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# Dying for a Diagnosis: The Impact of Racial Discrimination in Healthcare

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**Dying for a Diagnosis: The Impact of Racial Discrimination in Healthcare**

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First and foremost, I would like to dedicate this research paper to my mother Veronica, my daughter Celeste, my brother Dennis and the rest of my family and friends for inspiring me to pursue this degree. Thank you for all the encouragement and support, I could not have done any of this without you!

### **Abstract**

Previous studies have found that healthcare providers are affected by unconscious racial bias, reducing the quality of care and outcomes for African American patients (Yearby, 2010). This undergraduate study hypothesized when healthcare providers show more empathy, they provide higher quality care to their patients. Since African Americans face more discrimination on average, their chances for quality care is lower. Results reveal a positive correlation between empathy from healthcare providers and care administered to patients; furthermore, they reveal no significance found in discrimination of African American patients compared to other races. The study consisted of 93% female participants, which affects the data. Future research could include a sample size with more diversity of race and gender perspective on this subject.

## **Dying for a Diagnosis: The Impact of Discrimination in Healthcare**

### **Literature Review**

“Above all, do no harm” is what is expected from every healthcare professional, but what if the harm is unintentional and covert? The impact can be just as destructive. In American society, we like to think of ourselves as progressive and free of biases when it comes to treating people similar or different from us. We pride ourselves on being an open society that treats everyone equally; unfortunately, we know that is not the case in reality. With the rise of controversial figures on both sides of the political spectrum, there is clearly still mending to be done for race relations.

The United States institutionalized discrimination, and those negative prejudices still carry over into our society today (1982) as Barbara Fields explains in her article *Ideology and Race in American History*. Due to these negative stereotypes and prejudices forming in this nation’s inception, people were sectioned off into different categories now known as race. This construct decided if people were treated either respectfully or poorly. Those of European descent were treated with respect and those of African American descent were treated poorly.

The literature reviewed explores the impact and prevalence of healthcare discrimination that helped shape the current study. This chapter will provide context for racism and discrimination in this country (US); it will define and explore healthcare discrimination; discuss the impact of discrimination in healthcare for this African-Americans, and examine the mechanisms of such discrimination and provide factors that can reduce its prevalence for healthcare professionals.

**Racism and Discrimination: Past and Present**

As a species, humans prejudge things to make timely decisions on what course of action to take next. There is a lot of research on bias in human behavior, and the findings suggest prejudice is an evolutionarily developed trait to survive fight or flight scenarios (Bobo & Fox, 2003). Historically, ancient humans lived in groups; this fight or flight instinct would activate when an outsider appeared, as they often posed a threat. Humans as a result are predisposed to strangers or those with many differences. What was once considered an outsider has no doubt changed, but the attitude towards individuals who are considered outsiders has not. Unfortunately, these behaviors are not so easy to pacify. When people prejudge other people for whatever reason, we default to our visceral instincts which leads our personal beliefs and emotions override experience and knowledge (Tropp, 2003). Additionally, prejudices are found to be stable in that once prejudice is formed, it remains with the person throughout their life (Banks, 2006).

Discrimination is the act of behaving negatively towards an individual or group due to the social group they belong to (Dictionary.com, 2012). As it pertains to race in the US, people of Anglo-Saxon descent, known as the majority culture, have been extremely discriminatory towards people of other ethnicities, and in particular toward people of African descent. The manifestations of these prejudices lead to many atrocities, perpetrated by a superiority complex by those of European descent and inferiority of those of African descent (Plous, 2003). It is this mentality that has seeped into the collective unconscious of American society and caused much social tension.

*Discrimination Against African Americans.* Throughout American history, how racism and discrimination were practiced has evolved from overt dehumanization to

subtle barriers. The most prominent example is the transatlantic slave trade, where Africans were forcefully taken from their homes and families and enslaved to work in the newly acquired American colonies. This venture led to Africans being viewed and treated as subhuman chattel and not individuals with human cognition (Tomek, 2015).

Eventually, African American slaves were emancipated from their caste, but were actively barred from assimilating into American society. One example was the actions of the Ku Klux Klan a white supremacist group that terrorized African American neighborhoods across the South and eventually the nation (Fryer, Roland and Steven, 2012). Another instance would be the integration of Jim Crow laws, which legally segregated African Americans into the dredges of society. African Americans, as well as other minorities, were separated from the majority Caucasian populace which upheld the notion of “separate but equal” even though things were far from equal (Tomek, 2015). These laws made economic and social disparities seen today between the average Caucasian household incomes and the average African American household incomes. These inequalities are a direct result of the institutional racism that affects African Americans to this day.

Modern day racism is not as insidious and overt as it once was. Without a glaring situation as slavery to point to as an example, it can sometimes be difficult to notice when racism occurs. Everyday racism, also known as aversive racism, is described as well-intentioned beliefs in racial equality and viewing oneself as non-prejudicial while simultaneously harbor negative feelings like anxiety or discomfort around African Americans and other racial minorities (Pearson, Dovidio, & Gaertner, 2009). Aspects like these are where the lines become blurred as people’s actions have unintentional

consequences. In our modern society, we have the more covert forms of discrimination that are pervasive and seemingly inane. The issue of dealing with new forms of racism and discrimination a difficult one that may never be resolved.

A study was written by Elizabeth Deitch, Adam Barsky, Rebecca Butz, Suzanne Chan, Arthur Brief and Jill Bradley discusses the various types of subtle discrimination faced by African Americans especially in the workplace and its effects on the general well-being of those being targeted. The article states the difficulties of showing a direct link between to acts of aggression or harassment because it is not as obvious as overt discrimination (Deitch, Barsky, Butz, Chan, Brief, & Bradley, 2003). The article also points out how the frequent occurrences of subtle discrimination have the same, if not more, impact on the well being of those experiencing it (Deitch et al., 2003). The types of ramifications that are experienced are listed as feelings of hopelessness, anger, depression, and lower self-esteem (Deitch et al., 2003). Additionally, frequent instances of discrimination are documented to negatively affect one's mental and physical health such as raising blood pressure and avoiding interpersonal interactions (Deitch et al., 2003). Interestingly enough, those who perpetrate these subtle forms of discrimination do not see themselves as discriminatory (Pearson, Dovidio & Gaertner, 2009).

The state of mental health of those affected by discrimination was also taken into consideration and was proved to be correct in predicting that frequent and vague discriminatory acts or "microaggressions" have long lasting negative effects on the general well-being and mental health (Deitch, et al., 2003). The interesting thing that was found, was that those committing discriminatory acts would not consider as prejudiced because they considered more overt forms of discrimination as the only form of



discrimination. The microaggressions that were listed were the unwillingness to help or avoidance of the members of the out-group; additionally the belief of opportunity and individual mobility was a common belief among the in-group (Deitch, et al.,2003). This article examines the many facets of what perceived acts of discrimination have on a workplace environment, however the concepts found can apply to other facets of society.

### **Racial Discrimination in Healthcare**

When one thinks of healthcare, one thinks about doctors and nurses and people there to treat whatever condition one might be facing at the moment. Many do not realize just how much of an impact societal stereotypes play into how decisions made in every position in the healthcare field. For instance, Professor Dorothy Roberts (2008) examined whether or not using race in medicine is actually helpful in the diagnosing and treatment of diseases. Throughout her article, she compares the many instances where the use of race in medicine have been detrimental and other instances where they have been somewhat beneficial. She explains how the use of race in medicine to address disparities in different communities of people does not look at the social and environmental causes of why certain diseases affect certain races more than others. She views this as a way of legitimizing race in biology even though it is purely a social construct (Roberts, 2008). In the article, Roberts points out how in the past when societies were looking for a reason to enslave certain individuals due to their appearance, they used the scientific myth that Africans were less than human (Roberts, 2008). The use of this scientific belief then led to hundreds of years of slavery and mistreatment due to incorrect beliefs that used science as its foundation.

This is what Roberts is trying to combat against in her article; she states, “By

making black people's subordinated status seem natural, this view provides a ready logic for the staggering disenfranchisement of black citizens, as well as the perfect complement to colorblind social policies (Roberts, 2008)". Roberts then goes on to say how the using race to determine the cause or probability of a disease occurring in an individual is similar to using one's race to determine personality, it is essentially useless (Roberts, 2008). Roberts writes about the ways that race was used as a way of uplifting some while hindering and mistreating others, and the effects of this practice on our society today. By having race so ingrained in our society, Roberts suggests that we are blind to the institutional racism that negatively impacts individuals that belong to certain races, which then leads to our society not questioning the validity of race in medical science. With all that being said, this article aims to enlighten its readers in looking deeper into race based medicine and how the use of a social construct in a biological and scientific realm is highly flawed and can be dangerous.

In her next article, *Legal Constraints on the Use of Race in Biomedical Research: Toward a Social Justice Framework* she discusses the legal issues that arise when race is used in biomedical research. The article first gives a little background information on why race is used in biomedical research. It is due to the fact that early on when medical studies were being conducted in the U.S., minority groups were often left out of the studies and thought of as subhuman (Roberts, 2006). Due to the history of leaving out minority groups in the U.S., government agencies then required the inclusion of all races in biomedical research thus leading to the use of race on a regular basis in medical research (Roberts, 2006). These requirements came to be from well-intentioned policies, but have ended up creating a non-scientific category for the classification of people. The

formation of different laws and policies that were made to address the health disparities that plague different communities play into the notion that different groups of people are fundamentally different and have vastly different genetic make-up. This then changes the focus of why some groups of people have access to better healthcare than others. These are the same governmental institutions forming laws for racial inclusion in medical biomedical while ignoring the societal and environmental differences that different groups are exposed to that lead to such stark differences in healthcare. To conclude, Professor Roberts proposed that the legal parameters of biomedical research should promote equality of the races while denouncing the myth of race being a biological category (Roberts, 2006).

Professor Jonathan Kahn provided an example of the mechanisms behind this type discrimination in healthcare, describing the first FDA approved ethnic drug on the market called BiDil that is specifically marketed to African-Americans to treat heart disease. Dr. Kahn highlights the problematic assumptions that African-Americans have different biological make up which is why this drug was created. Throughout this article, Professor Kahn looks at the lead up to the production and approval of the drug BiDil and how the larger picture is painting a very inaccurate narrative that we as people are fundamentally different and that race is more of a biological construct rather than the social construct that was formulated a few centuries ago. He exposes that even the developers of BiDil admit that, “race does not necessarily predetermine genetic characteristics” (Kahn, 2005). All of the implications that are created with the formulation of this drug are unsettling and a way for government institutions to avoid responsibility in the environmental that different communities of people are exposed to

due to their race and the history behind their treatment in the U.S. (Kahn, 2005). Professor Kahn states, “The strategy of reifying race to turn inequality into mere difference, and consequently privileging market over institutional intervention, has echoes beyond the realm of health disparities” (Kahn, 2005). To conclude, Professor Kahn explains how the production of the FDA approved drug BiDil could lead to new forms of discrimination in healthcare and other realms of American society. Even with the positives that could arise in making prescription drugs that are targeted to certain groups of people, in doing that, the previous laws and policies that were formed to combat discrimination could instead encourage it further.

### **The Impact of Healthcare Discrimination on African-Americans**

In the article, *Perceptions of Race/Ethnicity-Based Discrimination: A Review of Measures and Evaluation of their Usefulness for the Health Care Setting* written by Nancy Kressin, Ph.D., Kristal Raymond, MPH, and Meredith Manze, MPH, looks to study the perceptions of discrimination held by minority groups, mainly African Americans, from their healthcare providers. The goal of the study was to establish whether or not instances of discrimination occur and their effects on patients’ treatment in healthcare settings by their providers. Three levels of racism were used as measures to record discrimination, which were personally mediated, institutionalized, and internalized racism (Kressin, Raymond & Manze, 2008). The main focus of the three forms of racism was on personally-mediated which was as subtle not giving certain patients the full scope of treatment options due to the beliefs and stereotyping that the patient would not follow orders, are incompetent or just disliked (Kressin, Raymond & Manze, 2008). The perceived instances of discrimination included being disrespected, being given poorer

service in general and being treated with less courtesy than was given to members of other races (Kressin, Raymond & Manze, 2008).

What was found in the study was that some of the instances where discrimination was perceived by the patients were minimized and internalized by those experiencing the discrimination (Kressin, Raymond & Manze, 2008). Additionally, it was proven that everyday discrimination had a greater impact on the health status of the patient than less frequent but major instances of discrimination (Kressin, Raymond & Manze, 2008). All of these findings led to the acknowledgement that racism and discrimination by healthcare providers is an ongoing issue that not only affects the psychological health of patients, but the overall health and wellbeing of patients that belong to groups that experience frequent instances of discrimination.

On the same topic, Yearby (2010) looks into the changes or lack thereof in the healthcare industry that are supposed to address racial differences in the treatment and care of patients. In 1985, the secretary of U.S. Department of Health and Services (HHS) came out with a report that showed the evidence of racial disparities in the U.S. healthcare system (Yearby, 2010). By 1998, President Bill Clinton revealed the Initiative to Eliminate Racial and Ethnic Disparities in Healthcare by 2010 (Yearby, 2010). In 2002 the Institute of Medicine Study (IOM Study) *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* recognized continuing racial disparities in healthcare and gave suggestions on how to eliminate said disparities (Yearby, 2010). Even with all of these findings, the continued mistreatment and diagnoses of those belonging to minority groups persists.

The article illustrates the staggering number of minorities that suffered 60,000

more deaths due to diabetes, breast cancer and coronary disease than Caucasians even though Caucasians suffer from those diseases at higher rates (Yearby, 2010). Yearby explains the factor race has in racial disparities is due to its social impact not biological differences. She revealed that during a 1999 study, it was found that the race of the patient affected the care and treatments given by healthcare providers due to racial stereotypes held by healthcare providers (Yearby, 2010). Even a Caucasian doctor, Dr. Calman, serving a mostly minority community in New York admitted he and his colleague's struggled with overcoming subconscious racial prejudices that hindered the type of care his patients' received (Yearby, 2010). All of these facts lead one to question if any of the initiatives that were implemented have any effect on actually changing the way patients are given care. This then leads to a question of whether or not healthcare disparities are due environmental and social factors such as underlying racial biases and discrimination. Yearby concludes her article by proposing a revision to the Title VI of the Civil Rights Act of 1964 to include healthcare providers and disallowing racial discrimination in their field.

“Reducing and eliminating disparities in healthcare is a matter of life and death” (McHenry, 2012) states in her article *Healthcare Disparities, a Major Concern for the United States Healthcare Delivery System*. According to data there are 84,000 annual deaths caused from preventable diseases or conditions (McHenry, 2012). The US Department of Health states that disparities in healthcare are defined as, “differences in occurrence, frequency, death and burden of diseases and other unfavorable health conditions that exist among specific groups, including racial and ethnic minority groups” (Department of Health and Human Services, 2011). These numbers are staggering to

digest because some of those preventable deaths are due to some type of institutional or personal discrimination. Institutional discrimination is a kind of discrimination that is not openly seen but is ingrained in the fabric of the laws that govern this nation.

The more widely known type of institutional discrimination comes in the form of institutional racism, which is defined as “particular and general instances of racial discrimination, inequality, exploitation, and domination in organizational or institutional contexts, such as the labor market or the nation-state. While institutional racism can be overt, it is more often used to explain cases of disparate impact, where organizations or societies distribute more resources to one group than another without overtly racist intent” (p. 857, Clair & Denis, 2015). This form of discrimination can be as subtle as not wanting to have public transportation stops in certain affluent parts of town in order to prevent low-income individuals from entering those areas. It can also be as covert as intentionally targeting certain groups for harassment, arrest, and incarceration due to negative societal stereotypes.

### **Discrimination in Healthcare: Causes and Prevention**

There are several causes of discrimination in healthcare but this study explores those that eventually manifest into behavioral actions. Stereotyping is one of the most basic forms of cognitive processing which allows our brains to not have to individually process every stimulant (Burgess, Fu & Ryn, 2004). This is due to the way in which we learn and memorize things. This cognitive process is helpful in some cases, but often times it leads to incorrect generalizations that can cause major issues, especially in the realm of healthcare. Those that are in the healthcare field are not exempt from the vices of subconscious bias. This oftentimes translates into giving certain patients improper

treatment due to preconceived notion that the patient is either unintelligent, does not follow directions, or has a higher than normal pain tolerance (Burgess, Fu, Ryn, 2004). In a study conducted by Chen, D., Lew, R., Hershman, W., & Orlander, J., it was discovered that medical students have the highest levels of empathy in the beginning of their medical career but as the stress of the occupation catches up with the medical student, the levels of empathy begin to decline (2007). This finding then brings up a very important piece to the puzzle of discrimination in healthcare. The point being that the higher the levels of empathy present in the healthcare provider, the less likely the healthcare provider is to engage in discriminatory behavior towards their patients.

On the side of the patients, especially those of African descent, the constant subtle forms of discrimination causes a distrust in the healthcare system as a whole, which then leads to the exacerbation of the healthcare disparities (Boulware, Cooper, Ratner, LaVeist, & Powe, 2003). This is what is usually seen as avoidance of healthcare providers and seeking treatment in a timely manner among other factors that cause a negative feedback loop. All of these facets in what make up healthcare disparities can be attributed to the discrimination in healthcare.

### **The Current Study**

The current study examined if in fact there is a correlation of empathy levels and discrimination present in field of healthcare. Even though discrimination in healthcare continues to be a huge problem that costs consumers and healthcare providers millions of dollars, reduces effectiveness of treatments and interventions, and overall increases distrust among the African American community toward the medical system. Studies have found that African Americans continue to experience more adverse consequences of



diseases when compared with Caucasians even though Caucasians are diagnosed with those diseases more. It looks like this is due to racism, especially implicit attitudes held by healthcare providers, which lead to discriminatory behaviors and perception of discrimination among African American patients. However, empathy is one protective factor and among empathic clinicians, discrimination is less prevalent. Therefore, the current study will examine the links between empathy, race, and treatment/efficacy for healthcare students.

### **Hypotheses**

Hypothesis 1: The level of empathy a healthcare provider determines the level of care they give to their patients. The higher the level of empathy, the higher the level of care the patient receives.

Hypothesis 2: African American patients receive inadequate care due to stereotypes and lack of empathy from their healthcare providers; if the healthcare provider holds subconscious biases towards African Americans, the likelihood that their African American patients will be associated with negative feelings is high. If a healthcare provider has subconscious biases, even if they intend no harm, subtle forms of racial discrimination manifest into disparities in the treatment of their patients, such as the delay of pain treatment.

### **Method**

#### *Participants*

The number of individuals that participated was 54 in total but only 45 individuals

completed the study and had useable data. The gender makeup of the participants was 93% female and 7% male due to majority female campus of Dominican University of California (Graph 1). The participants involved in this study were students in the sciences, such as biological science, nursing, and psychology majors as well as Bay Area healthcare professionals. The majority of the students that participated were from Dominican University of California while the rest of the participants were recruited online and also reside in the San Francisco Bay Area. The age range of the majority participants were college age, which typically ranges from 17-35 years old; the average age being around 20 years old. The healthcare professionals that participated were determined to be at least 18 years old. The education level of participants ranged from having a high school diploma to Doctoral Degrees, with majority stating that they have some college credit. The ethnicities of the participants were 21 Caucasian, 10 Hispanic/Latino, 10 Asian/ Pacific Islanders, 2 African Americans, and 2 Non-Styled self-identified individuals (Graph 2).

### *Materials*

The material used was a questionnaire hosted on SurveyMonkey.com that comprised of 4 sections. Before the participants could proceed, they had to indicate that they were over 18 years of age and agree to the terms of the survey. The first section asked the participants to answer 5 demographic questions such as gender, ethnicity, education completed, education level, field of study/major in order to gauge the participants and better understand their mindset. Subsequently, the participants proceeded to take a series of questions from Jefferson Empathy Scale HPS (Hojat, 2007), a vignette that had a medical scenario with one out of three options being either an African

American patient, a Caucasian patient or a Non-Styled Race patient. Afterwards, the participants were given the Big Five Personality Inventory (Rammstedt and John, 2007) to determine the patient's personality to note if there was any implicit bias towards the patient in the scenario mentioned before. The Big Five Inventory is an empirically validated test designed by researcher Dr. Beatrice Rammstedt and psychologist Oliver John Ph.D. that was adapted to be shorter than the original Big Five personality test. This shorter inventory contained 10-items instead of the original 44-item questionnaire. The Jefferson empathy test is also an empirically validated scale, which was created by Dr. Mohammadreza Hojat (2003) and modified by Dr. Sylvia Fields (2007) and others to accommodate those in the medical field that are not physicians and/or students. The only modification in the scale present is the replacement of the word physician with the words healthcare provider.

### *Procedure*

Participants were recruited through in class presentations (Appendix A & B), and online through social media and email (Appendix C). As the participant was given the link to the survey, they were greeted with a letter of introduction and provided consent in order to continue the study (Appendix D). The first set of questions the participant answered were 5 demographic questions about their ethnicity, gender, education completed, education level and field of study/major (Appendix E). If the participant was not eligible to participate in the study, they were dismissed with a disqualification letter (Appendix L). Once that was complete, the first empirical test participants took was the Jefferson Empathy Scale for Healthcare Professionals - Student Version (Hojat, 2007) that contained 20 questions (Appendix F). The next phase of the survey was the

participants being given one out of three vignettes of a patient seeking medical treatment with broad symptoms that resemble a panic attack or a heart attack, which was determined by the month option in which the participant was born (Appendix M). Those whom said they were born from January through April received the African American vignette (Appendix G). Those who selected May through August as their birth month were given the Caucasian vignette (Appendix H). And those who selected September through December were given the Non-State Race vignette (Appendix I). The last part of the survey was a 10-question personality inventory that asked participants to rate the patient's personality from 1 to 5 (Appendix J). The surveys were completed between 5 to 15 minutes and the participant was dismissed with a thank you letter for participation (Appendix K).

## **Results**

The survey questionnaire links were distributed through email, social media networks Facebook and LinkedIn, and in class recruiting in two second year nursing classes. There were 54 responses in total, although only 45 participants completed the survey in its entirety. All of the participants were over the age of 18 but were not asked to specify their ages. The education levels ranged from High School Diplomas to Doctorate Degrees. All of the participants are currently residing in the Bay Area with the vast majority (90%) being Dominican University of California students.

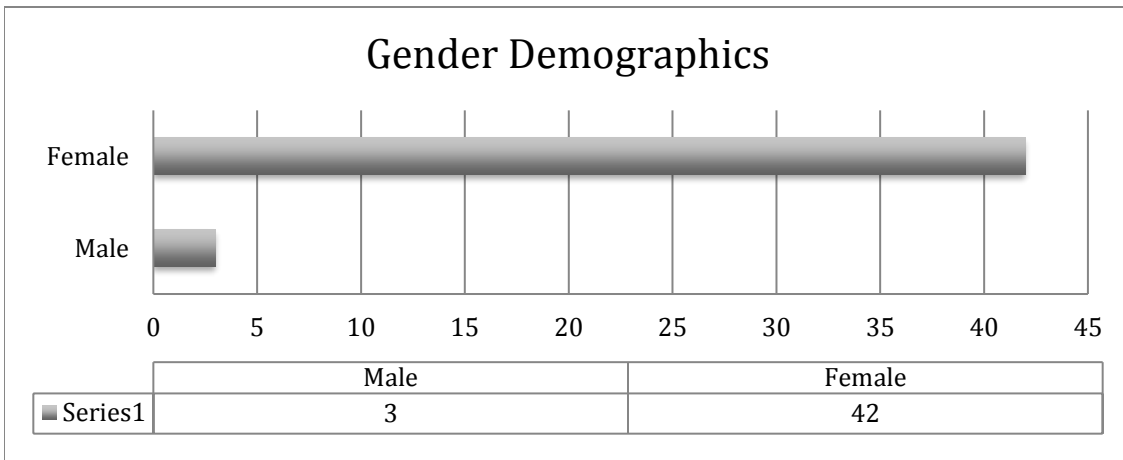
Participants were randomly assigned to one of three vignette options, each detailing a medical emergency scenario that described symptoms that were vague enough to be diagnosed as either a panic attack or a heart attack. The only differences in the vignette was the race being stated as an African American patient, a Caucasian patient

and a patient (Non-Race Stated). The gender of the patient was not stated and left to be assumed by participant.

It was hypothesized that participants who had higher empathy levels would provide a higher level of care, as measured by their perception of patients, their time to respond to the patient and whether they would administer treatment. It was also hypothesized that due to societal stereotypes, African Americans were more likely to be discriminated by healthcare providers in general. Specifically, participants assigned to the African-American vignette would rate the patient as more neurotic and having lower levels of openness, conscientiousness, and agreeableness. Participants' empathy levels were assessed using the Jefferson Empathy Scale and a sum score of questions that responded to the patient in the African-American, Caucasian, and non-stated race vignette conditions.

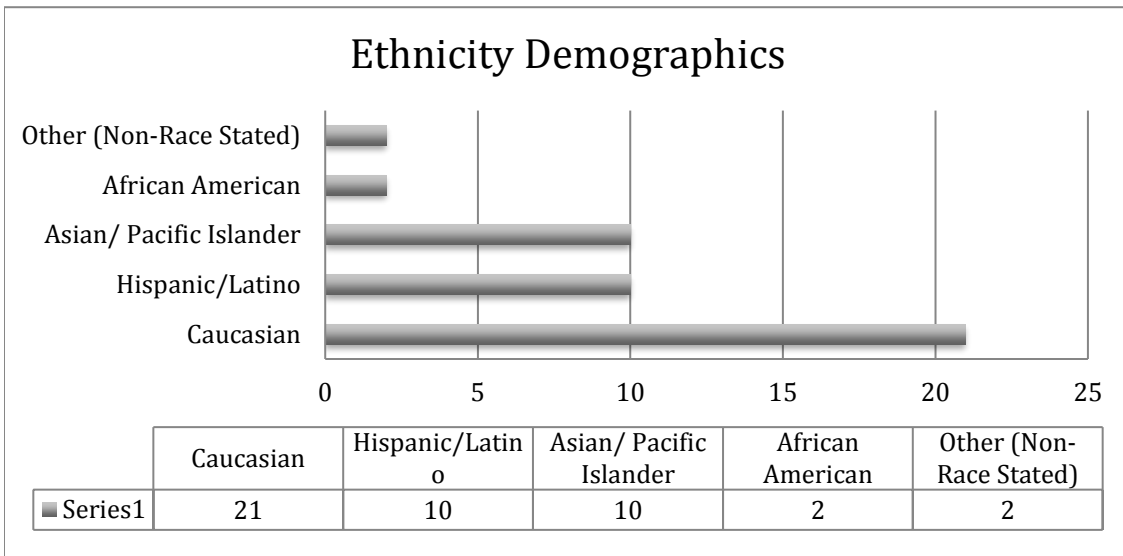
Results indicated a positive correlation between participants' empathy level and the level of care they administer to their patients. Specifically, empathy was positively correlated to how accurate participants thought patients were in describing their symptoms,  $r(45) = .3, p < .05$  (Table 3). Additionally, the data revealed that the more severe participants believed the patient's symptoms were, the quicker they responded to administering treatment,  $r(44) = -.462, p < .05$  (Table 4) and treated the patients more quickly when they were more likely to administer treatment,  $r = -.469, p < .01$  (Table 4). A one-way ANOVA found that the effect of race of a patient on perceived likelihood of treatment was significant,  $F(4, 42) = 3.809, p = .030$  (Table 5). Post Hoc analysis using Tukey's test for significance indicated that participants were more likely to treat African American patients than Non-Race Stated patients ( $MD = 1.333, p = .038$ ) (Table 6).

Graph 1



Graph 1 contains a bar chart of gender demographics of participants in this study reveal female majority sample.

Graph 2



Graph 2 contains bar chart of participant's self-identified ethnicity.

Table 3

| Vignette Type    | Severity of Symptoms Score |       |       |       |       | Total (N) |        |
|------------------|----------------------------|-------|-------|-------|-------|-----------|--------|
|                  | 5                          | 7     | 8     | 9     | 10    |           |        |
| African American | Count                      | 0     | 1     | 4     | 5     | 5         | 15     |
|                  | % within Vignette Type     | 0.0%  | 6.7%  | 26.7% | 33.3% | 33.3%     | 100.0% |
| Caucasian        | Count                      | 0     | 3     | 5     | 4     | 2         | 14     |
|                  | % within Vignette Type     | 0.0%  | 21.4% | 35.7% | 28.6% | 14.3%     | 100.0% |
| Non-Race Stated  | Count                      | 2     | 3     | 4     | 5     | 2         | 16     |
|                  | % within Vignette Type     | 12.5% | 18.8% | 25.0% | 31.3% | 12.5%     | 100.0% |
| Total            | Count                      | 2     | 7     | 13    | 14    | 9         | 45     |
|                  | % within Vignette Type     | 4.4%  | 15.6% | 28.9% | 31.1% | 20.0%     | 100.0% |

$r(45) = .3, p < .05$

Table 3 shows the frequency and percentage scores given by participants in ranking the severity of the patient's symptoms.

Table 4

| Vignette Type    |                        | Description Accuracy Score |       |       |       |       | Total (N) |        |
|------------------|------------------------|----------------------------|-------|-------|-------|-------|-----------|--------|
|                  |                        | 4                          | 5     | 7     | 8     | 9     |           | 10     |
| African American | Count                  | 1                          | 0     | 1     | 2     | 6     | 5         | 15     |
|                  | % within Vignette Type | 6.7%                       | 0.0%  | 6.7%  | 13.3% | 40.0% | 33.3%     | 100.0% |
| Caucasian        | Count                  | 0                          | 1     | 4     | 5     | 1     | 3         | 14     |
|                  | % within Vignette Type | 0.0%                       | 7.1%  | 28.6% | 35.7% | 7.1%  | 21.4%     | 100.0% |
| Non-Race Stated  | Count                  | 1                          | 2     | 2     | 5     | 1     | 5         | 16     |
|                  | % within Vignette Type | 6.3%                       | 12.5% | 12.5% | 31.3% | 6.3%  | 31.3%     | 100.0% |
| Total            | Count                  | 2                          | 3     | 7     | 12    | 8     | 13        | 45     |
|                  | % within Vignette Type | 4.4%                       | 6.7%  | 15.6% | 26.7% | 17.8% | 28.9%     | 100.0% |

$r(44) = -.462, p < .05$

Table 4 shows the frequency and percentage scores given by participants in ranking the accurate description of the patient's symptoms.



Table 5

|                            |                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------------------|----------------|----------------|----|-------------|-------|------|
| Treatment Likelihood Score | Between Groups | 16.152         | 2  | 8.076       | 3.809 | .030 |
|                            | Within Groups  | 89.048         | 42 | 2.120       |       |      |
|                            | Total          | 105.200        | 44 |             |       |      |

$F(4, 42) = 3.809, p = .030$

Table 5 shows a significance in the likelihood to administer treatment to patient.

Table 6

Dependent Variable: Likelihood to Administer Treatment Score

Tukeys HSD

| Vignette Type                    | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|----------------------------------|-----------------------|------------|------|-------------------------|-------------|
|                                  |                       |            |      | Lower Bound             | Upper Bound |
| African American Caucasian       | .190                  | .541       | .934 | -1.12                   | 1.51        |
|                                  | 1.333*                | .523       | .038 | .06                     | 2.60        |
| Caucasian African American       | -.190                 | .541       | .934 | -1.51                   | 1.12        |
|                                  | 1.143                 | .533       | .093 | -.15                    | 2.44        |
| Non-Race Stated African American | -1.333*               | .523       | .038 | -2.60                   | -.06        |
|                                  | -1.143                | .533       | .093 | -2.44                   | .15         |

\*. The mean difference is significant at the 0.05 level.

### **Discussion**

The results in this study revealed many things about perceptions of patients by the healthcare provider participants. The first finding was a positive correlation of empathy levels and care administered to patients. It showed that the higher the empathy levels present in the participants, the higher the level of care the participant would provide to patients regardless of race. The data found supports the first hypothesis made in the study. In other words, in order for healthcare providers to be effective, their empathy levels should be relatively high towards their patients. That is to say, the more an individual can empathize and relate to their patient, the more invested they will be in the patient's condition and overall health, thus providing a high level of care to patients. This finding reflects positively of what society looks for in a healthcare provider; someone who can put themselves in the shoes of others and relate personally. That implies that if an individual can put themselves in the shoes of someone else, they will treat the others with the same care they give to themselves.

Contrary to the second hypothesis, there was no correlation between the levels of discrimination shown against African American patients versus Caucasian and Non-Race Stated patients. In fact, African American patients' symptoms were believed to be more severe than Caucasian and Non-Race Stated patients. The data collected from this sample did not reveal a bias shown towards Caucasian patients as opposed to African American patients. The participants did not rate African Americans more negatively when rating their patient's personality through the measures on the Big Five Inventory in the found in this sample. The measures being higher on neuroticism and lower on openness, conscientiousness, and agreeableness compared to Caucasian and Non-Race Stated

patients. Empathy levels were measured using the Jefferson Empathy Scale, then a vignette with either an African American, Caucasian or Non-Race Stated patient. Interestingly enough, a negative correlation was found between the empathy levels of Non-Race Stated patients and African American patients. It unveiled lower levels of empathy shown to Non-Race Stated patients than African American or Caucasian patients. The data found did not support the second hypothesis. This could be the result of the region in which the study took place or could be reflective of the changing social climate that condemns blatant discrimination in our modern times. Although there are still forms of discrimination still present in our society, the data collected reinforces a positive hope for change and equality for all.

The findings allow one to come to the conclusion that in order for healthcare providers to have an empathic connection with a patient, the race of the individual needs to be mentioned. The reason behind this might be due to the way in which society conditions individuals to use race in forming connections with others. It was found in the article *Same Faces Different Labels* written by Hourihan, Fraundorf & Benjamin (2013) that the recollection of individuals' faces belonging to the same and other racial groups affects the way in which faces are encoded and stored in one's memory. That implies that if an individual belongs to a different race, the way in which they are perceived is heavily reliant on the own race of the individual interacting with the person. That can then increase the likelihood of discrimination towards others that belong to the out-group (Deitch, et al.,2003).

It was found in the article *Physicians' Anxiety Due to Uncertainty and the Use of Race in Medical Decision Making* (Cunningham, Bonham, Sellers, Yeh & Cooper, 2014),

how race is used as an important factor in determining the treatment path patients would receive, even if patients were suffering from the same condition. This then leads to developing higher levels of empathy towards individuals when one is aware of the race of the patient. In other words, participants felt like they did not know an individual until they knew that individual's race.

### **Limitations of the Study**

Although this research study intended to reach a more diverse sample size, a challenge the study faced was having a balanced gender representation in the participants. The data showed that there were higher levels of empathy than expected given to the patients in the vignettes, as well as low levels of discrimination towards patients. Either of these findings could be an accurate measure of the general psyche present within the demographic region this study took place in being the liberal Bay Area. Or the data collected could be a result of the various limitations present in the study. The study comprised of 93% female participants, and 7% male participants. Having this much overrepresentation of the female input could have significantly skewed the data. According to the article *Gender and Values* by Beutel & Marini (1995), women generally place higher value on caregiving and careers that require social skills and are less likely than men to take on a competitive demeanor in those jobs. It is also fairly well known by society that those entering the healthcare field are generally more empathic towards others, hence their attraction to the healthcare field (Beutel & Marini, 1995). That leads to what the data revealed, a high level of empathy among the female majority healthcare provider sample towards patients despite the race of the patient.

### **Future Research**

Future research would look into gathering a more diverse and gender representative sample. Additionally, future research should include different geographic areas of the U.S. since the entire sample size is only somewhat representative of the Bay Area perceptions. Further research on this subject could include a larger and representative sample size would reveal general perceptions on race, discrimination, and healthcare, which could be beneficial in the treatment of patients of all races and genders. Additionally, different aspects of research could be conducted that would look into why African American patients' symptoms were believed to be more severe than Caucasian and Non-Race Stated patients.

Findings in this study are intended to broaden the awareness of racial discrimination in healthcare and how negative stereotypes of certain ethnic groups affects every aspect of life including the receiving of healthcare. Even though discrimination in our healthcare system occurs more times than we would expect, the data collected from this sample shows a positive direction in which our society is headed. Our sample does not reveal any biases towards African American patients, but that does not mean they do not exist. Further extensive research could uncover some of the mysteries left untouched in this study. Future research into the various limitations that were encountered could uncover a specific issue that was missed or an entirely different perception, which should be explored.

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