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English Proficiency and Its Effects on Healthcare Perception and Quality

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Introduction

Communication is one of the most important factors that affects the quality of the treatment a patient receives. Whether that person is suffering from a small injury or is having to decide on a hospice plan, clear and honest communication is what allows patients to feel heard and is what lets physicians do their job to the fullest extent. Clearly, communication plays a vital role in the patient–physician experience, but what if I told you that many patients cannot communicate with their physician at all? What if I told you that this lack of communication has manifested itself in disproportionate rates of disease in certain groups? What if I told you that this lack of communication has caused entire groups of people to fear and/or mistrust the healthcare system that was designed to help them? These are the indirect consequences of communication breakdown within the medical setting and, without change, they are likely to only get worse.

One of the largest contributors to patient–physician communication breakdown is the presence of language barriers. With over 300 languages spoken within its borders, the United States is a country that is incredibly linguistically diverse. That being said, one unintended consequence of this linguistic diversity is having groups of people that can have problems communicating with each other. While this would likely only cause a small inconvenience in everyday life, this inability to communicate can have much larger implications when applied to the medical field. For example, according to the *Journal of General Internal Medicine,* non-English speaking patients are less likely to receive documentation to provide informed consent for invasive medical procedures. Furthermore, according to the AMA's *Journal of Ethics*, not sharing a common language with your patient can greatly reduce patient understanding, complicate medical diagnoses, and even increase morbidity rate in a patient.2 In other words, language barriers not only prevent patients from receiving satisfactory treatment, but also make it a lot harder for the physician to do their job correctly, and, with over 97% of physicians reporting that they work with non-English speaking patients, it is an issue that cannot be ignored and must be addressed.3

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Other than English, Spanish is, by far, the most spoken language within the United States. Having over 37 million native Spanish speakers within the United States, making up just below 19% of the entire US population, it makes sense that this group also makes up 60% of all non-English speaking people within the United States.4. With such a high proportion of non-English speakers being within a single ethnic group, it also is not surprising that this same group also faces much higher rates of such conditions as type II diabetes, cirrhosis, obesity, and high blood pressure.5 While these disproportionate rates of disease cannot be completely attributed to a lack of English proficiency, the correlation between the two is suspicious at best and alarming at worst. That being said, to what degree has the American healthcare system worked to adapt and address this issue? Do patients feel like they are receiving adequate care from their physicians? Do patients prefer electronic translators or human interpreters? Do patients see a difference in quality when an interpreter is used versus when one is not? These are some of the questions that multiple Spanish speaking subjects were asked over the course of three weeks in order to better understand how the patients themselves perceived the healthcare they were receiving and to, hopefully, promote further future action to improve the quality of said healthcare.

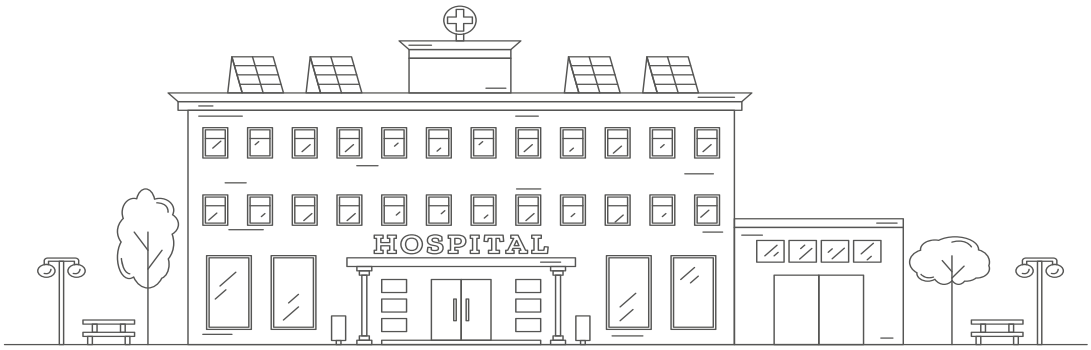
Methodology

In this study, the principal investigator (PI) was given the task of seeking out subjects at a local clinic to participate in the study and asking them to give their responses to an array of survey questions. The only qualifications for this study were that the subjects had little to no English speaking abilities, that the subject was an adult, and that the subject spoke Spanish as their first language. Additionally, all subjects within the clinic were assumed to be patients of the healthcare providers of said clinic.

All survey questions have been reviewed and approved by the Institutional Review Board at the University of Texas of Arlington for usage on human subjects.

Over the course of about 3 weeks, the PI would wait in the “triage room” of the medical facility and, as a patient had their vital signs taken, the investigator would randomly

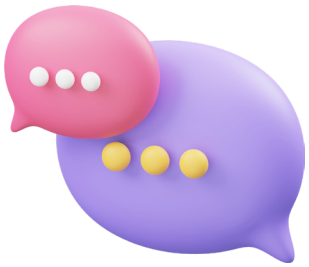
decide whether or not to ask them if they spoke English. If the patient said no or had issues answering the question, the investigator would then ask if they spoke Spanish. If the patient said yes and was an adult, the investigator would introduce themself and explain the survey and its goal in greater detail. Afterward, the PI would ask if they would like to participate in this study based on what they heard and, if the subject agreed, the subject would be asked to read over and sign a Minimal Risk Consent Form. If the subject agreed and signed the consent form, the PI would then hand them a copy of the survey form used for the study. This survey form consisted of twenty multiple-choice questions that asked various things, such as the subject's self-reported proficiency in English, the number of years they have spent within the United States, etc. After providing the subject with the survey form, they would then be sent to the waiting room where they would complete the study by circling the answers they felt most comfortable with. The PI would then remain in the triage room and, if needed, the PI would aid the subject in answering any questions on the survey form. Upon completing the survey, the subject would be instructed to come back to the PI to turn in their completed form. These completed forms would then be placed in a bag that would remain on the PI at all times to ensure confidentiality and security. Once the clinic closed for the day, the PI would input all data into an Excel sheet on a password-locked computer while the physical forms would be placed in the overseeing faculty's locked office. Once the data-gathering phase of this study was complete, all inputted data would be analyzed while the physical data would be kept in the faculty member's office until further notice.



Results

As mentioned earlier, participants in this study were given the task of filling out a short survey consisting of 20 questions discussing various topics about their personal experiences within the medical field. Overall, a total of 30 people participated in this study, but not all were able to complete all 20 questions on the survey, which was taken into account when calculating and interpreting the data.

The gathered data was as follows:



Q1: "How many years have you been within the United States?"
Majority answer: 1–5 years

Q2: "What ethnic group do you consider yourself to be a part of?
Majority answer: Hispanic/Latino

Q3: "What was the highest level of education that you have received?"
Majority answer: Middle school

Q4: "If you had to rank your English speaking abilities on a scale from 1–10, 1 is poor and 10 is excellent, what number would you give yourself?"
Average Answer: 2.97

Q5: "If you had to rank your English reading abilities on a scale from 1–10, 1 is poor and 10 is excellent, what number would you give yourself?"
Average Answer: 2.55

Q6: "Do you receive some form of federal or private health insurance that helps cover medical expenses?"
Majority Answer: No

Q7: "Before today, when was the last time you had seen a healthcare provider?"
Majority Answer: Within the last 2–3 months

Q8: "Annually, on average, how many visits do you see a healthcare provider (e.g., clinic, hospital, health department)?"
Majority Answer: 1–3 times

Q9: "When visiting a healthcare provider, how often do you request an interpreter to help you communicate with the physician?"
Majority Answer: Almost always

Q10: "Upon asking for an interpreter, how often is there an interpreter available to help you?"
Majority Answer: Almost always

Q11: "Which of the following would be your preferred form of interpretation during a medical visit?"
Majority Answer: Electronic translator

Q12: "Which form of interpretation have you used the most during medical visits?"
Majority Answer: Electronic translator

Q13: "If the doctor/healthcare professional was able to speak to you directly in your language, without the use of an interpreter, do you believe it would improve the quality of your appointment?
Majority Answer: Yes

Q14: "When a licensed interpreter is present, how often do you leave your appointment feeling informed and knowing what steps need to be taken for your health?
Majority Answer: Almost always

Q15: "When a licensed interpreter is not present, how often do you leave your appointment feeling informed and knowing what steps need to be taken for your health?
Majority Answer: split between Almost always and Occasionally

Q16:"When using someone other than a licensed interpreter, how accurate of a translation do you believe they provide during medical visits?"
Average Answer: 67%

Q17: "Who do you believe should be responsible for learning the other person's language to ease interaction between the patient and healthcare professional?"
Majority Answer: Both

Q18: "To what degree do you tend to trust your medical provider?"
Majority Answer: Completely

Q19: "When reading medical pamphlets, prescription labels, etc., how often is some sort of Spanish translation provided?"
Majority Answer: Almost always

Q20: "Based on your experiences, how well do you believe the US healthcare system as a whole provides services to those that only speak Spanish? (1 = very bad; 10 = very good)"
Average Answer: 7.38

Note: All questions were translated into Spanish before subjects were asked to answer them

Based on the data provided, a majority of our subjects have lived within the United States for anywhere between one and five years. 97% of our subjects were of Hispanic/Latino origin and also had, on average, an education level of that of a middle schooler. When asked to self-report their own proficiency in speaking English, all participants had an overall proficiency level of 2.97 (on a scale of one to ten with one being very bad and ten being excellent English speaking proficiency). When asked to self-report their proficiency in reading English, on the same scale, the subjects reported an average proficiency of 2.55. Of the 30 people that participated in this study, 90% were definitively uninsured, while the remaining 10% were unsure of their health insurance status. Additionally, a majority of the participants in this study also self-reported that they had only seen a healthcare professional within the past 2–3 months and that, on average, they visit a healthcare professional about 1–3 times a year. Most subjects claimed that they almost always request an interpreter, of some kind, when speaking with a healthcare provider and that one is almost always available when needed. The subjects of the study also claimed that they preferred an electronic translator over other types of interpreters (such as a licensed interpreter, family/friend, etc). Electronic translators were also the form of interpretation that the patients had used the most during medical appointments. Unsurprisingly, when the subjects were asked if a physician speaking their native language would improve the quality of their appointments, 89.7% said yes, while the other 10.3% said that they were unsure. When asked how often they leave appointments informed and knowing what to do next to take control of their health when an interpreter is not present, the subjects were split in that equal numbers of them said that they either almost always leave feeling informed or that they occasionally leave feeling informed. Compared to the same question being asked, but with an interpreter present, a majority of the patients said they almost always leave feeling informed. On average, our participants reported only understanding about 67% of what the physicians said when a licensed interpreter was not present. Interestingly, a majority of the participants also believed that both the patient and the healthcare provider had a responsibility to learn the other group's language to communicate. Finally, most subjects stated that they completely trust their physicians and that the pamphlets, prescription labels, etc. they received were almost always in Spanish. Overall, these patients also believe that, out of 10 with 1 being poor and 10 being excellent, the American Healthcare system does, on average, a 7.38 job of accommodating for patients that only speak Spanish.

Discussion

Proper communication is one of the most important aspects of good and effective healthcare. Only through effective communication can patients receive the high quality healthcare they deserve. Without it, physicians are also put at a disadvantage and, oftentimes, cannot fulfill their duties to the best of their abilities and, in a healthcare system as fragile as that of the United States, the consequences are usually deadly. In fact, it has been

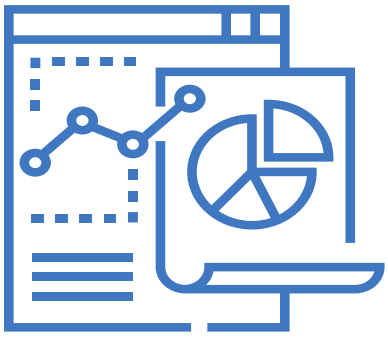
shown that individuals that identify as having low English proficiency are at a higher risk for having poor health. In other words, English proficiency seems to be inversely proportional to health quality6 and, considering the rather low average self-reported proficiency in both reading and speaking in English in our sample population, it can be assumed that this statistic applies to them as well. That being said, many of the results from our survey contradicted what other research has proposed about the effectiveness of certain forms of interpretation. For example, one study found that Google Translate was only accurate in translation about 58% of the time which, based on this statistic, would cause one to assume that it was not a favored form of interpretation among patients with low English proficiency.7 However, in our study, electronic translator was, by far, the most preferred form of interpretation, with over 40% of all participants choosing this option.

Something else that was interesting to see was that, overall, the participants seemed to have a relatively positive view of the American healthcare system and its ability to accommodate patients that only spoke Spanish. This is evident in the fact that, on average, the participants gave the US healthcare system a 7.38 on a 10 point scale, with 1 meaning that they do a poor job in accommodating patients that only speak Spanish and a 10 meaning that they do an excellent job in accommodating patients that only speak Spanish. On top of this, of all the subjects that completed the survey, nearly a third gave it a rating of 10 out of 10. Of course, this is not necessarily a bad finding; however, considering the data available regarding the perception of healthcare in Latinos, it is surprising that our sample gave such high ratings. For example, a study performed in 2019 found that Latinos reported experiencing discrimination in healthcare at a significantly higher rate than their Caucasian counterparts, something that would further promote a more negative view of the American healthcare system.8 In 2009, another study found that perceived quality of healthcare was positively correlated with health insurance availability in Latinos. In other words, Latino patients without health insurance were significantly more likely to give lower ratings of healthcare quality than those that had insurance.9 Considering that 90% of our sample group reported themselves as having no insurance, it further proves how the data collected by the investigation team goes against correlations proposed in other studies. This phenomenon also occurred in the data regarding the question of what degree our subjects trusted their physicians. When calculated, an overwhelming 76% of them said that they completely trusted their physicians, which, similar to the data regarding the subject's opinion on the US healthcare system, was much higher than anticipated. Based on previous literature on the topic, Latinos are more likely to report having medical mistrust and, as recently as 2021, a study found that Latino patients were 73% more likely to report having medical mistrust than their white counterparts, something that seems to go against the results gathered in our study.10. In all, these two pieces of data truly emphasize the vast variance in data regarding this topic and show the importance of performing more research like it in the future.

One result that did not surprise the investigating team was the fact that, on average, patients reported only understanding about 67% of what physicians said when something/someone other than a licensed interpreter was used to aid in translation. As stated before, electronic translators such as Google Translate are not the most accurate when it comes to medical terminology, and, in some cases, organizations have even advised physicians to give disclosures to patients that what the translator may produce may have errors in it before proceeding.11 Still, electronic translators are not the only ones prone to providing incorrect translations, particularly when it comes to medical language. In many settings throughout the work field, when interpretation is needed for two individuals to communicate, a makeshift or "ad hoc," as some call it, interpreter is often asked to provide assistance. These makeshift interpreters are usually not actual certified interpreters and, while they can do a good job at translating between parties in most situations, the quality of translation tends to drop when applied to medical settings. In one study, ad hoc interpreters were found to make translation errors with potential clinical consequences about 10% more than their licensed counterparts.12 On top of this, makeshift interpreters are known for causing many issues that can inhibit the quality of communication, such as having personal agendas, giving unsolicited advice, lacking confidentiality, being associated with a higher risk of patient readmission and longer hospital stays, being limited when discussing more intimate topics, and more.13 Clearly, these two sources of potential error in translation have played a role in this less than desirable statistic of understanding between patient and provider and, considering that over 70% of our subjects report they almost always request an interpreter, it is vital that licensed interpreters are used whenever possible. Not only are they associated with fewer of these issues overall but they also have been found to improve the quality of healthcare to nearly that of an English speaking patient when used.14 In other words, for facilities that can afford them, it is vital that licensed interpreters are used over makeshift or electronic ones for the good of the patient and the physician.

Of all the questions asked in our study, by far, one of the most revealing was the one that asked, "If the doctor/healthcare professional was able to speak to you directly in your language, without the use of an interpreter, do you believe it would improve the quality of your appointment?" From the 29 subjects that answered the question, a shocking 89.7% of them said that, yes, having a physician speak the same language as them would increase the quality of their appointment. This is something that has been repeatedly tested over and over again and is supported by multiple other studies. For example, in 2010, one study found that language concordance (the phenomenon of the listener and speaker speaking the same language) was significantly associated with lower odds of the patient experiencing confusion or frustration and reporting poor quality of healthcare due to language discrimination. In other words, by speaking the same language as the provider, the quality of healthcare given was significantly increased.15 In another study done in 2023, Hispanic patients were seen by either an English speaking physician, with the aid of an interpreter, or by a Spanish speaking physician. Upon comparing levels of comfort and satisfaction between both groups,

the group that was seen by the Spanish speaking physician scored significantly higher in both areas. Simply put, this means that even when an interpreter is used, patients were still more satisfied with their care and were more comfortable speaking directly to a physician in their language.16 That being said, who do patients believe holds the main responsibility of learning the other group's language? Based on our data, about 59% believe that both parties share some responsibility, about 34% believe that the patient holds all the responsibility, while only 7% believe that the healthcare professional holds responsibility. Considering that all our participants were patients themselves, one can assume that most patients, to some extent, believe they should be learning English in order to better communicate with their healthcare provider. Still, regardless of whose responsibility it is to learn the other group's language, this study has proven the importance of language concordance in the medical field. In using licensed interpreters, over ad hoc interpreters and electronic translators, and in speaking directly to a patient in their language, rather than using an interpreter at all, one can drastically improve the quality of the healthcare they provide. However, when it comes to other topics, such as opinions on the American healthcare system and the level of mistrust in the Hispanic population, data seems to still be inconclusive and contradictory—all the more reason why more research on this matter needs to be done in the future.



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