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BELIEFS OF TRANSLATORS ABOUT MEDICAL SPANISH PAMPHLETS

By

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A thesis submitted to the faculty of the University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College

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ABSTRACT

MARGARET COULTER: Beliefs of Translators about Medical Spanish Pamphlets

(Under the direction of Felice Coles)

This paper addresses the beliefs of professional Spanish medical translators regarding the use of dialect variation in medical Spanish translation and the resulting effects on the level of healthcare attained by Spanish speaking patients in the United States. The health gap between English-speaking and non-English patients is explored as it relates to inadequate translation of medical information and instructions leading to poorer health outcomes and higher readmission rates among Spanish speakers.

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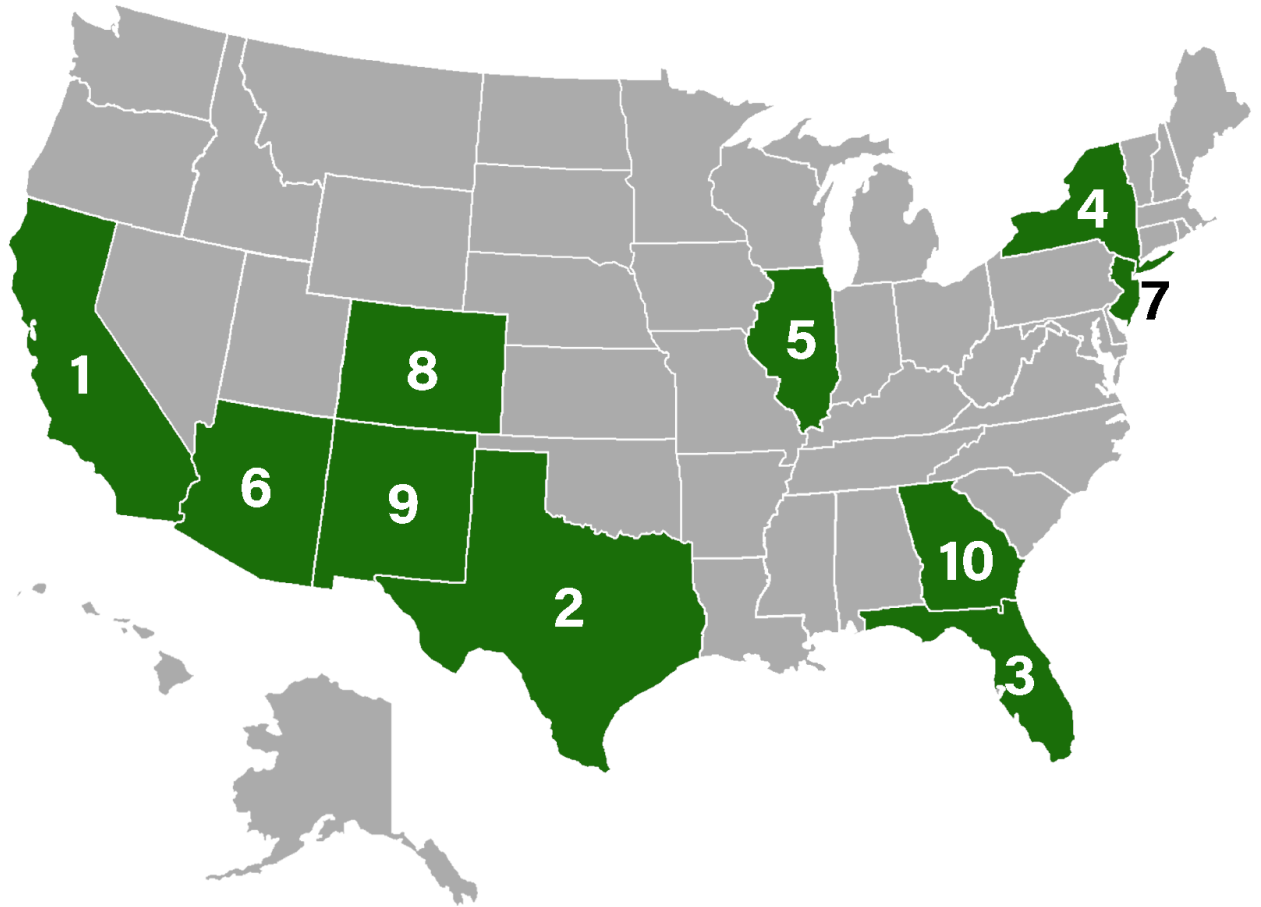
CHAPTER 1: Introduction

In this study, I will address the opinions of professional medical translators about the use of dialect variation in medical Spanish translation and the resulting effects on the level of healthcare attained by Spanish speaking patients in the Houston area. While I was shadowing Dr. Michael Mitschke, cardiologist, in a nearby suburb of Houston, Katy, Texas, a man came into the emergency room who was presumed to be in cardiac arrest. He only spoke Spanish, and since there was only one Spanish speaking nurse on call that night and she was otherwise occupied, Dr. Mitschke asked if I would help to interpret for himself and the patient. I then began wondering if Spanish speaking US citizens were able to obtain the same level of care as their native and non-native English speaking counterparts and how the style of Spanish used in these interpretations and translations affected the outcome.

When I began researching topics for my thesis, I came across an educational pamphlet meant for hospital staff and doctors regarding medical interpretation and miscommunication that mentioned a study in which non-English speaking patients have an overall higher rate of readmittance than native and non-native English speaking patients. Among the most common reasons for readmittance include for the most part miscommunication and/or confusion about the information relayed to the patient. I started to question if the different dialect variations of the Spanish language would make a significant difference in this discrepancy between the health outcomes of native and non-native English speakers and native Spanish speakers.

My general hypothesis is that professional Spanish medical translators and interpreters will prefer the use of the patient's preferred regional Spanish dialect rather than the standard academic Spanish variant in order to avoid miscommunication and inadequate translation of

instructions. I propose that if medical information in pamphlets is translated from an originally English version, then the dialect will be the supraregional, standard academic version. However, if the material is directly written in Spanish for use by a certain audience, then the regional dialect will overcome the supraregional variant. For example, if the material is from a dialect region such as Texas or California, then the dialect used will be Mexican-American colloquial Spanish due to the shared border and proximity of these two states to the Spanish speaking country of Mexico, although this dialect “might more legitimately be called Mexican American Spanish” (Lipski 2). In New York, “Puerto Rican Spanish [is] the major variety,” and the Cuban variation is “mostly closely associated with a singular geographical region” (Lipski) in Florida. I was able to confirm that these four areas have dense populations of Spanish speaking citizens using the US census site. In all four regions, Hispanic or Latino was reported as the second largest population group by percentage, the first largest being White. More specifically, “Hispanic” or “Latino” accounts for 43.7% of the total population in Harris County, Texas, 26.4% in Florida, 29.1% in New York City, and 39.4% in California. In Map 1 of the states in the US with the largest concentration of Hispanic/Latino Americans according to the Census Bureau, the first four states in that ranking coincide with the states I have chosen to focus on in my research.



Map 1: States with Concentrations of Spanish-Speaking Populations (U.S. Department of Health and Human Services Office of Minority Health)

- 1: California (Hispanic population: 39.4% of total)
- 2: Texas (Hispanic population: 37.6% of total)
- 3: Florida (Hispanic population: 26.4% of total)
- 4: New York (Hispanic population: 17.6% of total)
- 5: Illinois (Hispanic population: 15.8% of total)
- 6: Arizona (Hispanic population: 29.6% of total)
- 7: New Jersey (Hispanic population: 17.7% of total)
- 8: Colorado (Hispanic population: 20.7% of total)

9: New Mexico (Hispanic population: 46.3% of total)

10: Georgia (Hispanic population: 8.8% of total)

(U.S. Census)

For my research I grouped together pamphlet materials from Texas and California to represent the Mexican American dialect and that of New York and Florida to represent Caribbean dialect variants. In my survey of professional medical Spanish interpreters and translators in the Houston area, I include eight main questions to determine whether or not the use of regional dialect variants in written information, such as the pamphlets I have studied, would be more effective than the supraregional variant. I propose that in the case where materials are directly written in a specific Spanish regional dialect, the overall effect on the health outcomes of those patients will be positive and that the survey participants' answers will also reflect this.

I created a short survey to be completed by several professional Spanish medical interpreters and translators. In the survey, I asked questions that elicited their opinions on using regional dialects in order to convey medical information to Spanish speaking patients based on the pamphlets I chose to review as well as what they thought about the health care gap between English and non-English speaking patients and whether this could be caused by dialect or standard translations of medical information.

From my investigation, I hope to create a discussion about whether or not the lengths we go to in order to convey accurate and easily understandable information to Spanish-speaking and other non-English speaking patients in the US is sufficient. In addition, my research will give insight into ways in which we can better the existing translations that we use to provide

non-English speakers with the necessary information that they need, rather than expecting them to learn English immediately upon arrival in the United States.

I discovered from my first survey that the majority of professional medical Spanish interpreters and translators did believe that the best manner of translation is to use the patient's preferred regional dialect, but understood that other socioeconomic factors are at play that contribute to the health gap between non-English speaking patients and English speaking patients. The majority of participants also agreed that they had been aware of dialect variation in the past and had even noticed it in their own workplace.

From the data obtained by my second survey, I was able to deduce that although many professional interpreters and translators say they prefer the use of the patient's preferred regional dialect rather than the supraregional variant in order to avoid miscommunication due to regional differences, in practice they are much more concerned with what sounds most natural. Grammar (syntax, in particular) was an important factor to the participants of my study regarding what phrases and terms sounded most natural, but regional differences were of little to no importance. The Spanish that seemed to read as the most "fluid" to the participants wound up being the standard academic Spanish variant.

My study will begin in Chapter 2 with a literature review of previous studies investigating dialect differences, followed by a more thorough description of the methodology of my research in Chapter 3. Chapter 4 will include the results of my investigation, and I will draw conclusions from the findings of my research in Chapter 5, as well as discuss the significance of my study and what could be improved and extended.

Terms

Some of the most common terms used in this thesis are glossed here.

Dialect: a regional (or some other characteristic) variety of a language distinguished by features of vocabulary, grammar, and pronunciation from other regional varieties and substituting together with them a single language

Interpreter: a person specially trained to convert oral messages from one language to another (Refugee Health)

Grammar: the collection of principles defining how to put together a sentence (LSA)

Interpretation: a conversational exchange from one language to another that happens in real time (Asetrad)

Pamphlet: a small booklet or leaflet containing information or arguments about a single subject (Oxford Languages)

Standard: substantially uniform and well established by usage in the speech and writing of the educated and widely recognized as acceptable (Merriam-Webster)

Supraregional: of, relating to, characteristic of, or serving more than one region (Merriam-Webster)

Translator: a person specially trained to convert written text from one language to another (Refugee Health)

Variant: a form or version of something (in this case a language) that differs in some respect from other forms of the same thing or from a standard (Lexico)

CHAPTER 2: Literature Review

While shadowing a cardiologist, I began to think about how different modes of communication, specifically translation, affect the level of patient care afforded to non-English speaking Hispanic patients in the United States. I decided to focus on the Spanish dialect differences in written medical pamphlets and the opinions of healthcare professionals regarding the way in which they are formulated. I then came across a pamphlet aimed at medical professionals and other hospital staff that mentioned a study in which a higher rate of readmission among non-English speaking patients is attributed to miscommunication, likely due to insufficient translation or interpretation (Karliner *et al*). In this chapter, I will support with previous research the different criteria I chose to conduct my research and how I arrived at my final research hypothesis.

This thesis will focus primarily on the translation of written text between English and Spanish, rather than the interpretation of Spanish to English during medical conversations.

The use of Spanish dialects is of significant importance to Spanish speakers because “ethnicity and language... signify group membership and form part of individuals’ identities” (Bergman *et al*), meaning that, for example, Spanish speakers from Mexico are more likely to speak Mexican American Spanish rather than the standard academic variant if they identify more closely with their Hispanic heritage. They are also likely to feel more comfortable speaking in their native dialect than in another, more standardized version of Spanish. As mentioned by Varonis and Gass, this comfort is important in building trust, especially in a medical setting, and avoiding miscommunication based on a common background (Varonis *et al*).

Another important distinction is the difference between the Spanish dialects that I have chosen to compare: Mexican-derived Spanish, Caribbean-derived Spanish, and the standard academic Spanish variant used across the United States. As mentioned by Lipski (2008), as Spanish became more widely used and accepted in the US, the language was taught in high schools, colleges, and universities, which gave way to the emergence of the standard academic variation, also referred to as the “supraregional” variant.

Mexican-Derived American Spanish

In looking at Mexican American Spanish, “the vast majority of Mexican Americans are concentrated in Texas and California” (Lipski). The Mexican American dialect is the distinctly Americanized aspect of the form of Spanish used in these states, albeit replenished by close contact to the Mexican Spanish dialect. I will now describe the characteristic linguistic aspects of Mexican Spanish in order to distinguish between this variant, the supraregional variation, and the Caribbean variant. Linguistically, Mexican Spanish is more conservative than that of the Caribbean region (Lipski). The use of *vos* ‘you’ (2nd person plural informal) is rare in the United States in general in the Mexican American dialect and the Caribbean American dialects. For example, to refer to a group of people in second person, most U.S. Latin American dialects would use *ustedes* rather than *vos*.

(1) *Si **ustedes** nos pusieran una, **ustedes** podían ver la diferencia.*

‘If you made one for us, you’d see the difference.’ (Coles)

Mexican American Spanish speakers also frequently use the indirect object pronoun *le* ‘he/she/it’ instead of the direct object pronoun *lo* ‘he/she/it’ (object pronoun) with intransitive verbs and direct objects, especially imperatives, to refer to people.

(2) *¿Y Luis? El padre le llamó hace un momento.*

‘And Luis? His father called him a minute ago.’ (García and Otheguy)

Rather than referring to a person with *lo*, some American Spanish speakers use the indirect object pronoun *le* to refer to the person, regardless of direct or indirect reference. Mexican American Spanish does not employ non-inverted questions, such as:

(3) *¿Qué dices tú?*

‘What do you say?’ (Lantolf)

as is frequent in Caribbean dialects:

(4) *¿Qué tú tienes?*

‘What’s the matter with you?’ (Lantolf)

Infinitives with subject pronouns, as in the sentence

(5) *pero para tú hacer vida diaria aquí, no es fácil*

‘but it’s not easy for you to lead a daily life here’ (Rivas *et al*)

are far less common in Mexican Spanish than Caribbean Spanish. It is common to use the phrase *¿qué tanto?* ‘how much?’ in place of *¿cuánto?*; *mucho muy* ‘most’ in order to form colloquial superlatives such as

(6) *eso es mucho muy importante*

‘that’s very important’ (Perez)

no más for ‘only’ or ‘just’; and *mero* ‘mere’ to mean ‘one and only’ or *ya mero* to signify ‘almost’ (Lipski).

In American Spanish specifically, as compared to the Mexican Spanish dialect, decline in the use of the subjunctive tense is noted, as most speakers prefer the indicative verb tense such as *sale* instead of *saliera*,

(7) *La piraña esperó que se sale*

‘The piranha waited for him to leave’ (Abchi and De Mier)

and the use of the imperative form of the verb is commonly used to order or instruct someone to do something, such as:

(8) *Ándale*

‘Let’s go’ (Lipski)

noun-adjective gender correspondence as in *chica gorda*

(9) *el mano*

‘hand’ (Coulter)

in which, even though *mano* is a feminine noun, the masculine article is used instead, as well as the convergence of *ser* and *estar*; in which it is acceptable to say

(10) *Soy enferma*

‘I’m ill’ (Coulter)

(11) *Estoy médico*

‘I’m a doctor’ (Coulter)

loan translations such as *patras* ‘back’ and Anglicisms, for example, *hacer fix* ‘to fix’ instead of *arreglar* ‘to fix’

(12) *Va a hacer fix la ventana mañana.*

‘I will fix the window tomorrow.’ (Coulter)

are common.

Some lexical items unique to Mexican American Spanish, obtained from the pamphlets originating from Texas and California, are: *médico* ‘doctor,’ *doctor* ‘doctor,’ *profesional/proveedor de cuidados de salud* ‘healthcare provider,’ *quedarse en casa* ‘stay at home,’ *aislase/permanezca en casa* ‘stay at home,’ *desinfectante de manos* ‘hand sanitizer,’ *pañuelo desechable* ‘tissue,’ *síntomas de leve a severos* ‘symptoms from mild to severe,’ and *lavarse las manos* ‘wash your hands.’

Caribbean-Derived American Spanish

For this project, I will group together the Cuban and Puerto Rican regional dialects, which are most common in Florida and New York respectively, due to the fact that “Cuban Spanish naturally shares many similarities with the neighboring Caribbean varieties” (Lipski 111).

In looking at the Caribbean Spanish, the African presence in Cuba after the Haitian Revolution had a profound impact on the dialect of Spanish spoken there, and thereafter carried into the United States mostly by Cubans seeking to escape from the dictatorial communist rule during the 20th century (Cuba: Una Historia). Cuban Spanish uniformly employs *tú* ‘you’ as the familiar second person pronoun, as opposed to the more formal *usted*

(13) *Mamá, ¿hiciste el desayuno?*

‘Mom, did you make breakfast?’ (Coulter)

and prefers diminutives using the suffix *-ico*, such as *ratico* ‘short while.’

Contrasting Mexican American Spanish, Cuban Spanish almost always uses noninverted questions when the subject is a pronoun, as exemplified in the sentence

(14) *Qué tú quieres?*

‘What do you want?’ (Lipski)

The placement of the subject pronoun after the verb lends an aggressive tone for Cubans (Lipski 112).

Following are some regionally specific vocabulary from the written medical information from Florida: *lávase las manos* ‘wash your hands,’ *desinfectante para manos* ‘hand sanitizer,’ *pañó de tela* ‘face covering,’ *maskarilla* ‘mask,’ and *pañuelo* ‘tissue’

Although Puerto Rico remains a territory of the U.S., “Puerto Rican Spanish has not suffered massive Anglicizing or ‘transculturation’” (Lipski). In fact, most of the pervasive Anglicisms used on the island are due to advertisement and media, not the US efforts to instill the English language and culture into Puerto Rican citizens, as many Puerto Ricans with minimal English proficiency employ a large number of Anglicisms. Puerto Rican Spanish maintains the use of subject pronouns where other variants of Spanish would consider them redundant as in

(15) *Yo salí media hora tarde pero yo cojo el reloj...*

‘I left half an hour late but I take the clock...’ (Brown and Rivas)

questions accompanied by subject pronouns are usually left uninverted such as

(16) *Pues, ¿qué tú crees que yo voy a hacer?*

‘So, what do you think that I’m going to do? (Brown and Rivas)

and personal pronouns are used liberally preceding lexical subjects of infinitives, such as

(17) *Y para tú poder activarlo mes a mes...*

‘And for you to be able to activate it monthly...’ (Rivas *et al*)

Contrary to the decline of subjunctive usage in Mexican American Spanish, subjunctive usage in Puerto Rican Spanish is evolving but not giving way to the indicative tense as is the case with Mexican American Spanish (Lipski). Loan translation is also common in Puerto Rican Spanish.

For example,

(18) *Él sabe como hablar inglés*

‘He knows how to speak English’ (Lipski)

Some characteristic Puerto Rican Spanish words obtained from the New York pamphlet are: *lávase las manos* ‘wash your hands,’ *quédese en casa* ‘stay at home,’ *máscara* ‘mask,’ *barbijo* ‘mask,’ and *pañuelo de papel* ‘tissue.’

Table 0: Dialect Differences in Pamphlets

	TX	CA	FL	NY	CDC	WHO
Phrases	Síntomas respiratorios de leve a severos				Los síntomas pueden ser de leves o graves	
	Proveer de cuidados de la salud				Proveer de atención médica	
	Máscara		Paño de tela	Barbijo		Mascarilla
	Quedarse en casa	Aíslese/ permanezca en casa		Quédese en casa		
	Pañuelo desechable			Pañuelo de papel		

Translating Medical Pamphlets

The World Health Organization describes the most effective way to translate medical information in three main steps: (1) forward translation, (2) expert panel, and (3) back translation (Who.int). Some of the criteria listed for sufficient translation of information is the avoidance of word-for-word translations and colloquialisms and insist that the target language should be formulated for the most common audience. (Later, in Chapter 3, in this project I will aim to demonstrate that regional translations are better equipped to ensure avoidance of any miscommunications).

‘Forward translation’ consists of a health professional knowledgeable in the English language but whose native language is that of the target audience rendering a document from English into Spanish.

The purpose of the bilingual ‘expert panel’ is to “identify and resolve inadequate expressions/concepts of translation” (WHO).

‘Back translation’ of the material is completed and tested by an English speaker who has no knowledge of the information in order to ensure that the correct concepts are not lost in translation (Who.int).

Another important theme to identify in the process of translation is how naturally the text reads. One study describes the naturalness of a language as “[use of language that] sounds natural to native speakers of that language” (Romano Fresco).

All of these steps are taken in order to ascertain that the translation is accurate, but this only applies if the material is first created and presented in English and then translated to another

language. In this study, the focus is on translating such information into Spanish, either in the standard academic Spanish variant or in a regional variety.

As mentioned by Miguel Ángel Jiménez-Crespo and Maribel Tercedor Sánchez in their study of Spanish medical translation, “lexical variation between translated and non-translated online medical texts” may cause register shifts in the information presented to the audience, which are known as “register mismatches.” Therefore, it is important to study how medical information is generated both in Spanish and English in order to avoid “comprehensibility issues” that can lead to poorer health of Spanish speaking patients. This most often happens when translating information in English to Spanish due to the fact that these two languages do not incorporate Latin to the same extent, which is important to bridge the gap between complex medical jargon that may only be fully understood by the doctor and more common place terminology that can also be understood by the patient.

Regarding the issue of adequate translation and its effects on patient health, a study by Bradely Dalton-Oates sites multiple international laws governing healthcare. With this evidence, the author supports the assertion that patients should have the right to have any important and necessary medical information translated into their native language to facilitate comprehension. This suggests that in some cases, miscommunication may be due to the fact that interpreters and/or translators are simply not available or accessible to non-English speaking patients. This sentiment is reflected in the responses to my first survey.

Two studies (DuBard *et al* and Karliner *et al*) suggest that there is a higher rate of readmissions for non-English speaking patients in the U.S., most likely due to miscommunication stemming from inadequate translation and/or interpretation of necessary

information. The differences in readmission between English speaking patients (both native and non-native) and non-English speaking patients remained significant even after adjustment for age, gender, and educational level, the latter of which is highly associated with socioeconomic status, suggesting that “language barriers are the fundamental contributor to gaps in health care” (Karlner *et al*), as opposed to access to healthcare or other such social factors.

Another study (Gass and Varonis) suggests that a lack of a shared background between two individuals involved in a conversation may affect the level of understanding between the conversation due to a lack of a shared, single linguistic code. This study applies to the notion that the use of a regional dialect may be more useful in conveying medical information to patients to ensure their complete understanding and avoid any miscommunication. However, the article from the WHO advises steering away from any colloquialisms or regional vernacular altogether in order to homogenize the language across geographical regions and therefore be most easily understood by the largest number of people.

This assertion is also supported by Martínez, who states that “our health is shaped by our culture.” For this reason, linguistics has become increasingly more important to healthcare, especially regarding “health disparities that affect minority-language populations,” such as Spanish-speaking patients in the United States.

Although the study by Jiménez-Crespo and Tercedor Sánchez suggests that miscommunication may be caused in part by register shifts between formal and informal in translated medical information, many of the medical pamphlets available to the Spanish-speaking population, especially the ones used in this study, are written in the formal register and employ professional, educated language as opposed to colloquial verbiage that can be more easily

understood by patients. This suggests that they have been translated directly from English rather than created and written for the Spanish-speaking population. In other words, most medical pamphlets and medical information sources in general cater to the English-speaking population, with non-English and Spanish-speaking populations being regarded as an afterthought.

Conclusion

These previous studies show that adequate medical translation is important in order to avoid miscommunication on behalf of the patient and suggest that the best way to convey medical information to Spanish-speaking patients is to maintain cultural competence.

CHAPTER 3: Methodology

The purpose of this study is to determine the beliefs of medical translators on effects of different dialect variants on the medical pamphlets for non-English speaking patients in the US, focusing on Spanish speaking patients in Houston, Texas. I asked professional translators/interpreters who work in the medical field in the Houston area to complete a survey to elicit their thoughts on the use of medical Spanish in written medical materials for Spanish speakers. I chose Houston because it is my hometown and contains one of the largest Spanish-speaking populations in the South.

I found pamphlets in English and Spanish describing medical protocols regarding the COVID-19 pandemic. I obtained one pamphlet from each of the four previously mentioned states as well as two pamphlets obtained from universal sources. I then used Lipski's previous literature describing the linguistic differences between Mexican-American Spanish and Caribbean-derived Spanish to find unique regionalisms to each Spanish variant group in the pamphlets and compare them to each other as well as the control sources to question participants with. The pamphlets from which I extracted these phrases came from each of the four states containing the largest Spanish speaking populations in the country: Texas, California, Florida, and New York. I also used pamphlets from the Centers for Disease Control (CDC) and the World Health Organization (WHO) as a control group, representing the supraregional Spanish variant compared against regional dialects from each of the four states.

My main research question asks if translators believe that the different dialect variations of the Spanish language would make a significant difference in this discrepancy between the health outcomes of native and non-native English speakers and native Spanish speakers. What would

professional translators in a busy urban area think of both types of pamphlets for patients? Do they believe that the kind of pamphlet would affect patient understanding?

My general hypothesis is that Spanish medical translators would prefer the use of regional dialects, according to the preference of the patient, rather than the supraregional Spanish variant as a means of ensuring that the patients do not suffer from poorer health outcomes due to miscommunication. In addition, if medical information in pamphlets is translated from an originally English version, then the dialect will be the supraregional, standard academic version, which would be less desirable for patients, according to the translators. However, if the material is directly written in Spanish for use by a certain audience, then the regional dialect will overcome the supraregional variant for improved understanding.

All participants involved in this survey are 18 years of age or above who reside in the Houston area and are professional medical Spanish interpreters or translators. Participants work in hospitals, with their main job as translating or interpreting between English and Spanish medical information for the use of patients. The participants were asked about their opinions on the use of regional dialects versus the standard academic variant of Spanish in order to convey medical information to patients, as well as if they believe that there is a correlation between poorer health outcomes of non-English patients and insufficient translation of necessary information. In this study, ten people consented to complete the survey (see appendices for the recruitment email, information sheet, survey template, and consent form).

The surveys were kept completely confidential, and no identifying information was recorded. Surveys were sent electronically via Google Forms to professional medical Spanish interpreters and translators. The survey consisted of nine questions, requiring approximately five

to ten minutes to complete. Questions were asked to ascertain personal opinions regarding the use of regional dialect variants in medical information pamphlets as well as if participants had previous knowledge of health gaps between English speaking and non-English speaking patients, and whether or not they believed this incongruence was due to language misinterpretations. Surveys were sent out January 4, 2021 and returned by January 7, 2021.

A survey was used because it is inexpensive to produce and disseminate and allows the participants to respond at a convenient time for their individual schedules. In total, ten surveys were collected, all of which were complete enough to gather data.

After the surveys were returned, I evaluated the similarities and contrasts in the trends in responses in order to gain a better understanding of the perceived pervasiveness of the health gap among non-English speaking patients and their English-speaking counterparts by professional Spanish medical translators and interpreters and if the Spanish language medical pamphlets translated produced for patients played any role in their opinions.

In addition to the first survey, I also created a follow-up survey containing more linguistically directed questions in order to analyze whether or not the same opinions about the use of different dialect variants were also true in practice. Participants were given two weeks to respond. The results were analyzed beginning on February 26, 2021. Five surveys were collected in total, although some of the respondents chose not to answer a few of the questions. Seven of the questions in the survey were multiple choice, asking the respondent to choose which of the phrases they would prefer to use when speaking to a patient. Three of the questions were short answer responses, asking the respondent to explain why they chose the multiple-choice answer from the previous question. (See the appendix for the follow-up survey.)

The next chapter will describe the results of the returned surveys.

CHAPTER 4: Results

In this chapter, I will discuss the results of the data that I collected from online surveys from professional medical Spanish interpreters and translators in the Translational Department at MD Anderson Cancer Center in Houston, Texas.

Participants were given two weeks to respond, although I received all responses within three days of distributing the recruitment email. The results were analyzed beginning on January 15, 2021. Ten surveys were collected in total, all of which were complete enough to analyze. Five of the questions in the survey (Appendix B) were simple “yes” or “no” responses, whereas the other four were open-ended short answer or paragraph responses.

The first question asked the participants to certify that they were at least 18 years of age in order to be eligible to participate in the survey, to which all responded “yes.” The second question asked the profession of each participant. Table 1 shows the results of this question. For the purpose of this study, I group together translators and interpreters but differentiate between those who identify as Spanish speakers and those who identify as medical doctors because whether or not they specialize in Spanish translation or interpretation is important to determine the significance of their responses and the medical doctors may have different opinions on how best to communicate information to patients. Of the ten respondents who participated in this primary survey, not all said definitively whether or not they were proficient in Spanish translation.

Table 1: Respondents’ Professions

Profession	Number of participants
Medical Doctor	1
Spanish Medical Translator/Interpreter	3

Medical Translator/Interpreter	5
Spanish Medical Interpreter/Translator and Medical Doctor	1

The next question asked if participants were aware of the health gap between English speaking and non-English speaking patients and the options included “yes” or “no.” On this question, seven responded “yes” and three responded “no.” Of the respondents who answered yes, two were Spanish medical interpreters/translators, both the medical doctor and the medical doctor/Spanish medical interpreter/translator, and three of the medical interpreters/translators who did not identify themselves as Spanish speakers. The respondents who answered no to this question include two of the medical interpreters/translators and only one of the Spanish medical interpreters/translators. Table 2 shows these results

Table 2: Awareness of Health Gap between English-Speaking and Non-English Speaking Patients

Yes	No
Spanish medical interpreter/translator (2)	Medical interpreter/translator (2)
Medical doctor	Spanish medical interpreter/translator
Spanish medical doctor and Spanish medical interpreter/translator	
Medical interpreter/translator (3)	

Next, participants were asked if they had noticed in their own work setting this disparity of participants speaking languages other than English generally having higher readmission rates and poorer health outcomes, and the options again included either “yes” or “no.” In response to

this follow-up question, six participants responded “yes” and four responded “no.” In general, all the respondents who answered yes to the previous question also answered yes to this question, and vice versa, except for the Spanish medical interpreter/translator that also identified him/herself as a medical doctor. This particular respondent answered yes to the previous question, but no to this question. Table 3 shows this result.

Table 3: Awareness of Poorer Health Outcomes of Spanish Speakers in Respondents’ Work Setting

Yes	No
Spanish medical interpreter/translator (2)	Medical interpreter/translator (2)
Medical doctor	Spanish medical interpreter/translator
Medical interpreter/translator (3)	Spanish medical doctor and Spanish medical interpreter/translator

The next question asked if the trend of Spanish speakers with poorer health outcomes was noticed by the participant prior to the COVID-19 pandemic and the options were “yes” or “no,” to which seven responded “yes” and three responded “no.” Table 4 Shows this result.

Table 4: Awareness of Poorer Health Outcomes Prior to COVID-19 Pandemic

Yes	No
Spanish medical interpreter/translator (2)	Medical interpreter/translator (2)
Medical doctor	Spanish medical interpreter/translator
Spanish medical doctor and Spanish medical interpreter/translator	
Medical interpreter/translator (3)	

All of the participants who answered yes to the initial question also answered yes to this question, and likewise all the respondents who answered no to the initial question also answered no to this question.

Next, participants were asked if they believed that poorer health outcomes of Spanish speakers were due to miscommunication and if not, what other factors they believed affected this trend. All ten participants chose to respond to this question. The respondents acknowledged that miscommunication does in fact play a role in causing higher readmission rates and poorer health outcomes of Spanish speaking patients. Eight respondents also pointed out other important contributing factors, such as the education level of the patients, and access to healthcare, insurance, and interpretational resources. Of these other factors, the most commonly noted was the low education level of many patients:

“I agree, but I would also add education level as well as the language barrier”

(Respondent 1).

One of the medical interpreters/translators also noted that the legal status of Spanish speaking patients may also contribute to the problem:

“No access to healthcare due to lack of health insurance or due to their legal status in the country” (Respondent 3).

Similarly, respondents were also asked if they believed the general aforementioned trend to be accurate and to provide their opinions on why in a short answer. The most notable answer to this question was from the medical doctor, who pointed out that this miscommunication may also be related to the symptoms of the patient, such as pain or fatigue, that may distract them

from hearing important information from their doctors as well as inadequate interpretation or translation:

“Most of our patients . . . are in pain, drowsy or so overwhelmed that they have a hard time focusing on the conversation or the instructions that are given. I have had the opportunity to interpret to the same patient in different appointments, I am aware of what was discussed in previous appointments, and even though I am sure that certain things have been fully explained to the patient, many times they said ‘no one has talked to them about it.’ This is not just due to the language barrier, even on the same language the miscommunication problem exists!

(Respondent 8).

Subsequently, participants were asked what they thought might be an effective method to use in order to ameliorate the negative effects of the trend. Again, a common answer to this question included the education level of patients:

“Educate families as much as we can” (Respondent 1).

More access to interpretational and translational resources was also a common answer, provided by 3 respondents:

“Provide more Spanish medical interpreters” (Respondent 7).

The medical doctor also strongly advised against letting doctors who know “some Spanish” attempt to communicate with Spanish speaking patients:

“Always have an interpreter for LEP [low English proficiency] patients, there are providers that know some spanish and think they can communicate with the patients...”

(Respondent 8).

The doctor noted the complexity of the Spanish language, stating that it is difficult to understand even other Spanish speaking colleagues because they are from different countries:

“Effective communication is always challenging, even in your own language! I can tell you that sometimes I do not understand my coworkers and they do not understand me, we come from different countries, we speak different spanish and we are educated, this is how complex it is!” (Respondent 8).

One of the medical interpreters/translators and also the medical doctor mentioned that it may be helpful to ask the patients to repeat back what they understood in order to correct any miscommunication or misunderstanding immediately:

“Always ask the patient to explain how they are going to take their medications, in which cases they have to contact the provider immediately, ask what they have understood about the conversation that they have had and written instructions, must be provided” (Respondent 8).

The final question asked participants if they thought that it was more effective to communicate verbally or in writing with non-English speaking patients using the standard academic Spanish variant or the patient's preferred regional dialect, to which the options were “Standard Academic Spanish” or “Preferred Regional Spanish Dialect.” Six respondents, including one of the Spanish medical interpreters/translators, three of the medical interpreters/translators, and both the medical doctor and the medical doctor/Spanish medical interpreter/translator, chose to answer “Preferred Regional Spanish Dialect.” The other four respondents included two of the Spanish medical interpreters/translators and two of the medical interpreters/translators who answered that “Standard Academic Spanish” would be better. Table 5 shows this result.

Table 5: Respondents' Preferred Variety for Communication

Regional Dialect	Standard Spanish
Spanish medical interpreter/translator	Spanish medical interpreter/translator (2)
Medical interpreter/translator (3)	Medical interpreter/translator (2)
Medical doctor	
Medical doctor and Spanish medical interpreter/translator	

The follow-up survey containing more linguistically directed questions about the use of different dialect variants were given to the same participants with the same instructions as the first survey. Five surveys were collected in total, although some respondents chose not to answer a few questions. Of all five respondents who participated in the follow up survey, all stated that they did indeed translate Spanish.

The first question asks the respondents to state whether they prefer the phrase (19a) *los síntomas de COVID-19 pueden ser de leves o graves*

‘COVID-19 symptoms can be mild or serious’ (CDC)

or

(19b) *los síntomas de COVID-19 pueden ser de leve a severo*

‘COVID-19 symptoms can be mild to severe’ (Texas)

The difference between *grave* and *severo* is that the two words differ in formality, as *severo* implies more importance and urgency than *grave*.

Four of the respondents answered that they would prefer the former option (19a), while respondent 3 answered that the second option is better(19b). Table 6 shows this result.

Table 6: Respondents' Preferences for 'COVID-19 Symptoms Can Be...'

<i>de leves o graves</i>	<i>de leve a severo</i>
4	1

The next question asked the participants to explain their reasoning for choosing their answer of *de leves o graves* or *de leve a severo*. A recurring theme in the answers to this particular question was that *de leves o graves* is more grammatically correct because the plurality of the adjectives agrees with the plurality of the antecedent, the COVID-19 symptoms:

“La palabra "síntomas" es plural, requiere adjetivo plural” (Respondent 3).

Two other participants also mentioned other grammatical errors in both phrases:

“When I see ‘de leve’ I understand we are using from...to... and the correct way of saying it is de...a...” (Respondent 1).

The following question asked whether the participants would use the phrase

(20a) *proveer de atención médica*

‘provider of medical attention’ (CDC)

or

(20b) *proveer de cuidados de la salud*

‘healthcare provider’ (Texas)

Four of the five participants chose to respond to this question, with two preferring (20a) and two preferring (20b), which resulted in a 50/50 split in the response. Table 7 shows this result.

Table 7: Respondents' Preferences for 'Medical Attention'

<i>atención médica</i>	<i>cuidados de la salud</i>
2	2

The next question asked each participant to explain why they chose one phrase from the previous question to refer to a healthcare professional. Of the two respondents preferring the first option (20a), both stated that it was because that phrasing makes more sense but did not give further explanation. The respondents who answered in favor of the second option (20b) said that it was more inclusive of all healthcare services.

The next question asked whether or not each participant would use the imperative to instruct patients. All of the participants, save one, answered that they would in fact use the imperative tense. One respondent chose not to respond to this particular question, but explained in the follow up question by explaining that they would translate or interpret the instruction exactly as the medical provider stated it. This individual also suggested that the use of imperative does not necessarily depend on the patient's origin, although this is possible, because there are other factors that may contribute to the decision to use the imperative:

“My answer would be "Not necessarily" I would interpret what the provider is telling the patient, in the way they are doing it. It would also depend on the situation, and whether or not the imperative is necessary” (Respondent 1).

Other participants who answered yes, that they would use the imperative, also agreed that it would depend on the exact phrasing of the doctor.

The following question asked participants to state whether they would use the formal second person *usted* when speaking directly to a patient. All respondents answered that they would use *usted* instead of *tú*, regardless of the origin of the patient. However, one respondent did note that this usage can vary:

“The use of the formal/informal does not necessarily depend on the patient's origin, although it can. It may depend on education, or the way they conduct themselves, their preferences, or those of the interpreter. It may also be a matter of respect for the patient” (Respondent 1).

The next question is a multiple-choice question asking which word the respondents would choose to refer to a mask or face covering to protect against COVID-19.

(21a) *Debe usar una máscara*

‘You should use a mask’ (New York)

(21b) *Cómo utilizar una mascarilla médica*

‘How to use a medical mask’ (WHO)

(21c) *Debe usar... un barbijo en público*

‘You should use a mask in public’ (New York)

(21d) *Cubra su rostro con un paño de tela en público*

‘Cover your face with a mask in public’ (Florida)

Three respondents said that they would prefer the translation *mascarilla*, while the other two respondents said that they would prefer the translation as *máscara*. No respondents preferred the options (21c) or (21d). Table 8 shows this result.

Table 8: Respondents’ Preferences for ‘Face Mask’

<i>máscara</i>	<i>mascarilla</i>	<i>barbijo</i>	<i>pañó de tela</i>
2	3	0	0

The penultimate question asks respondents to choose which phrase they would use to refer to a tissue. The answer choices were either:

(22a) *Cubrirse la boca y nariz al toser o estornudar con un pañuelo desechable*

‘Cover your mouth and nose when you cough or sneeze with a disposable handkerchief’

(Texas)

(22b) *Al toser o estornudar, cúbrase con un pañuelo de papel*

‘When you cough or sneeze, cover it with a paper handkerchief’ (New York)

Four participants prefer the first option (21a), while only one preferred *pañuelo de papel*. Table 9 shows this result.

Table 9: Respondents’ Preferences for ‘Tissue’

<i>pañuelo desechable</i>	<i>pañuelo de papel</i>
4	1

The last question asks what phrasing each participant would use to instruct a patient who suspects that they may have COVID-19 to quarantine. The options include:

(23a) *quédese en casa*

‘stay at home’ (New York)

(23b) *permanezca en casa*

‘remain at home’ (California)

(23c) *aislese en casa*

‘isolate yourself at home’ (California)

(23d) *quedarse en casa*

‘stay at home’ (Texas)

Three respondents chose (23c) *aíslese en casa*, and the other two respondents chose either *quédese en casa* or *quedarse en casa*, but none of the respondents preferred *permanezca en casa*.

Table 10 shows this result.

Table 10: Respondents’ Preferences for ‘Quarantine’

<i>quédese en casa</i>	<i>permanezca en casa</i>	<i>aíslese en casa</i>	<i>quedarse en casa</i>
1		3	1

In summary, respondents were more aware of syntactical grammar errors than dialect differences between the pamphlets from the different states and national sources. In general, respondents were less concerned with the cultural competence of the translated materials and more concerned with the “naturalness” of the language used and had a tendency to prefer the standard Spanish variant rather than regional dialect.

The next chapter will discuss the significant findings from this survey and relate them to previous research.

CHAPTER 5: Discussion

In this chapter, I will analyze the data collected from my online surveys conducted through Google Forms. The results from the first survey demonstrate that healthcare workers believe that poorer health outcomes are more common among non-English speaking patients, specifically Spanish speaking patients, and that the professional Spanish medical interpreters and translators participating in this study agree that it is best to employ the patient's preferred regional Spanish dialect when translating medical information. Results also showed that respondents are aware that many other factors that may affect the trend of this health gap are more socially related, but that they see inadequate translation as a contributing factor.

I will start by discussing the first survey. The first question that I asked determined the specific profession of each respondent in order to analyze how this information affected their answers to the latter questions. All of the respondents were either medical interpreters or translators, save one respondent who identified as only a medical doctor. In addition to this title of medical translator/interpreter, some respondents also chose to specify whether they specialized in Spanish medical interpretation/translation. One respondent was a Spanish medical interpreter/translator as well as a medical doctor. These differentiations are insightful in order to assess respondents' views regarding their preferences and opinions about adequate use of medical Spanish.

I found that many of the participants were aware of the health outcome gap between English and non-English speaking patients and have witnessed the effects of this trend in their own workplace. Seven of the 10 respondents (70%) answered in the affirmative to awareness of the health outcome gap, although only six of the 10 respondents (60%) reported witnessing this

manifestation of inequality in their own workplaces. Of those seven respondents, three identified themselves as a medical interpreter/translator, two identified as a Spanish medical interpreter/translator, one was a medical doctor and one was a Spanish interpreter/translator and a medical doctor. Two medical interpreters/translators answered “no” as well as one Spanish medical interpreter/translator. It appears, then, that being a Spanish speaker did not automatically predispose the respondents to noticing the health care gaps for non-English speaking patients in Houston; neither did being an English speaker automatically make respondents unaware of the health care gap.

In regards to seeing the gap in their own workplaces, all those who answered “yes” to the first part also answered “yes” to the second, except for the Spanish medical interpreter/translator/medical doctor. This information is significant because it demonstrates that most of the Spanish medical interpreters/translators who have a deeper understanding of the Spanish language also have a level of awareness of the issue of health disparity between English and non-English speaking patients, but Spanish language skill is not a requirement for that awareness. Other nonlinguistic factors may come into play for healthcare professionals to become aware of inequities in healthcare outcomes for non-English speaking populations.

When asked if they noticed this disparity before the appearance of the COVID-19 virus, seven (70%) participants stated that they had in fact noticed that the healthcare gap was a problem prior to the current pandemic. The occupational breakdown of these responses is identical to that of the previous questions, suggesting that the situation was not particularly exacerbated by the pandemic, due to the fact that every respondent who stated that they had noticed non-English-speaking and Spanish-speaking patients suffering from poorer health

outcomes and higher readmission rates also stated that they had become aware of this prior to the coronavirus era.

Participants were asked if they believed miscommunication to be the main source of higher readmission rates and poorer health outcomes among non-English speaking patients, as well as if they believed the general trend to be accurate or not, and what methods they thought could be effective in lowering this health gap. In response to the miscommunication question, the respondents answered that while miscommunication is a main contributing factor, socioeconomic aspects also play a role. Many responses included elaborations such as:

“Yes that is the main thing [miscommunication] but also the low level of education of patients” (Respondent 7).

Some other aspects that were frequently mentioned include low education levels of the patients and limited access to healthcare. One respondent also suggested that the legal status of a Spanish speaking patient may be an important aspect to consider:

“No access to healthcare... due to their legal status” (Respondent 3).

Only one respondent, a medical interpreter/translator, responded that they had not noticed an issue with miscommunication at all. This respondent did not identify him/herself as a Spanish medical interpreter/translator and may not work with Spanish-speaking patients, and so has not witnessed the detriment that the language barrier can have on a Spanish-speaking patient’s health status.

The following question queried participants about whether or not they agreed with the general trend of poorer health outcomes for Spanish speakers. The majority of respondents agreed that they believed the general trend to be accurate, while again stating that other factors

that may cause poorer health outcomes and higher readmission rates among non-English speaking patients. Low income and education level were again some of the most frequently used phrases in response to this open-ended question:

“Yes... we encounter this very often, especially with low income families” (Respondent 1).

One of the respondents who identified as a medical interpreter/translator, however, stated that they did not believe this trend to be accurate because it is “more of an economic than an education/language issue.” The medical doctor also had an interesting response:

“Most of our patients have a low education level, many of them are in pain, drowsy or so overwhelmed that they have a hard time focusing on the conversation or the instructions that are given” (Respondent 8).

suggesting that many times patients may have even more trouble understanding instructions from their doctor through the language barrier due to pain or similar such symptoms detracting their focus away from the conversation at hand. The last question in this group of related questions relates possible methods that could be effective in ameliorating the effects of miscommunication on the health of Spanish speaking patients. Two respondents suggested better educating health providers about the problem in order to protect their patients:

“Improve information to the medical community, including management, about the need for medical interpretation, as well as the fact that it is a legal requirement and a right of LEPs” (Respondent 1).

In conjunction with the concern about low education levels of the patients, health literacy for patients was commonly recommended among respondents from various occupations:

“Follow all the guidelines established by the CMS and continue "Education, Education, Education" (Health Literacy)” (Respondent 6).

The Spanish medical interpreters/translators were more concerned with providing more interpretational and translational services to Spanish speaking patients:

“Having more available interpreters would help” (Respondent 7).

Two of the medical interpreters/translators as well as the medical doctor suggested following up with the patient to make sure they understood everything necessary as well as having the patient immediately repeat what they understood from the conversation:

“Having a patient explain what they understood” (Respondent 2).

The medical doctor also mentioned that even among native Spanish speakers there still tends to be miscommunication due to the complexity of the Spanish language and differences in dialect. This response confirms the views of Gass and Varonis, who assert that even among individuals speaking the same language, there still exists the possibility of miscommunication due to dialect differences between the speakers.

Many responses to these three open-ended questions about ameliorating miscommunication were aimed at socioeconomic factors in addition to linguistic aspects, suggesting that when professional medical interpreters and translators think about the health gap between non-English speaking patients, they tend to take into account social aspects. Some commonly used phrases among the responses to these questions include “low income,” “education level,” and “access to healthcare.” Many responses, however, did not deny the fact that miscommunication and a lack of adequate interpreting and/or translation are also contributing factors, but that they simply believe that education and income are larger contenders

to the health gap in question. Participant responses suggest that linguistic factors are not the first to come to mind to healthcare professionals when communicating with Spanish-speaking patients.

The last question of the first survey asked respondents to state whether they believed the most effective mode of translation and/or interpretation to employ the standard academic Spanish variant or to defer to the preferred regional dialect of the patient. Six (60%) of respondents answered that they would prefer to use the patient's preferred regional dialect, while four (40%) respondents preferred the more universal standard academic Spanish variant. Of the six respondents who preferred using the patient's preferred regional dialect were one Spanish medical interpreter/translator, three medical interpreters/translators, the medical doctor, and the Spanish medical interpreter/translator/ medical doctor. The four participants who preferred to use the standard academic Spanish variant included two medical interpreters/translators and two Spanish medical interpreters/translators (see Table 5). In general, the difference between the preferences of Spanish and non-Spanish medical interpreters/translators preference regarding dialect were not significant. However, the data does indicate that both respondents who identified themselves as medical doctors prefer the use of regional dialects over the standard academic version of Spanish. This data aligns with the assertions of Jimenez-Crispo and Tercedor Sanchez, that "the shift toward a patient-oriented model has resulted in a growing number of materials specifically designed for patients" in order to facilitate a higher level of understanding for patients. Having Spanish language ability is important to avoid register mismatches that may cause miscommunications and misunderstanding for the patient, so it is better to employ culturally accurate language in order to adequately convey information to Spanish-speaking

patients. My survey indicates that the Spanish-speaking participants are aware of the health disparities between English and non-English speaking patients and that they are actively thinking about ways in which this issue can best be corrected.

The second survey that I administered was more linguistically focused, asking participants specific questions about which Spanish phrases they would prefer using when speaking to a Spanish patient or writing a medical pamphlet with the intended audience being the Spanish speaking population. The pamphlets from which I extracted these phrases came from each of the four states containing the largest Spanish speaking populations in the country: Texas, California, Florida, and New York, with pamphlets from the CDC and the WHO for the supraregional Spanish variant against regional dialects from each of the four states. The data collected from this survey suggests that the respondents were less concerned about regionalisms in the pamphlets and more concerned with grammatical aspects to make the language sound, or rather read, more naturally. In this case, what appears to be most natural-sounding to the respondents of the second survey is the standard academic Spanish variant rather than the regionalisms. Another possibility is that the “regionalisms” of the pamphlets do not correspond to the regionalisms used by the participants. Even though most respondents in the first survey said that they preferred using regional dialects to avoid any miscommunication due to dialect differences among different Spanish variants, my survey revealed that this preference was not necessarily as true in practice as in theory.

For lexical variation from the pamphlets, one question asked if participants preferred the phrase

(19a) *los síntomas de COVID-19 pueden ser de leves o graves* (CDC)

or

(19b) *los síntomas de COVID-19 pueden ser de leve a severo* (Texas)

with a focus on the adjectives for ‘serious.’ Four of the five respondents (80%) preferred the phrase from the CDC rather than the version found in the pamphlet from Texas. Their preference was elaborated in the second question, in which the most common responses referenced the necessity of number agreement between the noun *los síntomas* and the adjectives, which should be plural *graves* and *severos*, as well as that the correct way to represent range would be *de...a* rather than *de...o*. This data suggests that grammatical correctness is more important to translators and interpreters than regional dialects.

Next, I asked participants to choose which phrase they would use to refer to one who provides medical services (see Table 7). Two participants (50%) stated that they would say *proveer de atención médica* (CDC), both asserting that it sounded better that way. The two other participants (50%) who chose to answer this question preferred *proveer de cuidados de salud* (Texas) because it was more inclusive of all medical care. As before, the respondents seemed to be more attentive to the “naturalness” and semantics of the phrases instead of dialect aspects.

The next question asked respondents whether or not they preferred the use of the imperative when giving instructions to a patient. All four respondents (100%) asserted that they would use the imperative, rather than an indirect question, also cautioning that their use of imperative would depend on the exact words that a medical doctor would use in a particular situation.

I then asked respondents whether they would always use the second person formal *usted*, or whether their use of formal *usted* versus informal *tú* was dependent on the patient’s cultural

origin. The four participants (100%) responded that they would always use the formal *usted* to refer directly to a patient. One participant who chose not to respond did leave a comment stating that although the use of the formal or informal second person can depend on the origin of the patient, it can also depend on such factors as education, comportment, personal preference, or even the personal preference of the interpreter/translator. In general, the WHO advises the employment of a standardized language so as to apply to more patients, so the standardization of using the formal *usted* when referring to a patient may help minimize confusion and establish a relationship of respect between the doctor and patient.

The following question examined which word preference was dominant when referring to a mask or face covering to protect against COVID-19. Three respondents (60%) preferred the term *mascarilla*, while only two (40%) preferred *máscara*. The other two options came from pamphlets from Florida and New York, so it is not surprising that none of the respondents (all of which are from Texas) chose those options. *Mascarilla* is used frequently in pamphlets originating from Texas as well as pamphlets from the CDC and the WHO, so no significant insight can be extrapolated from this particular question regarding regional preference over use of the supraregional variant, except to say that the Cuban-derived regional variant was not preferred by participants in Houston, TX.

The penultimate question inquired which phrase respondents would prefer to use to refer to a tissue. Four respondents (80%) preferred *pañuelo desechable*, the Texas variant, while only one respondent preferred the CDC variant *pañuelo de papel*. In this case, clearly the regional dialect had some influence on the preference of the respondents.

The last question queried what phrasing the respondents would use to instruct a patient to self quarantine after a COVID-19 exposure (see Table 10). The majority of respondents (60%) preferred to instruct patients to

(22c) *aislese en casa* from the CDC

while one respondent preferred

(22d) *quedarse en casa* from the Texas pamphlet

and the other remaining respondent preferred

(22a) *quédese en casa* from a pamphlet from New York

This data further demonstrates that although many of the respondents said that they preferred using regional dialects, when given an actual comparison between a regionalism and the standard academic Spanish form, they tended to pick the supraregional phrasing. The choice of a standard academic Spanish version by my participants is not surprising, given that medical Spanish is generally more educated, formal and professional, as noted by Jiménez-Crespo and Tercedor Sánchez. I also take into consideration that written Spanish is more formal than spoken Spanish in general, as also expressed by Jiménez-Crespo and Tercedor Sánchez.

The responses to this survey also indicate that overall, the participants in my surveys viewed some of the phrases obtained from the pamphlets in question to be grammatically incorrect, regardless of origin. This lack of standardization suggests that the pamphlets were not originally written by native Spanish speakers for Spanish speakers, but rather that the information contained in the pamphlets was written originally in English and later translated into Spanish. Nonetheless, I am unable to ascertain the Spanish language ability of the pamphlet writers (translation from English, or written in Spanish by Spanish writers, or machine

translation, which is the least likely), so I can't judge the ethnic affiliation or ability of the writers, only the beliefs of the translators about the writing. More information on the authorship of the pamphlets' information may be investigated later to examine this speculation.

In conclusion, my findings did not wholly answer my research question, but did afford good insights into how my study can be expanded upon in the future. My initial hypothesis was that Spanish medical translators would tend to prefer the use of the patient's preferred regional dialect over the use of standard academic Spanish, however, based on participants' responses to my surveys, I was not able to make a clear conclusion but did learn that the translators, when looking at the language, noticed grammatical errors and fluidity (which is linguistic in nature) but not necessarily dialect variation.

CHAPTER 6: Conclusion

The purpose of this study was to evaluate the beliefs of professional translators about the use of medical Spanish translation and the perceived resulting effects on the health status of Spanish speaking patients. The results of my study were for the most part in line with the current literature: most of my participants expressed awareness of the fact that Spanish-speaking patients in the U.S. tend to have worse health outcomes than English-speaking patients, and that this health gap is in part due to miscommunication stemming from inadequate translation or interpretation of medical information. Even so, participants also noted other factors of importance that may result in Spanish speaking patients having generally worse health outcomes than their English-speaking counterparts: level of education, socioeconomic status, access to health care. The participants in my study noted those other socioeconomic factors that may be an obstacle for Spanish-speaking patients and non-English speaking patients in general in obtaining the same level of care as English speaking patients ahead of mentioning linguistic differences. However, it should be noted that respondents' preoccupation with socioeconomic status does have a linguistic tie: higher SES is linked to more education, which is linked to better reading ability; therefore, looking at written Spanish will assume a higher SES by the reader.

Most respondents also agreed that they favored the use of the patient's preferred regional dialect to avoid miscommunication due to regional linguistic differences. However, when asked to choose between certain Spanish medical phrases and terms that varied across regional dialects, many respondents opted for the standard academic Spanish variant. Again, in line with previous studies, these educated healthcare professionals using medical Spanish will gravitate toward the

standard rather than the colloquial in written and verbal interaction in institutional settings such as hospitals and clinics.

My study has shown that although regional dialects are an important aspect to consider when translating medical information into Spanish, what is of more concern is how naturally and fluidly the language reads, paying particular attention to grammatical errors.

This study did have certain limitations. It proved difficult to convey the type of answers I was seeking through Google Forms without thoroughly explaining the contents of my study, although I do believe that all the answers were invaluable. Even though some respondents may not have answered the questions in my survey in the manner that I would have preferred, these answers still brought about important factors to consider in my study. For example, one question from my second survey asked participants to choose which phrase they would prefer to use to convey a certain message and also to explain why they picked that particular phrase over the other option. My goal was to differentiate between different sources of Spanish medical information originating from states with different dialectical variants of Spanish, but most respondents focused on the grammatical errors in the phrases obtained from the pamphlets rather than the linguistic differences between regional dialects. Although this study was small, it does have the potential to expand to include a larger number and more diverse group of respondents. A preliminary survey to ascertain the dialect of the participants could be beneficial to ascertaining which dialect the respondents prefer in general. It would also be beneficial to reach out to Spanish medical interpreters and translators from other major cities in the four states with the largest Spanish-speaking population to gather more diversified responses, as I did with the Translational Department at MD Anderson Cancer Center.

Much research still needs to be done in order to examine the effects of regional dialects on miscommunication in medical settings and what results that may have on the health status of non-English speaking patients. More clearly stated questions should be used to ensure that the respondents understand what aspect of the language the researcher is asking them to examine. The translators and interpreters could be asked not only if they prefer employing the patient's preferred regional dialect over the supraregional variant, but also if they believe the use of regionalisms would be effective in minimizing miscommunication among Spanish speaking patients. Respondents could also be given pamphlets to choose which one they think would be most helpful. Another task may be for respondents to write translations themselves, in order to examine what variation may occur when translators are given materials to translate freely. As Dalton-Oates points out, the issue of language barriers is not isolated to differences in spoken and/or written languages, but also "hearing-impaired and visually-impaired citizens." Another study could be formulated with Hispanic/Latino patients that are also either hearing or visually impaired in order to study the intersectionality of language barriers and miscommunication.

In general, more research should be done to evaluate the effects of socioeconomic factors, such as education and income levels, on the level of healthcare obtained by Spanish speaking patients.

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Appendix A: Recruitment Email

Dear _____,

My name is Margaret Coulter and I am currently a senior Spanish student at the University of Mississippi (Ole Miss). I am working on my Honors College senior thesis in which I will be analyzing the use of regional Spanish dialects in medical settings. I would greatly appreciate your participation, which would require merely your answers to a few short online survey questions that you may complete at your earliest convenience and your signature on a consent form. Please let me know if you would be willing to help me with my research.

Best,

Margaret Coulter

Appendix B: Consent Forms

Margaret Coulter's Senior Honors Thesis Consent Form

I, _____, confirm that Margaret Coulter has my consent to use my answers to her online survey for her project and in any work she may publish about her research findings. I also acknowledge that any identifiable or personal information will be kept confidential and used only for the purpose of the research in question.

Printed name: _____

Signature of Participant: _____

Date: _____

Appendix C: Information Sheet

Information Sheet

Title: Dialect Variants in Medical Spanish

Investigator

Margaret Coulter

The University of Mississippi
(281) 755-7241

Advisor

Felice Coles, Ph.D.
Department of Modern Language
E-210A Bondurant Hall

The University of Mississippi
(662) 915-7702

- By checking this box I certify that I am 18 years of age or older.

Description

I am analyzing the effectiveness of using dialect variations compared to the supraregional standard academic Spanish in order to convey medical information to patients. I would like to ask you a few questions regarding your professional experience with medical Spanish. You will not be asked for your name or any other identifying information.

Cost and Payments

It will take you approximately ten minutes to complete this online survey.

Risks and Benefits

This survey will take a very short amount of time and can be completed at your earliest convenience. All survey submissions will be completely anonymous. There are no risks to answering the questions in this survey.

Confidentiality

No identifiable information will be recorded in this survey, therefore I do not think you can be identified from this survey.

Right to Withdraw

You do not have to take part in this study and you may stop participation at any time. If you start the survey and decide that you do not want to finish, your answers will not be submitted or recorded. If you do not wish to participate in this study, please let me know by email. You may skip any questions in the survey that you do not wish to answer.

IRB Approval

This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482 or irb@olemiss.edu.

Statement of Consent

I have read and understand the above information. By completing the survey/interview I consent to participate in the study.

Appendix D: Survey 1

1. Will you please confirm that you are 18 years of age or older?
2. What is your profession?
3. Have you ever read or heard that Spanish-speaking citizens generally have higher readmission rates and poorer health outcomes than their English-speaking counterparts, and more than even those who are native Spanish speakers who also speak English?
Yes
No
4. Have you noticed this personally in your work setting?
Yes
No
5. Before COVID-19, were you previously aware that this was a potential problem?
Yes
No
6. Do you think that miscommunication is the main source of these statistics? If not, what else do you think could be causing this trend?
7. Do you think the general trend is accurate? Why or why not?
8. What do you think would be an effective method to fix this problematic trend?
9. Do you think it is more effective to use the supraregional standard academic Spanish or to communicate with a client or to use their preferred regional dialect?
Standard Academic Spanish
Preferred Regional Spanish Dialect

Appendix E: Survey 2

1. Which option do you prefer to use?

Los síntomas de COVID-19 pueden ser de leves o graves

Los síntomas de COVID-19 pueden ser de leve a severos

2. Why did you choose A or B?

3. Which option do you prefer to use?

Proveer de atención médica

Proveer de cuidados de la salud

4. Why did you choose A or B?

5. If instructing a patient, would you use the imperative? For example: "Describame los

síntomas" or "Dime qué dolor tienes"

Yes

No

6. Why or why not?

7. If talking to a patient, would you use the formal Ud. or informal tú?

Formal Ud.

Informal tú

It depends on where the patient is from

8. Which word would you use to refer to a mask?

Máscara

Mascarilla

Barbijo

Paño de tela

9. Your patient has COVID-19 and needs to sneeze. Which of these would you tell them to use?

Pañuelo de papel

Pañuelo desechable

10. Your patient thinks they might have COVID-19, what would you suggest they do?

Quédese en casa

Permanezca en casa

Aíslese en casa

Quedarse en casa