Engineering a Resilient Regional Healthcare System

An Analysis of the Effect of Patient-Doctor Communication on Health Outcomes

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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

Every year, 805,000 Americans have a heart attack. About 12% of these annual heart attacks are fatal (Benjamin, 2019). Factors that can cause a greater probability of having a heart attack include: gender, race, household income, age, tobacco and drug use, obesity, and diabetes among others (Mayo Clinic, 2020)(Ford, 2007). The heart attack treatment timeline includes lifeline ground and air emergency services to the hospital, surgery with balloon angioplasty, stent placement, or coronary artery bypass, cardiac rehabilitation, then ongoing medications (IU Health, 2022). However, it is also important to consider preventative care, such as eating healthy, early detection of lipid buildup, and post-heart attack care in order to reduce the burden on healthcare facilities. Although 12% of all heart attacks are fatal, this percentage is much greater for non-white individuals and individuals that have less education and are impoverished. This example pertains specifically to heart attacks, however, social determinants of health are a factor in patient outcomes regardless of the ailment or symptom that is being treated. The treatment timeline and causes of the symptoms are important to be evaluated due to inequities in our systems. For example, a study conducted in 2018 found that ambulance response times to cardiac arrests in lower socioeconomic areas across the United States took 10% longer compared to middle class and high income areas (Hsia, 2018). These response times result in the patient being in a more critical condition upon arrival to the Emergency Department and consequently having worse outcomes. Once the patient is already at the hospital, the methods of treatment still result in outcome disparities depending on race and gender. Women, specifically black and latina women, are less likely to receive rapid treatment for cardiac arrest when they show up to the hospital presenting with heart attack or coronary disease symptoms. When compared to white women, black women are 50% less likely to be treated according to their complaining symptoms, and latina women are 16% less likely to be treated accordingly (American Heart Association, 2019).

When researching the impact of patient demographics on medical outcomes, it became apparent that a lack of humans understanding each other results in the complication of medical care. As a result of

this, it is critical to analyze how cultural similarities can empower patients to express their medical needs and differing language and communication techniques can result in a power dynamic that makes receiving proper healthcare more difficult. *My aim is to dissect how the way that a patient communicates during a doctor's visit determines the outcome of their care. In this paper, I focus on patient versus clinician demographics and how cultural differences between the groups result in differential treatment and care for patients.*

Problem Framing/Scope

It is important to note that there has been a myriad of research that examines how language impacts patient health outcomes and their risk of preventable adverse events when a patient is admitted to a United States hospital and does not speak English fluently (Johnstone, 2006). Additionally, there has been much research as to how health outcomes are disproportionate depending on social determinants of health such as race, gender, and socioeconomic standing. However, research is lacking on how varying language types and how culture impacts health outcomes for patients, particularly, when the patient comes from a different cultural background than their providing physician. It also should be addressed that it is difficult to measure culture and cultural differences as a variable that can be studied via statistical analysis. In much of the literature, culture is identified as something that is organized and static for a collective, yet it doesn't acknowledge the nuances that occur regionally and separated by generations (Johnstone, 2006). Regarding racial backgrounds and understanding of the English language, the identified challenges are included below.

Regarding race, it has been found that when comparing black and white patients admitted to hospitals for cardiovascular disease, the black patients are 33% more likely to die in the hospital regardless of care quality. Regarding gender, women are less likely to receive cardiac care when complaining of chest pains which puts them at 25% more likely to die in the hospital if cardiac specific care is not provided (American College of Cardiology, 2018). This data was collected in 2018 by the

American College of Cardiology's Cardiology Magazine with the motive of seeing if discrepancies in patient outcomes had changed since the Institute of Medicine conducted a similar report 17 years prior. The conclusion that can be drawn is that very little has changed regarding making morbidity rates consistent across patient demographics. Regarding overall life expectancy, it has been found that Asian Americans have the highest life expectancy of 84.9 years, then white Americans in rural Northern Plains/Dakotas, then low-income whites in Appalachia and the Mississippi Valley, then western Native Americans, then middle-income blacks, then southern rural blacks, and lastly blacks in poor urban areas with a life expectancy of 71.1 years (Havranek, 2015). It is critical to note that the lowest three groups all identify as black and that race played more of a factor than income, as it could be seen that low-income whites had a higher life expectancy. Additionally, the overall gap of 13.8 years displays a statistically significant gross inequality of life expectancy across these groups. From this data, the practice that must be explored is how communication plays a role in doctor/patient relationships.

Dr. Warren J. Ferguson is the Director of Academic Programs, Health and Criminal Justice Program as well as a Professor and Vice Chair of the Department of Family Medicine and Community Health at the University of Massachusetts Chan Medical School. His interest in mediating health disparities for vulnerable communities (Ferguson, 2021) led to him investigating this topic on Culture, Language, and the Doctor-Patient Relationship. What he found was that patients that have less of a command of the English language receive less emotional care from their healthcare providers and do not develop long lasting relationships with them. Those results caused the patients to not receive as much information about their conditions as well as less say in how they are treated when compared to their white counterparts but more so their English speaking counterparts (Ferguson, 2002). Ferguson's exploration shows the importance of fluency in the same languages, however, different vernaculars within the same language must also be analyzed for their impact on medical outcomes. While many people speak the same language, different regions and cultures may adopt vastly different meanings for the same words as well as unspoken connotations associated with certain phrases. As a result, it is critical that doctor's

have education on the cultural practices of their patients. Even more so, it is necessary for the career path of a clinician to become more accessible so that physicians of varying backgrounds can connect with their patients on shared experiences. In my thesis, I explore cultural impacts on the doctor-patient relationship and look into what type of patients are receiving medical care and how to make the field of doctors more closely resemble the backgrounds of their patients.

As the data is clear on discrepancies between patient-doctor primary languages as well as how race factors into health outcomes, it is now important to dive into anthropological linguistics. Anthropological linguistics is the study of how language and culture relate to each other (Encyclopedia Britannica, 2022). The root being anthropological is important to note because in addition to being the science of humans, a major subsection is cultural anthropology which is studied using archaeology, ethnography and ethnology as well as the important to note studies of folklore and linguistics (Encyclopedia Britannica, 2022). Fatiha Guessabi is a Professor of Languages and Translation in the Literature and Humanities Department at the Université de Béchar in Algeria and has also received her PhD in Translation. Dr. Guessabi argues that language cannot be evaluated without studying the culture associated with that language. Her studies have taught her that every language is composed of words and grammar rules, but also that words convey meanings within the cultures that use them and to not take that awareness into account, is to ignore the language expectations and rules of that culture. Particularly, it is necessary to acknowledge that as language evolves, so does culture, and as culture evolves, so does language. This acknowledgement recognizes that language and culture will forever be interconnected and that whether spoken or within context, language can either describe cultural attitudes and beliefs (Guessabi, 2019).

Stakeholders: Patients, Doctors, and Caregivers

As of July 1, 2019, there were 918,547 active doctors registered with the Association of American Medical Colleges. Of the active doctors, 56.2% identified as white with the second largest

group (17.1%) identifying as Asian and the third largest group (13.7%) being unknown (Association of American Medical Colleges, 2019). In comparison, as of the 2020 census, the largest racial groups of the United States were 57.8% identifying as white, 18.7% as hispanic, 12.4% black, and 6% as asian (Quarshie, 2021). Clearly, there is a large discrepancy between 18.7% of the US population being Hispanic while only 5.8% of doctors are. Additionally, only 5% of doctors are black compared to 12.4% of the US population.

For patients, having the same cultural experiences and language background as their physician, allowed them to more clearly express their needs and symptoms and ask questions pertaining to their visit. Studies have found that even when the patient is capable of speaking English fluently, they ask fewer questions of their doctor when speaking in English compared to speaking in their first language of Spanish. Beyond the use of a native language, assessments of patient affect including friendliness, interest, and engagement with the physician show that when the patient and physician are the same race, the patient scores much higher on these assessments. In addition to the physician's assessment of the patients perceived affect, ethnic minority patients' assessment of their doctor's communicative behaviors ranked lower which resulted in those patients not being as compliant with treatment plans due to a lack of the patient and provider understanding each other (Schouten, 2006).

The beliefs of the doctors are necessary to consider as in addition to the patients, as they are a stakeholder in their patients health outcomes. According to the hippocratic oath taken by physicians, in addition to doing no harm, they swear to only act in the hopes of providing "benefit of the sick" (U.S. National Library of Medicine, 2012). Although it is another debate whether or not the American healthcare system fully upholds the hippocratic oath, the sentiment remains that doctors are an established stakeholder in the relationship. The danger that occurs with physicians having different cultural backgrounds from their patients are when certain cultures believe that a patient proves their need of care by being emotionally vulnerable and expressive while other cultures believe that it gets in the way of proper treatment and as a result they suppress their emotional investments. This is dangerous because if

the physician requires emotion to fully trust the severity of a patient's symptoms, yet the patient believes that providing that emotion would label them as hysteric, the physician will not take the patient seriously. The same issue arises if the reverse is true and the physician views an emotional patient that is trying to be a self advocate as dramatic and minimizes their claims. Additionally, there is a culture of medicine that is taught in Western medical institutions to prioritize the patient. However, certain cultures either neglect or minimize the patient as an individual and prioritize the role of the patient within their familial unit. It has been shown that physicians consider a subjectively good patient to be independant and undemanding, and as a result, if the patient's culture is one in which their whole family expects to contribute to their care, the physician may not prioritize that patient which results in worse health outcomes (Manassis, 1986).

Within the discussion of patient-provider communication, an often overlooked subgroup as a stakeholder are caregivers. Caregivers are defined by Merriam-Webster as "a person who provides direct care (as for children, elderly people, or the chronically ill)" (Merriam-Webster, 2022). To this effect, for a patient to have optimal health care outcomes, it is also necessary for their caregivers to have a similar cultural background to the physician. This also begs the question of if the caregiver being from the same cultural background as the patient also results in better health outcomes. An example of a caregiver-patient dynamic in which the patient has varying levels of ability to verbally contribute to appointments is when the patient has been diagnosed with Alzheimer's disease. It has been found that when the patient and caregiver are interacting with their primary care physician (PCP), the PCP makes up 53% of the verbal communication during the appointment while the Alzheimer's patient speaks for 16% of the appointment, with the remaining 31% being the patient's caregiver. Although the patient is unable to have legal control of their care and requires aid in receiving it, the same study by Schmidt et. al showed that in appointments where the patient communicated more, they received better care, regardless of their mental functionality. Although not pertaining to culture, an important finding of this study is that patients (regardless of their gender) had increased percentages of communication during the appointment if their

caregiver was male; if a female caregiver, the patient had lesser levels of communication. Additionally, when the caregivers had a college degree, the physician comprised 13% less of the verbal communication during the appointment. This was directly correlated to the caregiver having a higher level of interpersonal satisfaction with the appointment (Schmidt, 2009). The data concluding that the caregiver's level of education as well as the patient's ability to communicate using the same means as the physician proves that even when a patient is unable to speak on accord of their own health, having similar backgrounds to the physician still provides better levels of care.

Discussion

Regarding current action items that are being utilized for clinicians to have cultural competency, standards such as the Culturally and Linguistically Appropriate Services (CLAS) Standards have been instituted by the U.S Department of Health and Human Services. These standards are a list of 15 practices to minimize inequity in healthcare settings and organizations caused by a patient's culture or use of language/communication. The standards have been grouped into four categories: Principal Standard, Governance, Leadership and Workforce, Communication and Language Assistance, and Engagement, Continuous Improvement, and Accountability (US Department of Health). However, when looking at the institution of such standards, it is clear that they are not the norm in healthcare settings.

This claim that the CLAS Standards are not being sufficiently taught comes from a study by Mainous et. al that found that as of 2016, only 35.5% of clinicians were aware that CLAS standards existed. However, of the studied population, 66.3% of the clinicians had received education in cultural awareness and treatment at some point during their career. It is also evident that cultural competency training is an effective tool as when comparing untrained to trained clinicians, there is a jump of 19.1% that feel "fairly knowledgeable" on their patients healthcare beliefs, customs, and values (Mainous, 2016). While it is promising that around ⅔ of clinicians have received training on cultural competency, that is a

very broad and vague question to be able to fulfill which points to the necessity of specific standards and regulations that ensure proper adherence to guidelines.

As discussed in Manassis's research, data is missing from the research field in regards to differences in traditions between patients and physicians as people from the same cultural background can have different health expectations based on how traditional they are (Manassis, 1986). However, I believe that in order to measure levels of "tradition," that falls among the research of measuring differences in levels of religious beliefs, age, education, and time from which one immigrated to America from their country of origin. It is clear that not only are cultural distinctions important to note during appointments, but also for doctors to consider age and other demographic factors prior to entering a patient's room. Throughout this discussion, it is clear that language interpreters are not enough during doctors appointments. A potential avenue to consider are patient care managers to discuss patient experiences with physicians to provide a sort of cultural interpretation rather than solely a language interpretation. However, in a country like America that is a melting pot of cultures, yet many are overlooked and not prioritized, it will be impossible to equalize patient health outcomes pertaining to cultural differences from their physicians without the medical field, specifically the physician field, being diversified for percentages to at least match the ethnic proportions of the citizens of the United States.

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