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Black and White Health Disparities: Racial Bias in American Healthcare

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Cover Page Footnote

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Throughout history, race has had a defined power in America's structures through a social construction that makes it significant. This social construction of race is the reason for persistent racism directed at Black people in the country which lingers in customs and systems. One of these systems is the healthcare system, as racial bias has been rampant through the progression of the medical field. There is racism present in this structure through algorithms that discriminate against Black people, as well as direct racism through the quality of care provided by physicians. Doctors take an oath to treat all patients with equal care; however, this is not the case, as Black people are more likely to report discrimination in medical care as compared to white people. One of the reasons for this imbalance in discrimination reports is due to implicit bias towards Black people in healthcare settings, which has stemmed from the historical implications of race in medicine. It is crucial when analyzing the health disparities of Black people associated with healthcare, to delve deep into what causes these inequities: racism in society.

The Racial Health Inequities in America

In America, the health inequities between Black and white people are significant. This is apparent due to alarming statistics regarding life expectancy, which is a prime indicator of health. The research shows that Black people have a lower life expectancy at birth than white people as well as an infant mortality rate twice the national average (Corbin et al. 2020; Carratala & Maxwell 2020). In addition, Black people also have the highest mortality rates of cancer despite developing certain cancers at lower rates (Carratala & Maxwell 2020); Black women specifically are less likely to develop breast cancer yet, they are 40% more likely to die from it (Stallings 2018). These alarming statistics show that Black people disproportionately suffer in terms of their health, and these disparities have also persisted for a long time (Yearby 2018, 1136). Despite there being many possible determinants of health that could have led to decreased favourable health outcomes, such as socioeconomic status, experiences of racism in daily life, or access to healthcare, the focus of this essay will be exclusively analyzing quality of medical care received, and the connections it has to past treatment of Black people. The research shows that there is a discrepancy in the quality of care obtained between Black and white people by healthcare providers and physicians (Corbin et al. 2020, np). Black people are three times more likely to experience and report discrimination from healthcare providers or hospital staff than white people (Gonzalez et al. np), and 62% of physicians in a 2014 study reported witnessing another physician providing poor quality healthcare due to a patient's race or ethnicity (Yearby 2018, 1141). This is crucial to address, as there is a clear link between racial bias and reduced quality of care. Although discrimination can be against gender, age, income, sexual orientation, and other factors, the research used

in this essay has controlled for these confounding factors or taken them into account and still reported the same findings, proving that an amount of discrimination occurs due to racial bias. A patient's race plays a factor in a doctor's clinical interview, decision making, and referral to specialty care (Yearby 2018, 1135). A study that analyzed physicians' racial attitudes and stereotypes found that they subconsciously treat white patients better in these cases even if they were not explicitly racist (Yearby 2018, 1135), showing how implicit racism is at work in these scenarios. The data shows that some individuals in America may die from a disease simply because they were not cared for it correctly due to their race (Bridges n.d.). For example, bias leads to white people being more likely to receive curative surgery for early-stage lung cancer than Black people, and if they both had equal chances at surgery, the lung cancer mortality rate of Black patients would be significantly lower than it is, approaching the survival rate of white patients (Yearby 2018, 1137). Moreover, Black people are more likely to be given less desirable treatments, such as amputation, or ineffective antipsychotic medication that has been proven to have long-term negative effects (Bridges n.d., np). Thus, racial bias has a direct impact on Black peoples' health through treatments received and the quality of care obtained. In order to understand these biases, it is imperative to explore the roots and historical implications of where they originated.

Biological Science & its Racist Undertones

Race has employed an important role in society, which is important to outline as a factor of bias. Throughout American history, there has been a defined social hierarchy of race, with Black people being 'inferior' to white people in terms of the hierarchy (Guess 2006, 651-652). This social implication of race set a divide between Black and white people, defining them as different. In the past, this social construction of race is conjoined with biology. Biological ideas about race are what led scholars to decide that one race was 'less than' the other and allowed a justification of slavery through biology. Through this, race soon found its way into medical studies and experiments before becoming involved in the entirety of the medical field. The past view of race within medicine must be explored as it lays a foundation for the racial discrepancies seen in healthcare in contemporary times.

In the past, the racist nature of society allowed biology to be used to introduce and uphold false ideas regarding race. Scholars used science and medicine to form a divide between Black and white people in this time, as scientists were adamant on establishing biological differences between these races because it justified enslaving people based on this racial factor. Dr. Samuel Cartwright, who was very 'pro-slavery', used his profession to develop racist ideologies about Black people based on science. He theorized that Black people experienced different diseases

than white people (Bankole 1998, 5), quantifying race as biology. One of the untrue diseases he formulated was "Drapetomania", which he explained as a disease that causes slaves to seek freedom and run away (Bankole 1998, 5). Realistically, there is no such thing as *Drapetomania* as it was created to justify the continued enslavement of Black people who, like any enslaved person, would only want to run away to seek their human right of freedom from unjust treatment. Another argument that was presented during this era by scientists was that Black people are physically inferior to white people, which makes them more capable of enduring labour and harsh painful conditions that white people cannot (Bankole 1998, 8). This argument implies a difference in physiology between Black people and white people, which is specifically what pro-slavery scholars wanted in order to categorize Black people as 'less than'. From this 'less than' argument stems the issue of questioning the humanity of Black people. Based on their physical differences, scholars identified Black people as subhuman, giving white people a superiority over them (Bankole 1998, 7). Dr. Cartwright stated that since Black people are "scarcely considered human beings" (Bankole 1998, 7), they do not need to be treated with the same equality that white men are treated with. This is the premise for the inequality Black people were treated with in comparison to white people. Black people were also perceived as inferior in terms of intellectuality (Bankole 1998, 7), something that was surprisingly supported by scientists and doctors. This subhuman classification of physiology and intellectuality was highly impactful on medicine in this era, as it gave doctors a reason to conduct studies on this 'less than' race. These ideas that Black people were inferior humans served as a basis for race in medicine during these times and remained ingrained in the medical society post-slavery.

Although race is a social construction that has no connection to the biological make-up of an individual other than genetics, the definition of race as biological in antebellum America maintained a legacy through history. It laid the foundation for current misconceptions surrounding the biology of race in medicine. One of these misconceptions is the idea that Black people experience pain differently than white people. This belief is scientifically impossible because the reason race is categorized is solely because of society, as established earlier. In America, there is a significant difference in pain treatment between Black and white people (Hoffman 2016, np). Black people are less likely to receive analgesics and when they do, it is a less amount than their white counterparts who report the same conditions and self-rating of pain (Hoffman 2016, np). This is observed as Black patients are 17% less likely to receive pain medications for fractures than white people (Hoffman 2016, np). Even for children, a study with one million participants diagnosed with appendicitis in America showed that Black children were less likely to be given any pain-relieving medicine than white children with the same condition (Hoffman

2016, np). The research shows that this discrepancy in pain treatment is due to a bias in perceptions of other peoples' pain (Hoffman 2016, np). Findings portray that a large proportion of white medical students believe Black people have a higher pain tolerance than white people, and 73% of the participants had one or more false beliefs about biological differences between the races (Rees 2020, np). This is alarming because recent data states that 56.2% of active physicians identified as white (AAMC 2019, np). Since more than half of physicians in America are white, it is concerning if the research shows that a large number of them could hold an unconscious bias in pain perception due to myths regarding race and physiology. These false misconceptions most likely developed from the arguments that were mentioned previously to justify slavery. There was a defined difference in anatomy between Black and white people, which was that Black people endure labour and harsh conditions differently than white people, as they bear pain more efficiently, or do not feel it the same way (Bankole 1998, 8). There were also myths that Black people have 'thicker skin', less sensitive nerve endings, and stronger immune systems (Rees 2020, np), which skewed people's perceptions of how they feel pain. In today's medical field, these same ideologies from the past emerge, solidifying the false belief that there are biological differences in race in terms of pain sensitivity. This causes disparities in the treatment of pain received by Black people, harming their overall health and forming a negative experience for them with a healthcare system that denies them relief from pain or illness.

The Characterization of Black People & its Impacts on Physicians' Biases

The ideologies of doctors such as Cartwright planted a seed in how Black people were seen medically post-slavery. Racist beliefs about Black physiology persisted in society and the medical field after slavery ended. In the nineteenth century, it was argued that Black people were 'primitive', and scientists theorized that Black people would not survive in America as they were more susceptible to disease and crime due to their race (Brandt 1978, 21). It was generally accepted by doctors that health disparities of Black people were not due to the subpar socioeconomic factors that they endured, but because of their biological processes (Brandt 1978, 22). There were theories that Black people would be extinct and that their brains were a thousand years behind that of white peoples' (Brandt 1978, 21). These theories are very dehumanizing as speculating the extinction of a race within humankind is reaffirming the notion that they are 'less than human', which is the same principle that enabled slavery. By the twentieth century, medical professionals generally supported these racist nineteenth century views, and these latent beliefs are what lead to the beginning of the infamous 'Tuskegee Syphilis Study' in 1932. This study was conducted to observe the progression of syphilis in Black men, and the study population was four hundred Black men in Alabama (Brandt 1978, 21).

Another indicator in this study that physicians disregarded the health and lives of Black people is their refusal to treat infected Black men with penicillin when it became a viable medication against syphilis (Brandt 1978, 22). Nineteen years after the public availability of the medication, the study was continued by the Center for Disease Control (Brandt 1978, 26). One doctor on the committee by the name of Dr. J. Lawton Smith stated that "You will never have another study like this; take advantage of it" (Brandt 1978, 26). This quote is portraying how the thought of ethical considerations for this experiment was completely disregarded. “Take advantage of it” was referring to the medical findings of the study, but since this study was being conducted on men who were not even aware of how the study was impacting their health, the doctor is essentially saying “Take advantage of them.” It was finally halted by the Department of Health, Education and Welfare in 1972 (Brandt 1978, 27), decades after a treatment for syphilis had emerged. By this time, possibly more than one hundred of the men had died because of syphilis related reasons (Brandt 1978, 21). In the context of scientific advancement, the Tuskegee Study did not even reveal anything about the progression of syphilis. It did, however, reveal how unethical this study built through racial bias and injustice was. This study is a stain in the history of ethics in medicine, and an injustice that was justified by alienating Black people. The views that warranted the start and continuation of this study are imperative in understanding the medical mistreatment of Black people in present times.

The Tuskegee study portrays the position that Black people had in the medical community and ramifications of it can be observed in contemporary times. There are now certain stereotypes in society that work to alienate and categorize Black people. Research shows that many popular media depict Black people in a negative manner and white people in a positive one. The word “black” is constantly seen with words like “violent”, “lazy”, and “dangerous”. However, the word “white” is seen alongside words such as “successful”, “educated”, and “conventional” (Feldscher 2018, np). These stereotypical ideas about Black peoples’ intelligence and behaviour stem from the history of white scholars classifying them as intellectually inferior and ‘primitive’. These claims, although obviously untrue, remain historically relevant and are seen in today’s media. The messages in media affect peoples’ thoughts and play a part in the implicit bias that becomes formed in one’s head. In the case of physicians, these words influence the way they think and act when they see Black patients versus when they see white patients. As stated before, research shows that Black patients receive inferior care when compared to white patients (Corbin et al. 2020, np). Findings from a survey of physicians’ perceptions of patients showed that doctors rate Black patients as less intelligent and less educated than white ones, and that Black patients would be more likely to not comply with their medical advice (Yearby 2018, 1135), despite

evidence contradicting these beliefs. Media that affiliates Black people with words like "lazy" is responsible for these associations formed in a clinician's head to assume that their Black patients are less intelligent when delivering their care. These associations decrease the quality of care given to the Black patients, as the doctor is inclined to unconsciously deliver inferior care when assuming their patients will not follow medical advice due to laziness or intelligence level. The other way that media has been shaped through historical implications of race is through the use of the words "violent" and "dangerous". In the past, scholars associated crime and vice with Black people and characterized them as 'primitive' (Brandt 1978, 21). These words in media cause bias to form against Black people in the eyes of healthcare providers. Young Black men who come into the emergency department for stab wounds or gunshot wounds are presumed to be perpetrators of violence and treated inadequately (Corbin et al. 2020, np), as doctors make these assumptions about them. This treatment of young Black men as if they are "violent" stems from the media implications of the word, which have originated from the past connections of Black people and crime. These presumptuous associations of crime and Black people are the reason for limited optimal care by the physicians even when the Black men are the victims in the case. One important note to make here is that optimal care should be delivered regardless of whether the patient is a perpetrator or a victim; the hospital is not a moral policing system nor should the origins of an injury even give rise to low quality care. In the case of bias, however, the physician seeing their patient as the person who initiated violence because of their race in media clouds their judgment. A recent survey found that 22% of a nationally representative probability sample of Black adults in the US avoided medical care due to fear of being racially discriminated against and approximately a third of Black Americans reported personal experiences of racial discrimination when visiting a clinic or the doctor (NPR et al. 2017, 12). Thus, discriminatory treatment is often sensed by Black people, causing them to mistrust and avoid the healthcare system in general (Yearby 2018, 1136), which is detrimental as a medical condition may get worse if they avoid getting necessary medical help. To conclude, the association of Black people as "intellectually inferior" and "primitive" in the past led to continued links between these two ideas in media and in society. This is damaging because in the eyes of healthcare providers, seeing a patient as less intelligent could mitigate them from providing medical advice that they believe the patient would not follow. Similarly, viewing a patient as a criminal or as an instigator of violence clouds a physician's judgement to treat their injuries with less care, which is immoral and wrong.

Genealogical and Reproductive Health of Black Women in the Past & Present

When discussing the racial implication of medicine, the trials of Black women are crucial to examine, as they were wickedly mistreated. This section will focus the role that 'The Father of Gynecology', Dr. J Marion Sims, played in this. In the nineteenth century, he developed a technique to treat vaginal fistulas (Ojanuga 1993, 28), which were very common among enslaved women as they were at risk for them. Dr. Sims took advantage of this, and he experimented on enslaved women to create a technique to combat these fistulas (Ojanuga 1993, 28). Seven women were operated on overall without anesthesia as Sims had not known about it at the time (Ojanuga 1993, 29). These women did not volunteer to be experimented on, their masters gave their consent, which completely takes away any autonomy that the women have over their bodies. The first woman became ill after he tested his operation on her. She endured intense pain and humiliation as an abundance of doctors watched his 'work' (Ojanuga 1993, 29). Following this, he continued until he was successful four years later on a Black woman named Anarcha (Ojanuga 1993, 29). She underwent thirteen painful operations until she was cured of her fistula. An abundance of white women came for treatment after his success, but not a single one of them could withstand the surgery as it was too painful (Ojanuga 1993, 30). The contrast to observe here is that they were allowed to stop whenever they saw fit, as they were their own beings and it was their body in the eyes of Dr. Sims. However, the Black women he operated on without consent were not given this same agency over their bodies. He operated on them regardless of what they desired, or whether it was too painful or stressful, in order to achieve success in the surgery, which is an unethical travesty. He had used enslaved Black women as his test subjects, and this dubbed him the 'Father of Gynecology', a name that is unworthy. His 'work' shows Black women were not valued at all in society and in the medical field. He was merely ignoring the reproductive rights that these women should have had and that should have been respected, because of their race. This is an astounding piece in medical history, as it shows how disregarded Black women were when it came to their reproductive health and control over their bodies. It highlights their importance as meagre not only in healthcare, but in society overall. This level of importance is still applicable today in medical statistics that portray disparities in the reproductive health of Black women.

In the contemporary era, the statistics surrounding the reproductive health of Black women in America are concerning. This section will focus on pregnancy-related reproductive health, maternal mortality rates, and discrimination against Black women in healthcare settings. Black women are three to four times more likely to die during complications in pregnancy than white women (Rees 2020, np),

and they are more likely to die from every single pregnancy-related cause, such as hemorrhage, or pregnancy-induced hypertension (Anachebe & Sutton 2003, 38). Apart from biological and medical factors that could lead to maternal mortality, quality of care is an uber determinant of the outcome that occurs in a hospital. One of the reasons for the maternal mortality disparity could be the quality of care delivered prenatally and postpartum, as well as the satisfaction and perception of care that the women feel when seeking healthcare (Flanders-Stepans 2000, np). As mentioned before, Black people report discrimination at higher rates than white people in medical care, and among these statistics, Black women report discrimination at very high rates (Gonzalez et al. 2021, np). This discrimination manifests in two main ways: firstly, in clinical trials for uterine fibroids, where Black women are only 15% of the participants, even though this condition disproportionately affects them (Biem 2020, np). This is interesting to observe because in the past with Dr. Sims, when he did not require consent, he took advantage of Black women to study a condition that affects them; however, in today's society where consent has been established as a prerequisite for research, Black women are underrepresented in studies for a condition that disproportionately impacts them, portraying how they remain to be undervalued in healthcare even now. The second way this discrimination manifests is through direct inequitable treatment, such as doctors brushing off Black women's health concerns, not giving them a full range of treatment options (Stallings 2018, np), or the denial of pain medication that was discussed previously. This unfair treatment of Black women at the hands of discrimination is implicit racism at work and the cost is the wellbeing of pregnant Black women. The quality of this care is acknowledged in America as Black women feel unheard or misunderstood in healthcare settings (Stallings 2018, np). This awareness leads to less trust in the healthcare system by Black women, which is clear as only 73% of Black women begin prenatal care early on in the first trimester of their pregnancy, compared to 85% of white women (Anachebe & Sutton 2003, 38). The research portraying these health inequities is well-documented but there has been no real improvement in maternal mortality rates of Black women (Flanders-Stepans 2000, np). The discrimination that Black women endure in hospital settings, and the level of care obtained plays a role in the disturbing findings regarding their pregnancy-related complications and maternal mortality rates. Historically, as noted above, there were inequities in Black women's reproductive health in medicine at the hands of Dr. Sims. 'The Father of Gynecology' mistreated Black women and their reproductive health, and today white women have a better chance of receiving good quality care than Black women regarding reproductive health and pregnancy. Although not as atrocious as the medical travesties of Dr. Sims, this is still an injustice that must be addressed regarding the treatment of Black women.

`Racism within Healthcare Algorithms

All of these implications of race in medicine have led to an overall racist healthcare system in America. Apart from the implicit racism present among healthcare providers, the racist system is also expressed through a healthcare algorithm. This algorithm is used by a lot of American hospitals with the purpose of allocating resources to patients (Ledford 2019, np). Recently, an analysis found that it systematically discriminates against Black people (Ledford 2019, np). It is less likely to refer Black patients to services than white people who have the same medical needs, and it is used for the care of 200 million people in America (Ledford 2019, np). Not only is this highly inequitable to begin with, but Black people are on average sicker due to social reasons such as socioeconomic status and social exclusion, and the algorithm still refers white people more often. Studies found that if the algorithm were not flawed, the proportion of the Black patients who would be receiving referred care should be 46.5%, but due to the racial bias in the algorithm, the proportion of referred patients who were Black is only 17.7% (Ledford 2019, np). This value is not merely a percentage, it is a value of individuals who were denied optimal quality of medical care and referral to specialists due to discrimination against their race from an algorithm that is supposed to serve a healthcare system that treats everyone equally. The study also found that although this algorithm is very biased, it is not as biased as unconsciously racist healthcare providers (Ledford 2019, np), as addressed above. American healthcare works against the health of Black people not only through implicit racism in physicians, but also through systemic racism in algorithms aimed at allocating resources.

Racism in healthcare does not work at an individual level or a hospital level. It is ingrained in America through the historical significance of it and the systematic applications of it. To cure America of the ailment that racism plays in healthcare, action must be committed at a macro level of society. The American government must look upstream and solve this issue at the societal level which has given an abundance of disadvantages to Black people in healthcare. Dismantling racism in society is difficult through the long-standing significance and power it has held historically, but some changes can be implemented to assist with the issue in healthcare. Some ways to combat implicit racism in healthcare is through education and media. Education is crucial in battling racism in healthcare. Premedical programs and medical institutions should emphasize and educate that race is not biological, regardless of what history says. It should be reinforced so that medical students understand not to treat patients differently based on false connotations that their physiology is different due to race. This is an imperative topic to teach before they become practicing physicians. Following through with this, there should be inclusion and anti-discrimination workshops or training at hospitals with a policy

battling racial bias, especially for doctors who treat Black women, so physicians can continuously be educated on this matter and its dangerous implications in healthcare. As for media, it has been established how powerful media influences are on a person's mindset. Black people should not be affiliated with negative words such as "violent" or "lazy" in media as it forms an association between these attributes in the viewer's eyes leading to unconscious bias to treat them adversely and provide inferior care. Finally, the CDC claims that protocols aimed at improving quality of care in healthcare settings that are in disproportionate communities and addressing implicit bias there would lead to better patient-provider interactions (CDC 2019, np) and this would decrease maternal mortality death rates amongst Black women. Black women should also be recruited in more ethical clinical trials so that their demographics are represented for doctors to remain aware of. With these improvements, the healthcare system would be closer to becoming the just system that it should be.

Black and white health disparities are significant in America and implicit racial bias in healthcare is partly to blame. The historical implications of the medical field have made way for bias in today's healthcare system through people and algorithms. Racial bias has a direct cost on Black peoples' health because it impacts whether or not they receive certain treatments, their perception of healthcare, the maternal mortality rates of Black women, and the overall quality of care and resources received. In order to combat this medical racism, policies to improve quality of care in disproportionate communities should be implemented, media influences should be revised for racist connotations, and education regarding biology and race should be provided to aspiring and practicing physicians. Racism has run its course in America, and it is time that reign ends for the wellbeing of Black Americans, as well as the overall health of the population.

References

Anachebe, Ngozi F, and Madeline Y Sutton. 2003. "Racial Disparities in Reproductive Health Outcomes." *American Journal of Obstetrics and* Gynecology 188 (4): S37–S42. https://doi.org/10.1067/mob.2003.245.

Association of American Medical Colleges. 2019. "Percentage of All Active Physicians by Race/Ethnicity." *AAMC,* 1 July 2019, www.aamc.org/data-reports/workforce/interactive-data/figure-18-percentage-all-active-physicians-race/ethnicity-2018.

Bankole, Katherine. 1998. "The Human/Subhuman Issue and Slave Medicine in Louisiana." *Race, Gender & Class (Towson, Md.)* 5 (3): 3–11.

Biem, Piraye. 2020. "The Disparities in Healthcare for Black Women." *Endometriosis Foundation of America*, 6 June 2020. https://www.endofound.org/the-disparities-in-healthcare-for-black-women.

Brandt, Allan M. 1978. "Racism and Research: The Case of the Tuskegee Syphilis Study." *The Hastings Center Report* 8 (6): 21–29. https://doi.org/10.2307/3561468.

Bridges, Khiara M. "Implicit Bias and Racial Disparities in Health Care." *American Bar Association,* https://www.americanbar.org/groups/crsj/publications/human_rights_magazine_home/the-state-of-healthcare-in-the-united-states/racial-disparities-in-health-care/

Carratala, Sofia, and Connor Maxwell. 2020. "Health Disparities by Race and Ethnicity." *Center for American Progress*, May 7, 2020. http://www.americanprogress.org/issues/race/reports/2020/05/07/484742/health-disparities-race-ethnicity/.

CDC. 2019. "Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths." CDC Newsroom, 6 Sept. 2019, https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html

Corbin, Ted J, Loni P Tabb, John A Rich, and Jeffrey A Kline. 2020. "Commentary on Facing Structural Racism in Emergency Medicine." *Academic Emergency Medicine* 27 (10): 1067–69. https://doi.org/10.1111/acem.14093.

Feldscher, Karen. 2018. "Racial Bias and Its Effect on Health Care." *Harvard School of Public Health*, 22 June 2018, www.hsph.harvard.edu/news/features/racial-bias-and-its-effect-on-health-care/.

Flanders-Stepans, Mary Beth. 2000. "Alarming Racial Differences in Maternal Mortality." *The Journal of Perinatal Education* 9 (2): 50–. https://doi.org/10.1624/105812400X87653.

Gonzalez, D., Skopec, L., McDaniel, M. and Kenney, G. 2021. "Perceptions of Discrimination and Unfair Judgment While Seeking Health Care." Robert Wood Johnson Foundation. *Urban Institute*, April 5, 2021. https://www.rwjf.org/en/library/research/2021/03/perceptions-of-discrimination-and-unfair-judgment-while-seeking-health-care.html?cid=xem_other_unpd_ini%3Acoronavirustrackingsurvey_dte%3A20210401_des%3Adiscrimination.

Guess, Teresa J. 2006. "The Social Construction of Whiteness: Racism by Intent, Racism by Consequence." *Critical Sociology*, vol. 32, no. 4, July 2006, pp. 649–673, doi:10.1163/156916306779155199.

Hoffman, Kelly M, Sophie Trawalter, Jordan R Axt, and M Norman Oliver. 2016. "Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites." *Proceedings of the National Academy of Sciences - PNAS* 113 (16): 4296–4301. https://doi.org/10.1073/pnas.1516047113.

Ledford, Heidi. 2019. "Millions of Black People Affected by Racial Bias in Health-Care Algorithms." *Nature (London)* 574 (7780): 608–9. https://doi.org/10.1038/d41586-019-03228-6.

National Public Radio (NPR), Robert Wood Johnson Foundation, and Harvard T. H. Chan School of Public Health. 2017. "Discrimination in America: Experiences and Views of African Americans." *Washington, DC: Robert Wood Johnson Foundation*, October 2017. https://www.rwjf.org/content/dam/farm/reports/reports/2017/rwjf441128.

Ojanuga, D. 1993. "The Medical Ethics of the 'Father of Gynaecology', Dr J Marion Sims." *Journal of Medical Ethic*s 19 (1): 28–31. https://doi.org/10.1136/jme.19.1.28.

Rees, Mathieu. "Racism in Healthcare: Statistics and Examples." 2020. *Medical News Today*. September 16, 2020. https://www.medicalnewstoday.com/articles/racism-in-healthcare.

Stallings, Ericka. 2018. "The Article That Could Help Save Black Women's Lives." Oprah.com, October 2018. https://www.oprah.com/health_wellness/the-article-that-could-help-save-black-womens-lives#ixzz5VRnkBHiz.

Yearby, Ruqaiijah. 2018. “Racial Disparities in Health Status and Access to Healthcare: The Continuation of Inequality in the United States Due to Structural Racism: Continuing Racial Health Disparities.” *The American Journal of Economics and Sociology* 77 (3-4): 1113–52. https://doi.org/10.1111/ajes.12230.