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## **What Did You Say?: The Impact of Language Barriers on Access to Healthcare**

### **Abstract**

Initial research was done on gender and racial bias but my interest began to develop towards the topic of language barriers. As more research was conducted, the following research questions developed more fully: How do language barriers affect a patient's quality and accessibility to healthcare services? How does this problem not only affect the patient but possibly their family members as well? I had hypothesized that people who spoke a primary language that was not English would be impacted negatively by language barriers and family members who acted as translators would also have negative experiences. A survey was created and distributed, alongside interviews, in order to answer my research questions and prove my hypothesis. I came to the conclusion that language barriers do in fact affect a patient's healthcare experience negatively, by not being able to speak for themselves and in some cases having harm come to them in the form of confusion of treatment. The family member's experience can be negative as well if they are unable to reliably interpret medical jargon.

### **1. Introduction**

My topic of interest is the way in which language barriers affect the quality and accessibility of healthcare services. Originally I researched gender and racial/ethnic bias in healthcare. As I continued to find sources on racial bias, one particular point caught my eye: the

issue of a language barrier between healthcare providers and patients. When patients cannot understand their treatments or physicians cannot understand their needs, it is hard to form a bond of trust and can ultimately lead to serious consequences, such as physical harm to the patient. I had not thought of language being a disparity that many people encounter, especially people of color and immigrants, and so having this highlighted opened up a new area of healthcare to my research.

My current research question is: How do language barriers affect a patient's quality and accessibility to healthcare services? How does this problem not only affect the patient but possibly their family members as well?

## 2. Literature Review -

In order to dive deeper into my topic, I looked at academic journals that touched upon different areas of language barriers and helped me develop my thinking around this topic. The two following articles are about the more general topic of gender and racial bias in healthcare which initially was my topic of research.

The article, "Brave Men" and "Emotional Women": A Theory-Guided Literature Review on Gender Bias in Health Care and Gendered Norms Towards Patients with Chronic Pain.", by Anke Samulowitz and others, discusses how despite a large amount of research on sex differences in pain, there is little research for gender differences with pain. The purpose of the study is to understand gender bias and norms in pain literature along with analyzing these findings against concepts of dominating masculinity and the use of male descriptions for non-male people in healthcare. The 77 articles chosen were a combination of quantitative and qualitative research that varied from high-income countries. Only one of these articles, however,

was published in a journal that specialized in the topic of pain. Several gendered norms about the expression and experience of pain came up such as stoic men, sensitive women, and hysterical women. Gender has played a role in how the men and women coped with the pain in their lifestyle as some men felt emasculated by their diagnoses and some women just decided to cope with it. A paradox was discovered that even though women are seen to be more sensitive to pain and show it more, their pain is taken less seriously in the medical world. The article concludes by saying that gendered norms appear in pain literature but gender is socially constructed so it changes over time and it is important to show more awareness of gendered norms in order to provide equitable care (Samulowitz, Anke, et al).

Similarly, “Exploring Gender Bias in Healthcare” published by Thomas Jefferson University Online, talks about studies that are now showing how damaging gender bias can be to health outcomes. In healthcare, gender bias is when a person is assessed, diagnosed, and treated at a lower quality than a person of a different gender who has the same complaints. It can also show in the assumption that males and females are the same even though there are differences in both sexes. Patients suffer when gender bias causes diseases and complaints are not considered due to their gender. Heart attacks are the leading killer of American women even though there is no physical reason for this and their odds of survival are the same as men when receiving therapy. The causes of these high rates of death stem from the fact that women experience heart attacks differently as they might manifest with symptoms in likeness to acid reflux, flu, or aging. The symptoms advertised in media are symptoms that more commonly occur in men and for these reasons medical professionals and the woman may not recognize a heart attack. Mental health is another area where gender bias shows through. Rates of psychiatric disorders are overall the same but there is a great difference in how men and women are diagnosed. Women

are more likely to be treated for depression even though men have a similar rate of depression. This can lead to men being less likely to talk about mental problems to their doctors. This also can cause women to be overdiagnosed with mental problems and ignore their other physical problems. Pain management is also another area where treatment varies greatly between the two genders. Studies have shown that women dominate most diagnoses having to do with chronic pain and that there are great differences in how the sexes interpret pain. Many women say that they feel that their pain wasn't initially taken seriously by medical professionals. Because women's pain is often dismissed or has inadequate research, most illnesses with chronic pain that do not have a direct method of treatment directly affect women. Pain is subjective but more research needs to be done on female pain and the perception of pain from both genders needs to be addressed as well. Improving the situation around gender bias can be addressed through recognizing that the bias exists, conducting more research including women, and educating health professionals about how it can manifest ( Thomas Jefferson University Online). This article is relevant to my research because there is a possibility for differences in disparities, within racial disparities, depending on the gender of the patient and what kind of treatment they are receiving because of their gender.

“Racial and Ethnic Disparities in Healthcare-Associated Infections in the United States, 2009–2011.”, a study by Anila Bakullari, was what brought to my attention the racial and ethnic disparities in terms of hospital-acquired infections and how language barriers may be a contributing factor to the quality of care that a patient receives. The US Census Bureau says that in 20 years there will be no single racial or ethnic group that will be the majority representative. Minority groups, such as Hispanics and Asians, are growing at a faster rate than the total population. This change in demographics means that racial and ethnic minority groups are

interacting with the healthcare system as patients much more frequently than before. There has been extensive research into the disparity of outcomes and process of care but there has been less research on patient safety, especially in healthcare-associated infections (HAI), or infections that were contracted while a patient was hospitalized. It has been noted that a gap in knowledge exists for racial and ethnic disparities in HAIs. This study looked at racial and ethnic disparities in 6 different types of HAIs. Races included white, black, Asian, American Indian/Alaska Native, and other (mixed race). Ethnicity was broken into Hispanic and non-Hispanic. The results showed that non-Hispanic white patients, Hispanic patients, and Asian patients were at a significantly higher rate of getting an HAI, even after adjustment for comorbidities. When patients can't effectively communicate with their doctors and nurses, it is more likely that they get sick since it is harder to describe what they are feeling. The doctors are then not aware of the patient's symptoms and this results in the contraction of illnesses/infections. Disparities in healthcare can come from language barriers, unconscious bias, and frequent use of lower-quality healthcare by minorities groups. Education and economic status also play a role in the outcomes of disparities which is why they were shocked by the results compared to the Black group. Hispanic and Asian groups typically have a higher income and education than Black groups and Asians also have a higher income and education compared to non-Hispanic whites. For this reason, they believe that economic and education issues may not be the significant contributing factor, but rather English proficiency is (Anila Bakullari et al). Though it is not explicitly said, it can be implied that the reason non-Hispanic white people also had high rates is because they are non-English speaking immigrants.

The next four articles all contain proposals as to how this problem of language barriers can be solved or at least can be alleviated from the minds of patients.

The text analysis, “Implications of Language Barriers for Healthcare: A Systematic Review.” by Hilal Al Shamsi et al, reflects on the results of multiple studies on the topic of language barriers that was concluded to be an important factor in a patient’s healthcare experience. Language barriers are proven to cause challenges in terms of quality of treatment and maintaining patient safety. While hospitals and clinics do offer translation services, this can increase the cost and duration of treatment. The purpose of the study is to look into the impact of language barriers and to suggest possible solutions to this issue. 14 studies were looked at coming from developed and developing countries, but mainly from the US. Keywords such as, “ ‘language barriers,’ ‘satisfaction,’ ‘healthcare,’ ‘limited English proficiency,’ ‘quality of care,’ ‘communication,’ and ‘access to health services’ “ (Al Shamsi et al) were used by the researchers to look for relevant information in the studies that would relate them to the topic of language barriers in healthcare. The review resulted in confirming that language barriers harm the satisfaction of both healthcare workers and patients and the quality of treatment, such as patient safety. Access to translating services did increase the satisfaction rate but it also indirectly caused the cost and duration of treatment to increase as well. One problem with this was that many institutions do not have adequate translation services or have none at all. One solution to this issue is the use of an app called MediBabble, which allows for a more secure line of communication between patients and physicians as it specializes in translating medical jargon. One setback of the application is that it only translates into six languages but overall it greatly increases the satisfaction of treatment (Hilal Al Shamsi et al).

Building on the idea of technological solutions, “Using mobile technology to overcome language barriers in medicine” by Chang, DTA, et al, highlights how mobile technology has played a role in improving communication with patients who do not speak fluent English.

Australia has a large immigrant community that made up 27% of the population in 2011 and around half of them did not speak English as a primary language at home and others did not speak English at all. While interpreting services are valuable assets in healthcare services, there are variables that affect the ability to use interpreting services successfully, such as cost and availability. The case study focused on a Persian-speaking patient that was in Australia seeking asylum and needed to have some medical procedures done due to his medical history. A professional interpreter was hired to ensure clear communication between the patient and doctor but some problems arose from this arrangement. There were conflicts in scheduling and the interpreter had high costs. The interpreter could not always be there early in the morning or late in the day, so to remedy this, transactions would be done over a phone call but there were still problems in explaining graphs. This also posed a problem as the doctors had to wait to work with the patient if the interpreter was busy and this resulted in an even higher cost. The team of doctors settled on using Google Translate in order to effectively communicate with the patient when the interpreter was unavailable. Professional interpreting services are often expensive and can delay the work that needs to be done on the patient if there are scheduling conflicts. Online translating services such as Google Translate are often free and accessible to anyone who has a phone so it is easier to communicate with a patient (Chang, DTA, et al). These services act as an alternate and more accessible option for patients that cannot communicate directly with their doctors and it is also more financially available for both the patient and the hospital.

The article, “Home Care Patients with Language Barriers at Higher Risk for Rehospitalization.” by NYU, looks beyond patients in hospital environments and includes the consequences of language barriers when it comes to at-home-care patients. When patients speak another language other than English, it increases their likelihood to be readmitted to a hospital.

This barrier also causes a negative impact on the quality of care and patient safety, as patients who do not speak the dominant local language are more likely to experience falls, infections, and longer hospital stays. When it comes to at-home healthcare, it is harder to provide translation or interpreting services to the patients. For example, many older people do not have good internet access and so online services can be difficult to use for them. It was discovered that many home care services do not meet the need for translation services as “only 20 percent of patients speaking a language other than English were visited by a provider who spoke their language” (Communications). This contradicts the service’s goal to keep patients out of the hospital while they receive care and defines the service to be low quality. Researchers looked at the outcomes of patients who spoke in their preferred language while receiving home care services. It was observed that English speakers had the least amount of risk for rehospitalization. Solutions proposed to stop this from happening include a team-based transition plan, better translation services, and having employees that can speak a different language (Communications).

The article, "Challenging Spanish: Ways for nurses to become bilingual." by Wendell Oderkirk, provides another solution to language barriers, that was briefly touched upon in the previous articles, in the form of having hospital staff, such as nurses, learn another language in order to expand ways of communication. Learning a different language, in this case Spanish, allows for there to be a more trustful connection and can give a nurse more opportunities. Many times a patient who has low English proficiency, are unable to fully understand what they need to consent to and this can cause problems for nurses. Nurses often find temporary ways to communicate with patients such as having a bilingual nurse help or contacting an interpreter, which can be costly and may not always work due to scheduling issues in both examples. It is common for relatives to act as translators for nurses even though most times it is difficult to

interpret medical terms in a different language. This also becomes an issue of privacy as the patient may decide to not share certain information. It is suggested that in order to have more bilingual nurses, a language requirement could be included in the requirements for admission or graduation. This will also help nurses in future opportunities as being bilingual is an advantage in many settings (Oderkirk Wendell). Bilingual nurses allow for a deeper connection to be made with the patient as they can communicate directly with them instead of through someone else, and this benefits the patient's experience in many ways.

While language barriers are a major concern for patients, they can also be a legal concern for doctors. "Physician-Patient Language Concordance and Malpractice Concerns." is a study by Chen, Jie, et al that looks at this concern from the lens of malpractice lawsuits. It highlights the amount of association between language commonality between patient and physician and the physician's concern with malpractice. A physician's fear of lawsuits due to malpractice severely impacts what decisions they make, such as hospitalization and diagnostic tests. However, not much research has been done on exactly what are the factors that sway a physician's concern, but there has been research looking into how communication is important in affecting medical liabilities. Good patient-physician communications allow for fewer legal actions after medical errors are disclosed due to a higher concern for malpractice lawsuits. A language barrier can mean that a patient has less satisfaction with their treatment and more medical errors can occur as well which would lead to more lawsuits. A survey was sent out to 4720 physicians that asked them several questions about their concerns with medical liability lawsuits. Patient demographics were also submitted in order to understand the context of their answers. The results of the study show that with patients that have no difficulty communicating with the physician, there is less concern for lawsuits. Because there are no language barriers, there is less room for medical

errors due to confusion or misunderstandings. Since there are fewer chances for errors, there is a lesser chance that those patients will file a lawsuit against the physician (Chen, Jie, et al). In addition to these results, physicians also felt less concern in an environment where translation services were available. The service acts as a breach of the language barrier in order to provide better communication between the patient and physician.

As language barriers can be a major concern, it is important to be aware of what can happen when there are inadequate translation services available to patients. "Language Proficiency and Adverse Events in US Hospitals: A Pilot Study." by Divi, Chandrika, et al had an extensive literature review that gave more new information about the topic and touched upon both the lack of translation services available and the harm it causes patients. When a person has limited English proficiency (LEP), this means they speak, understand, hear, and write English on a level that makes them unable to communicate with people, and in this case healthcare professionals. Healthcare in the US, and in other countries, is provided to a multi-cultural and lingual population and with this diversity, the portion of those people who have limited English proficiency are at a higher risk of experiencing disparities. Good communication is an important factor in maintaining trust, quality care, and follow-ups. This break in communication is what can lead to adverse events in healthcare. Adverse events are defined as unintended harm to a patient by an act done or not done instead of the patient's illness/condition. While this is an important issue in healthcare, there are few studies that look at the direct relationship between language barriers and patient safety. There are some reasons this relationship is hard to study: many adverse events go unreported, lack of racial/ethnic/primary language documentation, and lack of access to interpreter availability. In most of the US, there is a lack of trained translators in clinical settings. Fewer than 25% of clinics in the US provide translator training but even then,

inaccuracies in translations can potentially cause serious consequences for the patient. Many hospital staffs are not trained to work with interpreters and have no education on cultural and linguistic issues in healthcare. It often falls on bilingual nurses to translate for patients with limited English proficiency. This proves to be a problem as the accuracy of these translations have led to serious miscommunications in the understanding of symptoms and patient concerns. Six hospitals volunteered to record their experiences with patients with limited English proficiency. The results showed a surprising response of 49.1% of patients with LEP reported adverse events in the form of detectable physical harm. The LEP patients also suffered from a higher rate of harm being moderate to severe. More than half of these adverse events, 52.4%, were attributed to failures in communication between the patient and healthcare staff (Divi, Chandrika, et al). Overall, there are many risks to patient safety due to issues caused by language barriers which reinforces how important it is that LEP patients receive quality and accessible translation services in healthcare settings.

The next two articles not only speak about patient experiences but also start to touch on the topic of using a family member as a translator at doctor's appointments due to the unavailability of translating services or in place of hiring a translator.

The article "Language Access and Latino Health Care Disparities" by Eliseo J. Pérez-Stable, explores how the research around healthcare disparities has transcended past seeing the rates and outcomes of diseases, and now a central role is being observed that is played by race, ethnicity, social class, and language. Overlooking these variables is a mistake that can lead to failure and must be taken into account in healthcare environments. Studies have found that minority patients, especially those with limited English proficiency, are less likely to build a relationship, receive empathy, and receive information compared to their white counterparts.

These gaps in understanding become critical in being able to have a relationship that provides positive outcomes for the patients. It must be addressed that there are challenges in relaying information to these patients and developing a manner that makes it easier for patients to understand what they are being told. Clinicians often use medical jargon at an experts level and expect the patients to understand what they are being told. These issues not only arise in limited English proficiency groups but also in groups that come from a lower-privilege background. When studied in an environment limited to Latino populations, it was seen that longer waits, lack of regular care, and better quality care are associated with English proficiency. This means that patients that only speak Spanish are less assertive in reporting symptoms and being able to receive timely and regular care. This, in turn, raises bigger questions such as whether there should be specific clinicians that serve low English proficiency patients. This also pushes the idea that these types of patients should learn English in order to be able to understand what is being told to them. Many patients also have some kind of translator whether they are professional or not, but these are still not perfect solutions as it can be hard to relay medical information. Many patients suffer from longer hospital stays and adverse events. Errors caused by the inability to communicate efficiently can harm both the clinician and more importantly, the patient (Pérez-Stable, Eliseo J). These patients experience oppression through their level of English proficiency and have to suffer the consequences of miscommunication that occurs. These disparities are normalized as patients are expected to know English or they even resort to bringing their children with them to translate their medical information.

The article “Immigrants Women’s Experiences and Views on the Prevention of Cervical Cancer: Qualitative Study” By Maria Grandahl, focuses on exploring the experiences of immigrant women with cervical cancer screening, HPV vaccination, and condom use. Many

western countries implement programs that offer cervical cancer screening and prevention services, as it is a disease that kills women worldwide. Interviews were conducted that asked open-ended questions about cervical cancer and prevention to a group of immigrant women. As a result of the discussions, it was seen that there were common themes of women's health not being prioritized, positive attitudes to the availability of women's healthcare, negative and positive attitudes towards the HPV vaccination, and barriers in communication limit healthcare access. There was evidence that cultural aspects impacted their beliefs towards this subject as it was described that a woman could not be examined unless she was married or she was less valued than a man, so her health did not matter. It was also expressed that having a physician who was not a woman as it made them uncomfortable or due to religious beliefs, was not allowed. Another big problem was communication barriers, as they would not always understand the papers they were given. Due to this, they would have to use the internet or people they knew for help, which can result in a lack of privacy for their information. Some also did not know how to communicate their feeling and symptoms to their physician as a result of language barriers, and so they had to hire an interpreter for their appointments. It is concluded that while the immigrant women were positive towards cervical cancer screenings, they had issues when it came to communicating with their physicians and feeling comfortable (Grandahl, Maria, et al). It has become more apparent that it is important to take cultural differences into account when dealing with immigrants in healthcare, as it may affect their experiences in a way that may not be something that healthcare workers are used to seeing.

### **3. Project Proposal- Research Methods & Design**

In order to collect data, I sent out an initial survey to the school, including students and faculty, to gather a diverse pool of responses. The initial survey was comprised of a single question that asked participants to describe an experience in which a language barrier affected their healthcare experience, which also included having to be a translator for a family member. This allowed the data to be qualitative as experiences with language barriers in healthcare are different for every person that is able to answer the question. The survey was anonymous but if a participant was willing to be included in a follow-up interview, they could leave an email for me to contact them. When the initial survey was sent out, I did not get many responses from the school community so I asked my mother to share it with the people she worked with and her friends. From the combination of the two communities, I was left with thirteen responses to the survey question and four people who were willing to participate in a follow-up interview. I was unable to use five of the thirteen responses due to them being irrelevant to the question, for example, the responses were: N/A, no issues, etc. From there, I emailed each participant that had agreed to meet and conducted the follow-up interviews. Each interview was 5- 10 minutes long and consisted of me asking a series of 5 questions that were altered to fit the circumstances of each participant's submission, such as rewording it to make more sense in the context of their survey response. This allowed each person to add any details that they saw fit while still being relevant to my study.

#### **4. Finding/Results**

From the results of my survey and interviews, the four themes of the difficulties of being a translator, the medical impact of sick relatives, the emotional impact on patients, and the dependency on a family member, became apparent in all of the answers. I noticed that the fact

that a person had to act as a translator for their relatives came up many times. Many times a parent had to translate for a grandparent or a child had to translate for a parent because they did not speak English at all or not to the degree of understanding medical terms. Those who had experience translating for others at an appointment expressed that they believed that without their translations, the appointment would have been unsuccessful or would have led to many misunderstandings. It was also expressed that acting as a translator can be very difficult as it is hard to translate medical language across languages, ex. English to Spanish. For many of these words, there is no direct translation and it was expressed that people were unsure how to translate or did not know how to convey the message at all.

This difficulty in interpreting can be harmful to the patient in question as one experience described having a grandparent hospitalized but having a delay in transport to another hospital for surgery due to a miscommunication with the doctors. Another experience described a grandparent being misdiagnosed and given the wrong treatment because even with a family member translating for them, there was still a miscommunication between the patient and doctor. A common theme in the interviews conducted is that the people that need the translations felt isolated from their doctors because they were unable to speak for themselves and directly share what they were feeling. Being confused over their own treatments was common because of the difficulty of being able to explain medical procedures. A dependency on the family member who translated for them was also a noticed trend. One interviewed participant spoke of how if they were not available to translate for their parents, then they would seek out a doctor who would be able to speak their language instead of going to the same place. Conflicts in scheduling also became a problem as the translating relative was not always there to help.

As a result of all of my research, I have seen that language barriers impact patients in a negative way as it becomes very hard to facilitate a trusting environment, they feel isolated from their own healthcare experiences, and oftentimes can be harmed physically by miscommunication. They cannot directly relay information to a doctor so this also affects their information privacy and can even make them feel vulnerable to tell this information to a relative in order to relay it to their healthcare provider. This break in communication not only impacts the patient but also family members who find themselves needing to act as a translator. It puts pressure on them to make sure they are doing a good job of interpreting and having to know everything that the patient is experiencing medically, which can be hard to handle.

On a very large scale, my results, along with the results of many other studies done on this topic, show that language barriers are a huge problem in the healthcare industry as it impacts many people. The industry has many resources to implement solutions and yet there seem to be few results. Simple online translators, such as Google Translate, are available as a quick solution but can be inaccurate in interpreting, such is the case with familial translators. However, with a specialized translating app this conflict can be resolved or become less pronounced. Professional translators are also extremely helpful but can be too costly for some patients to afford on top of hospital costs. This may lead them to seek out their own means of translating or forgo any at all. One solution I can see being impactful is implementing language into medical school. This can ensure that healthcare professionals may have some level of communication with patients although it may not be perfect. This can expose them to how difficult it can be to translate and understand these topics. Language barriers and their impact on healthcare is a topic that is more complex than it initially may seem and for this reason, finding solutions may not be as easy as it

may appear. Despite this, I believe that with this topic being more apparent to more people, there will be more solutions that prove to be useful in all aspects.

## **5. Reflection**

My initial thesis statement was that I think my research will show that language barriers affect patients because they can not communicate effectively and can be harmed because of that. This was proven to be true not only in the research I had read but also in the research I conducted. I had discovered many examples of patients being unable to communicate effectively and being harmed whether physically or emotionally because of this lack of communication. Something else I unexpectedly discovered is that there is a problem of lack of accessibility to translating services for both patients and healthcare providers. This seems to be a factor of healthcare experiences that is overlooked time and time again and even when it is pointed out there is not much that is done. I believe that my way of conducting research, through surveys, was very effective in not only showing that my assumptions were correct, but also in giving me responses that were personal and detailed. This also worked well in collecting responses from people who had acted as translators or were able to relay that information to me from another relative. This however did not give me any responses from people who had experienced this barrier firsthand, as a patient. If I had the chance to conduct this research again, I would distribute my survey to a wider group of people and gather more responses. Although I did have good responses I did not have many, so this acts as a limitation on my research. I would also hope to interview more people that experienced this as a patient because it would give me even more detailed explanations of their stories, which is valuable to my research.

The advice I would give to researchers who would like to further explore this topic is to take into account the experiences of family members who have to act as translators. They provide valuable information and a different perspective on the situation. While they may not be impacted in the same way as the patient, they are impacted in a different yet important way. I would also advise them to search for qualitative data. Quantitative data can be utilized to show the numbers of what is going on but I feel like this is a topic whose nuances shine through the details that vary from person to person, connected by overarching themes.

I feel very proud of my research as I was able to unpack a complex topic and look at it from different perspectives. Language barriers are something that can be overlooked if you are not the one who has to experience them every time you go to the doctor, so this research has made me more aware of a problem that is common to many different people. I hope that my research works to inspire other young people to see the problems in the healthcare system and decide that they want to understand why it is happening. Though there is no simple solution yet, based on the studies I looked at and my own research, I have hope that soon we will be able to overcome this problem, giving more personal access to healthcare to everyone. This is all but a small step in looking at how to solve a much bigger problem but once the impact is realized, more people will be able to have the healthcare they deserve.

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