

The Unfortunate Relationship between African Americans and Cancer

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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Introduction

African Americans are more likely to be “diagnosed with cancer at a regional or distant stage” (Cancer Facts & Figures for African Americans 2019-2021, 2021) than white people of the disease. One reason for this occurrence is that statistically, white people tend to have a better socioeconomic status than African Americans. The American Cancer Society has shown that in 2017, “21% of blacks and 9% of whites were below the federal poverty level” if “22% of blacks and 36% of white people completed a 4-year college degree (Cancer Facts & Figures for African Americans 2019-2021, 2021). Socioeconomic status is a good indicator on whether or not one can afford the proper healthcare or treatment from medical workers. The social construction of technology (SCOT) framework is used to better comprehend the connection between the American healthcare system and African Americans. Which leads to the following research question: What diagnostic measures can be taken to reduce cancer disparities for African Americans?

Supportive Background Information

Understanding Cancer

Cancer is a disease that causes cells to grow at an abnormal speed. Human cells “normally grow and multiply (through a process called cell division) to form new cells as the body needs them. When cells grow old or become damaged, they die, and new cells take their place” (National Cancer Institute, 2021). Although the cause of getting cancer is unknown, there are risk factors that increase the likelihood of getting cancer such as “lifestyle factors (smoking, poor diet), family history, inheritance, genetics, exposures to certain viruses, environmental exposure” (Stanford health care). However, the first stages of cancer occur when the cell division process is interrupted, meaning new cells are growing at an abnormal rate or old cells are not dying when they need to. Cancer is broken into four stages: Stage zero is where cancer begins to

appear yet has not spread to any other part of your body. Stage one is where cancer initially spreads, however, it has not grown deeply into nearby tissues of where it is located. Stage two and three is where it has grown deeper into the tissue. Finally, stage four is the final stage where cancer has diffused to other organs and parts of one's body. The four most common cancers that kill Americans are lung, colon and rectal pancreatic, and breast cancer (National Cancer Institute, 2015).

Understanding African American History After Integration

For most of American history, African Americans have been mistreated by society with the roots of slavery and segregation still rooted in present America. It was clear that “racial tensions were high in 1970, as blacks became frustrated with economic conditions that did not improve despite advancements in civil rights” (Racial Tension in the 1970s). Despite the civil rights movement, discrimination still occurred against African Americans, and fitting into society was still a challenge. The intentional marginalization that persisted even after slavery and segregation made it difficult for African Americans to progress in society. From 2004 - 2007, Bank of America had to reimburse \$335 million for Countrywide's scandal that involved selling “African-American and Hispanics riskier borrowers riskier loans” for a higher cost than white people with the same credit score (CBS News). In 2016, “the median net worth of non-Hispanic White households was \$143,600. The median net worth of Black households was \$12,920.” (Amadeo, 2016). The social issues that the average African American face today have affected their economic status to be low-income, unable to live comfortably in America.

STS Framework

The STS framework that is in use necessary for the following analysis is the SCOT (Social Construction Of Technology), which is the idea that technology does not dictate the

actions of humans, but the actions of humans shape technology. SCOT theory proves that the result of technology can be dependent on how society is constructed in a social manner. The social groups that have a stake in a conflict must be resolved between one another to find the most optimal solution. One main issue with having many diverse perspectives coming together to find a solution is that the solution may either be very difficult to come up with or a solution will not be found.

The SCOT framework is used to understand the relationship between the American healthcare system and African Americans. According to Cancer Health Disparities, a low socioeconomic status “has been associated with poor access to high-quality care, lower screening rates, delays in treatment after diagnosis and lower treatment adherence” (Zavala, V et al., 2020). The need for more medical assistance poses a challenge to African Americans due to the lack of access to medical technology, given their economic status and inability to afford a proper healthcare system.

Research Question and Methods:

Research Question: What diagnostic measures can be taken to reduce cancer disparities for African Americans?

The following analysis utilizes a case study approach to demonstrate why and how African Americans are more likely to have cancer than other ethnicities, along with understanding ways to reduce this disparity that exists. The first case study is from the Centers for Disease Control and Prevention is about a cancer intervention by community health advisors to encourage African Americans to take cancer screening seriously. The second case study is from the National Center for Biotechnology Information, which is comparing the relationship between the economic well-being of a person and the possibility of one surviving cancer. The

third case study is from the Journal of Community of Health, which evaluates the connection between medical mistrust and colorectal cancer screening among African Americans. The next parts of this paper are organized thematically based on the general causes of the cancer disparities that African Americans face.

Results and Discussion:

Decades of medical distrust have created a sociotechnical divide between medical professionals and the African American community. This research has provided further understanding that it is essential to raise awareness in the African American community about what cancer is and the risks that are involved with having it. Part of the reason why African Americans are not getting screened is simply due to not trusting the medical workers that test them for cancer. The SCOT theory is relevant in creating a proper solution because this issue is between two social groups, African Americans, and medical workers. These identified social groups need to establish a solution between one another to create a healthier relationship that contains trust. Being able to establish a healthy and non-discriminatory relationship will allow all African Americans around the United States to be able to feel safe around medical workers for routine procedures.

The first case study that was explored was titled “Promoting Cancer Screening in Partnership With Health Ministries in 9 African American Churches in South Los Angeles.” This was a pretest-posttest study led by community health advisors (CHA) and their goal was to be able to reduce cancer disparities among the African American community. The participants consisted of 775 African American males and females with an age range between 50-75 years of age. The test first started out by determining how many participants adhered to the national cancer screening guidelines. The researchers did this by giving out a one-page assessment to

determine what cancer screenings the participants followed such as colorectal cancer screening, breast cancer screening, cervical cancer screening, and prostate cancer screening. It was confirmed that 56% of participants adhered to the guidelines while 44% of participants did not. Once the CHA was able to identify who did not adhere to the cancer screening guidelines, they would then continue the study with that group to promote adherence to the guidelines. CHA would provide counseling to these participants to understand their reasoning for not taking part in the cancer screenings and advise them to invest in their health. Afterward, a 3-month surveys follow-up was conducted to update their status on adherence to any cancer screening guidelines.

The results of this study showed that 185 out of 226 participants were overdue for colorectal cancer screening, 77 out of 110 female participants were overdue for breast cancer screening, and 48 out of 60 female participants were overdue for cervical cancer screening (Maxwell, A. E., 2019). Some comments that the participants did not get screened were: “ “I feel fine,” “I don’t like to go to doctors,” and “no time” (Maxwell, A. E., 2019).” After the three-month follow-up, it was reported that 5% of the 84 male participants with colorectal cancer went out to get a stool blood test and 8% received a colonoscopy (Maxwell, A. E., 2019). It was also reported that of the female participants, 16% received a stool blood test, 10% received a mammogram and 17% received a Pap test after the 3-month follow-up (Maxwell, A. E., 2019). Some comments participants also said during the follow-up were: “ “Early detection can save your life”, “I need to take better care of my health,” “I learned about increased risk for cancer with age,” and “remember to get screened even if you feel healthy” (Maxwell, A. E., 2019).” This study shows that African Americans simply are not aware or not motivated by cancer screening and how beneficial they are. After the participants were able to learn more about

cancer screening, there was a slight increase in cancer screenings by the participants that did not initially get screened.

The second case study is “Socioeconomic status and lifestyle behaviours in cancer survivors: smoking and physical activity”. This study was conducted by the University Health Network Research Ethics Board. Participants were recruited from Princess Margaret Cancer Center, located in Toronto, ON. The participants were of diverse backgrounds and cancer survivors, and they received a questionnaire that asks about their lifestyle habits, along with their education level and socioeconomic status (SES). They had to answer questions about their smoking and physical activity 1 year before their cancer diagnosis and 24-30 months after they were cancer-free.

The results of this study show that 1456 people participated in this study and 1222 of them completed the questionnaire for either the smoking questions or the physical activity questions. Out of 1222, 1192 of them completed the smoking questionnaire section where 556 participants were “ever-smokers”, patients who smoked more than 100 cigars in their lifetime, and 636 participants never smoked. 1106 completed the questionnaire where 427 participants lacked physical activity, while 679 were physically active before diagnosis (Naik et al., 2016). A notable piece of data was 45% of smokers had lung cancer and only 27% of them had continued with smoking after they had lung cancer (Naik et al., 2016). Of the 556 ever-smokers, 182 smoked one year before diagnosis, while 374 did not smoke one year before diagnosis (Naik et al., 2016). 104 out of the 182 participants who smoked before diagnosis quit after, while the rest of them continued to smoke (Naik et al., 2016). Of the 427 who lacked physical activity, only 77 participants became physically active, while the rest stayed inactive (Naik et al., 2016). Furthermore, the participants with a high school education are 1.5 times more likely to be

inactive than those with graduate or professional education (Naik et al., 2016). The participants with less than a high school education are 2.7 times more likely to be inactive than those with graduate or professional education (Naik et al., 2016). The participants with a high school education are 2.0 times more likely to stay inactive after diagnosis than those with graduate or professional education (Naik et al., 2016). The participants with less than a high school education are 3.5 times more likely to stay inactive after diagnosis than those with graduate or professional education (Naik et al., 2016). The participants with a high school education are 2.2 times more likely to be inactive than those with graduate or professional education (Naik et al., 2016). The participants with less than a high school education are 4.1 times more likely to be inactive than those with graduate or professional education (Naik et al., 2016). The participants with a high school education are 2.4 times more likely to stay inactive after diagnosis than those with graduate or professional education (Naik et al., 2016). The participants with less than a high school education are 5.9 times more likely to stay inactive after diagnosis than those with graduate or professional education (Naik et al., 2016). All this data was able to show the direct correlation between education and healthy lifestyle choices after their diagnosis. The more academically the participant was educated in, the better chance that they had of maintaining healthier lifestyle choices. This study showed the improved lifestyle that cancer survivors had after they had cancer. Smoking and exercise were slightly improved by cancer survivors to reduce the risk factors of experiencing cancer again. Furthermore, more academically educated people tend to stay more active before and after cancer than less academically educated people.

The third case study “Medical Mistrust and Colorectal Cancer Screening Among African Americans” was by Leslie Adams, Jennifer Richmond, Giselle Corbie-Smith, and Wizdom

Powell, writers for the Journal of Community of Health. The purpose of this study was to review other studies pertaining to the link between medical mistrust and colorectal cancer (CRC) screening among African Americans. Adams et al. (2017) searched for published articles with empirical literature around a variety type of databases. When searching these databases, keywords such as colorectal cancer, African American, mistrust, and other CRC screening methods. A few requirements that each article had to have been that the participants had to be African American or other ethnic or racial groups, above the age of 50, adhere to the CRC screening guidelines, and the articles had to be published between 2000 - 2016, and empirical or analytical studies. The quantitative studies examined the link between medical mistrust and CRC screening, while the qualitative studies identify common themes linked to medical mistrust and CRC screening.

The results of this study started off with the database producing 776 articles relating to the research topic. Of those articles, the Journal of Community of Health used only 27 articles, with 15 quantitative, 11 qualitative, and 1 mixed method (Adams et al., 2017). 37% of these articles were cross-sectional designs while 30% of them were focus groups (Adams et al., 2017). Each qualitative study had between 14 - 55 participants per study, while each quantitative study had between 43 - 961 participants per study (Adams et al., 2017). These articles focused on different types of screening tests such as FOBT, colonoscopy, and sigmoidoscopy. 96% of these articles focused on mistrust measured at the physician level, while 56% focused on both physician and organization levels of mistrust (Adams et al., 2017). 59% of these articles had only African American participants, while 59% of these individuals were 50 years of age or older (Adams et al., 2017). Around 22% of all the participants were not up to date with their colorectal cancer screening (Adams et al., 2017). The qualitative study results showed that in nine articles

the participants noted their mistrust of doctors and/or the healthcare system. In five articles, participants expressed skepticism of provider motives for recommending colorectal cancer screening (Adams et al., 2017). In three articles, participants expressed mistrust of some providers' competence and training and the quality of health received (Adams et al., 2017). In three articles, participants expressed worry that health care providers might treat them unfairly or supply poor quality treatment due to race, gender, ethnicity, etc (Adams et al., 2017). The quantitative studies were measured based on the participant's type of association between medical mistrust and CRC screening. A positive association means that studies with higher scores of medical mistrusts are associated with higher rates of CRC screening, while a negative association means that studies with higher scores of medical mistrusts are associated with lower rates of CRC screening. Out of the 14 quantitative studies that measured association, 18 associations were recorded with 1 positive, 6 negative, 4 conditional, and 7 with no association (Adams et al., 2017). Out of the 11 quantitative studies that inspected mistrust at the physician level, 11 associations were recorded with 1 positive, 4 negative, 2 conditional, and 4 no association (Adams et al., 2017). That means that approximately 67% of the associations were negative, meaning higher scores of medical mistrusts were heavily associated with lower rates of colorectal cancer screening. Of the 5 studies examining mistrust at the physician and organization level, 5 associations were recorded with 1 negative, 2 conditional, and 2 no associations (Adams et al., 2017). This study showed that to this day, African Americans still have a suspicion of the services provided by medical workers due to the history that the two groups have together.

Limitations

One main limitation that occurred with this research was trying to conduct interviews with doctors and NAACP leaders. Initially, the plan was to obtain credibility from both the medical and social perspectives of the medical workers and the African American viewpoint. With the medical side, the goal was to interview 1 or 2 doctors about their experience and knowledge on handling patients with cancer and what they observed from people who survive/die from cancer. The social perspective would require me to interview 1 or 2 NAACP leaders to understand more about their experiences and knowledge about their views on how they believe African Americans get treated during doctor visits. These two perspectives would have been further understood and brought me closer to a constructive answer to my research question. The only issue with this was that there was not any easy access to these sources since my research was time constrained.

Future Research

If I were to continue this research, I would wish to further probe the cancer disparities among other races/ethnicity and compare them to the African American cancer disparity. It would be interesting to compare how the knowledge of cancer and the relationship with medical workers compares with African Americans and whether or not a cancer disparity exists because of these reasons.

Conclusion

Making sure that African Americans have a strong understanding of cancer, and its risks is the first step to reducing the cancer disparities that exist in America. Once that is solved, ensuring that medical workers are promoting a safe and healthy relationship with African Americans allows them to trust their services more in order for them to utilize their services for more checkups and cancer screenings.

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