

# Miscommunication:

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## Hispanic Language and Culture in Health Care

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Spring 2014

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## **Précis**

My desire to research this topic originated from a personal experience with miscommunication in Spanish health care coupled with my desire to become a physician in the state of Washington. After taking my required premedical courses as well as multiple Spanish language courses to fulfill requirements for obtaining a minor, I was not fully aware of the need for Spanish fluency in health care settings. Growing up in eastern Washington, I was aware of the Hispanic influence in the Central Basin area of the state, but had never really questioned the implications that it could have on the delivery of health care until after attending a medical service trip in Guatemala. While I served as a medical translator on this trip, I was able to experience just how difficult it is to communicate medical information between a patient and a physician, and the potentially dangerous consequences that could result when there is a substantial language barrier. I learned very quickly that there is a need for full language competency when conveying medical information, rather than the intermediate Spanish skill level that is obtained through an undergraduate minor. These experiences made me realize that this problem not only applies to medical missions, but in the general delivery of health care within the confines of the United States, and even more specifically in Washington State.

I was able to discover that this medical miscommunication problem is indeed prevalent in our country, and has led to serious problems that I was entirely unaware of. Effective communication between physician and patient is a vital component to successful health care practice, and the Spanish language and culture essentially impedes the process. This study acts to identify the specific barriers that both the language and cultural differences present, and discuss the various strategies that have been done to combat this issue. These strategies are then evaluated on their use and effectiveness to ultimately shed light on the most efficient solution to

this growing problem, in hopes that our nation will eventually adopt a change that will promote equity in the delivery of health care to the booming American Hispanic population.

The study concluded that the use of translation services in health care environments produce more complications than expected, and carry many potentially dangerous clinical consequences. It was then found that complete fluency at the level of the health care provider is needed to most effectively eliminate disparities, and in many counties across Washington there are not a sufficient number of health care providers compared to the demographic of which they are caring for. The study is then concluded with a proposed plan of action that will hopefully tend to this issue that is growing comparatively with the Hispanic population. Above all my hopes for this study are to help raise the awareness of the issue, and open the door for subsequent research across the state and country as a whole to eventually eliminate it.

**Advisor Signature Approval Page**

As thesis advisor for Kyle Ellingsen, I have read this paper and find it satisfactory.

Daniel F. Moffett  
Thesis advisor signature

3/31/2014  
Date of signature

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## **I. Introduction**

Language is often considered the greatest barrier between groups of people, both across and within populations. America, the so-called “Melting Pot” of the world, is a population with a wide array of cultures and languages all coexisting under the same government. Unfortunately, coexisting under the same legislation does not equate to different cultures and languages living and thriving together. In fact, America is quite divided by these language and cultural barriers that inhibit effective communication between those individuals and groups divided by them. These barriers can be burdensome in many aspects of everyday life, but what happens when this communication barrier inhibits the equity of healthcare delivery?

The Hispanic<sup>1</sup> population has grown rapidly over the last half a century, and will continue to expand throughout the next. According to the United States Census Bureau estimates, the Hispanic population living in the United States has reached 52 million, which is about 16.7% of the total population. This percentage is projected to double to 30% by the year 2050 (“The Hispanic Population”). In fact, more than half of the growth of the total population in the United States in the past 10 years was due to the increase in the Hispanic population. Among these Hispanic subgroups scattered throughout the United States, a large portion of families speak only Spanish at home as their primary language. In the 1980, it was found that roughly 11 million American citizens spoke Spanish or Spanish Creole at home. This number then increased by 232.8% to almost 37 million Americans speaking Spanish at home by the year 2010. About 44% of these 37 million Americans who speak Spanish at home had also reported to speaking English less than “very well.” A large contribution to the Spanish speaking American population

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<sup>1</sup> The terms “Hispanic” and “Latino” are commonly used synonymously when referring to a person of Cuban, Mexican, Puerto Rican, or South or Central American, or other Spanish culture or origin, regardless of race (*U.S. Census, 2010*).

comes from the group of foreign-born individuals, and even more so from those that lack citizenship. Among the Spanish speakers, about 55% of the foreign-born naturalized citizens, and over 75% of foreign-born noncitizens spoke English less than “very well” (“Language Use in the United States”). Regardless of citizenship status or country of origin, the language and cultural miscommunication within American territory is more prevalent now than it has ever been, and statistics suggest that it will only increase in magnitude.

A vast majority of the Hispanic population resides along the U.S.-Mexico border, with over three-quarters living in the western or southern parts of the United States. California, Texas, and Florida have long since been recognized as the states with the highest numbers of Hispanic residents, constituting over half of the entire Hispanic population in the U.S.; of these, California alone accounts for 28%. Our state of Washington contributes to the Hispanic population trend in the west coast, as the language and cultural miscommunication trend stretches into the Pacific Northwest. Along a similar trend as the rest of the country, Hispanic Americans are the fastest growing population in Washington state. In 2010, there were about 760,000 Hispanic individuals residing in the state of Washington, accounting for 11.2% of the state population, and ranking 12<sup>th</sup> in the United States. This number had grown 71.2% from its previous Hispanic population recorded 10 years prior in the year 2000 (The Hispanic Population). A large majority of the Hispanic population in the state of Washington resides in the areas of heavy agricultural influence in the southern and central areas of the state. Some of the highest densities of Hispanic populations in Washington concentrate around the southern and central areas of the state, and mostly from immigration throughout the 90’s. The Hispanic population growth in Washington is seen mostly in the Central Basin agricultural counties such as Adams, Grant, Franklin, Benton and Yakima. The Census reports suggest a similar trend in which metropolitan areas like the Tri-

cities and Wenatchee both recorded over a quarter of their population speaking Spanish at home, 27.3% and 25.7% respectively (Language Use in the United States).

It is also crucial to account for the age groups of this incoming Hispanic demographic. Immigration typically occurs by individuals in the 18-40 year old range, which is also encompasses what is widely considered the prime child bearing age range. Consequently, as the immigration rates increase in the state of Washington, the Hispanic population age 18-40 years old should increase as well, which will in turn increase the numbers of Hispanic births, and account for the rapid growth in overall Hispanic population in Washington State. Such a claim is supported by the fact that 35% of the Hispanics living in Washington are foreign born, and that the median age of the Hispanic population in Washington is 23, which is almost 20 years younger than the median age for Washington's Non-Hispanic white population (Demographic Profile). Following trends over the last 30 years in Washington, this predominant Hispanic growth rate will continue to assimilate the Latino culture into the preexisting Caucasian-dominant one as time progresses.

The Hispanic population is not only the fastest growing racial or ethnic group in the United States; it also has the highest uninsured rates among racial or ethnic groups. Although roughly one third<sup>2</sup> of the Hispanic population in the United States lacks health insurance, many face other cultural or language barriers that inhibit them from acquiring quality health care. The Affordable Care Act (ACA) could help the uninsured Hispanic population through the expansion of Medicaid and development of health insurance exchange marketplaces that provide tax credits, but the quality of health care is not necessarily determined by insurance coverage (Health

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<sup>2</sup> The state of Washington is consistent with this national average, where 31% of the Hispanic population in the state lack health insurance coverage ("Demographic Profile").



Coverage). Even in an ideal world of universal health insurance, many Hispanics will still find themselves deprived of quality health care simply due to language or cultural barriers in the health care environment.

This research examines the collision between languages and cultures that acts as a barrier in health care settings, and the potential challenges it brings to the citizens of our changing population. It is imperative to understand the communication barriers between doctor and patient that we are facing today as a nation as well as within our own state of Washington. This issue is and will continue to be an important one, and deserves attention in hopes that one day we can adapt to the changing times, eliminate disparities, and provide the best quality health care to a population that very well could become the majority in generations to come.

## **II. Research Question**

Are there language and/or cultural barriers in the delivery of health care for Hispanics in the United States, and specifically in the state of Washington? What are the potential consequences of these barriers?

## **III. Methodology**

The first steps to carry out an investigation such as this were to gather general background research information about the Hispanic population of the United States. This includes the geographical distribution throughout the country, comparing different regions to others, and considering the relative growth of other ethnic groups in the same time and place. Gathering Hispanic population percentages by county in the state of Washington helped depict trends not only in our state, but across different regions to help narrow the focus of where miscommunication might be a larger issue in comparison to regions of lower Hispanic

representation. It was also essential to compare the Hispanic populations today to previous years in order to gather information on the population growth trends in specific areas of the country in order to understand the rate of change and possibly shed light on how the future demographic will pan out. At this point it was useful as well to research the trends in age, citizenship status, employment, and health insurance coverage across different Hispanic populations to gather information on the lives of the Hispanic individuals residing in the country. Perhaps the most important piece of information gathered in this preliminary background fill was the proportion of foreign born individuals, and most notably those that had reported speaking Spanish as their primary home language, which correlates directly with those individuals that reported speaking English less than “very well.” The lack in English proficiency, or Spanish language preference statistics establish the framework of the investigation, because it is essentially the root of the communication issue in which is being examined. This preliminary data was for the most part obtained through collections from multiple reports by the United States Census Bureau. These reports provided us with the raw statistical information by state and across the nation from which to analyze. Another valuable source was of which this data was obtained was the Pew Hispanic Center. The Pew Hispanic Center has been developing their “Hispanic Research Project” in which statistical analyses of Hispanic populations by age, gender, income level, insurance coverage, education level, and English proficiency have been made easily viewable online and narrow the focus down to individual counties of each U.S. state.

After sufficient background information was gathered, the supplemental research focused on language and communication issues in the medical context. I examined peer reviewed medical and non-medical journal articles as well as health statistical information specific to the Hispanic population. We picked through articles from various journals such as *The Journal of*

*the American Medical Association, The Journal of General Internal Medicine, Social Science & Medicine, the Virtual Mentor: American Medical Association*, in addition to databases like the Association of American Medical Colleges (AAMC) and the Centers for Disease Control and Prevention (CDC). I also considered cultural issues that are often overlooked when a physician is dealing with an individual of a different culture, a circumstance that may present a more difficult hurdle than language alone. This led me finally to a consideration of solutions that have been used to overcome language and cultural barriers.

Combining the preliminary background research specific to the state of Washington with the supplemental research information on certain barriers between the differing cultures or languages provided me with a basis to estimate the degree to which this issue is relevant to our state. In this sense, our research is a meta-analysis of various data sets and conclusions of other studies from which we are able to draw our own conclusions that suggest patterns on health care disparities throughout the United States. This then allowed us to infer how the patterns specifically correlate to the state of Washington, and how we compare. Information on some of the specific barriers to health care and consequences that the Hispanic population encounter was found, however some assumptions were formulated and relied on due to the limited information on examples specific to the people of Washington. Although there are potentially similar barriers in multiple fields of health care, such as medical, dental, pharmaceutical, or occupational therapy, our research focuses primarily on the barriers and corresponding consequences in the primary care, and emergency medical settings.

#### **IV. Results and Discussion**

Every day in America there are Hispanic citizens that are denied the effective access to quality health care because of communication barriers between the patient and physician. One of the more clear-cut origins of this miscommunication is due to the primary language spoken, whereas the other origin that is commonly overlooked stems from differences in cultural competency. Whether it is a cultural or language barrier, the same inevitable outcome of a lower quality of health care compared those who do not face such barriers is reached.

##### *Language as a Barrier*

From a 2002 national survey of the Latino population in America, conducted by the Pew Hispanic Center as part of their Hispanic Trends Project, it was found that about 30% of the American Hispanic population have reported having problems communicating with their health care providers as a major problem in their health care experiences. It was also reported that half of those who are Spanish dominant had poor health care experiences due to difficulty communicating with providers, compared to only 8% of those that are English dominant. These poor health care experiences were also the consequences of challenges that they had encountered such as problems with paying medical bills, delays in seeking care because of costs, and more importantly under the scope of this research, not getting needed health care services because of either language barriers or because of their race and ethnic background. It was found that almost three in ten Latinos said that they have had problems communicating with their health providers over that past year, 12% saying that it was a major problem and 17% who said that it was a minor problem (Health Care Experiences). It is important to notice that this report was gathered in the year 2002, and the Spanish-speaking population has since increased dramatically, which

means that these statistics have most likely increased accordingly. About 40% of those individuals born outside the United States reported having similar experiences as well. Considering a fair portion of the Hispanic population in the United States and specifically in the state of Washington are foreign-born Spanish speaking individuals, this equates to a large sum of problems and inequity reported by the Hispanic population in the realm of health care services.

*Informed consent* is a term referring to the process of giving voluntary consent by either the person or a responsible proxy, for participation in a medical study, treatment, or invasive procedure after being completely informed of the purpose of the procedure, methods, benefits, and most importantly the possible risks of the procedure. Obtaining informed consent is an imperative aspect of medical care, and is a topic widely debated in biomedical ethics because it requires communication fluency in dialogue between the patient and the provider, which is often an overlooked and underestimated aspect. In a study from the medical department of the University of California, San Francisco, at a public teaching hospital that serves the surrounding city and county of San Francisco, the conflict of language differences in the delivery of such consent is explored through a study of LEP patients receiving invasive surgeries such as a thoracentesis, paracentesis, or lumbar puncture. It was found that patients who do not speak English are less likely to have documentation of informed consent for some common invasive procedures compared to English competent patients receiving the same medical procedures. In this case, 53% of English-speaking patients were reported having full documentation of informed consent, whereas only 28% of LEP patients reported the same information (Schenker et al. 2007). Since informed consent is considered a fundamental aspect of the health care system in the United States, this result had important implications. Informed consent is legally recognized for its importance in quality of health care and the patient's safety, and such ethnic disparities are

unacceptable in today's world, especially when they could be fixed through various methods that we will get into later.

With the LEP Latino population being one of the fastest growing groups of the United States population, the threat of ineffective communication and its subsequent safety hazards is growing proportionally. Aside from informed consent issues previously mentioned, the language barrier can bring forth other hazards such as inadequate comprehension of diagnoses and treatments that could be tied with preventing morbidity or mortality. This miscommunication is not one sided because often times the language barrier inhibits a provider's ability to comprehend the patient's symptoms, which can lead to inappropriate treatment and diagnostic errors that could be avoided. In a pilot study on language proficiency and its adverse effects in hospitals in the United States, it was found that some degree of detectable physical harm occurred in almost half (49.1%) of reported LEP Latino patient adverse events in the study compared to 29.5% of adverse events for patients who speak English. This study defines adverse events as "any unintended harm to the patient by an act of commission or omission rather than by the underlying disease or condition of the patient" (Divi et al. 2006). In this study, physical harm was categorized into minimal, moderate, and severe temporary harm, severe permanent harm, and death. The study reported that in comparison with English speaking patients, the adverse events experienced by these LEP individuals more often resulted in detectable harm to the patient, with greater severity of that harm, with a higher frequency of that consequence of failure coming from communication issues.

The Spanish language has many words that look as though they would be cognates, meaning they look similar to its same word translated in English, but actually carry very different translations or connotations, and can mislead someone who is incompetent in the Spanish

language. As an example, the Spanish phrase “Estoy embarazada” would seem as though it would translate in English to “I’m embarrassed,” when it actually means “I’m pregnant.”

Hypothetically, if a case like this appeared in which the physician thought a female patient simply admitted to being embarrassed, the physician could easily order x-ray or other tests that would harm the developing fetus. Although this is a hypothetical situation, strict miscommunication errors causing varying degrees of unnecessary harm are not uncommon in the United States. A famous example of miscommunication in an emergency care that is commonly used is the case of Willie Ramirez in 1980. The 18 year old Hispanic boy living in Florida was taken into the emergency room in a South Florida hospital after collapsing into a comatose state from an intracerebellar hemorrhage. His girlfriend and family that brought him into the hospital, who had limited English proficiency, described him using the word “intoxicado,” which is an all encompassing word meaning sickness from something that you ate or drank, rather than what was understood as “intoxicated.” They had meant that he consumed a hamburger earlier that day, and thought that would be the cause of his sickness, but that was not correctly communicated. The tending emergency room physician then diagnosed an overdose, and did not consider the possible diagnosis of the hemorrhage despite the family’s insisting that Willie was not a drug user. Although the hamburger clearly did not cause Willie’s sickness, the physician was adamant on treating his nonexistent overdose because he believed that was what his family members had said. In the end, what could have been avoided had the hospital’s neurosurgeon been called after a thorough medical screening been done, resulted in Willie becoming quadriplegic because of the misdiagnosis (Price-Wise, 2008). Although Willie Ramirez represents an extreme scenario that does not come around often, the underlying miscommunication issue due to a lack of language

proficiency leading to some form of harm happens every day in American medical health care environments.

### *Culture as a Barrier*

Fluency in the Spanish language alone does not make a physician and other health care providers capable of effectively communicating with Hispanic patients. Though it is never acceptable to stereotype all Hispanic patients in a certain way, there are some general cultural ideals that hold somewhat true to most Hispanic individuals to varying degrees that an effective health care provider should absolutely be aware of. In the United States, there are a number of cultural beliefs among the Latino community that can influence illness experience and medical decision making, and are known as “cultural scripts.” These cultural scripts, or patterns of social interaction that can be related to health care commonly include *familismo*, *machismo*, and *fatalismo* (Smith et al. 2009).

*Familismo* is really a concept that embodies loyalty to the family, immediate and extended as well. In this concept, loyalty to the extended family is often seen as more important than the needs of an individual alone. In this case, Hispanics often are influenced by encouragement or direction given by a large number of family members. It is an important concept to most of the Hispanic culture, but can make it difficult for individual family members to make important medical decisions on their own, for they often will wait to discuss them with multiple members of the family. In some cases, an absolute barrier to decision making arises if individuals don't have access to important members of their extended families. For example, in a case studied in which a 22 year old woman from Guatemala was nearing the end of her fatal fight against acute myelogenous leukemia (AML), she did not have access to her extended family members because



they were still back in her native country of Guatemala. In this case, the family involvement in her medical decision-making was hindered by her family's immigration status, geographical distance, and rapidity of her physical decline. This barrier to her medical decision making could have been avoided by finding a way to connect with her family members back home via telephone or even web-cam if internet access could be acquired (Smith et al. 2009). In a more commonly seen case in the United States, with Hispanics suffering from type 2 diabetes, *familismo* can affect the treatment process of diabetes. Often times, physicians find it hard for Hispanic individuals with type 2 diabetes to commit to lifestyle changes because of their family meals. They are typically high in carbohydrates or saturated fats, are an extremely important aspect to their culture, and some fear that changing of one's diet will cause the whole family to change their diet accordingly and violate their traditional way of living (Caballero, 2011). In these cases, often times it is hard for one individual of the family to be willing to make the whole family change their diet because of a disease they have been diagnosed with.

*Machismo* is a cultural script pertaining to Hispanic males, and can have consequences in their wellbeing. *Machismo* refers to a set of attitudes associated with masculinity, and this traditional gender role can heavily influence decisions that are made regarding health care. Often Hispanic men believe that pain should be endured, and visiting a physician is a sign of weakness. In this case, it is difficult to treat illnesses like diabetes when a Hispanic man refuses to "succumb" to medical intervention of a disease even after the caretaker wife convinces him to seek medical attention (Caballero, 2011). In the example previously mentioned of the 22 year old female Guatemalan patient with AML, *machismo* was shown to negatively affect the female patient because her male partner insisted on making decisions on her behalf to sustain her life at all costs, when that may in fact not have been what the female patient desired at that point in the

development of her condition (Smith et al. 2009). In cases like this, it is often effective for a physician to confer with female Hispanic patients in private, eliciting their concerns respectfully, and directing the medication or care towards improving their ability to provide for their families.

*Fatalismo* is the belief that one's future, including the course of an illness, is pre-determined, and not under the individual's own control. This cultural script is often considered in pair with religious or spiritual aspects of the Hispanic culture. In a health care setting, *fatalismo* can result in Hispanic patients being less likely to stick to their physician-recommended treatment plans. In many terminal illness cases, including in the palliative care leukemia case, *fatalismo* can be the cause of pessimistic attitudes, and delays in seeking treatment. In a study on patients' attitudes toward autonomy by ethnicity, Mexican Americans were significantly less likely than both African Americans and European Americans to believe that patients should be told of their terminal prognosis, and also less likely to believe that they should make decisions about life-supporting technology (Blackhall et al. 1995). In a study on type 2 diabetes, it was found that 78% of Hispanic patients diagnosed with the disease believed that it was God's will, and that only God could control it, meaning they had less motivation to actively manage their diabetes (Caballero, 2011). Although the underlying problem could be stemmed to a lack of education on diseases, the bulk of the problem seems to lie within cultural or spiritual beliefs hinders their desire to make the required lifestyle changes that would prolong their livelihood.

There are many different cultural scripts that could somehow be related to the health conditions and care for Hispanic patients in the U.S., but the *familismo*, *machismo*, and *fatalismo* are the most often encountered and struggled with in a health care setting. For a health care provider in the United States, it is important to be accustomed to these cultural differences, and

understand how they can affect different scenarios, and they must find a way to practice effective health care while respecting the cultural beliefs in which the Hispanic population was built upon.

### *Breaking Barriers*

One of the obvious and most historical means to combat the barriers between two parties separated by a cultural or language difference is the use of translators. Translators are used every day and in all settings, be it political, business, or even in a trip to the local supermarket. There are translators used today in the medical field, and often times their use results in great success. But what happens when these translation sessions are not as successful? There are different levels of translator services, and each has their own pros and cons.

An *ad hoc* interpreter<sup>3</sup> is referred to as any untrained person who is used to interpret in a given scenario. In a health care setting, an *ad hoc* interpreter could range anywhere from a family member, to another bilingual staff member, or even a bilingual volunteer sitting in the same hospital waiting room. *Ad hoc* interpreters are very useful in times in which communication becomes an immediate emergency that needs to be dealt with on the spot. In a health care setting, this leaves the assumption that there is not a professionally trained translator or interpreter available. *Ad hoc* interpreting brings forth many difficulties naturally due to its unprofessional and somewhat invasive nature, but for most cases that require an *ad hoc*, it is the only option available, and for that reason is valued very much in America. *Ad hoc* interpreters typically do not organize the interaction or steer the flow of the conversation. In medical settings, often times they do not know how to properly convey every vital piece of information from physician to patient, or vice versa. Most of the problems with *ad hoc* interpreting in hospitals lie with the

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<sup>3</sup> The term “interpreter” can be used synonymously with translator in the scope of this project.

difference in understanding of technical medical terms, and understanding how medical professionals convey their ideas in certain ways that would not be apparent to someone without proper medical translation training.

When on a medical service trip to Zacapa, Guatemala, I got to experience firsthand the difficulties of being an *ad hoc* interpreter for one of the physicians that accompanied us on this mission. As an undergraduate I have obtained a minor in the Spanish language and culture, and would have previously considered myself more than sufficient in my Spanish communication skills. However, when I was making rounds in the recovery wing of the Zacapa hospital with the maxillofacial surgeon to conduct a post-op check up on his cleft palate repair patients, I found out just how difficult it can be to medically translate. I was unable to effectively convey the symptoms that the worried mother was trying to explain about her child, and fortunately there was a bilingual physician part of our team who was close by that was able to clarify the conversation in areas that I had missed so that we could relay the vital information to the physician. Although this situation was not like a typical *ad hoc* scenario in the United States in a sense that the patients spoke absolutely no English, and I, the interpreter, was not near fluent enough to break the language barrier on my own, it provided me with valuable insight on how difficult it can be to translate, and how easy it can be to make small, potentially costly mistakes.

Professional medical translators are, by name, much more efficient in bridging the gap between patient and physician. Organizations like the National Board of Certification for Medical Interpreters have been attempting to improve patient safety, patient/provider communication, and thus overall healthcare outcomes by validating and certifying medical interpreters in America since 1986. At UT Southwestern Medical School, they have been developing their Translator Apprenticeship Program (TAP) to increase the numbers of available

translators that are proficient in the medical Spanish language (Schenker et al. 2007). There have been multiple state legislative initiatives on healthcare interpreter certification across the United States, but there is still no federal standard for governing the certification of such health care interpreters that has been universally adopted (Chen et al. 2007). The number of medical translators across the country is growing, but there are still many hospitals in the United States still do not have ready access to medically trained interpretive services. These hospitals then rely on either general translation services via telephone, or even *ad hoc* interpretation. No matter the degree of professionalism in the interpretive services to a hospital, there will always be problems to face in equal health care delivery while translators are bridging the direct interactions between English speaking physicians and LEP Spanish patients.

In a qualitative, cross-sectional study at a multi-ethnic university affiliated primary care clinic in Southern California, the accuracy of medical interpretation via *ad hoc* interpreters was observed. In this study, bilingual nurses that have not had training in medical interpretation, but frequently translate for patients, were observed. Their interactions between them and both the patient and physician were transcribed and analyzed during the encounter for 21 Spanish-speaking patients. It was found that half of the encounters resulted in serious miscommunication problems that affected the physician's understanding of the presented symptoms, or the credibility of the patient's concerns. Many of the observations noted errors in the nurse's descriptions of the medical conditions, and when the descriptions were medically accurate, often times they did not agree with the information the patient actually provided them with. Also, the cultural conflict was presented when the patients would explain symptoms with cultural metaphors that were not picked up by the interpreter (Elderkin-Thompson et al. 2001). In a very similar study, pediatric encounters at a hospital outpatient clinic in which Spanish interpreters

were used were recorded. The errors that were made were categorized and their potential clinical consequences were determined. However, this study differs from the previous one because in this case professional hospital interpreters were present for almost half of the 13 encounters in this case, while the other half was interpreted by various *ad hoc* volunteers. The results showed that there was an average of 31 interpreter errors per encounter, and 63% of all errors were deemed to have potential clinical consequences. The clinical consequences ranged from failing to question drug allergies, to incorrect instructions on dose, frequency and duration of antibiotic treatments, or incorrectly instructing on the application of hydrocortisone cream (Flores et al. 2003). Although the errors were more likely to have clinical consequences than not with *ad hoc* interpreters as opposed to professional hospital interpreters (77% vs. 53%), there were still potentially costly errors committed by these professional interpreters.

The best and most efficient way to either eliminate or almost completely minimize the potentially dangerous miscommunication errors between physicians and Spanish LEP patients is for the two to be fluent in the same language. In this case, either our physicians will have to become fluent in Spanish, or the Hispanic Americans are all going to have to obtain fluency in English. In either situation, one party will have to take on the difficult task of learning a completely foreign language and culture, which is not an easy thing to ask. It could be argued that the burden of learning a new language should be on the patients, just as it could be argued that the burden of losing weight should lie with the overweight patient. In either case, it would benefit the patient greatly to overcome such barriers, but the physician must treat diseases given the reality of the situation (Clarridge et al. 2008). In this case, the reality of the situation is that our country's foreign born population is constantly increasing, and there will consistently be an equal increase in the number of patients that are not fluent in English.

I believe that the ability to communicate effectively with a patient is an underlying virtue of becoming a physician, and therefore is where the responsibility should lie. The number of physicians in the U.S. is very limited, especially of those who are fluent in a foreign language like Spanish. This can act as a two edged sword because while this means that there are fewer physicians than Spanish-speaking patients, meaning it should theoretically be easier to have all physicians learn a foreign language rather than the patients, it is hard to say that we can afford to limit the amount of physicians that our medical schools are putting out each year by having a strict foreign language competency requirement. It would be impossible to suddenly impose such a requirement right away, because the undergraduates that are trying to become medical students right now in America have not been exposed to substantial opportunity for foreign language competency, so this requirement would have to be a very gradual transition. Teaching today's physicians to become fluent in Spanish is almost out of question. With the schedules that they have, as well as their older age and effective niche already settled, if those who work in a heavily Hispanic county cannot already effectively communicate with their Spanish speaking patients, then it is difficult to assume that they ever will by the end of their careers.

The next step down then is medical school. As far as incorporating a rigorous clinical medical Spanish section into the already jam-packed schedule that today's medical school students endure, it is illogical to assume the task of obtaining fluency during such a restricted time period. That isn't to say that there isn't supplemental work that could be done to compliment their studies while immersing medical students into the Spanish culture. Almost every medical institution in the United States has programs that involve serving rural underserved populations and medical mission work abroad that can be done in the summer terms. The University of Washington School of Medicine has recently added the optional

pathway programs to their curriculum for students interested in caring for under-represented populations in the state. For example, there is the Hispanic Health Pathway (HHP) that provides the students with the educational opportunity to learn in these urban or rural communities with high Hispanic populations, in hopes to accustom future physicians to these areas that have been exposed to the language and cultural barriers that are becoming increasingly prevalent (Pathways). Medical universities all across the nation in areas with heavy Hispanic influence have developed various programs involving the local Hispanic populations in order to incorporate the Spanish language and culture into their medical training. I believe that these programs are fantastic, and will work as a great supplemental experience in obtaining medical Spanish fluency, but I am afraid that they will not be enough on their own.

The underlying issue lies partially with the lack of experience and exposure as undergraduates, but also with the public schooling system from high school and even below. In the state of Washington, public high schools require a minimum of 2 years of foreign language exposure, and that is it. This means that most of the graduating seniors from almost any university in the country that were born in the state of Washington have most likely gone through their entire 20 plus years of their lives with no more than 2 years of beginning level foreign language exposure that they most likely have not retained. Assuming this high school language requirement is consistent with the rest of the country, this would equate to a large portion of our college graduate population that can't speak a coherent thought in a foreign language. When many of these mentioned graduates go on to attend a professional school and enter a health care profession, the language barriers and underlying consequences in the delivery of health care will only remain at status quo.



My proposal, then begins at the state public schooling level, and continues to the level of undergraduate premedical education. At the public schooling level, even if elementary schools repetitively exposed students to the most basic Spanish (or another foreign language depending on the demographic) enough to where they can hit the ground running in high school, at which point they can further extend upon these skills for a longer required time of three or four years, then it wouldn't be absurd to set a more rigorous foreign language requirement to matriculate into American universities. From this point, for any student aspiring to enter a health care profession, it would also not be unreasonable to require competency or fluency in a foreign language and culture. Fixing the problem this way will take time to accomplish, but every year the Spanish speaking population in the United States is growing, and the health care providers need to adapt in order to accomplish their professional goals, and eliminate the disparities that exist today.

### *Washington at Risk*

According to the Center for Disease Control and Prevention, two of the top five leading causes of death for Hispanics across the country as a whole were heart disease and diabetes (Hispanic or Latino Populations). These patterns are consistent with the state of Washington. Hispanic adults are more likely to have diabetes and also more likely to have heart disease in comparison to the average of the rest of the state of Washington. One in eight Hispanic adults has diabetes, where one in 14 Hispanic adults has had a heart attack, coronary heart disease, or angina (Chronic Disease Profile). Diseases such as type II diabetes and heart disease are both diseases that can be avoided via preventative medicine and require lifestyle or dietary changes. As previously discussed, specifically with type II diabetes, this preventative care is difficult to administer to patients when the physician cannot effectively communicate the importance of the

disease and influence the necessary lifestyle alterations. We have established that this implies not only a linguistic competency, but a cultural competency to where the physician can understand how the Hispanic culture, and cultural scripts like *familismo*, *machismo*, and *fatalismo* can influence the progression of said diseases. In the Central Basin agricultural counties in which the Hispanic population has comprised over 100% of their total county growth as previously mentioned, it is of the utmost importance that there are physicians capable of communicating effectively with their patients. Figure 1 below represents a visual representation that I constructed from data collected by county from the Washington State Department of Health. It demonstrates the relationship between the percentage of physicians that speak a foreign language compared to the percentage of physicians that claim having patients and their dependents that are transitory agricultural migrant farm workers (Figure 1). Judging from the before mentioned census data, we can assume that in this data, a majority if not all of the foreign languages spoken by the primary care providers in these areas of interest speak Spanish as their second language. Likewise it is safe to assume that most if not all of the transitory agricultural migrant farm workers are of Hispanic descent, and would fall under the category of those who speak Spanish as their primary language at home. These data show us that for the most part, there are a greater percentage of primary care providers in southern and central Washington that have LEP migrant farm workers as patients, compared to the percentage of providers that can effectively communicate with these patients in their native tongue. Benton and Franklin county, which encompass the Tri-cities area, most likely show deviation because this is more of a metropolitan area that may have less migrant agricultural workers, but these areas still are two of the most heavily Hispanic populated counties in the state. Chelan county, another area in Washington with a high Spanish-speaking population did not have recorded information on the percentage of

physicians that spoke Spanish, but it was reported that 78% of the primary care physicians noted having patients that were migrant farm workers, allowing us to assume that Chelan county would most likely be consistent with the pattern following the rest of the Central Basin counties. From this figure we can then draw the conclusion that our state's health care is most likely facing the same disparities that are consistent with the rest of the country as a whole. It is safe to assume that the previously described language and cultural barriers to equal health care are prevalent between Washington physicians and LEP patients.

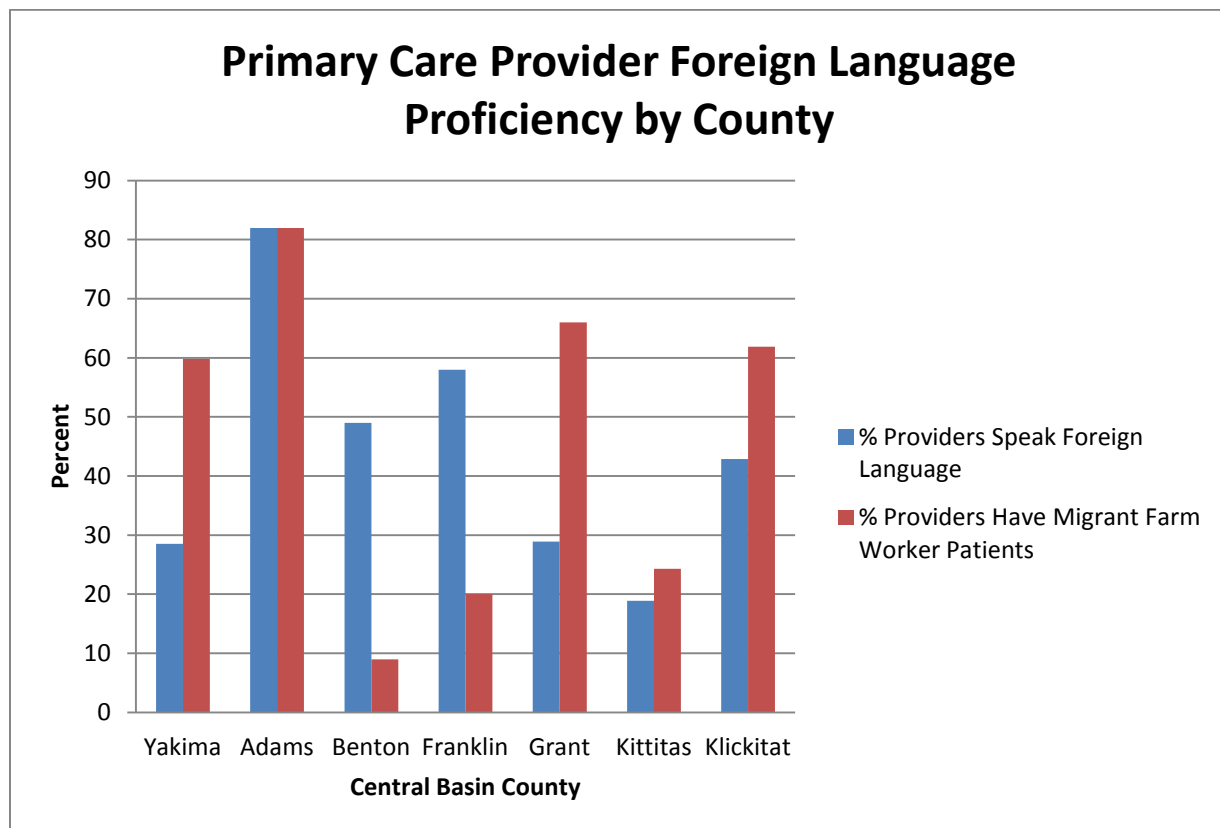


Figure 1: This figure was created from data that was collected from the *Washington State Department of Health* from the Primary Care Provider Survey Summary Reports by each county.

The University of Washington School of Medicine has fairly recently been implementing their various pathways for medical students like the Hispanic Health Pathway, that will hopefully alleviate some of the disparities experienced with the Spanish speaking patients in rural southern

and central Washington. Although these pathways represent a great initiative in moving our state's health care into the right direction of equality to all populations, I believe that we will find a need to implement a more rigorous foreign language exposure at the public school level that will ultimately ripple into more extensive studies throughout undergraduate premedical coursework.

## **V. Conclusions**

Effective communication between a physician and a patient is an essential aspect of quality health care. In the United States, both the differences in language fluency and cultural competency can act as a barrier between the physician and the patient in the delivery process. With the booming Hispanic population across the nation as a whole, more patients are being denied quality health care simply because they do not have access to health care providers that can effectively communicate with them. In these scenarios, the Hispanic patients are left unsatisfied, and exposed to potentially dangerous clinical consequences resulting from these miscommunication events. The use of different interpretive or translation services can be successful at times, but it was also noted to have adverse consequences on patient's health care. Therefore it was found that the most effective solution is for physicians and patients to communicate directly, suggesting Spanish proficiency at the level of the physician, rather than English proficiency at the level of the patient.

In comparison to the rest of the country, the state of Washington is very comparable in terms of Hispanic population and Spanish language use at home. Most of the Washington Hispanic population residing in the Central Basin counties is composed of recent immigrants that have settled and found agricultural work in the area, and therefore have limited English proficiency. It

was also found that these areas in question lack sufficient primary care providers that are fluent in the Spanish language, thus most likely lack the cultural competency as well. From this, we can conclude that the state of Washington is experiencing the cultural barriers and their subsequent negative consequences similar to those that have been reported on across the nation.

Our solution then, to break these communication barriers and eliminate disparities, begins with an earlier exposure to the Spanish language at a public schooling level, and an increased selection for Spanish fluent applicants into health care professional schools. I know that this would not be a simple transition for our country, but statistics suggest that there is indeed a problem in delivering equal health care to the Hispanic population. If nothing is done about this issue, then I fear that these barriers will not only remain, but worsen with the constantly growing Hispanic population. I believe that it would not be impractical to require a strong foreign language and culture competency for matriculation into a medical school.

This study focused on the need for Spanish speaking physicians because the American Hispanic population is by far and away the largest and fastest growing, but the truth is that these same issues are being faced for other cultures living in America. Those individuals desiring to attend medical school should then be allowed to choose which foreign language that they will become fluent in, if not already, based on the demographic of the area they desire to work in or their background they have with a certain language or culture. Regardless of the language the future physician decides to obtain fluency in, if any foreign language competency is required to enter medical school, then I believe that the disparities seen in the delivery of health care in today's America will eventually equilibrate into equal health care delivery to all Americans, in which physicians can effectively communicate with all of their patients.

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