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Cultural factors affecting Latino diabetics

Maud Danitza Garcia

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CULTURAL FACTORS AFFECTING LATINO DIABETICS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Maud Danitza Garcia
June 2006
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ABSTRACT

This research paper analyzed how cultural factors affect Latino diabetics. It focused on a select group of dialysis patients who have been diagnosed with diabetes. The sample size was a total of 21 participants who were informed of what the study entailed. This study focused on how nutrition, lack of health care, culture and language affect Latino diabetics.

The author developed an objective quantitative close-ended questionnaire that was used to test the hypothesis and data was collected to analyze the responses. The sample size of this study was composed of 21 Latino male and females who have been diagnosed with diabetes. The findings indicate that the cultural factors that most impact Latino diabetics are: culture in making treatment decisions and the patient’s race in making treatment decisions. The results of this study demonstrate that there is a need for further research and deeper exploration in order to understand the impact of other factors that influence Latino diabetics’ treatment decisions and maintenance.
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DEDICATION

This is dedicated to the most important people in my life my mother, Rosa, my daughter, Quetzali, and my brother, Miguel. I especially dedicate this book to my mother. Thank you for being my back bone. You have been my number one supporter and you have motivated me to conquer all. Thank you for always believing in me and loving me unconditionally. To my daughter, you are the best thing that has ever happened to me. My love for you can never be expressed in words. To my brother, you are next. I believe in you and love you immensely.

I also dedicate this thesis to my familia, the Hurtado’s. To my younger cousin’s keep going to school, it’s worth every penny. To Lina and Pricila you have my full support like you gave me yours. Keep going to school and I will be by both of your sides always. I especially would like to thank my Uncle Juan and Aunt Genevieve. Thank you for always helping me with my little girl and for supporting me.

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# TABLE OF CONTENTS

ABSTRACT .................................................................................. iii

ACKNOWLEDGEMENTS ......................................................... iv

LIST OF TABLES ................................................................. vii

CHAPTER ONE: INTRODUCTION

   Problem Statement .............................................................. 1
   Purpose of the Study ......................................................... 7
   Significance of the Project for Social Work ....................... 8

CHAPTER TWO: LITERATURE REVIEW

   Introduction ........................................................................... 12
   Epidemiology ....................................................................... 12
   Health Behaviors/Quality of Care ...................................... 15
   Culture ............................................................................... 16
   Theories Guiding Conceptualization ................................. 18
   Summary ............................................................................. 19

CHAPTER THREE: METHOD

   Introduction ........................................................................... 20
   Study Design ....................................................................... 20
   Sampling ............................................................................ 21
   Data Collection and Instrument ......................................... 22
   Procedures .......................................................................... 23
   Protection of Human Subjects .......................................... 24
   Data Analysis ..................................................................... 25
   Summary ............................................................................. 25
CHAPTER FOUR: RESULTS

Introduction .................................................. 26
Presentation of the Findings ............................... 26
Summary ......................................................... 29

CHAPTER FIVE: DISCUSSION

Introduction .................................................. 31
Discussion ....................................................... 31
Limitations ....................................................... 33
Recommendations for Social Work Practice, Policy and Research .............. 35
Conclusions ..................................................... 39

APPENDIX A: QUESTIONNAIRE ............................... 40
APPENDIX B: INFORMED CONSENT ......................... 43
APPENDIX C: DEBRIEFING STATEMENT ..................... 45
APPENDIX D: INFORMED CONSENT (SPANISH VERSION) ........ 47
APPENDIX E: DEBRIEFING STATEMENT (SPANISH VERSION) ................. 49
APPENDIX F: QUESTIONNAIRE (SPANISH VERSION) .................. 51
REFERENCES ................................................... 54
LIST OF TABLES

Table 1. Significant Bivariate Correlations ............ 27
CHAPTER ONE
INTRODUCTION

This Chapter described why it is important for diabetes research among Latinos to be in the forefront of the social work profession. This chapter described why diabetes among Latinos is an issue that will be increasing since many Hispanics are unaware that they have this deadly disease. The chapter also discussed the two types of diabetes and how they affect much of the Latino population who are unaware of the major complications that arise from having diabetes. It also touched on the importance of this subject for the social work profession and what roles social workers can play in order to understand deeper the dynamics between this illness and culture. Finally, this chapter will give background information on this disease.

Problem Statement

The prevalence of diabetes among Latinos is growing and current research indicates that there is a major need for more study on the impact of diabetes on Latinos. The social issue that is being studied is diabetes among Latino and how cultural factors affect glycemic control.
Bertera (2003), states that over fifty percent of patients with diabetes are over the age of sixty-five and 3.6 million people over the age of sixty-five or older are afflicted by the disease. The majority diagnosed with diabetes mellitus are type 2, non-insulin dependent. Diabetes is a disease that affects millions of people each year and many of them are undiagnosed.

According to the American Diabetes Association (ADA, 2004) over one third of the population are undiagnosed. Currently, 18.2 million or 6.3 percent of the population has diabetes. Thirteen million people are diagnosed and 5.2 million people are undiagnosed. Approximately 206,000 people under the age of 20 have diabetes. The American Diabetes Association reports that studies have found that type 2 diabetes is becoming more common among Hispanic/Latino, Native/Native American Indian, and African American children and adolescents.

There are two types of diabetes that affect human beings. Type 1 diabetes is usually diagnosed in children and young adults. On the other hand, type 2 diabetes is the most common form of diabetes and is usually diagnosed in older adults. Diabetes is a disease that has many associated complications. According to the American
Diabetes Association, diabetes is the fifth leading cause of death in the United States (ADA, 2004). Most death certificates do not reflect this disease but rather the major complications that arise (ADA, 2004). Some of the complications are heart disease and stroke, blindness, kidney disease, nerve disease and amputations (ADA, 2004). Many diabetic patients develop diabetic nephropathy, which is the leading cause of end-stage renal disease; this accounts for forty-three percent of new cases (ADA, 2004). According to the ADA, Hispanics are 1.5 times more likely to have type 2 diabetes than non-whites. Two million Latino Americans aged 20 years or older have diabetes. Twenty-four percent of Mexican Americans in the United States are diagnosed with diabetes (ADA, 2004).

Mexican Americans are 4.5 to 6.6 times more likely to suffer from end-stage renal disease than Caucasian women and men. According to many studies, culture is a major factor which influences how Latinos manage their glycemic levels. In Latino communities there is a belief that many illnesses can be cured by holistic treatment instead of by Western medicine. There is also a language
barrier when it comes to literature and general medical treatment.

According to a study done by the Kaiser Foundation in March of 2004, over one-third of Latinos lacked medical coverage, which is necessary in order to become diagnosed with diabetes, receive treatment, and maintain a healthy lifestyle. Kulkani (2004) also states that another issue that affects Latino diabetics is nutrition. Latinos are less likely to follow medical treatment due to the foods that are a staple in their diet. Many of these foods do not include high amounts of fiber, or fruit. Most of the food is fried, and has very low fiber.

According to the National Diabetes Information Clearinghouse (NDIC) statistics for 2005, 6.2 million Latinos are undiagnosed due to the majority not having medical insurance. This appears to be much of the reason why Latinos do not receive medical attention. However, when they do have medical insurance and are being treated for diabetes mellitus many issues arise due to the lack of appropriate translators and material in their native tongue. Much of the material needs to be translated into the language of the patient. Patients who are diagnosed would benefit from nutrition classes in Spanish that
would discuss aggravate their diabetes or help them. Included in the education list should be the foods that are common in their culture.

The American Diabetes Association is very concerned with the growing cases of diabetes among Hispanics, since this disease is not only costly, but it is unfortunate that 5.2 million people are undiagnosed (ADA, 2004). It is also important to the Latino community since they are the ones at higher risk for this disease. Most important, this issue is of great concern to social workers because there is a huge population of Latinos undiagnosed. Social workers need to help the Latinos community become educated and informed about this deadly disease that affects approximately two million Latinos 20 years or older. Social workers need to look at language barriers, medical access, and nutrition. The Latino community needs to be made aware of this growing problem since they will be one of the populations projected to be primarily affected by this disease in the years to come.

Social workers can play very important roles helping undiagnosed diabetic Latinos. Social workers can become translators and help physicians and nurses explain the appropriate treatment for an appropriate glycemic level.
Social workers can also develop support groups for this population as well find translators to translate the material into Spanish. Social workers can also provide support and follow-up services to patients who have uncontrolled levels of sugar and find themselves without any family support.

In addition, social workers need to help patients who are amputees become integrated emotionally back into the workforce and become adjusted with their new life. Social workers can also help patients’ families cope, accept, etc with the changes that are occurring to their loved ones. They can also play the role of a liaison between the varying systems (The Department of Public Social Services, support groups in their surrounding area, education courses, etc) that will help the patient adjust to these changes and the patient.

It is vital for this diabetes among Latinos to be researched because there is a large number of people who are undiagnosed and need information about this deadly disease. It is important for this population to receive the proper treatment since diabetes is associated with problems such as heart disease and stroke, as well as with blindness, and diabetes nephropathy. Diabetes is a
rapidly growing illness that not only affects Latinos, but is also growing within the African American, Native American, and Asian communities (Kulkarni, 2004). This social issue can save lives if people are informed and given the proper tools to deal with diabetes and the other conditions that plague them.

Purpose of the Study

The purpose of this study was to help the population of Latinos who are undiagnosed to receive appropriate medical treatment and for those who are diagnosed to properly care for themselves by maintaining appropriate glucose levels. This study addressed cultural factors that prevent Hispanic diabetics from getting diagnosed early, controlling their glycemic levels, and obtaining appropriate transportation, health insurance, and better education on nutrition. It was hoped that this study would bring to light the significant role social workers can play by advocating for this growing population that is disenfranchised due to lack of medical insurance and lack of translators.

The specific clients that the study researched are patients who are on dialysis. Most patients' age ranged
from 30 years to 70 years old and have been diagnosed with diabetes. Diabetes is one of the leading causes of end-stage renal disease. Surveys were be conducted at Gambro dialysis center.

The method that is best for this research is the quantitative approach. This method was chosen because it would help identify which cultural factors affect Hispanic diabetes. Asking specific questions about ethnicity, age, food, health care factors, and culture will give an overall view of what is impeding Hispanics from maintaining their glucose levels. The quantitative method can also assess the relationship between two or more variables (Grinnell, 2001, p. 99). The thesis would benefit from the four main points that the quantitative method strives for which are measurability, objectivity, reducing uncertainty and duplication, and the use of standardized procedures. These four points will allow the thesis to become more focused and viable.

Significance of the Project for Social Work

The social work profession can benefit greatly from this research project. The social work profession can help this disenfranchised population by helping many
access resources that are needed in order to maintain good health care services and good glycemic levels. The social work profession can also bridge the gap of lack of medical coverage for the Latino community and also help patients while receiving treatment. It is important to help these patients understand how culture plays a major role in their treatment involvement. Social workers need to make diabetic Latinos aware of the importance of diet and exercise. Social workers can help patients feel comfortable when they see their primary doctors. Many do not receive translation services when they visit their primary physicians. It is important for Spanish speaking patients to communicate with the doctor as well as the doctor to communicate with them.

In addition, social workers can help the 6.2 million people who are undiagnosed with this disease (NDIC, 2005). Studies show that the Latino community has little to no medical coverage and it is important to test this undiagnosed population for diabetes. Social workers can provide these patients with emotional support and bridge their needs with the medical field/staff. Diabetes brings a lot of other complications that affect a patient psychologically. For example, Latino men are 1.4 to 2.7
times more likely to suffer from lower limb amputation than women. Social workers can help these men adjust to their changed life, and return to the workforce (ADA, 2004).

Social workers can be brokers, advocates, and case managers, in order to help the patient live with such a constraining disease. It is important for social workers to analyze whether language and other factors affect diagnosed and undiagnosed diabetes patients. Preventative work with Latino children and young adolescents is needed, since increasing cases of juvenile diabetes are being recorded. Social workers need to advocate on behalf of this population and ask government officials to help alleviate some of the lack of services. Social workers can help with developing programs that will screen for diabetes with the young and old. It is important for social workers to educate families about nutrition and how at risk Latino children are for obesity and juvenile diabetes.

In addition, many agencies and hospitals really have no control over the medical access of patients. Much of the work has to be done at the government level. The government has to make some changes to health care.
Government officials need to implement universal health care for all its residents. This would alleviate many of the undiagnosed cases.

Social workers need to start at the assessing stage of the generalist intervention model. They must go into the Hispanic community and begin looking for families at risk. Social workers need to begin surveying the community and asking how many family members have diabetes, and how they are related to them (mother, father, sister, distant cousin). Social workers need to ask if cultural factors affect Latino diabetics and if so how?
CHAPTER TWO
LITERATURE REVIEW

Introduction

The literature on diabetes among Hispanics is not as available as the general literature on diabetes. Diabetes is a growing problem among Hispanics and information is currently being collected in order to understand the impact of this disease on the Hispanic population. Diabetes is a disease that has many complications associated with it. It is the fifth leading cause of death in the United States. It is important to try to understand why this disease is growing rapidly among the Hispanic population. This literature review will discuss the prevalence of diabetes, how cultural factors play a role in diabetes maintenance, and how access to health care is one of the main reasons why one third of the population with this disease are undiagnosed.

Epidemiology

The prevalence of diabetes among Latinos is growing and current research indicates that there is a major need for more research on diabetes and how culture affects diabetic Hispanics. There are approximately 18.2 million
people in the United States diagnosed with diabetes mellitus type 2 and 5.2 million are undiagnosed (American Diabetes Association, 2004; Morbidity and Mortality Weekly Report, 2003; Black, Ray, & Markides, 1999). The Morbidity and Mortality Weekly Report (1999) indicated that diabetes is a growing problem with the Latino community and that diabetes among Latinos has twice the prevalence as among non-Hispanic whites. One factor in the prevalence of diabetes is poverty among Latinos.

Diabetes also affects men and women in different ways as well as affecting each individual depending on their age. Diabetes is more likely to be prevalent in people 65 years of age or older. According to the American Diabetes Association (ADA, 2004) approximately 9.3 million women over the age of 20 in the United States have diabetes. However, one-third of them are unaware. Women with diabetes have the increased risk of vaginal infections and complications during pregnancy. On the other hand, approximately 8.7 million men over the age of 20 have diabetes and over one-third are undiagnosed (ADA, 2004). Among men impotence and heart disease and stroke are the major complication of this deadly disease.
According to many studies, diabetes is more prevalent among person aged 65 years and older (American Diabetes Association, Collins, 2004; Morbidity and Mortality Weekly Report, 1999, 2003; Black, Ray, Markaides, 1999). As more Latinos are living longer, more cases of diabetes are reported. Between the years of 1994 and 2001, the annual rate of newly diagnosed elderly individuals with diabetes increased by 36.4 percent. Latinos had the greatest increase of 55 percent (Mc Bean, Li, & Collins, 2004; Morbidity and Mortality Weekly Report, 1999). According to the American Diabetes Association (2004) approximately 18.3 percent of the population age 60 and older has diabetes. Many of the deaths from diabetes are related to the complications that diabetes produces and they go unreported as diabetes because not much is known about diabetes and complications associated with the disease.

Three studies do indicate some limitations with their research. The authors report that their survey population might underestimate the actual prevalence of diabetes due to the survey being conducted over the phone and issues of self-reporting by patient and physician (Morbidity and Mortality Weekly Report, 1999; 2003;
Black, Ray, & Markaides, 1999). Having such a small sample and not really having a true population of diabetics due to 5.2 million people being undiagnosed can cause major differences in reported prevalence of Diabetes.

Health Behaviors/Quality of Care

Current research indicates that Latinos who speak no English have a higher risk of poor health behaviors and quality of care because of educational obstacles and organizational and cultural barriers to receipt of care (Brown, Gerzoff, & Karter, 2003). Most studies also conclude that Spanish speakers are at higher risk for low participation in self-care behaviors and for poor process and intermediate outcomes of care (Brown, Gerzoff, & Karter, 2003; Somnath, Arbelaez, & Cooper, 2003).

According to three studies Latinos and Blacks had lower levels of education, income, private health insurance, and health status than did White and Asians (Brown, Gerzoff, & Karter, 2003; Somnath, Arbelaez, & Cooper, 2003; Terry, Anderson, & Kendall, 2000). According to Somnath, Arbelaez, and Cooper (2003), Latinos were less likely than Blacks or Asians to receive
routine testing and monitoring and services due to lack of health care coverage. One study suggests that Latinos have lower quality patient-physician interactions (Somnath, Arbelaez, & Cooper, 2003).

It is suggested that more research should be done on health care quality and racial disparities among Latinos and Asians since these are the two fastest growing populations.

Culture

Studies suggest that holistic medication is an alternative way to help Latinos cope with their diabetes (Ronnau, 1997; Bertera, 2003; Warda, 2000). According to Warda (2000) culture plays a role in access to and acceptance of health care by Latinos and it has not received adequate attention. Warda states that Latinos see the medical system and other bureaucracies as unresponsive, which makes them less likely to get help in an emergency or to seek the resources from which they might receive information.

Studies suggest that Latinos are more likely to receive medical care if they feel comfortable with their physicians and staff. Food is also quite important in
diabetes maintenance among Latinos. According to Kulkarni (2004) food is a big part of Mexican American life. The traditional Mexican diet is low in fat and high in fiber. Kulkarni (2004) goes as far as to give an example of how food can be modified to help Latinos make the transitional to better care. His meal plan is as follows.

Breakfast typical
3/4 cup refried beans with chorizo, 2-3 cups corn tortillas, 8 oz. coffee with 3 oz. milk.

Breakfast modification
1/3 cup boiled beans with chilli sauce, 2 corn tortillas, 8 oz. coffee with 3 oz. low-fat milk, 1 small banana.

Research suggests that making slight changes in the diet of Latinos can help keep blood glucose within normal limits. In one study it was found that social support among Latinos is not as strong as reported in previous studies (Bertera, 2003). Social support plays a major role in compliant health behaviors (Bertera, 2003).
Theories Guiding Conceptualization

This research was guided by systems theory. Systems theory guided the study by allowing it to understand how agencies need to come together and work with each other in order to provide services to this growing population. There also need to be agencies, whether in the medical setting or other agencies, that will help these patients maintain their blood glucose levels. The teams can help the patients with education, proper usage of their equipment, helping them access other resources, and identifying Latinos that are at high risk for diabetes, or already have diabetes.

In the future researchers need to look at how an ecological perspective can help further this research. Finally, there are several agencies and groups that are interested in this matter. Some of the agencies are the American Diabetes Association, Pew Hispanic Center, The Henry J. Kaiser Foundation, Hispanics Today, primary health physicians just to name a few. However, as the increasing numbers of new cases of diabetes are reported among Latinos, more and more research will be done in order to help people suffering from this deadly disease.
Summary

In summary, this chapter describes past research on diabetes among Latinos. Chapter Two describes limitations in the research and what more needs to be done. There is literature on what has been done to improve research on this subject as well as to show how rapidly this disease is growing. This chapter outlines current research and how social workers can collaborate with doctors and nurses in order to provide services to the Latino community.
CHAPTER THREE

METHOD

Introduction

This chapter discusses the method design, the study group, the procedures, how protection of human subjects did take place, and finally how data analysis was conducted. This chapter discusses what methods were used and describes exactly how sampling occurred. It discusses the criteria that were needed in order to be a participant in this study and it gives a brief discussion of Gambro Dialysis Center in the city of Colton. It identifies the type of study and what instrument was used to collect the data.

Study Design

The research design for this thesis explored why diabetes is becoming one of the deadliest diseases among the Latino community. The study explored how culture affects Latinos. In order to find out this information, a quantitative survey was used which asked particular questions regarding diabetes and how cultural factors were involved in patients' decision-making and health care. Quantitative research was an effective tool to
gather the information that was needed to answer whether cultural factors affect Latino diabetes. The reason why the study was quantitative was because it helped analyze the data for this research in different ways.

The questions posed were to acquire information on nutrition and how language, race, and culture affect decision-making as well as to manage their disease. The research question was whether or not cultural factors affect Latino diabetics.

Sampling

The data collection took place at Gambro Dialysis Center in the city of Colton. The dialysis center had approximately sixty dialysis patients who have been diagnosed with diabetes. The survey targeted the population who have been diagnosed with diabetes and are currently on dialysis. The data collection required passing out surveys to patients while they are waiting to receive their dialysis treatment. There were three different shifts for the patients that are around 3 to 4 hours in length. According to the center most of their patients are Latino. The criteria for the sample are
patients who are diabetics and have been diagnosed with diabetes by a physician and are Latino.

Data Collection and Instrument

The variables studied and measured cultural factors. The study examined whether cultural factors affected Latino's treatment control. The independent variable, cultural factors, was measured by asking the participant questions regarding race, language, nutrition, culture, and quality of health care (Appendix A) (Appendix A). It was necessary to gather the medical reports to find out which patients were diabetic. The patients' glucose levels were examined to determine compliance.

The variables were measured by using some questions from an instrument used to measure quality of care and questions that were made especially for this study. The questions are formatted as follows: seven questions focused on language, three on nutrition, four on health care, and three on culture.

The survey was pre-tested with similar patients in order to test the survey's reliability and validity. The strengths of the survey were that it asked particular
questions about culture and how culture is an influential factor when receiving treatment.

The instrument asked participants to answer questions with a Likert scale that ranged from one through four. The participants answered with a response of (4) strongly agree to (1) strongly disagree. These were added to create an interval score ranging from 17 to 68.

In addition, demographic information was asked in order gather background information on the participants. The demographic variables were age, gender, race/ethnicity, and language spoken. The demographic variables with a nominal measurement were gender, race/ethnicity, and language. The demographic variable with an interval measurement was age.

Procedures

The data collection took place at Gambro Dialysis Center in Colton. The center treats Latino, African-American, and Caucasian patients. The patients are seen on either on Monday, Wednesday, Friday or Tuesday, Thursday, and Saturday. The first shift begins
at 5 am. There are three shifts of three to four hours in length. The sample represented patients from each shift.

The patients were identified and asked if they were willing to participate in the study. The patients had the option of going into a private office to fill out their survey and read the consent form or they were given the survey in their treatment chair. There was enough space between the chairs that privacy was guaranteed. This was the same method that the social workers in the center use. The survey only took about 15-20 minutes and that included reading the informed consent as well as the debriefing statement. If the patients needed the informed consent, the survey, and debriefing statement read, the social work student performing the survey was available to provide this service.

Protection of Human Subjects

The protection of the human subjects is always at the forefront of any research project. All information was kept in a locked file cabinet in order to maintain confidentiality. In addition, none of the forms that were being used needed names, signatures, or initials of any kind. All the surveys had as their cover an informed
consent page that was both in English and in Spanish as well as a debriefing statement that informed the participant what the study was for and who would be handling the information. The patient would not be able to be matched to their medical record. The medical record will only be used to identify the patient for the survey.

Data Analysis

The study was conducted in a quantitative manner that utilized a survey instrument. In order to validate the research question, frequencies and bivariate correlations were used to test whether cultural factors impact Latino diabetes.

Summary

In conclusion, this chapter discussed who was surveyed, where the survey took place and the methods that were used to conduct the research. This chapter includes in brief detail what the standardized instrument was and how the data were analyzed once gathered. Finally, the chapter discussed what tests were used in order to understand if cultural factors do influence glucose maintenance among Latinos.
CHAPTER FOUR

RESULTS

Introduction

Frequencies and bivariate correlations were used to examine whether cultural factors affect diabetic Latinos. Measurements of cultural factors were based upon the participants’ responses to close-ended questions that were asked in the survey. A bivariate correlation was also used to examine the relationships between the independent and dependent variables. The independent variable, culture, which included language, race, nutrition, and quality of health care were. The findings are presented and reviewed in this chapter.

Presentation of the Findings

Out of the 176 dialysis patients at Gambro, 21 patients (12%) participated in this study. Of the 21 patients that completed the questionnaire the oldest was 89 years old and the youngest was 29 years of age. The average age was sixty-two (S.D. = 13.9). Of the surveys completed, 13 (61.9%) were from females and 8 (38.1%) were from males.
Questions 20 and 21 at the end of the questionnaire (See Appendix A) also collected demographic information regarding ethnicity and language spoken. Of the 21 participants, 14 (66.7%) were Mexican, 5 (23.8%) were Mexican-American, 1 (4.8%) was Salvadorian, and 1 (4.8%) was Guatemalan. In addition 15 (71.4%) were Spanish speaking only and 6 (28.6%) were bilingual in Spanish and English.

It was necessary to collapse the variable race/ethnicity to form a new race variable. Race and ethnicity were collapsed to form the variable New Race which, consisted of Mexican and Mexican-American. For statistical purposes Guatemalan and Salvadorians were omitted. Mexican participants comprised 73.7% of the
participants while Mexican-Americans comprised 26.3% of the participants.

After and analyzing the possible associations it became clear that the five out of seventeen relationships were significant. The relationships among patient’s race, doctor’s race, doctor’s language, race importance, culture importance, and literature in patient’s language showed significant correlations.

All 21 of the participants reported that their culture does impact their treatment decisions. The table below shows the relationship between a person’s race and how important consider their race when making treatment decisions \( (r = -.512, \ P = .025) \). This indicates that Mexican-Americans were more likely than Mexicans to use culture when making treatment decisions.

Another association that had significance was the relationship between race and the importance of race in treatment plans. This relationship indicates that Mexican-Americans were more likely to feel that their race plays an important role in their treatment decisions \( (r = -.613, \ P = .005) \).

A further significant association was between new race and the importance of the patient’s doctor’s race.
This relationship informs that Mexican-Americans were more likely to consider their doctor’s race when making treatment decisions \((r = -0.530, P = 0.020)\).

The relationship between new race and the importance of the patient’s doctor speaking Spanish was found to have significance. Mexican-Americans were more likely to consider a Spanish speaking doctor when considering their treatment decisions \((r = -0.494, P = 0.031)\).

Finally, the last significant correlation was the relationship between new race and the importance of the patient’s medical literature being in their language \((r = -0.577, P = 0.012)\). Mexican-Americans were more likely to feel that reading their literature in Spanish would help them make better decisions regarding their treatment \((r = -0.577, P = 0.012)\).

**Summary**

The results of this study demonstrate that cultural factors do affect Latino diabetics. It was noted that there were strong relationships between culture, race, doctor’s race, patient literature in Spanish, and the importance of race in treatment considerations. This
chapter also demonstrates that Mexican-Americans are more likely to consider cultural factors in treatment then any other Latino group surveyed.
CHAPTER FIVE

DISCUSSION

Introduction

This chapter discusses the findings and what they mean for future policy and research and for social work practice. This chapter also discusses the limitations of this study. It also includes a discussion of what could be done to integrate other factors, such as socioeconomic, health insurance, and family support for Latino diabetics. The purpose of this study was to assess if cultural factors affect Latino diabetics. The factors that were included in this study were language, race, culture, and nutrition.

Discussion

Data in the present study does support the hypothesis that cultural factors affect Latino diabetics. Cultural factors were measured by asking respondents about food, language, race, and quality of care. The respondents appeared to see the importance of race and culture when making decisions about their treatment.

It appeared that there was a strong relationship between the respondents taking better care of themselves
if they considered their race in their treatment plans. The Mexican-American participants were more likely to use race when considering treatment decisions.

It was also noted that Mexican-Americans were more likely to feel that culture played an important role in making treatment decisions. Culture was viewed as the patients' beliefs, values, and attitudes. Mexican-Americans were also more likely to feel more comfortable with a doctor of their own race.

In addition, Mexican-Americans were more likely to feel that if their doctor spoke Spanish they would feel more comfortable and at ease with their doctor and the care plan that he or she set for them. They also felt that if the literature was in Spanish they would feel just as important as those who speak English. Respondents felt that certain cultural factors do matter when it comes to making treatment decisions and feel more comfortable with their treatment plan.

These findings did support the hypothesis of this research. The research concluded that there are cultural factors that affect Latino diabetics. However, what was not anticipated was that Mexican-Americans were more likely to feel that cultural factors affected them more
than Mexicans. These finding could be due to Mexican-Americans assimilating to American culture.

Limitations

According to the American Diabetes Association diabetes is the fifth leading cause of death among Latinos in the United States (ADA, 2004). The American Diabetes Association estimates that 6.2 million Latinos are undiagnosed with this deadly disease (ADA, 2006). Since Latinos are the fastest growing minority it is important for future research and policies to be implemented in order to help this disenfranchised population receive the proper medical attention.

Currently, Congress has diminished the few service programs that help many documented and undocumented Latinos with receiving medical services. Throughout California there are free clinics that service this population, but because of the fear of deportation Latinos are not being diagnosed with diabetes and do not attend vital educational groups and screenings. Many Latinos are at a crossroads due to the need of medical treatment and the fear of deportation.
As mentioned earlier, Warda (2000) noted that culture plays a role in access to and acceptance of health care by Latinos and it has not received adequate attention. Warda states that Latinos see the medical system and other bureaucracies as unresponsive, which makes them less likely to get help in an emergency or to seek the resources from which they might receive information. Latinos are in need of medical attention and screening in order to deal with this growing problem.

The limitations of this research project were related to the small sample size, measurements of culture, and the lack of research on diabetic Latinos. Although culture can be defined as common beliefs, values, and practices of a certain race it is very hard to capture the essence of culture. Culture involves so many components that missing one element could drastically affect the independent variable. Culture has to be narrowly defined in order to find significant results in a study such as this.

The term "culture" needs to be narrowly defined and explained. Culture encompasses so many components such as food, traditions, beliefs, attitudes, values, and more. Even with these components culture still needs to be
narrowed down. What does a tradition encompass? What are values? These are all important in order to examine whether or not cultural factors affect any ethnic group’s behavior.

Last, the sample for this research was too small to represent a good portion of the Latino population. Future research must be done to examine larger samples that include dialysis patients, patients that have been recently diagnosed with diabetes, and patients that have been living with the disease for years. Latinos are growing fast in numbers and this study is not representative of an entire population that is composed of so many individuals and families. It is important for future research to include a larger sample in order to get a good picture of this population and their needs. More research has to be done to examine the number of Latinos that are currently not diagnosed with diabetes.

Recommendations for Social Work Practice, Policy and Research

This study was conducted because of the growing numbers of Latinos that are being diagnosed with diabetes on a daily basis. The literature reviewed for this study suggests that over 6.2 million Latinos are diabetic, but
are undiagnosed (ADA, 2006). The literature review suggests that the lack of health care for this growing population. More should be done for Latinos since they are the fastest growing minority in the United States. Research should focus on access to health care and diabetes and its affects on families.

The local, state, and federal governments are the gate keepers to access of health care and social programs that can help improve this population’s health care needs. At this time Latinos of both sexes and all ages are being threatened by more restrictive immigration laws that Congress is trying to implement. Due to the fear of these laws more and more Latinos will go undiagnosed with this deadly disease. As reported previously diabetes is the fifth leading cause of death among Latinos and the complications associated with diabetes are extreme and deadly (ADA, 2004). Policymakers need to figure out a new form of health care for the Latino population. This includes Latinos that are undocumented and are afraid to apply for government-funded health care because of the fear of deportation and fear of never qualifying for citizenship. Policymakers need to provide better health care access than emergency services, which is only given
when the disease has taken its toll on the body and its major organs.

In addition, more research should be done on Latinos and nutrition. Research should include ideas, which incorporate Latinos traditional foods in a healthier and more nutritious way. More research needs be done on screening for diabetes and education for both the patient and family. Research has focused on socioeconomic issues, but there is a need for further study. Compliance is another issue that needs to be looked at as well as alternative medicine.

Furthermore, future research should focus on the assimilation of Latinos. It was not anticipated in this research that Mexican-American’s would be more affected by cultural factors more than any other Latinos. Future research should focus on generational factors such as first, second, and third generations. It should include identifying how strongly Latinos identify with American culture and if these assimilations make a difference in deciding whether cultural factors affect Latinos.

The Latino population is a population with many health care needs that have gone unmet. The medical social worker can bridge the gap for the newly diagnosed
Latino patient and the Latino patient that has been suffering from this disease for years. The social worker can help patients understand their treatment plan and educate the Latino patient on the value of the food they eat and how to incorporate some of their traditional foods in healthier ways.

In addition, the medical social worker can develop new support groups, informational and educational sessions that involve the patient and their family. The social worker can also help the patient with resources and compliance with their treatment plan. Having the social worker employ their case management skills will help the patient be compliant with treatment, but at the same time help the families prevent diabetes by making some small changes to their lives. This also gives the social worker the opportunity to enhance his/her cultural competence by learning and educating herself/himself about other Latino populations and sharing that information with other organizations, agencies, colleagues, and populations.

Last, the social worker can offer other agencies and organizations vital information about Latino diabetics and the needs that they face. Social workers can advocate
for Latinos’ health care rights and access to health care. Latinos face a hard battle with legislators and upcoming legislation. Social workers can be the Latino patient’s liaison to both legislators and legislation.

Conclusions

This chapter discusses several different topics. The chapter began by giving some background information of Latinos and diabetes. In addition, this chapter discusses the findings from Chapter 4 in further detail. It also discusses several limitations of this research project such as small sample size and the measurement of culture. And finally, it discusses recommendations for social work practice, policy and future research.
APPENDIX A

QUESTIONNAIRE
QUESTIONNAIRE: CULTURE AND HOW IT AFFECTS HISPANIC DIABETICS

Please answer the following questions and circle the answer that best fits the way you feel. The questions range from #1 being Strongly Agree to #4 being strongly disagree.

1. **Strongly Disagree** 2. **Disagree** 3. **Agree** 4. **Strongly Agree**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If my physician spoke Spanish I would understand my disease and manage my diabetes better</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2. If my treatment was explained to me in Spanish I would manage my disease better.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>3. I feel that using an interpreter interferes with my treatment.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>4. If the literature on my disease was given to me in Spanish I would feel just as important to those who speak English.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>5. If the staff spoke Spanish to me while receiving my treatment I would feel more comfortable.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>6. If my doctor were of my same race/ethnicity I would feel more secure of my treatment.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>7. My race/ethnicity play a major role on how I think about my treatment plans.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>8. Eating my traditional foods impede me from maintaining my disease.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>9. I need to change my eating habits in order to control my diabetes</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>10. If I were to stop eating certain traditional food and add more vegetables I could control my diabetes better?</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>11. Do you believe that your quality of health care is equal to those who speak English?</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>
QUESTIONNAIRE: CULTURE AND HOW IT AFFECTS HISPANIC DIABETICS

Please answer the following questions and circle the answer that best fits the way you feel. The questions range from #1 being Strongly Agree to #4 being strongly disagree.

1. Strongly Disagree 2. Disagree
3. Agree 4. Strongly Agree

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<tbody>
<tr>
<td>12. If the staff were courteous and respectful I would feel better cared for</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. The staff’s warmth and amicability plays an important role in my health care decisions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I feel that my culture plays an important part in my health care decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. If the hospital or clinic was in my neighborhood I would be more encouraged to attend.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. If the staff were of my nationality I would feel more comfortable discussing my disease</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

17. Age ______

18. Female/Male

19. Ethnicity/Race ______

20. English/Spanish/Bilingual speaking
APPENDIX B

INFORMED CONSENT
INFORMED CONSENT

Dear Participant:

The study in which you are being asked to participate is designed to investigate if cultural factors affect Latino diabetics. This study is being conducted by Maud Garcia, a graduate social work student at California State University, San Bernardino. The study has been approved by the Department of Social Work subcommittee of the Institutional Review Board of California State University, San Bernardino.

In this study, you will be asked questions related to your culture, language, quality of care, and nutrition. It should take about 10 minutes to complete the questions. All the information gathered is held strictly confidential by the researchers. At no times will your name be used or will you be identified by your answers. The risks to you of participating are minimal. If you have any questions about this study, please contact Dr. Rosemary McCaslin at (909) 880-5501. Please understand that your participation in this study is totally voluntary and you may withdraw at anytime.

By placing a mark in the space below, I acknowledge that I have been informed of, and understand the nature and purpose of this study, and I freely consent to participate.

By checking an "X" at the bottom of this form, I acknowledge that I am at least 18 years of age, give my consent to participate and give the researcher permission to access my rounding reports.

____  Yes  ___________  Date  ___________
APPENDIX C

DEBRIEFING STATEMENT
DEBRIEFING STATEMENT

Thank you for your willingness to participate in this study conducted by Maud Garcia, a Master of Social Work student at California State University, San Bernardino, under the supervision of Dr. Rosemary McCaslin Professor of Social Work at California State University, San Bernardino. The purpose was to study whether culture affects diabetic Latinos.

If any of the questions you were asked on the questionnaire caused you any emotional harm, please refer to the Dialysis Social Worker, Felipe Amaya. If you should have any questions about this research study, please call Dr. Rosemary McCaslin at (909) 880-5501. The results of this study will be available at the Pfau library, at California State University, San Bernardino after July 1, 2006.
APPENDIX D

INFORMED CONSENT (SPANISH VERSION)
Información para un Consentimiento

El Estudio en el cual se le ha pedido que participe está diseñado para investigar si los factores culturales afectan a los pacientes Latinos que padecen de diabetes. Este estudio está siendo conducido por Maud García, una estudiante para Trabajadora Social en la Universidad Estatal de San Bernardo. Este estudio ha sido aprobado por el Departamento de Trabajadores Sociales subcomité del Instituto de Participar la Universidad Estatal de San Bernardo. En este estudio se le harán preguntas relacionadas a su cultura, lenguaje, calidad de cuidado, y nutrición. Esta inquesta tomará como 15-20 minutos para participar las preguntas. Toda la información que se participe será estrictamente confidencial por la investigadora. En ningún momento su nombre se usara o usted será identificado por sus respuestas. Los riesgos de que usted participe son mínimos. Si usted tiene alguna pregunta sobre este estudio, porfavor llame a la Dra. Rosemary McCaslin al teléfono (909) 880-5501. Porfavor entienda que su participación en este estudio es totalmente voluntario y usted se puede retirar en cualquier momento.

Poniendo una marca en el espacio de abajo, yo entiendo que he sido informado, y entiendo la naturaleza y el propósito de este estudio, y yo libremente doy mi consentimiento de participar.

Con esta marca reconozco que soy mayor de 18 años de edad, y doy mi consentimiento en participar, y hotorgo permiso al investigador para que tenga acceso a mi información.

_________ Si __________ Fecha __________
APPENDIX E

DEBRIEFING STATEMENT (SPANISH VERSION)
DEBRIEFING STATEMENT

Gracias por su participacion en este estudio conducido por Maud Garcia, estudiante para la Maestria en Servicio Social en la Universidad Estatal de San Bernardino bajo la supervision de la Dra. Rosemary MaCaslin profesora en Servicio Social en la Universidad Estatal de California, San Bernardino. El proposito era estudiar si los factores culturales afectan a los diabeticos Latinos.

Si alguna de las preguntas que se le han hecho en este questionario le produce algun dano emocional porfavor hable con el Trabajador Social, Felipe Amaya. Si usted tiene alguna pregunta o preocupacion sobre este estudio porfavor llame a la Dra. Rosemary MaCaslin al (909) 880-5501. Los resultados de este estudio seran accesibles en la libreria Pfau en la Universidad Estatal de California, San Bernardino despues de el 1 de Julio del 2006.
APPENDIX F

QUESTIONNAIRE (SPANISH VERSION)
Questionario Cultural

Porfavor lea las preguntas y circule la respuesta con la que se indetifique mas. Las respuestas se clasifican del #1 siendo Totalmente en desacuerdo al #4 siendo completamente deacuerdo


<table>
<thead>
<tr>
<th>Preguntas</th>
<th>Respuestas</th>
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<tbody>
<tr>
<td>1. Si mi Dr. hablara Espanol yo entenderia mejor sobre mi enfermedad y me cuidaria major</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2. Si mi tratamiento se me explicara en Espanol, yo proderia manejar mi diabetes major</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>3. Yo siento que usando un interprete, interfiere con mi tratamiento</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>4. Si la literature sobre mi enfermedad se me daria en Espanol yo me sentiria tratado igual que los que hablan Ingles</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>5. Si los empleados me hablanaran Espanol cuando recibo mi tratamiento, mi sentiria mas confortable</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>6. Si mi Dr. fuera de mi misma raza, yo me sentiria mas seguro de mi tratamiento</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>7. Mis orígenes juegan un papel importante sobre mi plan de tratamiento</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>8. Yo siento que mi cultura juega una parte muy importante al tomar desiciones sobre el cuidado de mi salud</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>9. Comiendo mis platillos tradicionales impide que controle mi diabetes</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>10. Necesito cambiar mi forma de comer para controlar mi diabetes</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>11. Si deja de comer algunos platillos tradicionales y agregar mas vegetales podria controlar mejor mi diabetes</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>
Questionario Cultural

Porfavor lea las preguntas y circule la respuesta con la que se indetifique mas. Las repuestas se clasifican del #1 siendo Totalmente en desacuerdo al #4 siendo completamente deacuerdo


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<tbody>
<tr>
<td>12. Usted piensa que la calidad del cuidad de su salud es igual de aquellos que hablan Ingles</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. Si el personal fuera de mi nacionalidad yo me sentiria mejor hablando de mi enfermedad</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. Si la clinica o hospital fuera en mi comunidad estaria mas entusiasmado de asistir mis citas</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. Si el personal fuera mas cortes y respetuoso yo me sentiria mejor tratado</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. El personal, carinoso y amable juegan un papel importante al tomar desiciones sobre el cuidado de mi salud</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

17. Edad ________

18. Mujer/Hombre

19. Ethnicidad/Nacionalidad _________

20. Habla Ingles/Espanol/Bilingue
REFERENCES


