limitations of this study include the low response rate and time constraints to scheduling interviews. The recruitment methods due to school locations were limited to only email and phone. The study also lacks generalizability due to the small sample size but the information extracted from interviews was still useful and provided a small glimpse into medical schools addressing issues regarding implicit bias and DEI.

Future research should include a larger sample size and could broaden to medical schools across the mainland United States. Within future studies, the impact current legislative policies have on the depth and development of curriculums in medical schools. Particularly research how implicit bias training of medical students who eventually matriculate into obstetrics and gynecology residencies patient outcomes could be impacted through implicit training during medical school. Additional research can also be done into medical students’ experience with implicit bias training in their medical schools and how they rate the effectiveness of the courses and curriculum.

**Conclusion**

The healthcare system of the United States as we currently know it would not be as advanced if not for the experimentation and exploitation of enslaved Black people. The experimentation even when brutal and unethical was seen as an overall good for the healthcare system. Despite the exploitation of their ancestors toward the improvement of medicine and healthcare, African Americans do not get to reap the benefits. In this country African Americans
still face higher rates of discrimination in every aspect of their care. With the worst example of this injustice being exemplified in maternal health.

The field of obstetrics and gynecology more colloquially known as OB/GYN has the similar course of appalling history of experimentation on enslaved people in this case enslaved women. Enslaved women were treated like lab rats to develop techniques like cesarean sections currently still used in obstetric procedures. Maternal mortality is exceedingly high for a country with over 30% of women dying in childbirth with all being preventable (Brigance et al., 2022). Black maternal mortality rates are double the national average (Hoyert, 2023). Black mothers’ issues in this system can be explained through multiple aspects: bias, access to healthcare, etc. Implicit bias is a major contributor to disparaging maternal health rates. Implicit bias by physicians is developing into a current public health crisis and if not addressed now thousands of mothers, black and non-black, will continue to be impacted horrifically.

With the insight of current faculty of medical institutions, it is evident that the current medical education urgently needs mandated courses regarding bias, race, and cultural competence. Medical students are still perpetuating myths and information that has been proven wrong dozens of times. If medical students' perspectives are not shifted from this backwards and detrimental thought processes it will carry over into the future when they become physicians. It will lead to the current issues in healthcare and equity to be exacerbated. Despite this evident need for medical training to address issues regarding bias and race, the current political environment of our country is preventing advancement of these concepts. In June 2023, the Supreme Court’s decision to make affirmative action unconstitutional created a domino effect that we have yet to see all the effects. One effect that can be seen is the introduction and passing of bills banning DEI initiatives in institutions of higher learning. Even some states that are
implementing bills banning DEI initiatives had previously passed bills that mandated physicians have implicit bias training and protected the rights of pregnant women. It is clear that state legislatures are not clearly aligned with their own previously passed policies that benefit the people they serve and are regressing into developing bills that only seemingly benefit one group of people. With the passing of bills banning DEI initiatives, medical schools and other graduate schools are struggling to work around these bills but in the process of that some institutions are just getting rid of addressing issues that surround DEI all together. In a field like healthcare not addressing DEI should not be optional, physicians interact with a variety of patients and people every day; they should have cultural competency and treat patients equally providing the best treatment for all. In the future, I hope that this country and legislative bodies will see how much DEI does just help the groups specifically targeted but everyone as a collective because if the conditions are improving for one group it should improve for everyone.


IRB Approval Letter

PI:

This is to inform you that your application to conduct research with human participants, “An Analysis of Professional Education for Future Physicians to Address Implicit Racial Bias in Black Maternal Health” (Protocol #24x-104), has been determined as Exempt under 45 CFR 46.101(b)(#2). You may proceed with your research.

Please remember that all of The University of Mississippi’s human participant research activities, regardless of whether the research is subject to federal regulations, must be guided by the ethical principles in The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research.

It is especially important for you to keep these points in mind:

- You must protect the rights and welfare of human research participants.
- Certain changes to your approved protocol must be reviewed and approved before initiating those changes. These changes include the addition of a vulnerable subject group (children, persons with disabilities, and prisoners), as well as the addition of research materials, such as the addition of surveys or interview questions and test articles, the addition of the use of deception, or any changes to subject confidentiality. Personnel amendments for exempt protocols are no longer required. Instead, PIs are responsible for keeping an up to date record of all active personnel and for ensuring that personnel have completed the necessary training to be on their protocol.
- You must report promptly to the IRB any injuries or other unanticipated problems involving risks to participants or others.
- If research is to be conducted during class, the PI must email the instructor and ask if they wish to see the protocol materials (surveys, interview questions, etc) prior to research beginning.

If you have any questions, please feel free to contact the IRB at irb@olemiss.edu.