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How is health seeking behavior and patient outcomes for Latin Immigrants affected by language barriers, socioeconomic status and health literacy?

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How is health seeking behavior and patient outcomes for Latin Immigrants affected by language barriers, socioeconomic status and health literacy?

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Abstract:

Background

Language barriers cause a disconnect between patients and health care workers. What further causes a disconnect is when patients have a lower level of education in addition to having a language barrier. I will be focusing on Latin immigrant individuals in the United States for my research. Many Latin immigrant patients may not have gone to school in their native countries, so their education level is lower making it harder to understand discharge information or patient teaching. When patients are unable to have that health literacy it may lead to negative patient outcomes due to not adhering to medication or not following their care at home.

Objective

The purpose of this investigation is to analyze how patients' outcomes are affected when there are disconnects in language barriers, health literacy and socioeconomic status. Further, the purpose is to assess quantitative and qualitative research to see how Latin immigrant patients feel towards the healthcare system and the barriers they face.

Summary of Findings

Through my descriptive literature review I found that patients find health topics difficult to grasp, which relates with health literacy. Findings included: 1) When interpreters were present, patients were able to fully express themselves; 2) Patients would forgo health care as they assumed health issues would simply go away; 3) Routine health care visits were seen to be less prevalent in Latin immigrants; 4) Medication adherence was seen to be affected due to not being informed nor having access due to cost, pharmacy operation hours, and lack of motivation; 5) When patients are given resources to learn more regarding health literacy they participate and show improvement on their knowledge.

Proposal

I propose to conduct a mixed method of qualitative and quantitative research. Using interviews

in communities in the San Francisco bay area with high populations of Latin immigrants. They

will be asked about their level of education, health care accessibility, and feelings towards health

care.

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Introduction

Language barriers cause a disconnect between patients and health care workers. But what further causes a disconnect is when the patient has a lower level of education in addition to having a language barrier. Many immigrant patients may not have gone to school in their countries, so their education level is lower making it harder to understand discharge information or patient teaching. When patients are unable to have that health literacy it may lead to negative patient outcomes due to not adhering to medication or not following their care at home. Interpreters are a great tool to help bridge the gap. However, interpreters aren't always available leaving patients in the dark about their care. This leads to patients resorting to other health care methods for their care as they don't feel heard.

I have seen the struggles patients face who have language barriers and a lack of health literacy encounter when understanding their health. Through clinical and volunteer work in my community. I have seen how patients wait so long before they seek help. Through the service learning program at Dominican University of California I was able to interpret in a non-profit clinic in San Rafael named Rota Care. This organization essentially gave health care access to patients who didn't have insurance free of charge. Through that experience I saw how giving access encourages patients to seek care and how essential it is to have interpretation to facilitate conversation. The majority of patients who would come to this clinic were low income, Latin individuals. These individuals have an array of hardships they experience. Having a better understanding of their feelings and why they don't seek care will allow healthcare workers to understand how to assist them and accommodate their needs. This will instill a more just and equitable society as all patients deserve to have access and have no fears when seeking care.

Literature Review

The descriptive literature review is aimed to assess different factors such as language barriers, health literacy and socioeconomic status and how they affect Latin immigrant patients when seeking care.

I used Dominican University's databases such as iceberg and google scholar in order to find my research articles. The key words and phrases that I utilized were "language barriers with Latin Immigrant patients". I also used "Medication Adherence with Latin Immigrant Patients". "Health literacy and its effect with language barriers" "Socioeconomic effect in health literacy". Depending on the phrase I was able to find 10-30 different research articles that relate somewhat with my research question.

I choose six articles to assess for this literature review. I created a literature review table to emphasize the articles key components like the purpose, important findings, type of study, and the strengths and weaknesses of the research. I then placed the articles in the literature review table in the order of newest study to oldest study. I decided on these articles because they looked at various aspects of my research question. All of the articles I chose have looked at Latin immigrant patients' experiences and examine the barriers they experience in regard to health care. For instance I looked at quantitative and qualitative data in order to get information that is well rounded.

Category 1: Language Barriers

The first category I am introducing is Language barriers. Language barriers are when individuals who are attempting to communicate with one another are unable to speak a common language (Merriam-Webster, 1828). I assessed three articles for this category that emphasized the importance of having individuals that are able to communicate in the same language.

The first article is "No Te Entiendo y Tu No Me Entiendes: Language Barriers Among Immigrant Latino Adolescents Seeking Health Care" by Garcia and Duckett. This article highlights the importance of having health care workers or interpreters that can speak the patient's native language but also provide culturally competent care in order to make the patient feel heard. They described barriers that were experienced by immigrant Latino adolescents when seeking health care. Conducting a qualitative study with one on one interviews on 14 recently immigrated Mexican-origin adolescents to see their experience. They found language barriers made it difficult to set up appointments or fill out paperwork when accessing health care. There were also negative experiences seen once receiving health care due to the language barrier. However, when interpreters were present it allowed patients to truly express their needs. The interviewes stated how it was difficult when they couldn't speak English and that their care was better when they were able to communicate with the providers in Spanish *(Garcia, C. M, 2009, p. 122).* My second article is "Professional Language Interpretation and Inpatient Length of Stay and Readmission Rates" by Lindholm, M., Hargraves, J. L., Ferguson, W. J., & Reed, G. This article looks at language barriers and how they affect readmission rates in the hospital comparing patients who received interpretation upon admission and discharge and analyzing results. This research looked at limited English Proficiency (LEP) in their length of stay and their receiving

professional interpretation at admission or discharge and readmission to the hospital within 30 days. This research was done over a three year period. The major findings showed there was a significant difference with patients who received interpretation upon admission and or discharge compared to patients who had interpreters for both (Lindholm, M, 2012, p. 1296). This shows the effects of interpreters in hospitals. LEP patients were also more likely to experience adverse medical events of a serious nature and had difficulty adhering to their treatment plan (Lindholm, M, 2012, p.1296). This indicates that the barrier truly affects the overall well being of the patient. Patients who didn't receive an interpreter during admission and/or discharge were seen readmitted to hospitals within 30 days of discharge. LEP patients were also seen with long lengths of stays in hospitals compared to patients with similar conditions between "0.7 and 4.3 days longer than English speaking patients" (Lindholm, M, 2012, p. 1294-1295). The effects on patients who are readmitted is baffling; there is a significant increase in longer stays and patients being admitted to hospitals. These statistics display the effects that language has with patients' health and the impact these interactions make on patients' willingness to seek care. Patients are being discharged without the proper teaching on how to continue their care leading them to be readmitted and developing more complications than patients with similar conditions who speak the common language. My last article "Nativity and Language Preference as Drivers of Health Information Seeking: Examining Differences and Trends From a U.S Population-Based-Survey" by Massey P.M Langellier et. The article overlaps within two of my categories; This research was found using the HINTS survey also known as Health Information National Trends Survey that was analyzed from 2008 to 2014 this viewed 15,249 individuals' experiences. Looking through the lens of language barriers the surveys found how foreign born Latin immigrants viewed language as an important driver when seeking health care (Massey P.M Langellier, 2017,

p.596). This shows how health seeking behavior is driven by being able to effectively communicate with health care workers. This category demonstrates the importance of language and giving culturally competent care. The effects on these populations are truly unjust. Patients not only feel disconnected from seeking health care they rely on family members that may have incorrect information regarding their health as their main sources of information.

Category 2: Socioeconomic Status

The second category is socioeconomic status looking at how it affects patients ability or reluctance to seek healthcare and their fears regarding this aspect of health care. The first article was "Routine Physical Examination and Forgone Health Care Among Latino Adolescent Immigrants in the United States" by Sarmiento, O. L. et. This research article analyzed data of a random sample of around 20,000 students from 7th-12th grade who received home interviews in English with Computer-Assisted Personal Interview and Audio Computer-Assisted Self-Interview technology. As well as in-home interviews using a paper questionnaire in English or Spanish were conducted with a parent or guardian. The major findings showed how first generation immigrants were more likely to speak Spanish at home than second or third generation immigrants, and they would have less-educated parents, and live at or below poverty level. They found that first generation patients would forgo healthcare less often than later generation immigrants. This portrays that there is a disconnect with our healthcare system. Patients who had lived in the U.S longer were forgoing health care which can indicate that they did not feel seeking health care was assisting them. There isn't easy access to health care for these individuals who are new to this country. Many patients reported that they would forgo health care as they thought their problem would go away on its own (Sarmiento, O. L, 2005, p.

312). This further portrays the lack of education due to lower economic status affects patients as they do not see the severity of their conditions. These patients are unaware that they do not have to live with pain or discomfort when something is wrong. This is proven through the literature when it is found Mexican immigrants who resided in the U.S for more than 5 years would schedule routine physical exams at higher rates and even higher rates were seen when they had insurance coverage (Sarmiento, O. L, 2005, p.312). Once patients are able to have not only the knowledge but the financial assistance through insurance seeking health care becomes more attainable to patients. Continuing to increase accessibility to healthcare would encourage Latin immigrant patients to be more willing to receive care. Cost is a big attribute to why many patients are reluctant to seek care. In the literature I examined how first generation adolescents from Cuba would forgo their health care as they couldn't afford it (Sarmiento, O. L, 2005, p.312). This further solidifies how a patient's socioeconomic status and ability to pay truly affects their willingness to seek care. The second article for this category is "Nativity and Language Preference as Drivers of Health Information Seeking: Examining Differences and Trends From a U.S Population-Based-Survey" by Massey P.M Langellier et. Examining this article through the lens of socioeconomic status. The major findings seen in this regard is how Latin immigrant respondents were the largest group of people who used printed material as their first source for health information (Massey P.M Langellier, 2017, p. 601). It was seen that Spanish speakers showed more distrust in the media. The movement of our society becoming a digital world is also attributed to the lack of Latin immigrant patients seeking care or resorting to outdated information when they have questions. This category demonstrates how a patient's education and wealth are key traits that impact Latin immigrant patients from seeking care.

Through the research it is seen how cost and the lack of knowledge on the subject truly does impact patients' experiences.

Category 3: Health Literacy

My last category is health literacy investigating how a patient's knowledge of health care attributes to their willingness to seek care. According to the CDC, health literacy is defined as the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others (CDC, 2020). My first article for this category is "Identification of Barriers to Medication Adherence in a Latino Population" by Sheryl Compton et. This study consisted of qualitative research that surveyed Spanish speaking patients who hadn't picked up their medication for more than 2 weeks. The patients were asked a series of questions that analyzed their demographic and medication-related questions, reasons for, and associated barriers with failure to pick up medications. The main contributing factors as to why patients failed to adhere to their medications was lack of patient motivation, knowledge, skills, and access. The education level of patients was relatively low with 45% having sixth grade education or less (Sheryl Compton, 2010, p.369). This information shows how patients likely have lower literacy levels which alters their understanding of the importance of their medications and how adherence is key to sustaining a healthy lifestyle. Although patients reported that they understood that the medication they were taking was important they weren't making actions to continue adherence. Which attributes to the finding of lack of motivation of these patients. This lack of motivation is attributed to the patients lack of health literacy although they reported they understood its importance doesn't guarantee they understand the effects of not adhering to their medication.

My second article for this category is "The Health Literacy and ESL Study: A Community-Based Intervention for Spanish-Speaking Adults" by Soto Mas et. This quantitative research study recruited 155 people through the community who met a list of criteria. These individuals were then tested using the TOFHLA which is the Test Of Health Literacy in Adults score; they were tested prior to taking a health literacy course and after. Through this research it was found that there was a significant increase of 13 points after completing the course. The people in this community showed interest in being a part of the study and it showed the health literacy and ESL curriculum can be a tool for improving Spanish-speaking adults health literacy (Soto Mas, F, 2015, p. 370-371). This assists my research question as Spanish-speaking patients have low health literacy but when given the opportunity to improve their knowledge base it is seen how people commit to their learning and becoming more comfortable in regards to their health. This would allow patients to feel more competent when having conversations with health care providers and likely lead patients to seek care. This category added how there is a correlation with patients who have lower education levels and how they are less likely to adhere to their medication. It also showed that when patients are given the education they commit to learning.

Literature Review Conclusion

This literature review encompasses three different lenses that show how there are many contributing factors that affect Latin immigrant patients when seeking health care. Through the literature it is seen how language barriers, health literacy, and socioeconomic status all play a huge role with patient adherence to medication, treatment and willingness to seek care. The overall strengths include having both qualitative research that would survey and hold one on one interviews to establish trust with clients, there was an array of different sample sizes, some

research was done over a long period of time to show how the impact continues. The weaknesses include some sample sizes were relatively small, patients had to recall information for interviews and they may forget certain information, some research only focused on certain age groups so it doesn't encompass all Latin immigrants experiences. The findings have brought awareness to the need for more resources and access to health care for Latin immigrants. Health care workers need to provide culturally sensitive care acknowledging patients' education levels as well as any language barriers as simply translating information doesn't guarantee a patient understands the information. The gaps identified through this literature review show that there is not enough research that analyzes all three aspects of my research question categories and how they overlap. I am making correlations based on the research presented but for further research finding the exact correlations with all three of my categories.

Theoretical Frameworks

The theoretical framework that will be used for this study is the Transcultural Nursing Theory which is also known as the Culture Care Theory. This theory was created by Madeleine Leininger in the 1950s (Nursing Theory, 2020). The theory encompasses the importance of understanding how culture influences patients' health. Embracing patients' diverse cultural differences allows nurses to be great patient advocates for their beliefs. Through this theoretical framework we nurses are made sensitive and aware to patients varying education, environments, and experiences (Busher Betancourt, 2015). This allows for an increased quality of care to patients as they feel understood within the healthcare system and not belittled for their differences. In order to give the best care, accommodating our care strategies to the patient will be the key motivator to instilling trust within our system. Through her framework there were

different scenarios that applied. For instance one was when a Mexican-American woman was

late to an appointment she explained that it was difficult to get transportation, the directions were

confusing and struggles with finding child care. However, the health care professionals didn't

understand her hardships and didn't accommodate the patient; the patient then found alternative

care (Leninger, 2001, p.64). Health care professionals must listen to patients' wishes and

collaborate with patients as they are on the receiving end of care. Applying this theory to my

research shows how imperative it is that healthcare professionals understand the barriers that

Latin immigrant patients go through that prevents them from seeking care. This will allow

healthcare professionals to accommodate their care in order to fulfill the needs of patients

allowing them to feel heard.

Proposal for Further Study:

Through my research we see how various factors are affecting Latin immigrants that

relate to my research question. However, there wasn't research that viewed how all those factors

affect one another. It is important to know what healthcare professionals can improve on, in order

to promote Latin immigrants to seek care when they need it and have good experiences. This

relates to my literature review as we saw the effects of language barriers, socioeconomic status

and patients' health literacy playing a role in patients' experiences.

Population & Sample

My proposal for research is to look at communities in the bay area with a high population

of Latin immigrants like San Francisco, San Rafael, etc. and do outreach; through talking to

clinics, grocery stores, going to food banks, and community centers. Ideally recruiting around 10

Spanish-speaking individuals per community will allow a holistic approach to understanding the barriers that are limiting individuals from seeking care.

Recruitment

Promoting the study through social media on Facebook, Instagram, Twitter, and much more. I would make a sheet where people who are interested can put their contact information that I would track on an excel sheet that is only accessible to me and people who will be assisting me on the research. If there aren't many people willing to participate, we can then use incentives like getting gift cards to try and recruit more individuals.

Research Design and Methods

I would then conduct a mixed method quantitative and qualitative study with one-to-one interviews with individuals who are willing to participate. Each interview will be planned for approximately one hour and will take place in a quiet, private room on the university campus or possibly in the participant's home. The interview will also be conducted by a Spanish speaker, so the participants are more comfortable to respond. Qualitative questions will be open-ended. Other questions will be able to be quantified by asking close-ended questions. The interviews will be recorded and transcribed.

I will be focusing the interviews around my research question which is:

- How is health seeking behavior and patient outcomes affected by language barriers, socioeconomic status and health literacy?

Through looking at this lens, the questions that would be asked to the community members include:

- Quantitative:

- ○ What is your level of education?

  elementary; some high school; high school graduate; some college; associate

  college degree; bachelor's degree; graduate school

- ○ What is your annual income?

  <$20,000; $21- 40,000; $41- 60,000; $61 - 80,000, <$80,000

- ○ Do you have access to health care/insurance?

  yes, no, or not sure

- ○ How long have you resided in the U.S (in number of years and, if applicable,

  months)?

- ○ Where do you currently live (county only)?

- ○ Have you encountered language barriers in your experiences with healthcare

  providers? yes, no, or not sure

- ○ How would you rate your understanding surrounding the healthcare system on a

  scale of 1-10 (1 being not at all, to 10 being I understand everything)?

- ● Qualitative:

  - ○ What are your feelings towards the health care system?

  - ○ Do you ever feel unheard in the healthcare system?

  - ○ If you have encountered any language barriers in your experiences with the health

    care system, please describe what you experienced.

  - ○ Please discuss any other barriers you may have encountered in your experiences

    with the healthcare system.

  - ○ Please elaborate on any of your answers.

Data Analysis

From the answers to these, I can then dive deeper into what are the systemic issues that are being presented to these individuals. Based on answers to the quantitative questions, I can then use descriptive statistics to determine the percentages of patients who have lower levels of education, and potentially distinguish between those who seek health care versus those who forgo health care.

I will analyze what the majority of the participants are stating their barriers are for seeking care by grouping together the similar words and phrases in participants' responses. The groups will then be organized into categories. Themes may be derived from the categories with assistance from experts in the field of qualitative research. If there are any questions about the intended meaning of participants' answers that arise when analyzing, I will go back and clarify with the participants again.

Ethical Considerations

The ethical consideration for this study is to ensure informed consent from all participants of this study. The consent form will be written in Spanish. As well as conducting the research on the principles of autonomy, beneficence, non-maleficence, and justice. Ensuring that participants understand that everything shared will be confidential, all data collection will be stored on password protected material no names will be published. Names will be coded to protect identities. The patients will be informed that they are able to withdraw from the study or refuse to answer any of the questions that are asked during the interview. No data collection will start until the Dominican University of California Internal Review Board (IRB) board reviews and approves the study.

Conclusion

The purpose of this paper is to have a better understanding of Latin immigrant individuals and how barriers affect them when seeking care and the effects seen on their health with the barriers. The focus was on socioeconomic status, language barriers, and health literacy. The gaps that were seen is that there isn't research that encompasses my exact research question but may focus on one or two of the topics. It is essential to know how these factors affect Latin immigrants as they make up a good amount of our population. In order to better serve communities regarding their health, health care workers must provide care in a way that will allow patients to understand their diagnosis, ease their anxieties and instill trust within these communities. Adapting care will promote patients to adhere to treatment and seek care when they need it. Through my literature review we saw the effects like how there were higher complications and readmission rates seen with patients who didn't receive interpretation upon admission or when being discharged. As well as how patients are willing to take classes to improve their health literacy when given the chance. Educating patients and providing accessible health care once patients are well informed will help bridge the gaps seen in health care to ensure we have equity and justice within our health care systems for all individuals.

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Mexican Immigrants in North Texas

Appendix A: Literature Review Table

Authors citation	Purpose and objective	Sample-population of interest, sample size	Study Design and Method	Major Findings	Strengths	Limitations
Massey, P. M., Langellier, B. A., Sentell, T., & Manganello, J. (2017). **Nativity and language preference as drivers of health information seeking: examining differences and trends from a U.S. population-based survey**. *Ethnicity & Health, 22*(6), 596-609. 10.1080/13557858.2016.1244745	To examine differences in health information seeking between the U.S.-born and foreign-born populations in the U.S.	Data from 2008 to 2014 from the Health Information National Trends Survey were used in this study (n=15,249) Individuals of all backgrounds were included	Mixed method study of qualitative and quantitative research. Bivariate analyses, logistic regression, and predicted probabilities were used to examine health information seeking and sources of health information HINTS survey 5 different categories	"Among all six groups, Hispanic foreign-born respondents used health professionals the most as a first source of health information (25.2%). Relative to other groups, Hispanic foreign-born respondents also demonstrated the largest percentage of those who used print material (17.4%) as a first source of health information."	Examined how Latinos don't have digital literacy to utilize the internet for their concerns. Was examining a broad time frame so it can truly show a systemic issue. The study shows how health-seeking behaviors vary between racial/ethnic groups They have a big sample size.	A self report survey relies on recall which may cause a bias on recall. This study is a secondary analysis They did not measure the patients health literacy

Authors citation	Purpose and objective	Sample-population of interest, sample size	Study Design and Method	Major Findings	Strengths	Limitations
			internet, health professional, family or friends, print material, and other sources.	"studies demonstrate that language preference is an important driver of health information-seeking disparities between foreign-born Hispanics (i.e. those born outside of the US) and other racial/ethnic groups." "Spanish speakers demonstrate a lower trust in media and lower use in various media channels	Emphasis the need for tailoring care for each patient.	

Authors citation	Purpose and objective	Sample-population of interest, sample size	Study Design and Method	Major Findings	Strengths	Limitations
				(Clayman et al. 2010), and have differen- tial home access to computers and broadband (Manganello et al. 2015)."		
Soto Mas, F., Ji, M., Fuentes, B. O., & Tinajero, J. (2015). **The Health Literacy and ESL study: a community-based intervention for Spanish-speaking adults.** *Journal of Health Communication,*	"Although Hispanics have a documented high risk of limited health literacy, there is a scarcity of research with this population group, and particularly with Hispanic immigrants who generally confront	155 people participated

"Participants were recruited from the community through local Spanish radio and television stations. They had to meet the inclusion criteria. | A quantitative study testing before and after education experience. | "health literacy encompasses a variety of social and life skills, such as the ability to read and understand text, use quantitative information, speak and listen effectively, understand disease | They ensured to compare scores based on how often people were able to attend the sessions

People in the community were very interested in being apart of this study | The retention of information doesn't take into consideration learning difficulties in people.

Some individuals may not have attended all the sessions. |

Authors citation	Purpose and objective	Sample-population of interest, sample size	Study Design and Method	Major Findings	Strengths	Limitations
20(4), 369-376. 10.1080/1081073 0.2014.965368	language barriers that have been related to low health literacy. The National Action Plan to Improve Health Literacy identified community-based English-language instruction as a strategy that can facilitate a health literate society"			processes, use technology, and network and interact socially." "Results indicate that the intervention was more effective in increasing the average TOFHLA score, which improved by almost 13 points (12.85) in the intervention group and by only 8.2 points in the control group. It is impor- tant to emphasize that a 13-point improvement in TOFHLA score could move a	"The Health Literacy & ESL Curriculum may be recommended as a tool for improv- ing health literacy among Spanish-speaking adults"	It was a relatively small sample Some people couldnt full commit to the study as there was a time commitment It is only meant for a certain age group. Study didn't do follow up assessments to see how much retention people had. People may have remembered the questions from the pretest and

Authors citation	Purpose and objective	Sample-population of interest, sample size	Study Design and Method	Major Findings	Strengths	Limitations
				participant to or closer to an adequate functional health literacy level."		that could have altered their answers.
Lindholm, M., Hargraves, J. L., Ferguson, W. J., & Reed, G. (2012). **Professional Language Interpretation and Inpatient Length of Stay and Readmission** Rates. *Journal of General Internal Medicine : JGIM, 27*(10), 1294-1299. 10.1007/s11606-012-2041-5	" To investigate differences among patients with limited English proficiency (LEP) in their length of stay (LOS) and 30-day readmission rate associated with their receiving professional interpretation at admission or discharge."	All LEP patients admitted between May 1, 2004 and April 30, 2007.	This is a retrospective analysis. This study looked at 30-day readmission rates. For patients that didn't receive interpretation at admission and discharge controlling for patient characteristics, including age, illness severity.	"Spanish and Portuguese speaking patients were most likely to have interpreters on admission and discharge. Patients speaking less prevalent languages were most likely to not have interpretation services on both admission and discharge." "Patients who did not have an	We can see how having bilingual providers improves patient satisfaction. They can also assist in shortening the LOS of the patients. The study evaluates patients over the span of 3 years so it truly shows the lasting impact of LOS and readmissions rates.	It is not known how often a family member or untrained staff is providing interpretation for the patient. Or if there was any bilingual staff available. The data doesn't include the time of admission. There was no data on patients mental capacity and alertness.

Authors citation	Purpose and objective	Sample-population of interest, sample size	Study Design and Method	Major Findings	Strengths	Limitations
				interpreter present on both admission and discharge days were in the hospital about 1.5 days longer than patients who had interpreters on both days (β = 1.49, SE = 0.46). In addition, patients who had interpreter present on discharge but not admission days had longer LOS (β = 0.87, SE = 0.36)" "patients who do not have access to interpretation at admission or	They also were able to find that the likelihood of a patient being admitted within 30 days of discharge seems to be associated with having an interpreter at either admission or discharge. They also looked at the different types of illnesses that patients would come in with and analyzed those with readmission rates and LOS as each illness can't be fairly compared.	The study was only done in one institution so it doesn't encompass all other hospitals. Socioeconomic status wasn't asked which may affect a patient ability to advocate for an interpreter.

Authors citation	Purpose and objective	Sample-population of interest, sample size	Study Design and Method	Major Findings	Strengths	Limitations
				discharge are more likely to be readmitted within 30 days."		
Compton, S., Haack, S., & Phillips, C. R. (2010). **Identification of barriers to medication adherence in a Latino population**	"This pilot project identified barriers that may hinder medication adherence in a Latino population. The results of the survey may identify trends in barriers allowing for the development of interventions aimed at improving medication adherence"	Ninety patients met the inclusion criteria of the study. Of these, 38 (42.2%) ultimately completed a survey.	This is a qualitative study. That looked at Spanish-labeled prescriptions that had not been picked up from a community pharmacy after a 2-week period to identify study subjects. Patients were contacted by phone and surveyed regarding	The most common classes of medications patients failed to pick up were chronic medications. More than 90% of the patients thought that the medication in question was helpful to them, and nearly 80% thought that the medicine was still needed. Patients cited communication issues (ie, content	"The education level of our survey sample was relatively low, with nearly 45% having a sixth grade education or less. Despite having Spanish interpreters, communication strategies should be at appropriate literacy levels to promote understanding and subsequent adherence to therapy."	"A relatively high number of patients were never contacted, even with 5 phone attempts. Discon- nected phones, wrong phone numbers, and reloca- tion of patients present ongoing issues for adherence programs." This was a very small sample size from a single

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			reasons for not picking up their prescription medication. The 24-item survey instrument consisted of demographic and medication-related questions, reasons for, and associated barriers with failure to pick up medications."	matter, such as when the prescription was ready), logistics, and limited hours of pharmacy operation as the primary barriers in picking up their medications, whereas nearly 40% failed to identify any barriers.	This study found that medication adherence is composed of motivation, knowledge, skills, and access. The primary barriers identified in our survey, such as logistics, hours of pharmacy operation, and cost, re- late to access and impact medication adherence in both Latino and non-Latino patients. Motivation, knowledge, and	community clinic.

"Also, the survey was not formally tested for validity and reliability, although it was reviewed by the authors for face validity. Finally, failure to pick up medication may not be an accurate reflection on a patient's adher-ence because of providers offering medication samples or changing |

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					skills may be more closely tied to communication and other culturally dependent variables.	prescription directions."
Garcia, C. M., & Duckett, L. J. (2009). **No te entiendo y tú no me entiendes: language barriers among immigrant Latino adolescents seeking health care.** *Journal of Cultural Diversity, 16*(3),	To describe barriers experienced by immigrant Latino adolescents seeking U.S. health care	A very small sample size of 14 recently immigrated Mexican-origin Immigrant Latino adolescents experience health dis- parities and barriers to accessing health care.	Qualitative research Ethnography using one to one interviews	Language barriers made it difficult to access health care. That be because setting up appointments or any interactions and filling out paperwork. Individuals also had negative experiences once they received	This study gives qualitative data that is consistent with those individuals' experiences. It was focused on new immigrants to see how culture and language barriers clash. The open-ended questions allowed for more	Generalizability is limited due to a very small sample size so it doesn't fully encompass all individuals' experience. It was also in an urban area. All the participants were Mexican so it can't be categorized as all

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120-126. https://dominican.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ccm&AN=105323234&site=ehost-live				health care. Doctors are becoming frustrated with the language barrier. Topics related to health were difficult to grasp. Interpreters enable patients to truly express their needs.	detail to be shared. There was also an establishment of trust with the researcher and participants as it was a face-to-face interview it likely enhanced data collection.	Latino adolescents.

Participants also had to recollect their past experiences so information could have been altered. |