INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

SI DIOS QUIERE

CULTURAL BELIEFS OF THE MEXICAN-AMERICAN IMPACTING SECONDARY PREVENTION.

by

Gladys Susan Benavente

A Thesis Submitted to the Faculty of the

DEPARTMENT OF NURSING

In Partial Fulfillment of the Requirements
For the Degree of

MASTER OF SCIENCE
WITH A MAJOR IN NURSING

In the Graduate College

THE UNIVERSITY OF ARIZONA

2 0 0 1

STATEMENT BY AUTHOR

This thesis has been submitted in partial fullfillment of requirements for an advanced degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under the rules of the Library.

Brief quotations from this thesis are allowable without special permission, provided that accurate acknowledgement of source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the copyright holder.

SIGNED: Gladys Susan Benavente

APPROVAL BY THESIS DIRECTOR

This thesis has been approved on the date shown below:

Mary Koithan
Mary Koithan
Professor of Nursing

May 1, 2001
Date

ACKNOWLEDGEMENTS

The completion of this project involved several special people whom I would like to acknowledge:

To my thesis chair, Dr. Mary Koithan, who through patience, understanding and support encouraged me to keep on going and seeing the completion. Thank you for your mentoring in the research process.

To Dr. Jody Glittenberg and Dr. Judy Berg, my committee members, I am grateful for your expertise and your nurturing support during the difficult times.

To my husband, Hugo, who was willing to be my strength and helped me to stay focused as our lives changed through this process. I love you for those special times and for believing in me.

To my Mom, Irma, for all the special comfort food "antojitos" you made for our family, but most important for your special faith and prayers you offered for me during those important deadlines.

To my sisters, Irma Amelia, Mary, Elizabeth, and Geraldine – for those special sisterly touches, the phone calls and prayers, special articles, the massages, hot chocolate and special times when you all knew that I needed your support, your laughter and companionship.

To my brothers-in-law, John, Rick and Eddie: thank you for your interest in my progress, the reminders to "play" and ongoing support .

To my nephew Pablo, and my niece, Priscilla – your love, emails and phone calls, and times spent at the library were greatly appreciated. Prisci, thank you for your ongoing words of encouragement – I did persevere.

To my DAD in spirit – thank you for always encouraging me to seek the challenge. I know your spirit was with me as I embarked on this journey.

To my friends and nursing colleagues who encouraged me to go for my master's and were always asking on my progress.

Finally , to my dogs Cookie, Princess, and Bamboo- thank you for understanding the changes that happened in our routine as I worked towards completion of my thesis. To my special dog, SAKI who had been a true companion in my life; thank you for holding on as long as you could; your spirit still is greatly felt.

TABLE OF CONTENTS

TABLE OF CONTENTS - *Continued*

TABLE OF CONTENTS - *Continued*

TABLE OF CONTENTS - *Continued*

TABLE OF CONTENTS - *Continued*

LIST OF FIGURES

Page

LIST OF TABLES

Page

ABSTRACT

Secondary prevention activities are used to decrease the incidence of complications to an already present disease process, through ongoing monitoring, patient education and early treatment. This research was a descriptive micro-ethnography that studied the Mexican-American's perspective on the use of early secondary prevention health care services. Leininger's (1991) conceptual model of Cultural Care and Diversity was used to inform the study. Descriptive ethnographic interviews and participant-observation were conducted with six participants in their Mexican-American households. Four taxonomies were identified from the data: (a) illness-related beliefs; (b) health-related behaviors; (c) health promoting supportive and non-supportive behaviors; and (d) cultural values and lifeways related to health promotion/prevention. Three cultural themes emerged from the data: (a) Support comes from multiple sources in the Mexican-American family and is very important in their lives when dealing with illness; (b) A strong faith in God's will helps the Mexican-American family deal with whatever results/ consequences come from the illness; and (c) In the Mexican-American, knowledge about a disease does not necessarily cause a change in behaviors; a change only occurs when symptoms create consequences that negatively affect a personal sense of well being. The results indicate that familial and community support and a strong belief in God's will could explain delays in seeking treatment and infrequent use of secondary prevention measures. The Mexican-Americans in this study approached their chronic illnesses and the prescribed prevention behaviors believing that God would care for them and that consequences occurred as God planned - *Si Dios Quiere.*

CHAPTER ONE

Introduction

Health care has undergone many changes in the United States (US) during the past 20 years. There has been an increased focus on patient participation and involvement and on health promotion/disease prevention activities that promote quality and longevity of life. This is especially important for people whose initial visit to a physician or a clinic reveals that they already have a chronic illness. Secondary prevention activities are used to decrease the incidence of complications to an already present disease process, through ongoing monitoring, patient education and early treatment. Through ongoing secondary prevention people remain at their highest levels of health, decreasing health care resource utilization through adjustment or adaptation to their chronic illness. (Shamansky & Clausen, 1980).

While this trend may be evident in other ethnic populations in the United States, it has been personally noted that the Mexican-American population does not consistently participate in these secondary prevention services. For example, many clients who have been diabetic for years seem to expect renal failure and dialysis as a natural outcome of the diabetic process. Some have had family members who were on dialysis and yet are not interested in participating in activities to prevent end-stage renal disease. Personal friends who are Mexican-American, diagnosed with hypertension, also seem to accept the diagnosis without efforts to participate in secondary prevention. They are willing to take antihypertensive medication, but are not necessarily interested in making lifestyle changes (dietary, exercise, and personal behaviors) that could help reduce the risk of

potential complications such as coronary artery disease or stroke. They are even unwilling to monitor their blood pressure or participate in self-help prevention activities.

Many questions arise from these observations. Why are Mexican-Americans unwilling to participate in preventive care for secondary complications? It has been noted in the literature that potential barriers related to decreased use of care could be lack of finances or insurance (Villareal, 1986). Another barrier has been described as lack of transportation (Aguirre-Molina, Ramirez, 1993; Bassford,1995). However other literature suggests that when financial and transportation barriers are removed, the Hispanic population still does not access services or participate in secondary prevention (Flores, Bauchner, Feinstein & Nguyen, 1999). Do cultural values and beliefs inherent in the Mexican-American culture impact the use of these services? The concept of fatalism has been mentioned in the literature as a potential contributor to this behavior, but limited studies have been done (Chavez, Hubbell,Valdez, & Mishra, 1997). Finally, how does the role of family and religion affect the use of preventive services?

Thus, it is important to study this population and understand the way which Mexican-Americans approach chronic illness and the prevention of complications. Do personal and cultural beliefs, values and patterns affect the utilization of early secondary prevention services? If so, becoming aware of these influences would assist nursing to develop plans of care that are more culturally congruent and relevant.

Background

U.S. health care professionals are increasingly interested in secondary prevention, disease management, and the prevention of complications secondary to primary

conditions that are chronic in nature (Hickey, Ouimette, & Venegoni, 1996). Currently, health plans and providers of care are most interested in secondary prevention related to diabetes mellitus. Diabetes mellitus is a very serious, costly and complicated disease. According to the Centers for Disease Control and Prevention (CDC) Surveillance Survey in 1997, 15.7 million people (5.9% of total population) had developed diabetes mellitus. Of those, 10.3 million had been diagnosed and 5.4 million had not been diagnosed. The incidence of new cases of diabetes mellitus per year is 798,000 (CDC, 1999). Prevalence by ethnic group indicate that Mexican-Americans are at twice the risk than non-Hispanics to have diabetes mellitus (CDC, 1999). Also noted is that as Mexican –Americans grow older, the prevalence of diabetes increases.

People with diabetes will have death rates 2 times greater than those without this disease. Diabetes was the 7th leading cause of death in 1996, but for Mexican-Americans, diabetes is the 5th leading cause of death (CDC,1999).

Diabetes also leads to numerous secondary illnesses and disabling conditions such as heart disease, stroke, hypertension, and amputations. Diabetes is the leading cause of blindness and end stage renal disease (ESRD). The US Renal Data System (USRDS) reports that there were 33,096 new cases of ESRD secondary to diabetes in 1997. In 1997, approximately 3,310 Hispanics were diagnosed with end-stage renal disease (ESRD), 51% of which was secondary to DM. Additionally, 74% of these patients had a co-morbidity of hypertension.

Treatment for ESRD includes lifetime dialysis or kidney transplantation. Overall cost for dialysis in 1997 for the US population was 15 billion dollars (USRDS, 1999),

cost among the Hispanic population can be estimated as 1.5 billion dollars. Furthermore, the American Diabetes Association (ADA) estimates that the 1997 costs for DM in the US were approximately 98 billion dollars. Direct medical expenses and indirect costs for disability, and work loss were estimated at $44 and $54 billion, respectively (ADA, 1998). Therefore, complications associated with DM account for more than ½ the total costs of incurring DM, complications that might be preventable through secondary treatment activities.

In 1997 there were 271,416 people in Arizona who had been identified with diabetes mellitus (CDC, 1999, ADA, 1998). Diabetes is one of the 10 leading causes of death in Arizona. For Native Americans and Mexican-Americans living in Arizona, DM is the 5th leading cause of death.

Secondary Prevention Activities for Diabetes Mellitus

The presence of a chronic illness will require ongoing monitoring, patient education and early treatment in order to decrease the incidence of further complications. The use of secondary prevention activities such as treating the symptoms and assisting the client in their perception of the stressor and its impact on the individual's system has been described (Lancaster,1996). The outcome would depend on the collaboration of the nurse and the client in setting mutual goals. When diabetes, especially Type 2, is diagnosed, there is already involvement in other organs. Therefore, DM treatment in the US health care system is based on secondary prevention due to the risk of long-term complications associated with this disease. However, there has to be active involvement

by the participants who have this disease, because they are the ones who should be monitoring their glucose control, and blood pressure status on a daily basis at home.

Clinical guidelines have been established for the treatment of DM and the prevention of secondary complications. These guide most practitioners in the ongoing monitoring of the diabetic condition. Activities such as glycosylated hemoglobin (HbA1c) monitoring; frequent blood sugar self monitoring, and professional and self-initiated blood pressure monitoring are among those recommendations that have been shown to decrease the incidence of complications and long term disability secondary to DM. The ADA also recommends a yearly eye exam to monitor for retinopathy, which could lead to reduction in blindness. Basic foot care monitoring for lesions, decrease in sensation and vascular changes should be instituted; reporting immediately any changes would lead to potential reduction of amputations. Cardiac complications such as hyperlipidemia, with potential for stroke, and coronary artery disease leading to heart attacks could be reduced if basic lifestyle changes such as dietary and exercise activities were modified. However, those who already have early stages of complications should be monitored with lipid lowering medications and continue to encourage dietary changes and smoking cessation (ADA, 1998).

Use of ongoing clinical preventive services will assist in delaying the progression of disease because of this frequent monitoring. Of concern, is the lack of utilization of health services by Mexican-Americans (Brunette& Mui,1999, Flores, Bauchner, Feinstein & Nguyen, 1999). The 1997 Behavioral Risk Factor Surveillance system (BRFSS) was a state-based telephone survey that was conducted in each state on a

monthly basis and used a random sample of subjects. Data that was collected was submitted to the CDC for processing and a yearly sample was created for each state. Results from this survey revealed that Hispanics who comprised 11% of respondents reported not having insurance, poor access to health care due to cost, poor health status, obesity, and diabetes which placed them at a higher risk for chronic disease (Bolen, Rhodes, Powell-Griner, Bland, & Holtzman, 2000). This group also reported that they were least likely to have had a routine physical exam. If the risks for long-term complications are present, then why are Mexican-Americans not utilizing the services, which are available?

Mexican-American Health Issues

The US Hispanic population is diverse. A variety of subgroups comprise this population, including Mexican-American (63.3%), Puerto Rican (10.6%), Central and South American (14.4%), and Cuban (4.2%) (Bassford, 1995; NCLR,1997). Cultural characteristics can not be applied generically to all. While there are some commonalities among the subgroups, each has their own specific characteristics. Unfortunately national statistics have not been differentiated by subgroups, but rather reported as "Hispanic".

Mexican- Americans comprise the largest group of the Hispanic population, with most of them living along the southwestern border (California, Arizona, New Mexico, and Texas) of the United States and Mexico. Mexican- Americans account for 22% of Arizona's total population; ranking Arizona fourth in total Mexican-American population in the US. (DHHS,1997). Mexican-Americans are projected to become the largest minority group by 2005. The Mexican-American is a very heterogeneous group and

consists of 4 different groups: (a) the Native American that learned Spanish and was christianized by the Spanish colonists but remained Indian, (b) the "Mexican National" that was part of the territory that was ceded to the United States in 1848, (c) the well-to-do exiled from Mexico for political reasons and (d) the laborers who immigrated for seasonal work. It is this last group that makes the majority of Mexican-Americans today in the United States (Urdaneta & Krehbiel, 1989).

Health issues associated with this population, such as diabetes (two times greater than the non-Hispanic population), HIV (18% of total AIDS cases reported), and increased rates of substance abuse, domestic violence and suicide, need to be addressed because of the increasing financial burden that will be imposed on the US health care system (CDC, 1998). If primary and secondary prevention services are not used, the potential for increase in complications will arise dramatically, increasing the financial burden to society. In order to assure that these behaviors occur, care must be provided in a culturally congruent and acceptable manner. It is important therefore to understand how cultural and population beliefs about health and illness impact and guide their health care behaviors.

The literature has reported that cultural beliefs influence Hispanics' perceptions about health and illness and affect behaviors and health care practices (Ailinger, 1988; Gordon, 1994; Perez-Stable, Sabogal, Hiatt, & McPhee, 1992). The San Antonio heart study in 1979 found that there was a greater prevalence of obesity in Mexican-Americans due to sedentary lifestyle. Exercise is considered a low priority in the Mexican-American community when other needs such as working two jobs are present (Stern, Pugh, Gaskill,

& Hazuda, 1981). The National Council La Raza (NCLR) reported that traditional Mexican families have a fatalistic attitude. If this perception is true, then these families might not believe that any secondary preventive action for DM would make any difference in the outcome, because they will still get the problems and they have no control. In addition, diabetes is viewed as "too much stress", "too much sugar" or even the "evil eye" at work. NCLR also reported that obesity may be seen as attractive because being thin meant that one could not afford to buy food. Food also plays a role in Mexican-American culture and is present at any celebration or gathering (D'Arrigo & Keegan, 2000).

On a personal note, I was born and raised in Mexico in the state of Sonora, which borders Arizona, and therefore, have experiences with health care practices in Mexico. I grew up in a bilingual and bicultural environment due to the copper mining industry. I considered myself a middle class person and note that there are distinct differences among the socioeconomic classes, including their health care beliefs and practices. I attended a private school in Mexico, provided by the mining company. My classes were taught in English and Spanish. At home, my parents spoke to us in both languages.

In my community there was an emphasis on illness treatment and not on prevention. The local hospital was available for illnesses, surgeries, accidents, consultations and prescriptions. Self-medication, self-diagnosing and health care consulting among friends was not uncommon. It was also not uncommon to get over-the-counter medications such as antibiotics, diuretics, and antidepressants by consulting the pharmacist. Routine ongoing prenatal care was not even considered. In discussions with

family members, the differences between what is stressed in current US prenatal care and how older Mexican- Americans had their children are startling. Relatives have reported that they never stopped smoking and had social drinks at parties while pregnant, did not take vitamins and had no trouble with deliveries or their babies. This older generation of Mexican-Americans was raised with a different, more traditional health care custom in which the importance of prevention was not emphasized or practiced.

In today's Mexican healthcare system, there is more emphasis on prenatal care and immunizations, but there still is the ongoing self-medication or treatments, particularly herbal treatments (personal communication). As people emigrate across the border, they rely on their health beliefs initially. As they become acculturated into the US lifeways, some may begin to adapt to other health beliefs while others may find themselves in conflict with US health care practices and continue their traditional practices. This is even prevalent in Mexican-American health care workers who have been exposed to disease prevention, illness treatment methods, and health maintenance practices. Depending on length of acculturation, length of stay in the US, and education level, many Mexican-American nursing colleagues acknowledge that there are traditional health beliefs that no longer are as significant or meaningful to them such as the use of special herbs to treat specific traditional diseases. However, family, respect, faith and some traditional lifeways still carry significant meaning and often come in conflict with the US health care system.

Statement of the Problem

Health promotion/ disease prevention services are available to the community and

emphasized in the current US health system. If people access these services and implement these recommendations, there would be the potential to prevent or delay the occurrence of complications, thereby reducing morbidity and mortality of chronic illnesses. In over 20 years of nursing practice, a trend among Mexican–American with chronic illness has been observed. This population seems to use prevention and early treatment services less diligently than the general US population. However, there is limited research or literature about Mexican-American cultural patterns and their impact on utilization of secondary prevention services when faced with a chronic illness. As this population grows and has the potential to increase the financial burden to health illnesses, these behaviors need to be explored and understood.

Statement of Purpose

The purpose of this study is to explore the behaviors and cultural patterns/lifeways of the Mexican-American related to early intervention and secondary prevention practices among chronically ill Mexican-Americans with DM and hypertension. Using Leininger's conceptual framework, this study will explore how Mexican-American view health and illness, what health care behaviors and practice patterns are common as they address their chronic illness and what the motivating factors are behind these health care practices.

Significance of Study

The Mexican-American population is one that has typically maintained their language, cultural beliefs and traditions (Reinert, 1986). These cultural beliefs and traditions impact not only the way health care services are perceived and delivered, but

affect the degree and pattern of service utilization and adherence to treatment regimen. As we continue to see an influx of immigrants especially along the Southwestern US borders, it is important to understand these cultural differences in order to develop culturally congruent programs of health care. By exploring cultural patterns and developing an understanding of these values and beliefs from the perspective of the Mexican-American health care consumer, health care providers can be more effective in program planning and delivery. This in turn will provide culturally congruent treatment plans that will be actively used by the Mexican-American health care consumer.

Research that explores these personal and cultural perceptions needs to be done from the perspective of the care recipient. Therefore, a qualitative design, such as ethnography was used. Ethnographic research will allow us to explore the culture from the Mexican-American consumers' own perspectives and will provide a rich description of values, beliefs and patterns that are held by members of this culture. This information will then provide health care providers with a broader knowledge base about this specific population and the use of secondary prevention within this group.

Summary

The Hispanic population is growing at a rapid pace in the United States. Health care issues and behaviors concerning this group need to be addressed, including barriers to care and service utilization. The cost of complications from diabetes, and renal failure are exorbitant, quickly rising, and can be prevented if secondary preventive services are utilized and if culturally congruent care is provided so that this population utilizes the services. Cultural patterns affecting the use of these services have not been studied in

depth and could provide some knowledge to assist in planning and implementing health care programs. This study will be to study Mexican-American cultural patterns in relation to health, early intervention and utilization of secondary prevention services among those with diabetes mellitus and hypertension.

CHAPTER TWO

CONCEPTUAL ORIENTATION AND REVIEW OF THE LITERATURE

Introduction

A general overview of Madeline Leininger's Culture Care Theory and review of the literature will be presented in this chapter. General concepts about culture and specific characteristics and beliefs of the Mexican-American culture will be discussed to further develop the idea about Mexican-American cultural values and beliefs that specifically affect health promotion and disease prevention activities. The concepts of health promotion and secondary prevention within the Mexican-American community will also be addressed through a review of the literature.

Conceptual Orientation

Madeline Leininger's Culture Care theory was used as a conceptual framework for this study. This theory was formulated in the 1950s when Leininger, as a practicing staff nurse, recognized that there was a missing link in nursing. She heard many comments about "good care" and "caring for patients", but there was no true definition of what "caring" meant. Her observations made her "realize that caring and nursing activities were extremely important to help people get well and prevent illnesses and, possibly death" (Leininger,1991, p.7). Through her experiences as a pediatric mental health clinical specialist, she identified a lack of understanding in cultural differences in caring for these children (Alexander, Beagle, Butler, Dougherty, & Robards, 1986). This led Leininger to pursue studies in anthropology and focus on two main issues: human care and culture.

Applying the knowledge gained from anthropology with her nursing perspective, Leininger developed her Culture Care Theory. This theory has helped nursing identify differences and similarities about human care, health, healing, and well being across cultures (Leininger, 1991). The idea of learning about cultures and ways of caring through the "person's view" instead of the researcher's or practicing nurse's view is another important aspect of this theory. There are several assumptions that guide nurses in their use of Culture Care Theory (Cameron & Luna, 1996, Leininger). These assumptions focus on the concept of culturally based caring as the essence of nursing, describing how the differences and similarities found within the cultures influences the caring provided by nurses to individual families and communities. Additionally, these premises propose that the qualitative paradigm be used to uncover what is culturally relevant and meaningful in the provision of care in a way that champions diversity, understanding and acceptance.

The assumptive premises that are of particular interest in this project are:

1. Culture care is the broadest holistic means to know, explain, interpret, and predict nursing care phenomena to guide nursing care practices.
2. Culture care concepts, meanings, expressions, patterns, processes, and structural forms of care are different (diversity) and similar (towards commonalities or universalities) among all cultures of the world.
3. Every human culture has generic (lay, folk, or indigenous) care knowledge and practices and usually professional care knowledge and practices which vary transculturally.

4. Cultural care values, beliefs, and practices are influenced by and tend to be embedded in the worldview, language, religious (or spiritual), kinship (social), political (or legal), educational, economic, technological, ethnohistorical, and environmental context of a particular culture.
5. Beneficial, healthy, and satisfying culturally based nursing care contributes to the well being of individuals, families, groups, and communities within their environmental context.
6. Culturally congruent or beneficial nursing care can only occur when the individual, group, family, community, or culture care values, expressions, or patterns are known and used appropriately and in meaningful ways by the nurse with the people.
7. Clients who experience nursing care that fails to be reasonably congruent with the client's beliefs, values, and caring lifeways will show signs of cultural conflicts, noncompliance, stresses, and ethical or moral concerns.
8. The qualitative paradigm provides new ways of knowing and different ways to discover epistemic and ontological dimensions of human care transculturally.

Leininger, 1991, p.45

According to Leininger, the metaparadigms of nursing are care, culture, health, humans and environment. Nursing, she states, is defined as a " learned humanistic and

scientific profession and discipline that is focused on human care phenomena and activities in order to assist, support, facilitate, or enable individuals or groups to maintain or regain their well being (or health) in culturally meaningful and beneficial ways, or to help people face handicaps or death" (Cameron & Luna, 1996, p.185; Leininger, 1991, p.47). Nursing, then, is action that can further be explained by the type of care provided. Leininger identifies three types of care: (a) cultural care preservation: where actions would help retain or preserve relative care values so that the client could maintain their wellbeing; (b) cultural care accommodation or negotiation: those actions that are assistive or supportive to an individual of a designated culture in adapting or negotiating with others for a positive healthcare outcome; and (c) cultural care repatterning or restructuring: those actions that assist or enable the client to change or modify their way of life for a new and beneficial health care pattern, while at the same time respecting the cultural beliefs.

Leininger (1991) states that care is the essence of nursing and the central, dominant, and unifying focus of nursing. Care refers to the assistive, supportive, or facilitative phenomenon toward or for another individual or group with evident or anticipated needs to ameliorate or improve a human condition or lifeway (Leininger, 1985). Care is further described as being generic or folklore and professional nursing care. Generic care refers to times when nonprofessional local or indigenous folk knowledge is used to facilitate health and healing. Examples of generic care would be *curanderismo, sobadores* and *herbalistas* in the Hispanic community. Professional nursing care is defined as formal and cognitively learned professional care knowledge,

and occurs when a health professional is engaged in healthcare decisions or interventions (Cameron & Luna,1996).

Person is not a term that Leininger uses. She instead describes person as humans who are "cultural beings who have survived through time and place because of their ability to care for infants, young and older adults in a variety of environments and ways" (Cameron & Luna, 1996, p. 186). She believes that "person" is a Western word and that some cultures do not have that concept. In other cultures, groups, communities, and families define person.

Environment, as a term, is not defined. Rather Leininger states that humans must be studied in their "environmental contexts"; one cannot be separated from the other. Environmental context is defined as " the totality of an event, situation, or particular experiences that gives meaning to human expressions, interpretations, and social interactions in particular physical, ecological, sociopolitical and /or cultural settings" (Leininger, 1991, p. 48). The *quincenera*, a Mexican-American family celebration, provides an example. The coming of age for a young girl is celebrated with a special mass for the young woman not only by her parents and godparents, but also by the community. The mass has a special meaning because the young woman has come to the church to give thanks for this special day arriving in her life. For some young girls, this is the first time that they are allowed to dance in a public place like a reception hall. Familial behavior during times of illness is another example. It is not uncommon for relatives to come from all cities to visit the person who is ill even if they are distant relation. *Comadres* and *compadres* will make sure everything is being taken care of at

home (i.e. meals are cooked, house kept clean) while the immediate family is at the hospital. Masses with special intentions may be offered for the ill person.

In defining health, Leininger states that it is more than just the absence of disease or a point on a continuum. She refers to health as "a state of well being that is culturally defined, valued, and practiced, and which reflects the ability of individuals (or groups) to perform their daily activities in culturally expressed, beneficial, and patterned lifeways" (Leininger, 1991, p. 49). Health must be understood through the person's view (emic) and how they perceive it. For example, the Mexican –American may view diabetes and its complications as illnesses that are meant to happen. Losing a leg, or becoming blind may be viewed as an act of God's will (NCLR, 1997).

Leininger (1991) defines culture as "the learned, shared, and transmitted values, beliefs, norms and lifeways of a particular group that guides their thinking, decisions and actions in patterned ways"(p. 47). She refers to culture as a blueprint for thought and action and considers culture to be a dominant influence in determining health-illness caring patterns and behaviors.

The Sunrise Model clearly demonstrates the relationships between each of the concepts in Leininger's theory (Figure 1). "This model views human beings as inseparable from their cultural background and social structures"(Cohen, 1991, p.900). Humans (person) need to be observed and assessed within their cultural and environmental context in order to fully understand their needs, their behavioral patterns and their perception of health and illness. This diagram can be used to guide research by suggesting different personal dimensions that may affect health behaviors or health

patterning. Therefore, as we search for understanding health promotion and secondary prevention patterns among chronically ill Mexican-American, we need to acknowledge these areas of potential influence. A Mexican-American who has been diagnosed with diabetes, may seek assistance from local healer or family friends to determine if specific herbs or teas could help him get better; he may ask for special prayer intentions at mass for his health, and he may seek the advice of a physician.

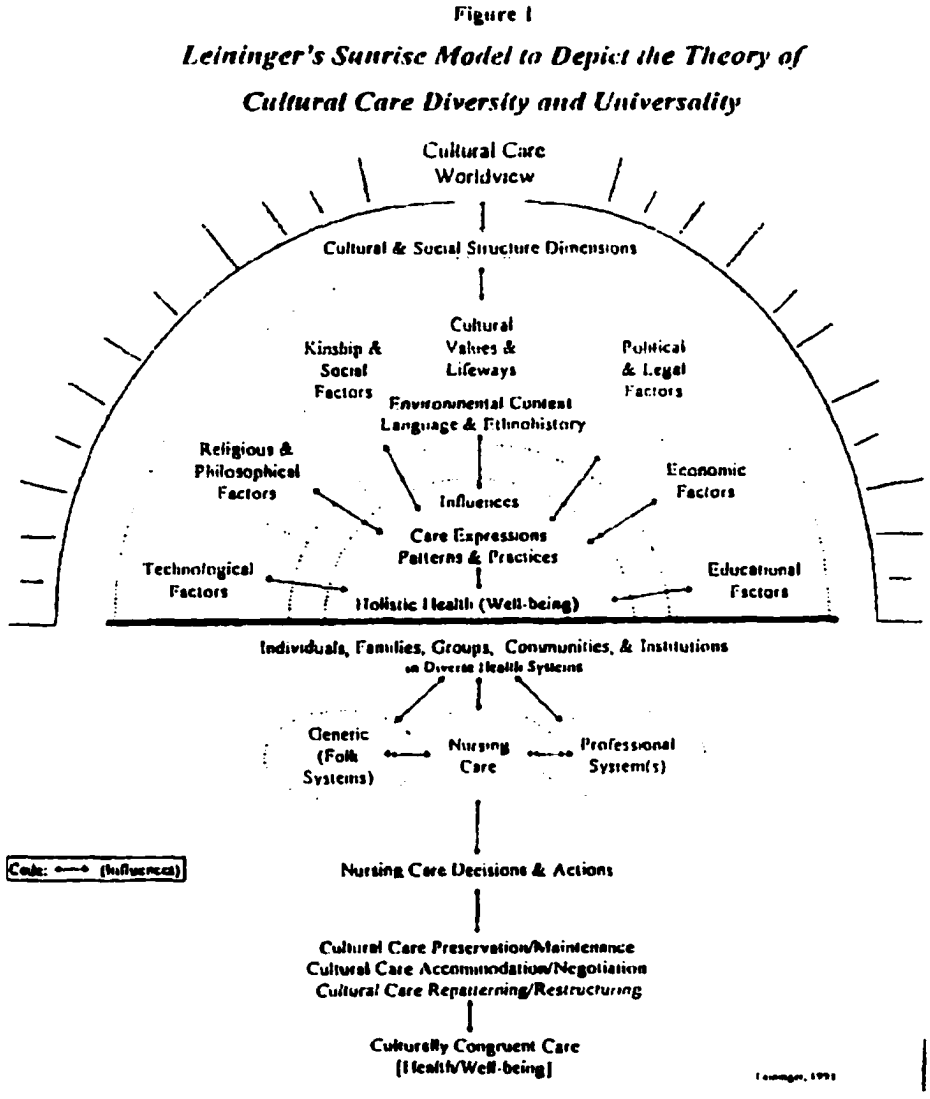
Leininger's model also helps to identify and construct the research process. It suggests that the areas of religious and philosophical factors, kinship and social factors, and cultural values should be explored in order to obtain a holistic and comprehensive database. The arrows in the model indicate influencers, but do not infer causal or linear relationships. This model can assist in understanding how different cultures view and understand their own human conditions, illnesses, care and healthy lifeways (Leininger, 1991; 1997). Leininger has developed four data collection/analysis processes which consist of (a) collecting and documenting observations, (b) identifying descriptors, (c) developing patterns and (d) describing themes. This study used the Sunrise Model and Leininger's assumptive premises to explore and describe cultural patterns and health care behaviors of the Mexican-American population relative to secondary prevention in diabetes mellitus and hypertension. The following section will describe Leininger's model as it applies to this study.

The Sunrise Model was used as a guide to assist in preparing questions to be used in the interview . Using the components from the cultural and social structure dimensions, the cultural values and lifeways, kinship and social factors, and religious and

philosophical factors, questions were derived to assist in discovering information specifically about these areas. Understanding these values, would also help explain the decisions made by Mexican-Americans in using the health care system whether it is generic (folk) or professional. This information could then impact how health professionals can provide information or care to this specific group.

Figure 1

Leininger's Sunrise Model



Reprinted from: Leininger, M. (1997). Classic article: Overview of the theory of culture care with the ethnonursing research method. Journal of Transcultural Nursing, 8 (2),37.

Research using Leininger' s Cultural Care Theory

Many researchers have used Leininger's Cultural Care theory as the theoretical framework for their study . McFarland (1995) used the Sunrise Model to guide her study of elderly Polish Americans. This ethnonursing qualitative study consisted of three key and five general informants, ages 58-84 years old, who lived in a Polish neighborhood in a northern city in mid- Michigan. The study was conducted over a two year period and consisted of three to four in-depth interviews, observations, and reflection. Data were analyzed in the four phases suggested by Leininger. In this study, the elderly Polish Americans were found to be fatalistic and focused inward on family, parish and neighborhood. Specific themes that evolved were preservation of Polish customs and traditions and religious holidays because they contributed to the wellbeing and health of the family, importance of kinship, caring for each other either with monetary or goods, caring for the elderly who are sick at home, and becoming involved in politics because that would provide the support for obtaining assistance for elderly. Of interest to this researcher was that the study also revealed this group to view health as "being active and free from disease" and being of clear mind (McFarland, p.414). The elderly polish group tended to use hospitals as a last resort and preferred home health services because of the security and being able to stay home.

Bodnar and Leininger (1995) conducted an ethnonursing study on American gypsies from three communities in three different locations. Their study subjects included a total of nine key informants and 20 general informants. In-depth participant observations were done over a three to six month period both in the community and also

in the hospitals where gypsies were admitted. The data was gathered, coded, and patterns and themes were identified. The gypsies were found to do a little of everything to survive, making a living from the natural environmental resources found wherever they lived. Gypsies were also found to be very distrusting of society and strongly believed in sustaining their cultural identity and self-esteem. Education and technology were not important to them, and most of their occupations consisted of fortune telling, tinkering, coppersmiths, horse dealing and magic. Some themes identified included loyalty to the Gypsy family, a strong belief in the supernatural powers that affects daily life, specific death rituals, strong belief in generic care and living life according to their own political laws since they distrust society. Findings revealed that gypsies' cultural values were deeply imbedded in their worldview, religion and kinship. Recommendations for culturally congruent nursing care include accommodation for family members to stay in attendance and allowing for specific foods to be brought in and rituals to be performed at the bedside in order to decrease the amount of distrust.

Leininger's Cultural Care theory was also used as the conceptual model for Rosenbaum and Carty's (1996) study on the subculture of adolescence. This ethnonursing study was conducted in a suburban community in southwestern Ontario,Canada. There were 27 key informants (15 females, 12 males) , all of whom belonged to a community youth group center and were in their first year of high school. Forty-four general informants (21 females, 23 males) were also recruited to be interviewed and to reflect on the information being provided by the key informants. Observation-participation and semi-structured interviews were used to gather data. Data was recorded, coded and

entered and analyzed using Leininger's four phases of analysis. Themes that were identified were (a) health was absence of illness, being fit and taking responsibility; (b) care meant "being there"; and (c) clothes, music and hair were symbols of their identity (Rosenbaum, p.744). The adolescents valued family, friends, and honesty. Rosenbaum recommended that nursing incorporate the importance of peer relationships in their health care delivery and use peers to become health leaders by providing information to them. Understanding this subculture of adolescents and their beliefs will assist nursing to provide culturally congruent care to this specific group.

Leininger (1995) also studied 20 key and 30 general Philippine American informants who lived in urban midwestern states. They viewed "life [as] a gift from God", and they saw religion helping them with any political oppression, illness and economic stressors (p. 351). Their faith in God was so strong that they put their lives in the "hands of God" and knew that they would be taken care of (Leninger, p.351). Some important values that were identified in this study included a strong sense of family kinship, extended families, caring for the elderly and unquestioned respect and deference to authority. Children were expected to care for their family, respect elders and maintain close ties. Education was strongly supported by the family. Maintaining a smooth, harmonious relationship and saving honor was viewed as very important to this cultural group. Health beliefs in the "hot/cold" theory and home remedies were also identified as being important.

Influence of Culture on Illness/Health Behaviors

Leininger defines culture as the lifeways that an individual or group learns, shares and transmits from one generation to another, including values, beliefs and practices that guide their patterns of actions and decisions (Leininger, 1997). While culture is dynamic, changing and diversified, dominant and meaningful culture values change less frequently than those with less significance. Respect and caring for elders and love for the family would be cultural values that would not change over time. However, change in dress garments could change more frequently because it is not as significant and dominant a value. Cultural values provide meaningful direction and a rational basis for a group's behavior over a long span of time (Leininger, 1978).

There are various examples of cultural groups, including ethnic groups (Mexican-Americans and African-Americans), religious cultures (nuns and priests), professional cultures (nursing and medicine) and social subcultures (gangs and fraternal organizations). Each cultural group has individual characteristics and normed behaviors and beliefs. Table 1 depicts core characteristics that are present in any cultural group.

Table 1: Characteristics of any cultural group

Characteristic	Description
Sense of Self	Validation of one's behavior and establishment of identity; sense of belonging and place.
Communication and Language	The exchange of messages and creation of meaning (Lipson, 1996); spoken word within the group; slang, different dialects and hand gestures are just a few examples.
Dress and appearance	Garments that may be worn by certain groups to identify them or identify a certain event in their life. Certain relics may have a significant meaning to the group. For example, nuns may be wearing a habit or a cross to identify them as a religious order.
Food and feeding habits	Particular foods that are traditional for some groups; some foods are even used as a utensil, such as a

Table 1. Continued

Characteristic	Description
	tortilla. Foods can have very significant meanings or are associated with religious events, i.e. *capirotada:* a special bread pudding that is usually done during Lent in the Hispanic community. Rice is a main staple for Filipinos and Vietnamese. Moslem may avoid pork cooked in alcohol. Orthodox Jews never serve meat and milk in the same meal.
Time	Some cultures live around time, i.e., exact appointments, not wasting time, keeping busy, and others are very casual about time, i.e., don't use clocks or watches. Mexican-Americans are known for their *"siesta"* or time for rest in the afternoon before resuming their work. Japanese are very prompt

Table 1. Continued

Characteristic	Description
	for appointments (Shiba, 1996).
Relationships	Two or more persons who share a common goal; defined differently within cultures, can mean an extended family unit which can be involved in all the decision making versus a nuclear family; it can also be a professional organization, or even the difference between male and female roles.
Values and norms	Basic beliefs such as family loyalty, honesty, responsibilty that are accepted by a group or individual; specific needs or priorities are determined by cultural groups. Some groups may be more concerned with basic survival, while others are concerned with being accepted by their peers.

Table 1. Continued

Characteristic	Description
Beliefs and attitudes	Specific ideas that lead an individual or group; religious beliefs may be the strong factor that guides the groups in their way of living. Individual's role may be defined by the group's beliefs, and tasks associated with the roles may also be determined, i.e. female role may be subservient or the matriarch of the family.
Work habits	Employment or roles within the group; specific work tasks or roles may be differentiated by gender.
Political systems	Governing body within a group; may take the form of governmental control, or class system, or communism. Sometimes, religion is highly mixed with politics and the church then has a strong power over the groups' priorities or needs.

Table 1. Continued

Characteristic	Description
Economics	Presence of funds; determines what goods can be provided and what financial priorities are for the cultural group.
Health	The absence of illness or disease; the way health issues will be determined will be defined by the group and will be impacted by government, economics, and religious beliefs.

Note: characteristic terms were adapted from "Managing Cultural Differences" by P. Harris and R. Moran, 1987, p. 190. Houston: Gulf Publishing, Inc.

Recognizing the different characteristics that impact any individual or family will assist the health caregiver in developing a plan of care. Ordering specific foods, allowing family members to participate in the care, and encouraging visits from personal healers if requested are just some examples of how a plan of care can be influenced by cultural characteristics.

Even while individual cultural characteristics of a particular person or group are taken into consideration, health care professionals may incur conflicts in the provision of care. Cultural imposition is a tendency among professionals who impose their own beliefs, values and practices upon another culture (Leininger, 1995). A conflict can occur if the health care professional believes that his/her own health values or professional beliefs take precedence in providing direct care to a particular group because of the difficulty in seeing any meaning to the group's own values. It is important to identify differences in beliefs and values and develop ways to work within the culture of the care recipient of care. For any change in behavior to occur, the care, education or intervention must be accepted by the group and must have meaning.

Health and illness will have different meanings in every culture. Depending on the cultural background, illness and symptoms may or may not be reported. For some cultures, symptoms such as pain are not reported because it is seen as a necessary part of life (Wenger, 1993). For others, an illness may not be considered as serious if they are still able to function with their daily activities . Health care providers need to recognize that the individual will act in health and illness according to beliefs and may have already sought out help from more acceptable healing systems.

Literature from various cultures was reviewed to see if cultural characteristics as listed above could be identified. Snow (1976) studied the medical beliefs and practices of a low income Black neighborhood. Residents (350) of Martin Hill were from rural backgrounds with education levels of primary schooling; few respondents had completed a couple of years of high school. This was not due to lack of interest in education, but related to factors of their childhood years, i.e. having to go to work at age 11 due death of a parent. Thus the differences relate to class not ethnicity. Single females headed more than 50% of the households. Incomes were low and occupations were that of cooks, laborers or working in a laundry.

Relationships with family, the church and the neighborhood were found to be of great importance. Primary obligations were to the family no matter how far they lived;contact with them was frequent whether by phone or daily visits. There was also noted to be an occurrence of "fictitious" kinship, where next door neighbors became adoptive relatives. Church was found to be another source of support: when illness is reported in the church, the members go visit those families in need and provide assistance such as money, food, and help in the household (Snow, 1976, 1983).

The worldview of this Black community was found to include a strong belief in natural causation; i.e. , God intended it to happen or due to unnatural causes related to evil. Health problems or illnesses are categorized as unnatural occurrences. A belief in maintaining harmony with the supernatural forces will lead to good health; a special emphasis is on moderation and monitoring the blood, i.e. the thickness or thinness of it could make one more susceptible to illness (Snow, 1983). Causes of natural illnesses are

usually related to "cold" air entering the body, and later manifesting itself as arthritis. "Taking cold especially in a woman who is menstruating could lead to the blood, which is already thinned, to clot and back up and could lead to a headache and stroke" (Snow, p.823). Other causes of natural illness include dietary indiscretion and improper behavior. The Black people believe that it is the individual's responsibility to care for themselves and eat right especially to maintain their blood in harmony. Eating foods that thin the blood such as vinegar, lemon juice, and garlic should be eaten when too much blood or "high blood" is present.

Religion has a strong influence on health beliefs in the Black community. Beliefs that God can punish with an illness is very prevalent and is usually related to the behavior of the person, i.e. having sinned or failure to share. However, they also believe that God also heals, especially if the person does repent.

Magical causes such as hexes have also been reported as causes of unnatural illnesses. Traditional healers are sought to help with any illness that does not go away within a reasonable time. "Poisoning the food" due to jealousy can cause hexes. Only healers can remove the hex because they have special powers.

Meleis (1981) described the Arab-American cultural characteristics. This group has a different attitude towards the healthcare system – instead of expecting a caring mode, they prefer a curing mode. They receive their caring from their family support and expect the Western healthcare system to be effective and cure because of their advanced technology.

Some characteristics included respect for authority, and a strong sense in family. They have daily gatherings with family or friends to share a meal and to offer support to each other. In having respect for authority, the Arab community expects those with expertise to be accountable for decisions and for any consequences.

Causes of illness have been described as an imbalance between hot/cold, food deprivation, and the evil eye. Food plays a central role in illness, it can be the cause of illness or it can also be a cure as it is providing love and support from the family during their illness.

Birth and death rituals are very different from the Western world. Birthing is seen as a female role, and the sooner it is completed the sooner the woman can continue with other duties. Death rituals are very specific; the family is not willing to consider that the person may be dying because it would be going against Allah (Meleis, 1981).

Shanahan (1995) studied the knowledge base of Anglo nurses with cultural characteristics and diversity in the Vietnamese patient. This study was conducted in a nursing department in Australia where the prominent culture was Anglo, but there had been a significance increase in migration of Vietnamese people. Cultural characteristics identified in the Vietnamese include a strong sense for family, with all decisions being made by the family and strong involvement in the care of an ill person. A strong influence of religion, (i.e., Buddhist, Catholic and the philosophy of Confucius) provides beliefs about spirits that can be the causes of illness. Harmony is another value that is important. Maintaining respect, such as not questioning the physician and keeping emotions in control is expected.

Illness is seen as a disharmony within the universe. An imbalance between yin and yang leads to illness. The Vietnamese believe that illness can be a natural cause, which can be averted if prayers and sacrifices are made. Stoicism makes a person strong in character according to the Vietnamese. However, this may also delay in seeking care until it is too late. This study was interesting to this researcher because of the outcome. The nurses were asked to complete a semi structured questionnaire regarding cultural knowledge about the Vietnamese population. Most of the respondents did not see any differences in culture or were very limited in their knowledge. Therefore their care to these people was basically the same. They all believed that the patient should conform to the Anglo mode of health care. Those who responded that they used the family as interpreter, did not grasp the importance of the role in caring for the individual that family had for this group.

Reviewing these studies revealed that each culture is different, but also some similarities to the Hispanic culture were identified. The importance of acknowledging the differences in each culture and incorporating them into the care of plan can only make the care more culturally congruent.

Hispanic Culture and Health Care Values

Hispanics comprise the fastest growing ethnic group in the United States. Hispanics form a diverse group and consist of Mexican-Americans, Puerto Ricans, Cubans, and Central Americans. The Mexican-American group resides mainly along the southwestern states of California, Arizona, New Mexico, and Texas; Cubans reside in Florida; and Puerto Ricans are found in New York. When evaluating the Hispanic

population, it has to be recognized that because of its diversity, the sub-populations cannot be collapsed into one larger Hispanic cultural grouping. While there are some commonalities found among Hispanic subgroups, each has its own unique characteristics and is therefore, by definition, its own culture. The majority of Mexican-Americans are relatively a young population ranging from 24-37 years of age, although an increase in elderly is beginning to be seen. This population tends to have a lower education level than Anglos. In 1997, only 54.7% of Hispanics had a high school education in comparison to 86.3% Anglos and 75.3% Blacks. Due to their proximity to the border and education level, most Mexican-Americans are in low-paying jobs such as laborers, repair occupations or service occupations, and have no health insurance (US Bureau of the Census 1994; Delgado, 1995).

Mexican-Americans comprise 63% of the total US Hispanic population. Arizona is one of the seven states in the US with over 1 million Hispanics (Mexican-Americans) which is 22% of its total population. Arizona was one of the top five states that had increased the Hispanic population from 1990-1998. The close proximity to the border and the instability of economics and government in Mexico has led to an influx of immigrants to the US (US Census Bureau: Hispanic Population : March 1997 Update). As of October 1999, Arizona has been ranked fourth in states with the highest Mexican-American Hispanic population.

Central Beliefs of Mexican-Americans

Mexican- Americans can be identified by cultural characteristics that are both unique to this population and shared with other Hispanic subpopulations. These

characteristics provide a framework or a lens through which all experience, including health and illness are viewed. Gaining a basic understanding of the characteristics is necessary in order to provide care that is culturally relevant and competent.

Communication and Language. Most Mexican-American speak Spanish as a primary language, whether it is formal or slang (combination of English and Spanish) and also speak English (US Census, 1993). When seeking health care, the English speaking family member may be asked to translate. However, this can cause role conflict especially if it is a younger family member translating for an older person or parent (Lipson & Steiger, 1996). The translator may also not be able to translate correctly due to sensitive issue being discussed or because their perception of the problem may be different than what the patient is saying. If a different interpreter is used, meaning of translation may also be lost due to different dialects in Spanish and also terminology used in medical field may have different meanings in Spanish.

Economics and work habits . Fifty-five percent of Mexican –Americans have a high school diploma and 47% of them work in technical or sales jobs, or in low-paying jobs or jobs that do not provide any or very limited health benefits (US Bureau of the Census,1997). While the Mexican-Americans are very hard workers, they struggle financially to support their families. Median income reported in 1997 was $26,628 in comparison to Anglo-American families' median income of $38,972. Poverty levels were reported at 27% for Hispanic in comparison to 11% for Anglo-Americans (US Census, 1997). If a choice between buying food and seeking health care has to be made, feeding the family will be the priority because it is seen as a basic need in comparison to

seeking health care. Therefore it is not uncommon for them to wait and seek health care until a crisis occurs. If illness or symptoms are present, they will try home remedies first, such as teas and over- the- counter medications. The 1997 Behavioral Risk Factor Surveillance System (BRFSS) reported that in Arizona, 26% of Hispanics did not have health insurance and 14% Hispanics reported not having routine physical examination (MMWR, 2000).

Relationships. Family has a very important role in this culture. Family means everyone: the nuclear family, extended family (aunts, uncles, grandparents) and community relationships such as *compadres* and *comadres* (Lipson,1996). Godparents take their roles very seriously and promise to maintain a religious and social obligation to the child and the family. Many decisions are not made until all the family has gotten together to discuss; the family is a very strong sense of emotional support. During illness, the whole family will discuss any medical treatment and then make a decision as a unit (Gordon, 1994). It is not uncommon to discuss with the *comadres* any female problems or children's illnesses and what actions to take. Lay women have been used as role models to assist in distributing health information to other women in the neighborhoods (Mahon, McFarlane, & Golden, 1991; Suarez, Nichols, & Brady,1993).

Beliefs and Attitudes. The majority of Mexican-Americans are Catholic. They have a high respect for the *Virgen de Guadalupe* (patron saint of Mexico) and offer many of their prayers to her. It is not uncommon to see shrines in their gardens or murals painted on the walls of their homes honoring the *Virgen de Guadalupe*. "*Mandas*" are promises made to the saints or *Virgen de Guadalupe* to intercede during their time of

need. If illness improves, the promise has to be kept. Usually a family member will accompany the person on their trip to repay the "*manda*". Special clothing such as the brown habit of *San Martin de Porres* might be worn for a specified time as a reminder of their intercession.

There is a strong belief in God's will (*si Dios quiere, si lo manda Dios*) and at times a feeling of fatalismo, a belief that they have no control over what happens to them in their lives (Fishman, Bobo, Kosub, & Womeodu, 1993). Special relics i.e., religious medals, rosaries, and "*milagros*", and "*escapularios*" will be used especially during illness. Some of these relics "*milagros*" signify the area that is affected, i.e. the leg, heart, and when illness is over , these relics are taken to the statue of the saints they were praying to intercede for them. A personal experience remembered as a child was when my father had a cornea transplant. My parents both prayed fervently to Saint Lucia who was the saint for sight. I recall seeing a picture of the saint on the dresser; what impressed me was the fact that two eyeballs were on a platter next to her; which symbolized what she would intercede. Upon his recovery, my father went to the church and requested several masses in honor of this saint in thanksgiving for her intercession.

Personalismo is a belief that in order to establish trust, one has to take time and have conversation before "getting down to business". One must find out how the family is doing, and also what has happened in their lives before dealing with the current issue. This action displays warmth and caring. Today's rapid pace of health care and the understaffing that contributes to a nurse's hustle and rushed nature may impact negatively the care that is being provided to Mexican-Americans. Mexican-American patients and

their families may interpret these behaviors as non caring. Having open communication does take time, but Mexican–Americans are more receptive to those who do take time and do not rush.

Respeto (being respectful towards other due to age, social position) and *simpatia* (being friendly, caring, approachable) are highly valued (Burk, Weiser, & Keegan, 1995). Being polite and respectful during interactions, especially with the elders, are of the utmost importance. Elders should be formally addressed when spoken to. In the US healthcare system, it is not uncommon to call someone by their first name; in the Mexican-American culture this would be interpreted as being disrespectful, especially when addressing an elder. *Respeto* also governs behaviors with health care professionals. Out of respect for authority or the doctors, the Mexican-American may be seen as the person being willing to agree to anything in order to please without really understanding the information being presented (Caudle, 1993). Physicians' instructions for medications or treatments may not be followed or used because the medications could be in conflict with the Mexican-American beliefs, but the Mexican-American will acknowledge understanding to the physician out of respect and need for maintaining a positive interpersonal interaction. Issues of noncompliance are often a problem for physicians in the US healthcare system.

Machismo is an attitude of males or male chauvinism shown towards women. Men will tend to be aggressive or assertive to make known that they are a powerful head of the household, especially in decision making situations (Scholz, 1990). This attitude is instilled during childhood years and is a distinguishable trait between the two sexes.

Males will try to prove their masculinity by an increase in alcohol intake, substance abuse, refusal to use condoms, or use of prostitutes. *Machismo* may be seen as a negative aspect of the culture, but could be used in a positive manner in dealing with health care issues. If health caregivers acknowledge *machismo* when addressing the males of the household, identifying them as responsible for and caring of the family, then males may be willing to participate in health education (Caudle, 1993).

Food. Main staples found in most Mexican-American meals are beans, corn *tortillas* and rice. *Chili* is always available, whether as a main meal or as a "*salsa*" with onions, tomatoes and *cilantro*. *Nopalitos*, a type of cactus, are also very popular. During illness, "*caldo de pollo*" (chicken broth), *atoles* and *sopitas*, and teas of *yerba buena* and *manzanilla* will be provided (de Paula, Lagana, & Gonzalez-Ramirez, 1998). "*Antojos*" or food cravings are always satisfied for the pregnant women because of the fear of having a deformed baby.

Health and Illness in Mexican-American Culture

Health and illness are viewed from a physical, mental, religious or magical perspective. Health is believed to be a gift from God or a result of good fortune (Kosko & Flaskerud, 1987). Health is also seen as a balance among the four humors of the body (blood, phlegm, black bile, and yellow bile). A healthy person looks good, eats well, is physically active, and is able to do their daily routine (Leininger, 1978). Illness is viewed as a punishment from God due to some wrong doing or sin. However, God can also be a source of help to the individual who has the illness, offering solace for their suffering.

(Becerra & Iglehart,1995). Many Mexican-Americans believe that if God wills it for them to be cured, then they will get better (Leininger, 1978; Rehm, 1999). Illness is also seen as an imbalance of the hot and cold, as a psychosomatic cause due to an emotional experience, or as a magical illness due to the supernatural or a hex.

Various cultures have their own specific folk illnesses. The Mexican- Americans have five major folk illnesses that are commonly referred to in any discussion about health. The older generation will probably have a stronger belief than younger members. Physical illnesses are related to the hot and cold imbalance theory. These illnesses are related to causes, including being exposed to "cold air", eating the wrong type of food, i.e. being too hot (not in temperature or spicy) or overeating "cold" foods. Illnesses caused by "hot" foods are stomach ulcers, "*empacho*"(indigestion) and "*colico*" (stomach cramps). In order to treat these illnesses, one must use "cool foods", such as teas, to get rid of the excessive heat in the body. With "cold illnesses", the opposite is true. Cold illnesses are caused by exposure to wind, an earache, or a body part being cold, arthritis. Recognizing foods that are for "cold" illnesses, such as chili and wheat, would help the health care provider in planning treatment and encouraging patients to follow through with treatment because their beliefs would not be in conflict with the treatment plan (Caudle, 1993; Gonzalez-Swafford & Gutierrez, 1983; Pousada, 1995).

Susto or fright is when one experiences a stressful event or witnesses a traumatic event that then causes symptoms of anorexia, insomnia, hallucinations and weakness. It is believed that a spirit has entered the body. Herbal teas, prayer and even having a "*barrida*" (spiritual sweeping) may be done as part of the treatment.

"*Mal de ojo*" or the evil eye is another folk illness. The belief in this illness is that someone has cast a spell, especially on a child, as they are being admired but not touched. Symptoms include fever, vomiting, excessive crying and listlessness for no apparent reason (Marsh & Hentges, 1988). A traditional treatment is a *barrida* or spiritualistic sweeping of the body with eggs, lemons, and bay leaves, accompanied by prayers.

"*Caida de Mollera*" or fallen fontanelle is caused when an infant is tossed around, or is pulled away from a mother's breast too quickly. The soft palate sinks in and the infant has trouble feeding or swallowing. Other symptoms that occur are diarrhea, fever, and restlessness. Some common home remedies would include turning the baby upside down or pushing the thumb up on the soft palate.

Mexican-Americans may seek medical help through various avenues before consulting a professional doctor. Most commonly, the female of the household should know the cause of an illness (Gordon, 1994). For simple ailments such as stomach cramps, common home remedies, teas and herbs such as *yerba buena* (mint) and chamomile, may be used by these women. If ailments are perceived as more serious, then the woman will seek help from her mother or grandmother. Another resource may be the community's *curandera* or healer.

Curanderos are considered to have special gifts for healing which came from the power of God (Leininger, 1978). They are mostly consulted for depression, anxiety, "*mal de ojo*", ulcers and musculoskeletal ailments. Curanderos use herbs, massage, prayers, and rituals and also have a discussion with the individual about the problem (Gomez & Gomez, 1985). *Curanderismo* is successful because it is within the

community; it understands the beliefs, is easily accessible, and cost is reasonable. The psychological impact of *curanderismo* is very important, because people who seek out the *curandero* are able to share their feelings and may discuss personal issues (Gomez & Gomez, 1985; Scholz, 1990). The Anglo medical profession is also sought, particularly when the condition has not improved. However, those visits usually tend to be emergent crises in the emergency rooms.

Literature that Examines Hispanic and Mexican-American Health Care Beliefs

The literature contains several recent studies about the Hispanic culture. These studies have primarily examined common and shared cultural traits among Hispanic population. There are limited studies on cultural values specifically on Mexican-Americans, as subgroups of the Hispanic population. Mikhail (1994) conducted an exploratory study to identify Hispanic mothers' initial sources of advice and help with children's illnesses, to determine beliefs about the cause of illness and how these illnesses were managed. Of the women (N=100) interviewed, 81% were born in Mexico, 17% born in the US with Mexican parents, and 2% were born in Central America or South America. These women attended a rural health clinic and had at least one child of five years of age or younger. Education level of these women was low; 58% had eight or fewer years of schooling and 34% had 9-12 years of education. The majority of the women (64%) did not work. Forty percent of these women had lived in the US for more than 10 years, 29% having lived six to ten years and 26% for two to five years. The semistructured interview was conducted by a trained bilingual Hispanic nurse. Only 12 interviews were conducted in English; the rest were done in Spanish. Mikhail found that

mothers, relatives, husbands were the first source of advice (67%) and that only 32% would seek advice from physicians or nurses. Traditional causes of fever, such as hot and cold imbalance, were mentioned by these women. They also identified infection as a cause for fever. The women also stated that poverty and lack of health care led them to use of folk/home remedies first, and if it did not help, they would then seek help from a physician as a recourse. Mikhail also found that folk healers were used for "*empacho, susto,* and *mollera caida*".

Zaldivar and Smolowitz (1994) studied Hispanics other than Mexican-Americans to determine whether they believed that religious and spiritual factors influenced the course of their disease (diabetes) and if they incorporated folk medicine into their treatment. A convenience sample of 104 subjects (37 males, 67 females) participated in the study. These subjects were being treated for diabetes in the medical clinics or diabetes education program and were well aware of long term complications. The subjects reported living in the US for 2 to 76 years ($\bar{x}$ = 26 years). Mean education level was fifth grade. The participants answered a questionnaire, which focused on religious, spiritual and folk medicine beliefs, which had been developed by the researchers. The researchers found that the sample had a fatalistic acceptance of diabetes; 78% of participants reported that they believed they had diabetes because it was God's will and 64% believed that they would lose their eyesight because it was inevitable. Most of the participants who were from Puerto Rico did not seem to believe as strongly as the Mexican-American in the use of herbs or any folk remedies for treatment.

Ailinger (1988) studied folk beliefs about high blood pressure in an Hispanic community in Washington, DC. Subjects (n = 330) had emigrated from Central America, South America and Cuba. Age ranged from 18-89 years; 59% were females. Interviews, using an interview guide, were conducted in the homes of the subjects by bilingual interviewers. Questions related to the subjects' perception of what caused high blood pressure, specific illnesses that caused it and specific treatments. Respondents (n = 271) reported that *colera* (anger) and (n = 239) that *susto* (fright) were contributing factors. Treatment options identified by the subjects included change in climate (73%), eating certain fruits such as bananas (65%) and drinking chamomile tea (39%). The author claimed that clients who believe that susto, an uncontrollable force, is a cause of high blood pressure might not seek medical help. They suggested that health care professionals allow them to take their own teas as well as encourage them to take medication in order to improve adherence to prescribed medical treatments.

Gordon (1994) did a mini-ethnography study to describe some common Hispanic cultural health beliefs. Subjects (n=11) were adult females who were currently enrolled in a community class to learn English. A focused group semi-structured interview was conducted by the researcher who was bilingual. Questions focused on identifying Hispanic health beliefs that affect health care practices and what actions were taken to treat symptoms of illness. Gordon found categories of home remedies for common conditions, remedies for less common ailments and a process described by the subjects for deciding what actions to take similar to the nursing process. Values and beliefs that had been learned and were shared by both the caregiver and ill person were used to assess

the illness, with the outcome always being positive, i.e. "they felt better, or never had those problems again." Most of the remedies that were described were familiar to most of the subjects and could also be found in popular herbal books.

Health Promotion and Disease Prevention

The delivery of health care has seen many changes. Historically, health care was seen as caring for someone at home. As technology developed, the focus of health care became one of curing a disease. Therefore, the setting was changed to the hospital where the individual received his care and was considered a passive recipient. However, as healthcare became more specialized, multiple services were being provided with no control as to cost and at times duplication of services. Subspecialty areas such as intensive care units and dialysis units were developed with the optimal goal to cure the acutely ill at whatever cost. Appropriateness of services and the prevention of those diseases were not addressed until healthcare costs became exorbitant. Due to the advancement of technology and pharmacotherapeutics, people were being successfully treated and living longer; and a rise in the incidence and prevalence of chronic diseases occurred (Banta & Gelijne, 1987).

As more people were diagnosed with chronic illness, the focus shifted to living with a chronic illness. The emphasis of care became one of health promotion and prevention of secondary disease complications such as diabetic foot care. A focus on patient participation in health care issues also developed when health was viewed not only as the presence or absence of disease, but as a changing state which needed the

active involvement from the patient. This led to the advent of care being provided in community centers, outpatient clinics, and parishes.

With soaring costs of healthcare, managed care has become a very popular method to capitate services in order to contain costs. Health care organizations have begun to realize the benefit of keeping people healthy by promoting early prevention. Health promotion/disease prevention activities can lead to a decrease in hospitalization days and therefore a cost savings (Singleton, Green-Hernandez, & Holzemer, 1999). However, health promotion and disease prevention can only be as effective as the consumer permits; these activities must be valued by the person and be a part of their health care belief system (Pender, 1996). It is important to note that the traditonal Mexican-American does not stress prevention but instead lives for the present (Villaruel, 1995).

The ongoing need to reach out and promote healthy lifestyles, and reduce the risk factors for cardiovascular disease, hypertension, and diabetes mellitus cannot be underestimated. Health risk factors such as smoking, obesity, sedentary lifestyles, and substance abuse need to be targeted in order to decrease soaring costs and increase longevity (Aguirre-Molina & Ramirez, 1993). In fact, *Healthy People 2000*, a national health promotion and disease prevention initiative, was established in the United States in 1990 to improve the health of all Americans through prevention. Overall goals included increasing the span of a healthy life, reduce health disparities and achieve access to preventive services for all Americans (DHHS, 1998). *Healthy People 2000* basically shifts our focus from illness to promotion of health and disease prevention (Northam,

1996). Currently two main goals have been established for *Healthy People 2010* : "Increase Years of Healthy Life" and "Eliminate Health Disparities". These goals will be supported by the concepts of promoting healthy behaviors, protecting health, achieving access to quality health care, and strengthening community prevention(HHS,1998).

In reviewing the statistics in *Healthy People 2000* for diabetes, the facts are alarming. There is an increase in Type II Diabetes as well as the complications associated with this disease all leading to increases in costs. Minorities are seeing an increase in this disease and its complications within their populations. However, secondary preventive services such as those recommended by the ADA in screening for diabetes, i.e. monitoring glucose control, yearly eye exams, frequent foot checks and blood pressure monitoring that are available to them are not being utilized (DHHS, 1998). Potential reasons for not utilizing services could be lack of transportation, economic issues such as cost and lack of insurance, language barrier, mistrust of the health care system or misunderstanding of the information being provided due to it not being culturally consistent with their beliefs, lack of bilingual and bicultural health providers, or even lack of knowledge that services are available (Aguirre-Molina & Ramirez,1993; Bassford,1995; Flores, Bauchner, Feinstein, & Nguyen 1999; Northam,1996). Addressing these barriers might help improve the use of the services that are available, lead to decrease costs and also improve quality of life.

Health Promotion/Disease Prevention in the Mexican-American Population

The Mexican-American population has several health issues which need to be addressed. There is a high incidence of Type 2 Diabetes Mellitus, Hypertension, Obesity,

HIV, substance abuse, lead poisoning, and cervical cancer (Furino & Munoz, 1991; Ginzberg, 1991; Novello,1991). It is also known that Mexican-Americans do not utilize health prevention or screening clinics and usually are seen in the emergency room when they seek medical care (Bolen , et al., 2000; Delgado, 1990,1995). Poverty and lack of insurance coverage are two powerful barriers to care in this population. These factors encourage individuals to postpone seeking help, hoping that the condition will improve. In addition, they will have probably consulted with friends or family and might have even tried folk remedies prior to seeking Anglo health care. If the condition worsens, they might go to the emergency room as a source for primary care for help. Therefore, the opportunity for primary prevention would often pass before the Mexican-American population would seek professional assistance (Aguirre-Molina et al,1993; Mikhail,1994; Ramirez, Villareal &Suarez, 1995).

The Hispanic Health and Nutrition Examination Survey (HHANES) of the National Center for Health Statistics was conducted in 1982-1984. This was the first major and specific study to examine the health and nutritional status of the Hispanic population in the US. This survey was not designed as a national survey, but instead three Hispanic subgroups (Mexican –Americans, Puerto Ricans, and Cubans) were selected to be studied in specific areas of the US. The survey found that only 25% of Mexican-Americans had a physical examination within the past year. Language and access to services (lack of health insurance, no specific provider) were identified as potential causes in comparison to the other two subgroups who spoke English and had insurance either private or Medicaid (Solis, Marks, Garcia, & Shelton,1990). The use of alternative

healers and dissatisfaction with care provided have also been considered as a potential reasons for not utilizing health services. However, the HHANES study did not find this to be true. Only 4% of Mexican-Americans reported using *curanderos*; although many are not willing to disclose the use of *curanderos* (Higginbotham, Trevino, & Ray, 1990). This study provided information that would stimulate further research as health care issues became known.

There is limited research that examines the impact of cultural beliefs and values on health promotion and disease prevention. Language and lack of bilingual health care professionals are barriers to healthcare access that have been noted (Ramirez et al. 1995). However, few studies have addressed whether the cultural beliefs and values are a reason that Hispanics do not access preventive services. In a qualitative study, Flauskerud & Calvillo (1991) described the health beliefs of Latina women about the acquired immunodeficiency syndrome (AIDS) and the relationship these beliefs had to their traditional beliefs about illness and treatment. The sample of Latina women (n = 59) were recruited from waiting rooms in a community nutrition program. The women had a mean educational level of ten years. Semi structured focused groups and interviews were conducted by three trained bilingual Mexican-American nurses. Participants answered a checklist of 79 items addressing causes of AIDS and prevention and treatment. General discussions were held using the responses found on the checklists. The group leaders also taped the interviews and took notes of the discussion. The women were well informed on causes of AIDS through public media, but had misconceptions about transmission and prevention. They also found that traditional Mexican-American beliefs also played a role

in misinformation. Several of the prevention measures were similar to what is known in the public: celibacy, one sexual partner, not using drugs. However, some subjects felt that commonly prevention measures for AIDS transmission included eating fresh fruits; purging body with herbs and laxatives on a regular basis; and maintaining spiritual and physical wellbeing by having faith and regular confession, penance and devotion to the Saints which were all offering protection by God. An implication from this study is that educational programs on prevention of AIDS should incorporate culturally congruent beliefs in the topics covered. Another suggestion provided by the participants was to include the women in the education process, as they in turn would provide the information to the family.

Fatalism, where the control of destiny is not on the individual but external influences, is a strong cultural belief in the Mexican-American population. The belief that they do not have any say in what happens to them since it is in God's hands, may prevent the Mexican-American from seeking any preventative actions either for a disease or for complications from a primary illness. Cancer is such a disease. Mexican-Americans are less likely to talk about it, or might not want to touch someone with cancer or even consider it a death sentence. Mexican-Americans fear dying from cancer, but also prefer not to be informed about an incurable cancer. They do not share any information about any diagnosis or prognosis with the patient for fear that the patient would give up or worry. On a personal note, this researcher has a cousin who was recently diagnosed with five brain tumors. The immediate family was notified of the extent of the cancer, but the individual was told that he only has one large tumor. His faith in God, herbal treatments

and spiritual healers are all being used in conjunction with modern medicine of radiation and chemotherapy. Although he is using all means to find a cure, his attitude at this time is that it is all in God's hands.

The concept of fatalism was studied by Chavez, Hubbell, Valdez, & Mishra (1997) in their study of self-reported use of Papanicolau Smears. Ethnographic interviews and a cross-sectional telephone survey were the methods for this study. Participants for the ethnographic interviews included 94 Latinas and 27 Anglo women who were selected by bilingual female investigators who had made presentations to organizations such as churches, and social functions. Interviews were audiotaped and also presented in either language. These interviews were used to explore cultural beliefs regarding risk factors for cervical cancer and were analyzed specifically for the frequency of fate being mentioned as a risk factor. The telephone survey was then implemented to determine the generalizability of the ethnographic findings and also to look for further factors that could influence fatalism. Subjects for this section of the study included 803 Latinas and 422 Anglos who were randomly selected. Results from the larger survey found that Latina women who had immigrated were more likely to have fatalistic beliefs than the Latinas born in the US and Anglo women. Interestingly, Latinas who were not insured believed that there was very little they could do to prevent cervical cancer, also stating that they would not want to know. Some of the reasons given for not having a PAP exam were not having any gynecological problems, never had sex, and did not need one until planning a baby.

Tortolero-Luna, Glober, Villareal, Palos & Linares (1995) conducted a telephone survey to assess ethnic differences between Hispanic and Non-Hispanic white women regarding self reported cancer-screening practices and knowledge and attitudes about cancer. A random sample yielded 233 Hispanic and 332 Non-Hispanic women. Statistical significant differences were found in health knowledge, attitudes and beliefs between the two groups. Hispanic women in both age groups (35-49 and $\geq$ 50) were more likely to see an illness as a matter of fate and that it was luck that determined their ability to get better fast. Hispanic women reported that they were less likely to practice a monthly self breast exam, to have a complete breast exam, and a fecal occult blood test as prevention activities.

Morgan, Park, & Cortes (1995) assessed knowledge, beliefs and behaviors about cancer in a group of 876 Hispanic women who were home health attendants in New York City. Questions about cancer beliefs, knowledge and barriers on the survey questionnaire were analyzed with descriptive analysis and an open–ended question about how people got cancer was evaluated for themes. Themes that were identified were: (a) carelessness (70%); (b) beliefs of harm to the body such as a hard knock to the breast (20%); (c) heredity (20%); (d) body chemistry (8%); and (e) environmental/chemical (8 %) (Morgan, Park, & Cortes, 1995). In this study, knowledge about cancer and the screening tests, pap smear and mammograms, was an important predictor for use of preventive services. This study also found that urban Hispanic women believed that bumps and bruises caused cancer and that if surgery was done, the cancer would spread. This implies

that misconceptions about cancer could decrease the numbers of women who would go for further medical care due to fear of cancer spreading.

One of the barriers to screening for breast and cervical cancer reported by Latina women in a Colorado research study was the spouse's non supportive attitude (Flores & Mata, 1995). Flores and Mata used focus groups of Latino males 18 years and older who were married or living with a Latina who was 18 years or older. The participants were recruited through newsletters, mailings, newspapers and church bulletins. A broad cross section of Latinos was recruited to obtain a variety of possible view points, experiences and understandings from a diverse group based on education, age, occupation and acculturation. The focus group questions were derived from the focus group data from a previous study. Fourteen focus groups were held which varied in size from six to fourteen. The co-researchers who were also bilingual conducted the focus group discussions. Areas studied were (a) the males' perceptions of their own health, and of their partners, (b) involvement in their partners' health seeking behavior and (c) whether men talked with their partners about health related issues and encouraged or discouraged obtaining access to care. Some common themes arose from this study (a) health was defined as a capacity to maintain physical work and a lack of symptom or a disease; as men aged over 50 a spirituality perspective was also mentioned, (b) there were three modes of knowledge noted among the groups of Latinos (1) those with limited knowledge and disinterest in their partners health seeking behaviors, (2) those who supported their partners in seeking care but with limited knowledge about the health issue, and (3) those who were genuinely interested in their partners' well being and

health. Of interest, the Latinos who were older and in strong relationships that were over 20 years old were the participants with the genuine concern and also the ones who communicated with their spouses about health issues. Of interest also, the study found that the men felt that a woman's problem should be addressed by the woman herself or discussed with her siblings or mother or grandmother. This study found that using the concept of family involvement in health prevention practices might increase the use of services.

Summary

This chapter described in detail Leininger's Cultural Care theory, and how its use could help researchers evaluate the Hispanic culture, characteristics and beliefs and plan screening programs for disease prevention which would be culturally sensitive. Using the cultural beliefs of Mexican-Americans when planning these services might increase use of services because there would be cultural consistency between health promotion/disease prevention services and the people served. Allowing participation of the Mexican-American in the development of some of these programs would also provide ownership for them. In addition, literature that identified Hispanic and Mexican-American cultural and health beliefs and health promotion practices was reviewed. It was noted that various barriers for accessing health care were identified, however limited studies on Mexcian – American cultural values and their impact on utilization of health services have been done and were recommended for further research. Statistics reviewed also indicated that Mexican-Americans are at a greater risk for chronic illnesses like diabetes, hypertension, kidney failure and HIV along with their debilitating complications, but are also less likely

to seek secondary preventive services in comparison to the Anglo population. Therefore, Leininger's cultural care theory and Sunrise Model can be used as an organizing framework, to obtain information about cultural values and their impact on Mexican-Americans' use of preventive services to prevent complications from chronic illnesses.

CHAPTER THREE

METHOD

Introduction

This chapter will discuss the method and design of this study. Other areas to be addressed will include sample size, setting, data collection process, and protection of human subjects, and description of data analysis. Rigour and trustworthiness in qualitative research will also be discussed.

Method

This study was a descriptive ethnography. This type of ethnography focuses on descriptions of cultures and then through analysis discovers patterns, categories and themes (Holloway & Wheeler, 1996). According to Spradley (1979) "ethnography means learning from people" (p.3). Leininger (1985) believed that "ethnography is the systematic process of observing, detailing, describing, documenting, and analyzing the lifeways or particular patterns of a culture in order to grasp the lifeways or patterns of the people in their familiar environment" (p. 132). Ethnonursing, the term used by Leininger to describe ethnography in nursing, is a qualitative method in research to study cultures that also generates nursing knowledge. By using Leininger's Sunrise Model as a guide, this researcher developed an interview guide incorporating questions relating to religious and philosophical views, kinship and social factors, and cultural values and lifeways that could be influencers on decisions made by the Mexican-American towards health care practices.

Ethnography can also be done on a macro or micro level. A micro ethnography study is of a smaller scale with a very narrow focus. A Macro study is broader with a much larger sample size and a longer time period of study. Due to time constraints this study was a micro ethnography with a very small sample size and narrow focus.

In ethnography, the researcher is the most important tool. By participating directly in the culture through observation and interview, the researcher is able to identify, interpret and analyze the culture being studied (Streubert & Carpenter,1995). By observing and requesting clarification of any event, the researcher is able to get the interpretations of activities as the members view them. Ethnography allows for the "emic" view to be described. Emic view is the insider's view which reflects the language, beliefs and experiences of the culture being studied (Streubert & Carpenter, 1995). This researcher studied the emic view through observations, interviews and any records or cultural artifacts available to the researcher. It was also important for this researcher to also reflect on own experiences in the Mexcian-American culture in order to not make assumptions from previous knowledge about this culture.

Sampling

A purposive sample was used in the study. This type of sample is selected based on a certain criteria established which will assist the researcher obtain the information they are seeking. The individuals selected in an ethnography study are key members of the culture that is being studied who have knowledge about the culture, its rules, language and rituals (Holloway & Wheeler, 1996). Sample size for this study was six adults, three males and three females. Five of these individuals had the diagnosis of diabetes mellitus

and one individual was diagnosed with hypertension. This sample was from the southwestern region of the United States. Criteria established for participants in this study included:

1. 40-64 age group
2. Individuals of Mexican American descent
3. Able to speak English or Spanish
4. Presence of a chronic illness: diabetes, or hypertension

The researcher believed that participants in this age group would be more traditional in their ways and be more culture oriented. This was verified by Ms. Dokken and Dr. James when asked to describe their average Mexican-American patients.

Setting

Fieldwork for this ethnography was done in Tucson, Arizona, located in the southwest region of the United States, at a convenient location for the participants (which was their homes). Most of their homes were located in the south side of Tucson which is considered to be a highly populated Mexican-American area. Being able to make observations and interview in the participant's home allowed the researcher to gain information about the culture that might be missed in an office room.

Human Subjects Protection

Human Subjects protection was approved by Human Subjects Committee at the University of Arizona (Appendix A). Initial contact with the Diabetes Clinic and the Renal Clinic at University Medical Center was done to obtain letters of cooperation for referral of clients for this study (Appendix B).

Once permission was granted from the Human Subjects Committee, participants selected for this study were verbally informed by this researcher of the purpose of the study, their voluntary rights to participate and right to withdraw at any time. Participants were also informed that confidentiality would be maintained. Participants gave consent for interviews to be taped. Any identifying information was deleted, pseudonyms were used, and any audiotapes were erased once the information had been transcribed. A written disclaimer was provided to the participant which provided them the name of a contact person if they had any further questions. (Appendix C).

Data Collection

Initial contact for referrals was done with Betsey Dokken,RN,NP in Diabetes Clinic and Dr. Sam James of Renal Clinic to request their assistance in referring clients for this study. Once participants, who met the criteria established, were identified and referred by Ms. Dokken and Dr. James, they were initially contacted at the clinic by the researcher to verbally explain the purpose of the study, how data would be collected, and to obtain consent. If participants agreed to participate in the study, an appointment was set up to do an audiotaped interview. A letter describing the study was also provided to the individuals so that they could think about the subject prior to the interview.

During the interview, this researcher collected data by observations, field notes and audiotape. All interviews ranged 60 minutes in duration. A semi structured interview guide was used (Appendix D) which was developed by using Leininger's Sunrise Model focusing specifically on the religious and philosphical factors, kinship and social factors and cultural values and lifeways. All interviews were conducted by the

researcher who was bilingual; one interview was held in Spanish, the rest were done in English. Each interview was initiated with the following grand tour question "tell me about when you were first diagnosed with your illness." Additional questions on the role of the family during illness, spiritual beliefs and foods used were asked using the interview guide.

Data Analysis

Once data was collected, the tapes were transcribed by the researcher to begin the immersion into the data. Spradley (1979) refers to analysis as 'the systematic examination of a culture to determine its parts, the relationship among parts, and their relationship to the whole' (p.92). The steps taken in this research study were: (a) domain analysis, (b) taxonomic analysis and (c) theme analysis. This was done by immersing oneself in the data collected by reading and re-reading the field notes, journal entries and transcriptions, looking for similarities which can be grouped together (domains), comparing and contrasting categories, and searching for a relationship within categories and grouping these together (taxonomy). Cultural themes and patterns were also identified. Interpreting and searching for meaning of the data to the culture was the final step (Holloway & Wheeler, 1996). A confirming interview with the participants was done to verify the accuracy of the summary of the data and interpretation.

Trustworthiness

Establishing trustworthiness in qualitative research is difficult due to its subjectivity. However, Lincoln and Guba (1985) have provided criteria for evaluating

qualitative research using: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability.

To ensure that credibility is established, accurate identification and description of the participants involved in the process must be done. The researcher's role should be described fully by including prolonged involvement in the study, follow-up with participants on the findings to verify accuracy (member check), and ongoing observation. This researcher was well informed about the Mexican-American culture as she had been born and grew up in Mexico. Being aware of the health practices in Mexico and cultural beliefs, allowed her to make observations and ask for verification. Being bilingual , this researcher was able to conduct the interviews in both languages, English and Spanish which provided her with the cultural terms. The thesis chair and a committee member who is an experienced ethnographer reviewed data analysis to verify its accuracy.

Transferability is being able to generalize the findings from the sample to a general population. Only the reader can decide this, but this researcher provided enough information on the data that was collected, and the analysis process, to allow the reader to determine if results could be transferable to another setting.

Dependability is related to credibility of the findings "how reliable are the results". This criterion is the same as validity in quantitative research (Lincoln& Guba, 1985). There is no dependability if the results are not credible. The thesis chair and committee members monitored the audit trail of the data collected and journal notes describing the analysis process.

Confirmability can be determined through the audit trail of the process that occurred left by the researcher which can be followed by the reader. Documentation of the process that occurred was kept via field notes, journal entries describing thought processes as analysis was being done. This audit trail was monitored by the thesis chair and committee.

Summary

This chapter discussed the research method, sample size, setting, human subjects protection, data collection procedure and data analysis for this study. Establishing trustworthiness was also included.

CHAPTER FOUR

RESULTS

Chapter four describes the sample and the results of the data analysis, including the domains, taxonomies and the cultural themes that emerged.

Sample Description

The following characteristics were obtained through responses by the participants to the demographic questions, observations made while conducting the interview and from the field notes.

A purposive sample of six participants, three males and three females, were used in this study. Ages ranged from 52 to 64 years (mean age for males = 57, mean age for females = 57) and all were second or third generation Mexican-American, except for one individual who was first generation. Five participants had diabetes and one had hypertension. All had previous family members who had been diagnosed with diabetes or hypertension. Educational level ranged from first grade to college degree. Two of the females were homemakers, one a retired speech therapist. One male still worked in construction, the other two were retired or on disability and had worked in construction and the mines or military. Four of the six participants had health insurance. All participants were bilingual, except for one individual who spoke only Spanish. Pseudonyms were given to all participants to protect their identities.

"Rafael"

Rafael was born in Yuma, Arizona and is a third generation Mexican-American; his parents were also born and lived in Arizona, but the grandparents were from Mexico.

Rafael was the only son of five children. He remembers being sick as a child with infantile paralysis for six months and being a "spoiled brat". He served in the military for three years and when he came back, completed his GED. Rafael has been married twice, has grown children, is presently raising two grandsons, ages seven and 13, and is very involved in their activities. In fact, Rafael admits that he is able to spend more time with his grandchildren than he did with his own children because he is retired. Rafael worked in the mining industry as a conveyor belt supervisor and retired at the age of 55. He prides himself in promoting education to his children and proudly reports that they all have a college degree. Rafael's home is filled with family pictures in the living room and in the den, has a collage of family events. The walls in the den also have memorabilia from the University of Arizona basketball team, as Rafael is an avid fan. On his computer desk, there are several "*estampitas* " or holy cards with prayers imprinted on the back and a novena book given to him by his mother. There is a large brown wooden rosary hanging from one of the walls. Rafael has had diabetes for over 10 years and recently had a heart transplant. On the second visit, the researcher also met Rafael's wife, who assured me that he was doing well. She was invited to participate in this second interview, but refused stating she felt that Rafael did not need interrruptions. At every visit, Rafael always offered the researcher something to drink before starting the interview.

"Victor"

Victor was born in New Mexico and is a second generation Mexican-American. His mother was born and grew up in Chihuahua, Mexico and his father lived in Tijuana,

Mexico. Victor moved as a small child to Nogales, Arizona and recalls many pleasant childhood memories going to Chihuahua to visit his grandmother who lived in the mountains where it was very common to go out and play in the dirt streets. Victor also recalls a favorite aunt whom he could talk to as he was growing up. Victor enlisted in the army at the age of 17 and served in Vietnam for three tours. He was medically retired from the service after being wounded in the head. His home has many family pictures in the living room walls. The den had numerous plaques with medals presented to him from the military and three bookshelves with history books. He has been married twice and currently is involved in volunteer activities, loves his yardwork and looking after his four dogs. Victor has been diagnosed with "borderline" hypertension since 1985 and has had several members from his father's side of the family die of strokes and heart attacks.

" Roberto" and "Maria"

Roberto is a second generation Mexican-American, growing up in Arizona in a rural community. His parents were born in Mexico. He completed three years of college and currently works in construction; previous employment included school bus driver and mining. He also served in the army as a technician. He has been married to his wife, "Maria" for over 35 years. He has had diabetes for over 14 years, but reports that he knew he was going to get it because his mother and sister have diabetes and there were many uncles from his mother side who had it.

Maria was born in Arispe, Mexico, a very small, poor, rural community . She lived there for 35 years before moving to Arizona to a small rural community. She completed only the first grade of school, but has taught self to read and write. She

currently is employed as a housecleaner. She has had diabetes for over 24 years , but was not willing to talk about it until just recently, and recognized that the illness was not going to disappear. She recalls her mother, who died three years ago, fondly . She also states that her beliefs came from her mother and upbringing in Mexico. Maria primarily speaks Spanish but can understand English; Roberto is very fluent in English but participated in both languages. During the inteview, Roberto sat close to his wife. When the phone rang, Roberto got up and answered it, but also explained to the caller that an interview was being held and spouse could not come to the phone.

Roberto and Maria live in a very modest home; they have enclosed the outside porch with screen windows and have a wooden stove burning in the side of the room. On this stove was a pan where "*membrillos*"(quince) were being boiled to make "*cajeta*" (jam). The kitchen is the main gathering room with a long breakfast table at one side of the wall. The kitchen stove had a big pot of "*albondigas* " being cooked. The refrigerator door was covered with holy cards. The dining room was a small room next to the kitchen; on one wall, there was a large mural of *the Virgen de Guadalupe*. On the opposite wall was a large picture of the Last Supper. Two grandsons, ages six and eight, were watching TV in the next room, but would come in to the kitchen to check on the visitors and talk with the grandparents. At the end of the interview, a lunch consisting of albondigas, tortillas, beans, salsa and lemonade was served.

"Carla" and "Monica"

Carla and Monica are sisters who both have been diagnosed with diabetes. Both are second generation Mexican-Americans born in Arizona. Carla completed her GED,

is married , and has been a housewife. She is very quiet in her manner and talks very softly. She said she was not interested in going to school. Monica received a college degree in speech pathology after she was 40 years of age; she recalls being told by her aunts as a child that nice girls did not go to school. She is retired after working in the school district as a speech therapist. She has been married twice and is currently divorced. Monica is the older of the two and is more assertive and protective. She stated she likes to read and enjoys ongoing learning. Monica was ready for the interview and wanted to be sure the researcher had everything available. Carla was more reserved and requested to sit as far away form the tape recorder as possible. This meeting was held at Monica's home, which is very well kept. The living room has peach coloring sofa and chair with a beige carpet, fireplace to one corner; entertainment unit with family pictures and floral arrangements. Floral prints are on the wall.

Interviews

All of the participants responded to the grand tour question "tell me about when you were first diagnosed with your illness". Further information was obtained from questions related to their family roles, religious beliefs, and foods used during illness that were generated during the course of the interviews.

Results of Ethnographic Analysis

Spradley (1979) defines ethnographic analysis as "a search for the parts of a culture, the relationships among the parts, and their relationships to the whole" (p.142). The narrative stories provided by the participants during the interviews allowed the researcher to identify specific cover terms or domains, the relationships between these

domains were used to form taxonomies and the themes that seek to portray relationships between the domains and the taxonomies that describe the whole of the cultural scene. These results addressed the research question of this study which was "What impact do Mexican-American values have on the use of secondary preventive health services?"

Following is a description of the taxonomic structure derived from the data. There were four taxonomies discovered: Illness related beliefs, health related behaviors, methods of getting support or non-support, and cultural values and lifeways. There were 13 domains, and 49 categories within these domains identified.

Illness Related Beliefs

This taxonomy is defined as how Mexican-Americans view illness when diagnosed, and what they believe could cause it. There were three domains identified with specific categories. These domains are: approach to illness, causes of illness and treatments (Table 2).

Approach to illness

This domain can be defined as how one reacts to an initial diagnosis and what it means to them over time from that initial diagnosis period. This includes participants' actions, beliefs and attitudes in response to their diagnosis. Seven categories were identified from the data .

No Worry. This action is defined as not being concerned at all when told about the diagnosis. All of the participants stated that they did not worry because the diagnosis did not really mean anything to them. Carla stated " I didn't see anything, so why worry

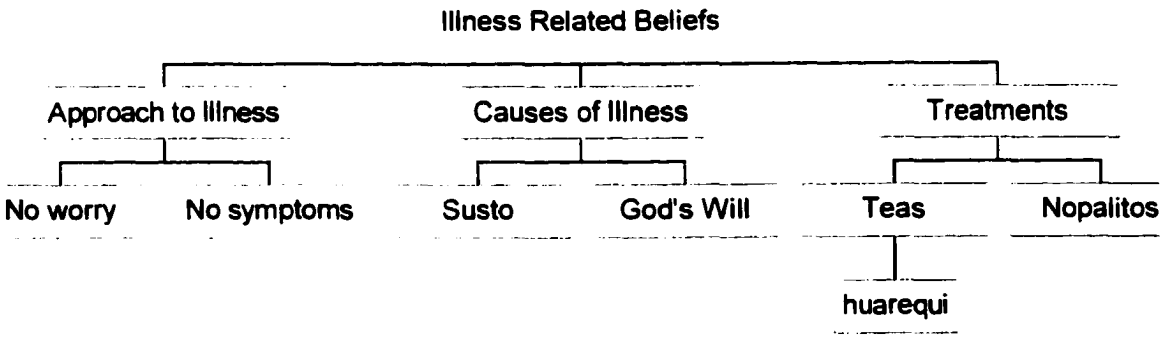
Table 2.

Taxonomy 1: Illness Related Beliefs

Domain	Categories
Approach to Illness	No Worry No Perceived Symptoms No changes made No preventive measures Contagious disease believed to be fatal Self-prescribe Disbelief
Causes of Illness	Heredity Genes Nationality "M*e lo mando Dios*" (God'sWill) *Susto* (fright) Pancreas Malfunction Smoking Diet consisting of high fat foods
Treatments	*Huarequi;Colpalquin* (Teas) *Nopalitos* (cooked cactus) Medications (pills, Insulin)

Figure 2

Taxonomic Structure 1: Illness Related Beliefs



about it." Rafael stated that when he was diagnosed at an early age, "one is still young, having a good time, drinking and smoking, one doesn't worry about those things." Victor relates "it didn't mean anything to me"

No Perceived Symptoms. This category describes the lack of symptoms as perceived by the participants when diagnosed. Since no symptoms were present, participants did not seek any health care service and also did not really believe that they had an illness. Carla reported that " she wasn't feeling anything and didn't see anything wrong". Rafael stated that "having no symptoms, made him not think about it". Maria stated "she never felt bad" but also acknowledged that "she had noted that she was always thirsty, but it was not until her brother questioned her about her weight loss" that she went to see a doctor.

No changes made. Participants stated that they did not change their lifestyles once diagnosed with their illness because they considered themselves healthy; therefore, this category was named no changes made. Carla stated "if it is not broken, then we don't do anything". Victor believed he had no reason to make any changes because "I did not make the connection between my high blood pressure and strokes".

No preventive measures. Participants also stated that they did not take action to diminish or prevent further progression of disease as an approach to their illness. All the participants stated that they continued with their diets which consisted of food they liked, kept smoking and drinking. Roberto stated that he was aware of his mother and sister having diabetes; however, he "reports never doing any preventive measures because he knew he was going to get it anyway." Victor stated that "he didn't want to change his

eating habits because his diet was a part of his culture and was exposed to high fat foods, and fried beans, so he continued to eat them". Monica also stated that as a " child we never did go to a doctor". Victor also recalled how "his family never went to see a doctor but instead went to the pharmacy to buy herbs; if they went to the doctor it was usually because they were really sick".

Contagious disease believed to be fatal. Participants described that they believed that the illness they had was contagious and fatal. This was a belief passed down by the parent. One participant, Maria, thought that diabetes was contagious and would be fatal, so she did not tell her friends until 20 years later. Maria recalls "her mother telling her that it was contagious and she thought if my friends knew about it they would not want to get close to me".

Self-prescribe. This category defines actions taken by participants in treating the illness. Maria reported drinking " a bitter herbal tea '*colpalquin*' and would see sugars go down from 500 to 200. Roberto also mentioned "*huarequi*" a cactus root plant that "one grinds it and puts it in capsules" and diabetes is cured. Maria also reported "stopping her medicines because she did not think she needed them".

Disbelief. This category describes an attitude of disbelief towards diagnosis. Two of the males did not believe the diagnosis because it could not happen to them. Victor reported that he did not stop smoking when told of high blood pressure, because "it happens to someone else, not me". Rafael recalls "not wanting to do anything about the diabetes because it didn't phase him, nothing could touch him".

Causes of illness

This domain describes what possible causes for the illness were considered by the participants. Eight categories were identified from the data.

Heredity. Roberto believed it was heredity because he knew his mother and sisters had it, so he knew he would also get diabetes. He stated " I knew it was a thing that was passed down, so I knew I would get it someday, so I didn't worry".

Genes. Monica stated that she had read that we had the gene and if the gene was present there was no way not to get it. She stated "not being fatalistic, but if the gene is there, you are going to get it."

Nationality. Some participants stated that they had read that certain nationalities were susceptible to certain diseases, such as African –Americans had sickle cell anemia. Roberto stated that he knew the Mexican-American nationality was more at risk of getting diabetes. Roberto stated "some cultures, diabetes is more common; in the Mexican culture it is the diet of a lot of sugar, sodas, *postrecitos*, flour that affects diabetes".

Me lo mando Dios (God's will).This category describes how faith and religion is considered a cause of illness. Maria and Carla both strongly believed that if it was God's will to get diabetes, there was nothing to do but accept it. Carla believed that "God does not give us things that we can't handle; he tests us to see what we will do". Roberto also believed that "if it was God's will, he would get illness, and he could not do anything about it." Maria also had heard that it could be a "*castigo de Dios*" (punishment from

God), but she was more inclined to think that God did not punish but would help the person in dealing with the illness.

Susto (fright). This category describes a Mexican-American belief about illness that is caused by a fright or emotional shock. The person usually experiences malaise, depression, nightmares, irritability and wasting away (Lipson,1996). Maria firmly believed that she got diabetes due to a *susto* that she had when her aunt died unexpectedly at the dinner table. Maria describes how after this extreme fright from the death of her aunt, "she began to lose weight, and lose her hair until she was almost bald".

Pancreas malfunction . This category describes a body organ that was seen as the cause of the illness. Roberto and Rafael both knew that the "pancreas was the organ that malfunctioned and then one got diabetes."

Smoking. Victor reported that his smoking was probably the cause of his high blood pressure. He stated that he had read that smoking was bad for his health, but he was not sure how it affected his blood pressure. He also stated that his doctor always encouraged him to stop smoking at his visits because of his poor circulation and because of the potential of getting cancer. However, he stated "I always consider myself healthy, I am now 52 and if I can get cancer from cigarettes, I would have it by now".

Diet consisting of high fat foods. All the participants stated that the diet of high fat foods such as fried beans and tortillas, and sweets, was probably a cause of their diabetes or hypertension. All of the participants stated that they had been advised by health care providers that healthy diets such as salads, vegetables, low fat foods like chicken and fish would help their diseases. However, Victor states " I don't want to

change my eating habits because a lot of my eating habits are my culture, they are a part of my culture". Roberto believed that "the majority of the mexicans use a lot of sugar in their coffee or eat *postrecitos* (sweet bread) which if the pancreas is not doing its job, then you have to watch what you are eating".

Treatments

This domain can be defined as the treatments that all the participants believed could help cure the disease. Three categories were identified in this domain.

Huarequi, Colpalquin (Teas). These are two teas that were described by Roberto and Maria which were roots that had to be boiled. The teas were very bitter but they both believed that diabetes got better when they drank these teas. Maria stated that "*colpalquin* bark is boiled and the water becomes red, but it is hard to drink because it is so bitter. You can check your sugar and be 500, and after two glasses of this tea, the sugar drops to 200". Roberto described "*huarequi* as a root that is is dried out and ground and put in capsules, again those who take it claim their diabetes is cured". Rafael reported that his sister takes a "tea which was lowering her sugar"; and he was considering taking it, but would check with his doctors first because of the other medicines.

Nopalitos (cooked cactus). This is a traditional Mexican food discussed by several participants. Monica, Carla, Roberto, and Rafael believed that *nopalitos* would help lower blood sugars. All of them mentioned *nopalitos*, but no one went into extensive discussion about them.

Medications (pills, Insulin). This category describes those medicines that were prescribed by a physician. However, when participants believed that their sugars were

getting low and in fact sometimes too low, they would stop the medication because they did not like the feeling of being nervous and perspiring. They believed that they were taking too much medication and did not need it. When Maria was first diagnosed and was put on oral medication and tested her urine, "she stopped the pills because she thought she was cured when her urine strips were now yellow color, and the urine now tasted salty instead of being sweet". Rafael stated that after he "started taking the Insulin, his sugar came down, so he stopped the insulin". Roberto reported to his doctor that his sugar was too low and that he stopped the Insulin.

Health Related Behaviors

This taxonomy is defined as what Mexican-Americans do or do not do to promote health care or prevent complications. There were two main domains identified (Table 3).

Promoting/Preventing behaviors

This domain can be defined as prevention behaviors described by the participants in promoting health care. Two main categories were identified, each with several subcategories.

Reasons / Motivation to seek help. This category describes why the participants would seek medical help. Various reasons were stated by the each of the participants for seeking help from a healthcare provider such as not able to take care of the problem with their own treatments, having symptoms, or following doctor's orders to seek help.

Presence of symptoms. Having symptoms made some participants seek help. "Being short of breath" was described by Rafael as to why he went to the hospital. Maria

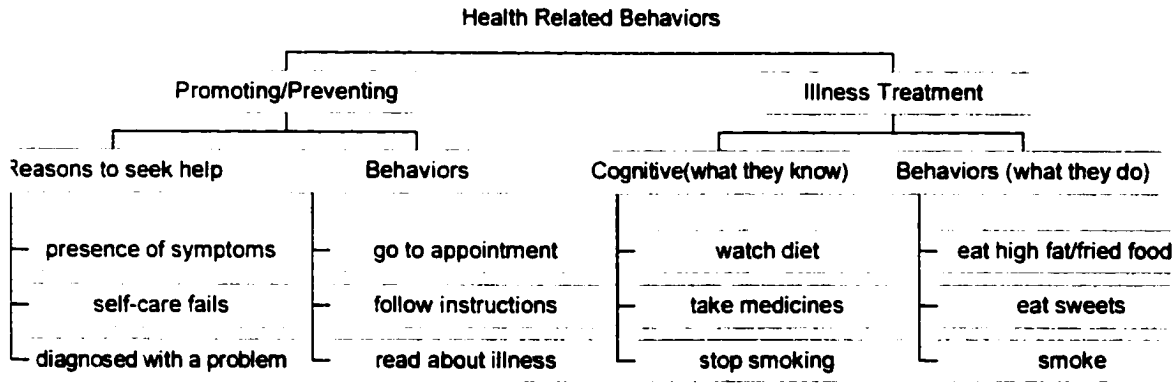
Table 3.

Taxonomy 2: Health Related Behaviors

Domains	Categories
Promoting/Preventing:	Reasons/Motivation to seek help Presence of symptoms Something is visible Diagnosed with a problem Authority tells them Self-care fails Prevention Behaviors Go to provider's appointment Follow providers' instructions Read about illness in magazines
Illness treatment	Cognitive Behaviors (what is known) Watch diet Exercise Take medicines Check sugars, monitor blood pressure Stop smoking Actual Behaviors Eat high fat/fried foods Eat sweets: panocha, postres Smoke Self –dosing

Figure 3

Taxonomic Structure 2: Health Related Behaviors



stated she was seeking care "because her legs tended to get ulcers from her poor circulation and they were very painful". Victor stated that when " he gets bronchitis and has trouble breathing he goes to the doctor".

Something is visible . Some of the participants stated that in order to seek help, they needed to be able to see something wrong; otherwise they had difficulty believing that they were having a problem. Carla felt that when "she saw her ulcer on her foot , she went for help". She was willing to take the medicines and see "if they would work and heal the ulcer". However, her cholesterol being high did not mean anything, because she could not see the inside of her body. Rafael stated that when "he started seeing family members with amputations, he knew he had to seek help". Maria stated that "when her brother saw how much weight she had lost, then she went to see the doctor".

Diagnosed with a problem . Being informed about having a problem is another reason to seek help. Both Victor and Rafael stated that "it is not for preventive reasons, but "because they now see themselves as having a problem". Victor felt that "now that he knew he had high blood pressure, he needed to go to the doctor." Rafael stated that when the doctors told him " he had an infection on the legs because they were red", then he knew he had to see the doctors instead of trying to treat the problem himself.

Professional Authority Request. The Mexican-American believes in respect for the professional authority, i.e. the doctor, nurse or any healthcare provider. When the doctor asks them to return for another visit, they will do out of respect for their knowledge. Roberto and Maria got help now because "their doctors told them to" and

"they respected them"and their knowledge. Maria stated "they are telling us for our own good and yes we believe them".

Self-care fails. Some of the participants were using self-care treatments in dealing with their illness. However, when they felt that those means were not improving the illness, then they went for help. Both Rafael and Maria felt that "if teas and self-prescribing or self dosing did not work," then they needed to go to the experts. Rafael strongly believed that if what he was doing, i.e. self adjusting his medicines was working, "then don't mess with it, continue doing what you are doing; if it gets to the point where it isn't , then you seek help".

Prevention Behaviors. This category defines behaviors described by the participants that would help maintain health. Subcategories of going to provider's appointment, following the provider's instructions and reading about the illness describe these activities. These behaviors were all being practiced by the participants

Going to provider's appointment. Maria,Carla and Victor believed that by going to their appointments they were preventing future problems. Maria saw an "eye doctor every three months for laser treatments" because her vision was affected and she did not want to become blind. Carla "made the appointments for her husband and herself". Victor saw "going to the appointment if he had a problem".

Following provider's instructions. This behavior can be done out of respect for medical personnel. Maria stated that if "she followed doctor's orders, she would get better". She trusted her provider because "they were telling her for own good".

Researching the disease: read magazines and do an Internet search. Research in this sense refers to seeking information. Victor, Monica and Rafael all stated that by "reading about illness or disease," one becomes more informed and can prevent problems or ask questions. Victor was looking for pamphlets on hypertension, so "that now he could ask questions at his visit". Monica believed that doing "research on any topic would provide her with knowledge". She used the knowledge about risks for Hispanic and diabetes, and asked her own provider to check her for diabetes because of the family incidence. Rafael saw an article " in the parade magazine about a new diabetes drug" He had saved the magazine to share with his provider.

Illness Treatment and Prevention of Secondary Symptoms.

This domain can be defined as ways to treat illness as described by the participants. It was interesting to see that the participants had knowledge about treatments, but their own actual behaviors were contradictory to the knowledge. There were two subcategories identified.

Cognitive. This category describes what information they know or have learned about as a treatment for illness. There were five subcategories identified. These activities are not what the participants do.

Watch diet. "Healthy diet" defined by the western world was mentioned by the participants. Every participant stated that if they watched or changed their diet to healthy foods like salads, vegetables, their illness would get better.Maria stated that her mother "ate fruits, vegetables and watched her potatoes and baked goods." Victor recommended

"eating more fish, chicken and salads". This information was heard through the newspaper, and TV ads.

Exercise . This is another learned piece of information that the participants spoke about as a way to treat illness. Everyone had heard that exercise was good and should be done at least three times a week. Victor stated exercise could be "vigorous work in the garden"; Monica mentioned "daily walks"and Rafael talked about the treadmill as a way of exercise.

Taking medicines . The participants stated that if medications that were prescribed were taken as ordered their sugars and blood pressure would improve. This knowledge had been provided by their providers; the participants did see some improvement; however it was when side effects occurred that they questioned.

Checking sugars, monitoring blood pressure . All participants knew that these tests could give them information as to how disease was being controlled. Again these procedures were told to them by their providers; but whether they believed them or understood the numbers was not well defined. Victor stated "that he would go to his appointment to get his blood pressure checked, but wasn't sure of the meaning of the numbers". Roberto did check his "sugars when he felt dizzy and would see that they were low".

Stop smoking. All the males recognized that smoking was detrimental to their health. This information had been learned through TV ads and through their providers . However, they did not see any connection to preventing illness, because Victor stated" I would have had lung cancer by now, at my age and I don't have it".

Actual Behaviors . This category describes what behaviors the participants actually do for treatment. These are reality behaviors compared to the cognitive behaviors which were just stated. These behaviors demonstrate what the participants actually believe and contradict what they have learned.

Eat high fat and fried foods. Participants all continue with their cultural foods which consist of refried beans, use of lard, tacos and sweets like *pan de dulce and panocha*. Victor stated that "food is my culture". Roberto and Maria both stated that "Mexicans eat sugar cane, panocha, pan de dulce". Cultural diet therefore is in conflict with preventive diet changes, and a change in behavior does not occur.

Eating sweets: *panocha, postres.* Sweet breads, brown sugar pastries, sugar cane, 3 to 4 teaspoons of sugar in the coffee are common behaviors in the Mexican-American. It is a custom to stop for mid-afternoon coffee and have a piece of cake or pie,or Mexican pastry . All the participants reported that they would not give up their "*pan de dulce*".

Smoke. The males all reported that they still smoke. Smoking in the Mexican-American population is a popular social behavior. Men report that "if they die, at least they died enjoying their cigarettes."

Self-care dosing. Participants reported adjusting their medicines when they experienced side effects or if they obtained information contradictory to the physician. Maria stated her daughter "got her information from the computer that told her that the glucophage affected her kidneys, so she decreased the dosage on her own because she didn't want kidney problems". Roberto reported that "when his sugars got too low he stopped the Insulin , but he also told the doctor". Victor stated that " he would stop his

blood pressure medicines because it was affecting his sex drive and that was more important to him".

Health Promoting Support or Non-support

The taxonomy of support is defined as care that is received during time of illness that provides comfort, sense of caring and belonging. Support, behaviors provided as reminders to take medicines or finding healthcare information in the computer, could be viewed as health promoting because the family member has taken an interest in the person who is sick and wants to make sure the ill person takes medications or reads about the information that the family found. The sense of caring and concern which is received from family, prayers and the community promotes healing and health. However it was also noted that family could also be a source of non-support by not talking about illness. There were four domains identified in this taxonomy (Table 4).

Support Behaviors

This domain can be defined as behaviors that were done at time of diagnosis or illness that are viewed as being supportive . Ten behaviors were identified by the participants that can be described as being supportive.

Remind to take the medicines. Maria stated that her husband was "always reminding her to take her medicines" so she would get better. Victor also stated that "his wife helped him understand his medications". This can be viewed as being supportive because a family member is being concerned about their loved one's wellbeing.

Provide information from the computer/ magazines . Maria also reported getting support from her daughter when "she found some information in the Internet regarding

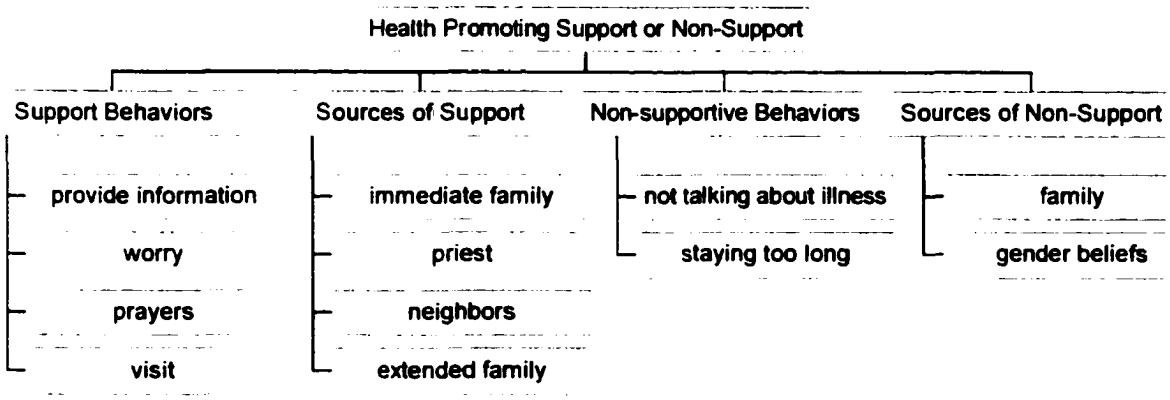
Table 4.

Taxonomy 3: Health Promoting Support / Non-support

Domains	Categories
Support Behaviors	Remind to take medicine Provide information from the computer Proximity, sitting close to spouse Worry about family Prayer Visiting Lighting Candles Saying Rosaries Sending Holy cards Phone calls
Sources of Support	Immediate Family *Tia, Tios,Nina* (Extended Family) Priest Friends Neighbors Faith: Personal Family Community
Non-supportive Behaviors	Not talking about illness Staying too long
Sources of Non-support	Family Gender beliefs and behaviors

Figure 4

Taxonomic Structure 3: Health Promoting Support or Non-Support



her medicines" ; Rafael and Monica received support from articles that were found in magazines relating to their illness. Even if the information provided is in conflict with their physician's orders; the fact that the family member took time to look up information is seen as a gesture of support.

Proximity ; sitting close to spouse. This was an observed behavior seen as being supportive. Roberto stated he sat close to his wife at the doctor's visits to give her support. During the interview, he sat close to her and translated to her if she did not understand a question. It is not uncommon to see family members at the hospital getting involved with the individual's care, making sure that somone is there with them at all times.

Worry about family. Monica and Carla both stated that they tended to worry about each other during their illness. Concern over a family member is very typical of the Mexican-American. This worry will involve even extended family members; Rafael stated " that his *tios* and *tias* from out of state called almost every day because they worried about him during his surgery

Lighting candles, saying rosaries and sending holy cards, prayer. Maria, Roberto and Rafael reported that "family and friends lit candles" for them during their illness and they received numerous holy cards. Rafael stated "his mother sent him a rosary and his *nina* sent him a novena booklet." Acts of religious faith are seen as being very supportive, because of the strong faith in God found in the Mexican-American. It is not uncommon to have masses or rosaries said at the church for the family member who is sick.

Phone calls and visiting – Rafael said that when he was hospitalized "family from out of state would call daily and also come visit during the weekend." Again, the act of caring for the individual is seen in this behavior. Any extended family member will try to be there during any illness, whether it is to help make meals or help care for the individual.

Sources of Support

This domain describes the people involved in providing the support. Six categories were identified in this domain . Because the Mexican-American family is traditionally a community, it was not surprising to see these categories being identified.

Immediate family. All the participants stated that their immediate family provided support during their diagnosis or any time they were hospitalized. Some family members will stay the night at the hospital to be sure that the individual will be alright . Accompanying the indivdual to the doctor's appointment; or driving the individual to the doctor's office by a family member is also seen as them providing support.

Tia,tios, Nina -Extended family. Rafael mentioned that during his hospitalization his *Nina (godmother)* sent a novena book and had rosaries said for him at her church even though she was not physically present. Also his *tios* (uncles) from New Mexico came for the weekend to visit him at the hospital.

Priest. A religious person from the church, taking time to visit the individual who is sick is seen as a source of support. Rafael and Maria reported receivng support from their priest while being hospitalized. It is not uncommon to call the priest to let

them know that somone is ill, so that the religious sacrament of communion can be offered to them while hospitalized.

Neighbors and friends. Maria and Roberto both stated that "their neighbors were always concerned about their health" and asking about them when either was hospitalized. Neighbors also support the rest of the family members by bringing over baked goods, so that they don't worry about making dinner while they spend their time in the hospital.

Faith. The Mexican-American has a strong faith in God. All the participants stated that it was personal faith that gave them support to deal with the illness. Faith provided by the family and the community such as community rosaries was also seen as a support being provided.

Non-supportive Behaviors

This domain consisted of behaviors reported by Rafael and Victor as being non-supportive. These behaviors affected health promotion because they were seen as negative and not helping the individual get better.

Not talking about illness. Victor felt that male family members had a difficult time sharing with other males their illness. He found it difficult talking to his brother in law about health because he would not bring up the topic. Victor stated " I have a brother in law who has diabetes, but we have never discussed it. I know it is serious for him and that he has done a lot of lifestyle changes, but we just don't share this information as men".

Staying too long. Rafael felt that when people came to visit at the hospital and stayed too long, that it was not supportive. People staying too long, increased his fatigue because he felt that he had to visit with them.. Rafael stated " I was glad they came, but in another way, they came too often. I had to tell them to come back when I got out of the hospital".

Sources of non-support

This domain describes people and beliefs that were non-supportive.Two categories were identified. Non-supportive can be described as behaviors or individuals who are not helping the individual to get better or not encouraging to improve their health.

Family. Although family is generally considered supportive, and providing assistance, both Rafael and Victor felt that family sometimes got in the way of improving health or recovering from illness. Rafael stated" he got tired from all the visits, and at times needed his privacy". By family members staying too long at the visit, the individual felt that he had to participate in the conversation, and at times he was not up to it and just wanted to sleep.

Gender beliefs and behaviors . Victor felt that males in the Mexican-American culture tend to not share feelings with other males about things going wrong and tend to have a pretense that everything is all right. He saw this as not being supportive because at times he wanted to share his feelings or concerns, but it was seen as taboo if you shared your concerns with another male. Males are seen as protectors.

Cultural Values and Lifeways Related to HealthCare Promotion/Prevention

This taxonomy is defined as cultural expressions and lifeways that were observed during the interviews. There are four domains in this taxonomy which are *respeto* (respect), family roles, traditional diet, and spirituality (Table 5). These cultural expressions could impact healthcare prevention because these are learned behaviors and there could be conflict with the information being provided and the cultural beliefs and values that are learned. The Mexican-American individual may agree to the information at the doctor's visit, but if it is in conflict with their belief system, they will not necessarily follow though. This behavior may then be seen as non- adhering to prescribed treatment by the health care provider.

Respeto (respect)

This domain can be defined as a cultural expression that has been taught and passed down from generations. This can impact health promotion and prevention, again by non-adherence to treatment if in conflict with beliefs. The individual may demonstrate respect to the healthcare provider by agreeing on the information at the time of the appointment, but it does not necessarily mean that there will be follow through. Two categories of respeto were identified.

For authority. Maria and Roberto voiced that they respected their doctors because "they knew more and were taking care of them". Rafael and Victor stated that the doctors should be the ones telling them how to take care of themselves because "they were the doctors". Even though they believed that the healthcare provider should provide the knowledge, if in their experience the knowledge is in conflict with what they have

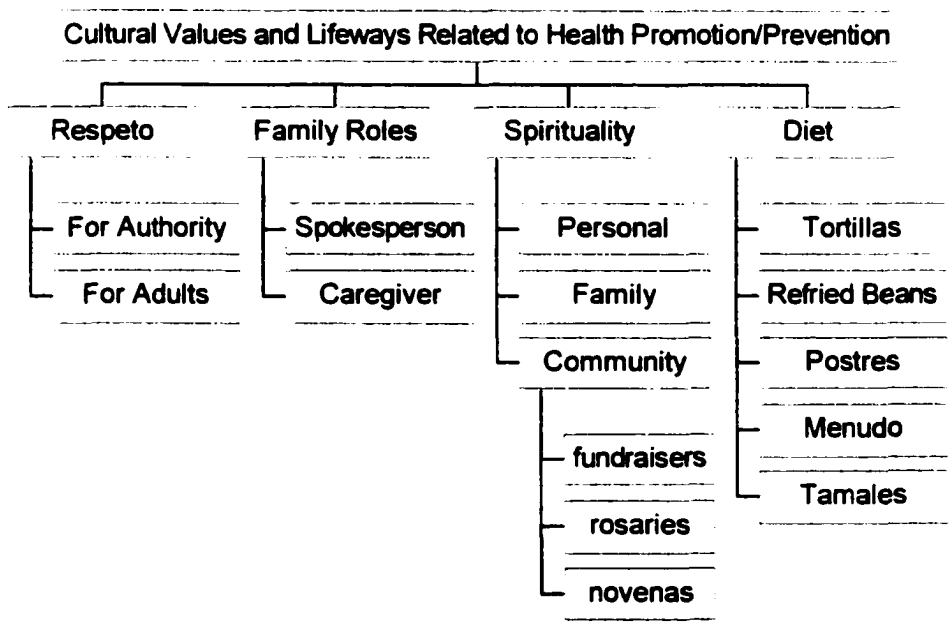
Table 5.

Taxonomy 4: Cultural Values and Lifeways Related to Health Promotion/Prevention

Domains	Categories
Respeto (respect)	For Authority: physicians, nurses, healthcare providers For Adults: children interactions
Family roles	Spoke person Caregiver: visit the sick
Spirituality	Personal Community Prayers Novenas Fundraisers Family
Traditional diet	Tortillas Refried beans Rice, potatoes, bread *Postres* *Menudo* *Tamales*

Figure 5

Taxonomic Structure 4: Cultural Values and Lifeways Related to Health Promotion /Prevention



learned, it might not necessarily be accepted, but they will not acknowledge that to the physician at the moment.

For adults. Roberto made sure that when the grandchildren came into the kitchen, that they greeted the researcher politely and then were asked to go away, since this was an adult conversation.

Family roles

This domain describe roles that are assumed or learned within a family. These roles may be seen and need to be taken into account in dealing with health promotion. Recognizing the significance of these roles will help the healthcare provider to plan their care approriately so that it can be meaningful.

Spokesperson . Because the Mexican-American family can be a large extended family, the role of a spokesperson is very significant especially for communicating information. Monica, being the sister that had a higher education seemed to be the spokesperson for herself and her sister Carla. She was concerned when her sister was not feeling well and "wanted them to check her sugar". She was the one that questioned more about the research and wanted to know details before being willing to provide any information. She wanted to know how the information would impact herself and her sister. Roberto saw himself in that role for his wife because he was bilingual and also had a higher education. He felt that he would be making the decisions for the family regarding health issues and also told his wife "that she had to tell the doctor when she made changes in her medicines".

Caregiver. Monica felt that she was the caregiver for her sister, because she worried about her. Rafael expected his wife to be the one to care for him during his illness. Maria cared for her ailing elderly mother until her death; Roberto saw himself as a caregiver to his wife due to her language barrier. The caregiver can be included in providing information on health and should be used to that advantage instead of creating conflict with them by not allowing them to provide care during the illness.

Spirituality

This domain defines different ways to receive spirituality which would promote health. Because of the strong faith seen in the Mexican-American individual, allowing for religious relics to be present while the individual is in the hospital will promote healing.

Personal. All participants stated that they believed in a God or higher being and that they did their own rituals such as prayers, read novenas, light a candle or say the rosary.

Community. All participants were aware that their community provided spirituality to them by means of prayer circles, fundraisers to help with expenses, and masses.

Family. Faith from immediate family members and extended family provided spirituality to the participants. Each one verbalized that they knew that prayers from their mother, aunts, cousins provided them strength to get well.

Traditional diet

This domain describes foods that were mentioned as part of their daily meals or for special occasions. The cultural diet did not promote health prevention according to the

definition by western medicine due to the ingredients found in most of these foods. This diet will be in conflict with what is being recommended by the health care provider.

Tortillas. All the participants stated that corn or flour tortillas made with lard were used with their meals. These tortillas tend to have a high fat content and will lead to health problems with cholesterol and weight.

Refried beans. All of the men stated that a diet without refried beans was not a diet. Again the fact that the beans are refried , will not promote good health according to western medicine.

Rice, potatoes, breads . Maria stated that the diet was usually high in starches and it was not uncommon to have potatoes and rice. These are basic staples found in every meal and can impact how diabetes is managed.

Postres (desserts). All participants described eating *pan de dulce, panocha*, sugar cane, and cakes with their coffee. These are cultural sweets that might be difficult to restrict because of the social meaning behind them, i.e. offering them as a way of caring .

Menudo-(tripe). This soup is usually available when there has been a celebration and everyone usually goes to someone's home after the party. The males stated that it was good for hangovers. This soup is very high in fat.

Tamales. This food is very traditional during the summer (green corn) and during the Christmas holidays (red chili or sweet tamales with raisins) The masa for the tamales is made with heavy lard to give it the special flavor.

Cultural themes

The final step in ethnographic analysis is defining the themes that have emerged from the data collected. DeSantis and Ugarizza (2000) define a theme as an abstract entity that brings meaning and identity to a recurrent experience and its variant manifestations. A theme captures and unifies the nature or basis of the experience (as well as the taxonomic structure) into a meaningful whole that addresses the concerns found in the research question (p.362). There were three themes identified in this study .

1. Support comes from multiple sources in the Mexican-American family and is very important in their lives when dealing with illness. Because of the care and concern shown for the individual, it would encourage the individual to get healthy or follow through with medications. All the participants voiced that they felt cared for and received support from various sources such as family, community, phone calls, visits, rosaries as they dealt with their disease.
2. A strong faith in God's will helps the Mexican-American family deal with whatever results /consequences come from the illness. All the female participants, Roberto and Rafael felt that God would help them heal even if they had not been practicing their faith recently. Maria stated that "one could not go against God's will but that they would also be helped by God." This faith will impact health promotion because of the belief that God will help them, and therefore early prevention may not be seen as necessary.
3. In the Mexican-American , knowledge about a disease does not necessarily cause a change in behaviors; a change only occurs when symptoms create consequences that

negatively affect a personal sense of well being. All of the participants expressed living for today, and not worrying about their disease. Once symptoms occurred, they all became knowledgeable and were more willing to make changes such as taking medications, monitoring blood sugars. Diet changes were very different to their lifeways, and a change in diet was not seen. Because of the high fat content in the diet which makes the food taste good, it will be difficult for the individual to consider substitutes.

The domains, taxonomies and cultural themes that emerged from the data all addressed the research question: Do Mexican-American cultural values impact the use of secondary preventive health services? Understanding the views and beliefs toward illness and health related behaviors that are demonstrated by the Mexican-American gives us insight into why there is less use of secondary services. Conflict within cultural lifeways such as diet changes, respect for professional authority, and a worldview for the present provides information as to how secondary health care services are negatively impacted.

Summary

This chapter described the ethnographic analysis of the data. Forty nine categories and 13 domains were first identified. Then a relationship between the domains was described. This created the taxonomic structure which consisted of four taxonomies. These were identified as: (1) illness related beliefs, (2) health related behaviors, (3) health promoting support/ non-support, and (4) cultural lifeways and expressions related to

health promotion/prevention. Three cultural themes emerged as the final step of summarizing the data, addressing the research question of this study.

CHAPTER FIVE

DISCUSSION OF RESULTS

The findings in the study and their relationship to the literature review and to Leininger's conceptual model are discussed in this chapter. The limitations of the research study, nursing implications for practice and education and recommendations for further study are also described.

Discussion of Findings

The domains and taxonomic structures identified as illness-related behaviors and cultural values and expressions support the belief that the Mexican-American lives in the present , does not concern themselves about what will happen in the future or even tomorrow, and will not seek treatment or participate in preventive behaviors when life is status quo and when there are no debilitating symptoms. This belief is not consistent with health promotion and disease prevention behaviors, nor does it support early intervention to prevent complications that result from identified illness. Mexican-Americans live life to the fullest and do not worry about what tomorrow will bring. They celebrate life for today sharing these celebrations with family and community. Food, drink and music are essentials at any of these celebrations. Because of these beliefs and values, Mexican- Americans find it difficult to change their behaviors of smoking, drinking, eating fat rich food when there is little cause for concern or disability. Both Rafael and Victor stated that "especially when one is young, thinking that nothing can hurt them, one continues to have good life by drinking, smoking and enjoying life".

The taxonomy of illness-related beliefs and its domains also describe how the Mexican-American views illness and what he or she is willing to do when initially diagnosed. It was not suprising to hear that many did not worry about diagnosis nor did they make any changes, because they had faith in God in helping them deal with whatever would happen. They strongly believed that God would help them deal with the illness. This perceived lack of control over what happens to them has been described in the literature. The perception of God's will, *si Dios quiere* was stated by Roberto and Maria and strongly believed that one should not question God's will because it is meant to be. Therefore, the title of this study "*Si Dios Quiere*". These behaviors and beliefs are also inconsistent with prevention and promotion activites as conceptualized in western medicine.

Furthermore, there is a strong influence in their lives from their faith and cultural values such as respeto and family roles. Family and community support are very important and are sought during times of stress or illness. The taxonomy, cultural values and lifeways related to health promoting behaviors, describes how diet might impact health prevention. The individual is not necessarily willing to make any changes on a diet of sweets or high fat because of its cultural meaning and the impact it would have on the family and friends. Family celebrations are very important in the Mexican-American family. Any social gathering will always have food associated with it, whether it is a simple coffee break with pastries or a community celebration such a s a wedding or quincenera where specialty foods will be prepared.

The taxonomy, health promoting support and non- support stresses that support is very significant to the Mexican-American individual, whether it is by spirituality or community involvement. The roles of spokesperson and caregiver could be used to help promote health and prevention by the health care provider. This support could be used to promote health changes by targeting group change rather than individual change in health behaviors. This could lead to alternate teaching approaches when emphasizing a return to wellness.

The understanding resulting from these taxonomies can impact health promotion/prevention because these are values that are passed down from generations. If there is conflict between the information or behavior being prescribed and what has been learned from a community or family member, the Mexican-American will opt to follow the advice from trusted sources of family and friends rather than adhere to treatment as prescribed.

These cultural values, expressions and shared behaviors do not change easily as they are learned overtime and have been passed down through many generations from trusted family members. When diabetes is diagnosed, diet changes to avoid sweets, change portion size, watch carbohydrates, are one of the first recommendations. However, in the Mexican-American diet, sweets are a very significant part of social interactions and the high fat foods and starches that are the basic staples will be difficult to modify. For example, if suppport is provided by social interaction and offering *postres,* cake and pie, the individual might not want to change because it is important to always offer and receive something to eat. Additionally, portions are not necessarily measured,

so while the Mexican-American may adhere to food restrictions, they may still consume far too many calories. Cultural diet is an example of a conflict that will occur in promoting prevention. Victor stated that his foods were his culture ; and he identified with them; it was who he was. Changing these would threaten self-identity and would not be welcomed. Prevention stands little chance of survival faced with these odds.

The theme, *support comes from multiple sources in the Mexican-American family and is very important in their lives when dealing with illness*, demonstrates how support impacts use of healthcare services and secondary prevention. Prayers, comfort, caring and nurturing promotes healing and demonstrates concern for the individual. If there is conflict in the information being provided by the health care provider, the Mexican-American individual might not follow through with treatment and secondary prevention behaviors. The family providing conflicting information and their support is more important to them than treating a problem they can not see.

Family members also provide medical and health promotion / disease prevention information for persons with impairments. This could impact follow-through and adherence to care suggested by the health care team if information that the family provides conflicts with what the physician has prescribed. Family have a strong influence on the individual's behavior; trust in the knowledge provided by the elderly is very significant because of their wisdom and experience. Furthermore, those family members who have a higher education are sought out because of their education in helping the individual decide whether to take medication or follow instructions.

Support provided by neighbors and the community also has a strong impact on health prevention / promotion. Home remedies may be suggested or requested from respected individuals in the community. These herbal drinks and the belief in them could impact any treatment that is provided by the health care provider by creating conflict.

The theme, *a strong faith in God's will,* definitely impacts health promotion,and prevention beliefs and behaviors. Mexican-Americans believe that no matter what, God will help them deal with the illness. This is similar to "fatalism" that is reported in Zaldivar's (1994) study on whether diabetes was caused by religious factors. Ailinger's study on hypertension also discussed fatalism as a factor. Participants discussed the belief that "what is meant to be will be". Secondary preventive behaviors such as yearly eye exam or podiatry check for a Mexican-American with diabetes may not be followed because of the belief that if is to happen , so let it be.

Finally, the theme, *knowledge about a disease does not necessarily cause a change in behavior unless symptoms occur that negatively impact their sense of well being* , describes how the Mexican-American individual treats a disease and thinks about prevention of complications. There is no meaning to a disease if there is nothing obviously wrong. This finding questions whether early secondary prevention is something that is valued in the Mexican-American culture. For example, high cholesterol leading to coronary artey disease does not really mean anything to the individual if they cannot see any damage occurring. Therefore the Mexican-American might not be willing to change their diet patterns or even consider taking the medication prescribed because this problem has not created a visible change in their life. The participants all had

learned about health prevention and promotion activities as it was relayed through the media, newspapers and in community events, and by their health care providers. However, not one had instituted measures to prevent complications. They were able to answer questions regarding health practices and "what should be done" according to western medicine, but they did not necessarily believe in these practices. They were still following their own diet, not actively seeking help for problems in their health and smoking. Therefore, even though they knew and realized that behavioral changes were necessary for someone with diabetes, it was not until foot ulcers occurred and limited their ambulation, that this change in behavior occurred.

In ethnography, it is important to look at all aspects of the culture rather than information shared by the sample majority. The sample that was studied revealed two outliers when compared to the other four participants. Four participants were reflective of a Mexican-American community that is found in southern Arizona. These participants were receiving regular medical care for their diagnosis of diabetes or hypertension; had a high school education, had worked in blue collar or technical jobs, were second or third generation families and were bilingual. They were aware of the health care resources available to them. The study results therefore brings into question the impact of acculturation, length of stay in the United States and education, on the participants' values, beliefs, and reported health promotion/secondary prevention behaviors. It was noted that one individual, Rafael , had a higher education, was third generation and had been very involved in his care recently. During the interview, it was noted that responses to the questions were very specific and almost as if he was trying to give the "correct

response" . Leininger (1995) refers to acculturation as "a process that an individual from a certain culture learns to take on many of the behaviors , and lifeways of another culture" (p.72). Rafael seemed to be more acculturated than the other participants. Rafael appeared to be more of an outlier from the rest as he stated he did not worry about finances because he had a good health insurance and had recently undergone a major operation; he promoted the concept of college education for his children and he was very sophisticated in his current healthcare. It seems that as some cultural values (Mexican) are exchanged for others (American), there will be acceptance of some of the secondary prevention practice. Some of the barriers that are normally seen in the Mexican-American family such as finances, lack of health insurance, low education were not seen in Rafael and in his beliefs.

The other outlier was Maria, who was the only first generation participant. She had maintained several of her cultural beliefs and values because she had lived in Arizpe , Mexico for over 35 years. She had preserved her health beliefs that were shared by her mother and also had a very strong influence from God. She believed that she would be cured thrugh her herbal remedies. It was not until recently that she had sought health care services for her diabetes because she had obvious ulcers on her feet and she was concerned about amputations.

In summary, the findings of this study reveal that family, community, cultural beliefs and behaviors may impact the use of secondary health prevention services in both positive and negative ways. The worldview of the present day and the strong faith in God

also lead to behaviors inconsistent with health promotion and secondary prevention of complications.

Relationship of Study Results to the Conceptual Model

Leininger's (1995) conceptual model on cultural care was the framework for this study. The purpose of her model is to study similarities and diversities in cultures in order to discover new knowledge and guide nursing in its practice. Using the Sunrise Model as a guide, research can be done at different levels such as worldview, and cultural and social structure dimensions. There are seven dimensions of cultural and social structure that can be addressed. This study addressed the religious and philosophical factors, the kinship and social factors, and the cultural values and lifeways as they relate to secondary prevention behaviors.

Religious and Philosphical Factors

All three themes: (a) support comes from multiple sources in the Mexican-American family; (b) a strong faith in God's will helps the Mexcian-American in dealing with whatever results / consequences come from illness; and (c) in the Mexican-American, knowledge about a disease does not necessarily cause a change in behavior, only when symptoms occur and negatively impact one's sense of well being does a change occur, reflect the religious and the philosphical factors described by Leininger. Support provided to the individual in the form of prayers, rosaries, and holy cards, and the individual's faith in God's will were mentioned throughout the entire interviews. Rafael reported that during his hospitalization, he had numerous visitors, phone calls and also knew that several family members were praying the rosary for him. Maria and

Roberto both believed that God would help them deal with their illness; and also felt the support from the community when fundraisers were done to benefit them. The worldview of present living reflects the philosphy of the Mexican-American and is also a reflection of their lifeways and the value of doing their work and living in the moment. This worldview also reveals that even though knowledge is provided, unless the disease impacts them negatively in a visible fashion, no changes in secondary prevention behaviors will occur.

Kinship and Social Factors

Leininger describes this as family, extended family, and community involvement that affects how health decisions are made and what beliefs are passed on. This is similar to the theme identifying the nature and frequency of support available to the Mexican-American individual who is ill. The community involvement in prayers and fundraisers; the extended family visiting or caring for the ill and the immediate support provided by the family are all examples of kinship. Leininger believed that kinship could influence how care would be delivered and whether they would be a source of help for providing care. All participants verbalized the importance of having this support in dealing with illness and believed that it helped in their healing.

Cultural Values and Lifeways

Leininger defines cultural values and lifeways as those shared patterns that are learned and passed on through generations. These lifeways are significant to the individual, family and community. The theme, *knowledge about a disease does not necessarily produce a change in behavior unless it negatively impacts their sense of well*

being, addresses this dimension. Although they recognized that their diet was not "healthy" according to the Western way of thinking and that they "should " change their eating habits; because no obvious symptoms were present or negative results occurred when they ate certain foods, they did not see the need to change their diet. Victor identified with the diet as being who he was. Some of the basic foods such as nopalitos and teas which were mentioned by Roberto and Maria had been learned from their parents and grandparents as useful remedies for illness.These beliefs were shared among the community too.

In summary, this study supported the three dimensions (cultural values and lifeways, kinship, and religious and philosophical) of Leininger's Sunrise Model through the information provided in the interviews, the domains, taxonomies and the cultural themes. The strong influence from the worldview of the present, the shared beliefs in the family and community and the strong religious beliefs as reported by the participants impacted how they viewed their diabetes and / or hypertension and whether they needed to seek health care services or participate in secondary prevention or accept the disease for what it is.

Relationship of Study Results to Existent Literature

The findings of this study supported the studies by Chavez, Hubbell, Valdez and Mishra (1997), Flauskerud and Calvillo (1991), Tortolero-Luna, Glober, Villareal, Palos and Linares (1995), and Zaldivar and Smolowitz (1994). These studies identified fatalism as the perceived cause for illness among Mexican–Americans and other hispanic communities, i.e. Puerto Ricans. Fatalism, the belief that not individual but external

forces control outcomes, is a very strong cultural belief of the Mexican-Americans and can impact the decision about seeking preventive care. The strong belief that if "it is going to happen" and "there is nothing to do but accept it", will lead the Mexican American to accept an illness and expect the resulting complications because they have no control. Zaldivar reported in his study of Puerto Ricans that they believed that diabetes was caused by God and that they were going to lose their eyesight. Chavez et al (1997) found that Latin women who had immigrated to the United States were more fatalistic about getting cancer and did not want to know anything about it. Similarly, Carla and Maria reported in this study that God would help them deal with whatever illness; that God sometimes tested them.

Ailinger's study (1988) on the cause of hypertension described another cultural belief. Susto, an extreme fright that leads to physical illness was described as a cause for hypertension. In this current study, susto was also mentioned by Maria as being the cause of her diabetes. She strongly believed that the sudden unexpected death of her aunt caused Maria to become physically ill and that is when she "got diabetes".

The results reported from the HHANES Study (1982-1984) were supported by this study. The HHANES study identified that curanderos were not used by the Mexican-American participants as frequently as it had been described. The participants in this study did not mention the use of curanderos or denied using them. The possibility that the sample was too small or also from third generation may have been a factor for this result.

The study by Flores and Mata (1995) on the non supportive attitude of the spouse was refuted by this study . Everyone spoke highly of the support provided by their spouses and family members. Monica reported that "her sister was a strong support for her, especially when she needed transportation". Rafael stated that "his mother prayed several rosaries for his health". A theme was identified from this study which revealed that the Mexican-American received support from multiple sources and it was very important in their lives in dealing with illness. Flores and Mata's study used much younger participants who were not as interested in their spouses' health issues and believed that the women should deal with their health with other women. It was interesting to note that in their study, the older generation did worry about their spouse's health, but also believed they should discuss it with their women friends.

The findings reported by Morgan, Park and Cortes (1995) about assessing knowledge was also refuted by this study. Morgan, Park, and Cortes found that knowledge about cancer and screening was an important predictor for use of preventive services. Although Mexican-American respondents were used , they were involved as health care aides and had been through some training and were delivering care. This current study did not find any preventive action with knowledge unless symptoms occurred that negatively impacted the individual's sense of well being. The possibility of acculturation with the participants in Morgan et al.'s study could have been a factor.

The cultural theme of support, the taxonomy of health related support, the theme about strong faith in God's will, and the taxonomy of cultural values and lifeways all support the existent literature that describes the cultural characteristics of the Mexican-

American. The influence of family, extended community, cultural beliefs such as susto, diet, and strong religious faith and values all were identified by the participants in this study as being very important in dealing with health and illness.

Nursing Implications

This research study was a micro descriptive ethnography on Mexican-American culture that addressed whether cultural values impacted the use of secondary health preventive services. Information about the views and beliefs toward illness and health-related behaviors can assist nursing in understanding why secondary preventive services may not be used by this population. Cultural conflicts with diet changes, family roles and respect for professional authority may also provide understanding as to how secondary preventive services are implemented in this population.

The first cultural theme describes the nature and importance of support in the lives of Mexican-Americans, particularly those who are dealing with illness. Nurses need to be aware that family members, extended family, neighbors and community will all be visiting or calling during any hospitalization or extended treatment program. Family is always willing to help care for the individual and will expect to be included in treatment decisions, treatment protocols, and prevention activities. They will bring religious artifacts or special foods, believing that these will assist in the healing process. Recognizing that conflict could occur with diet changes, accomodating cultural diet with restrictions may help facilitate adherence to dietary requirements and increase participation in health promotion activities. Recognizing that there are defined family roles, nursing may seek the family spokeperson to maintain the communication and

facilitate prevention. Encouraging family participation in the care of the individual and providing education to the family as a whole could assist with health promotion and prevention activities. Eliciting support and doing family interviews about beliefs could assist the nurse in defining the care that is to be provided to a family unit not an individual. This may increase secondary prevention in this population.

The second cultural theme describes the strong faith in God's will, *Si Dios Quiere*, that is found in the Mexican-American family. This belief helps the individual deal with whatever consequences occur from the illness. Nurses often question a delay in treatment or in lack of preventive care. Recognizing that the Mexican-American lives in the present and accepts "whatever God sends their way", may help the healthcare provider and the nurse understand this delay within the context of the Mexican-American cultural and spiritual belief system. This would then decrease conflicts related to the delay in treatment and increase the potential that the nurse provider could both assist the Mexican-American individual in preserving their beliefs as well as seeking earlier treatment options.

Nurses are the member of the health care team most frequently charged with educating patients and facilitating health behavior changes. The final cultural theme provides insight into the Mexican-American's receptivity to behavioral changes without the presence of symptoms or changes that are viewed as negative. This theme addresses how having knowledge about a disease does not necessarily create a change in behavior for the Mexican-American individual. A change will occur only if symptoms present themselves and create a negative impact on the individual's sense of well being. This

translates into an implication for nursing related to a need to change educational practices. Reaching out to the younger population, i.e., children in middle school, and begin teaching health promotion and preventive practices may lead to a population change in attitude and values. The older generation has already been diagnosed with a disease and we have seen that no change is made unless they are negatively impacted. If this cycle can be interrupted at an earlier age, maybe there will be an increase in preventive behaviors because of learned knowledge.

Acknowledging the differences in values and beliefs and attitudes toward health and illness in the Mexcian-American individual will help nursing practice be more culturally sensitive and improve understanding among provideers and recipients of care. Recognizing that a change in behavior will occur with symptoms that negatively impact a person's sense of well being, nursing can provide education on the disease process when a complication has occurred rather than chastise the individual for not seeking care in a timely fashion.

Limitations of the Study

A true ethnographic study takes time to observe the culture and sample the population adequately, so that credible representation can occur. Time and sampling constraints were two limitations for this study. Due to time constraints, only six interviews were able to be conducted with the participants which did not really allow for in-depth interviews. Time also did not allow for representative theoretical sampling of the population and therefore a convenience sample was used.

The sample size was small because of timing. Therefore, there may be limitations regarding generalizability. Additionally, the sample may not represent all generations of Mexican-Americans. Most participants in this study were third generation and may not have provided the information the researcher was seeking. There was only one first generation participant who seemed to have retained more of her cultural expressions. Maria believed in susto, and was aware of more herbal remedies for illness than any of the other participants. While third generation participants seemed to have changed some of their dietary and herbal beliefs and practice, the cultural values of family, faith, and respeto were maintained by all. Because of the limited sampling, saturation was not able to be obtained with this sample, thus limiting the usefulness of these findings and their generalizability.

The in- depth interviews were also limited.The researcher was in a student role and had difficulty with the process. Two of the first interviews had more of a conversational and provider / patient interview format than research format. However, as comfort level in the process improved and the researcher was re-oriented by committee members, interview techniques and environment observations improved dramatically. The final three interviews followed the research format more closely and elicited culturally rich data related to the research question, thereby providing information that led to the development of domains and taxonomies.

The role of clinician also impacted this study; as the student is also currently a practicing nephrology nurse. Interview techniques learned as a clinician were confused with research interview techniques. The researcher found herself in situations during the

interviews where the clinician role interfered; she provided medical information to questions or performed assessment interviews with the participants instead of focusing on the research process. However, learning how to do a research interview has now improved her clinican's skills in clinical interviewing.

Another limitation was the researcher's familiarity with the culture being studied. This provided some biases and important data might have been omitted due to shared meanings, symbols and language . More in-depth discussion could have occurred if she had not been so aware of the specific cultural terms. The researcher only became aware of the amount of in-depth data that could have been acquired toward the end of the data collection;the final interview provided more information about any specific cultural terms that were mentioned through expand questioning. However, a benefit to recognizing the cultural meanings and having lived the culture allowed the researcher to establish a relationship with the participants more easily.

Future Study Recommendations

In subsequent studies, a larger sample size and more purposive is recommended. This will allow for saturation to occur, leading to more credible findings. Also the researcher would recommend obtaining the sample from within the community such as the barrios, highly populated Mexican-American neighborhood, or from churches rather than from an established health care facility or provider practice. Recognizing that religious beliefs impact secondary prevention in Mexican-Americans, conducting focus groups in a church could allow us to develop detailed knowledge about beliefs that are shared within the community. Also seeking traditional first generation participants,

instead of a convenient and acculturated sample that was already addressing their health care issues, to study could help us see if generational differences impact the retention of cultural values and therefore affect health related behaviors.

Summary

This chapter described the findings of the study and how they related to the research question, Leininger's conceptual model and the existent literature. The research question, what impact do Mexican-American cultural values have on the use of secondary preventive services, was answered by the domains, taxonomies, and cultural themes that were identified. Support for Leininger's model was also addressed through the taxonomies and themes. The findings of the study were consistent with most of the literature research reported. Limitations of the study and implications for nursing were also addressed. Future practice recommendations included targeting a younger Mexican-American population in middle school to teach health promotion and prevention. Also studying first generation Mexican-American individuals to see if cultural expressions regarding health and illness attitudes are maintained is recommended.

Appendix A

Human Subjects Committee Approval

Human Subjects Committee

THE UNIVERSITY OF
ARIZONA.
HEALTH SCIENCES CENTER

1622 E. Mabel Street
PO Box 245137
Tucson, AZ 85724-5137
(520) 626-6721

6 October 2000

Gladys S Benavente, Master's Candidate
Advisor: Mary Koithan, Ph.D.
College of Nursing
PO BOX 210203

RE: MEXICAN-AMERICAN CULTURAL VALUES: DO THEY IMPACT THE USE OF SECONDARY PREVENTIVE SERVICES?

Dear Ms. Benavente:

We received documents concerning your above cited project. Regulations published by the U.S. Department of Health and Human Services [45 CFR Part 46.101(b)(2)] exempt this type of research from review by our Committee.

Thank you for informing us of your work. If you have any questions concerning the above, please contact this office.

Sincerely,

David G. Johnson, M.D.

David G. Johnson, M.D.
Chairman
Human Subjects Committee

DGJ/js
cc: Departmental/College Review Committee

Appendix B

Letters of cooperation

UMC
UNIVERSITY MEDICAL CENTER

1501 North Campbell Avenue
P.O. Box 245154
Tucson, Arizona 85724-5154

Disease Management
Tel: (520) 694-4811
Fax: (520) 694-9258

September 22, 2000

Dear Ms. Benavente,

It was a pleasure talking with you the other day. The purpose of this letter is to let you know that I will support your research project as best I can by referring Mexican-American adults with diabetes for your study.

Sincerely,

Betsy Dokken, NP, MSN, CDE
Coordinator, Diabetes Care for a Lifetime program

THE UNIVERSITY OF ARIZONA
HEALTH SCIENCES CENTER

Department of Medicine
Section of Renal Disease
PO Box 245022

THE UNIVERSITY OF
ARIZONA
HEALTH SCIENCES CENTER

Tucson, Arizona 85724
(520) 626-6170
FAX (520) 626-2024

January 20, 2000

Gladys Benavente, RN
Adult Nurse Practitioner Student
University of Arizona – College of Nursing

Dear Ms. Benavente:

I agree to refer my patients to your qualitative research project. The project studies Mexican Americans with chronic illnesses to explore cultural patterns in their health belief system that may impact their responses to chronic illnesses.

Sincerely,

Sam H. James, M.D.
Associate Professor of Clinical Medicine

SJ/kl

Appendix C

Subject's Disclaimer

UNIVERSITY OF ARIZONA HEALTH SCIENCE CENTER
SUBJECT'S DISCLAIMER FORM

Mexican-American Cultural Values: Do They Impact the Use of Secondary Preventive Services?

You are being asked to voluntarily participate in a study exploring Mexican-American cultural values and their impact on utilization of health preventive services. By responding to questions in an interview , you will be giving your consent to participate in this study.

The interview will take place in a location convenient for you and will last approximately one (1) hour, and a follow-up interview which will last 20 minutes may be requested. With your permission, a tape recorder will be used. Your identity will not be revealed and your confidentiality will be maintained in all reports of this project. The audiotapes and transcripts will be locked in a cabinet in a secure place.

You may choose not to answer some or all of the questions. Any questions you have will be answered and you may withdraw from the study at any time with no consequences whatsoever. There are no known risks involved in your participation.

The overall aim of this study is to help nurses learn about the Mexican-American cultural values . This information could be used to help plan for health care services that would be suitable for the needs of the Mexican-American.

I can obtain further information from Dr. Mary Koithan at 626-2506. If I have questions concerning my rights as a research subject, I may call the Human Subjects Committee office at 626-6721.

Thank you.

_____ _____

Investigator Date

_____

Telephone Number

UNIVERSITY OF ARIZONA HEALTH SCIENCE CENTER
SUBJECT'S DISCLAIMER FORM

Los Valores Culturales Mexico-Americanos: Affectan el Uso de Servicios Secundarios Preventivos?

Se le ha pedido a usted que participe voluntariamente en un estudio que explora los valores culturales del mexico-americano y su impacto en el uso de los servicios preventivos de salud. Respondiendo a las preguntas en una entrevista, usted estara dando su consentimiento para tomar parte en este estudio.

La entrevista tomara lugar en un sitio conveniente para usted y durará aproximadamente una hora. Una entrevista que durará 20 minutos se le puede pedir para completar el estudio. Con su permiso, una grabadora se usará. Su identidad no se revelará y su confidencialidad se mantendrá en todos los reportes de este proyecto. Las cintas y transcripciones seran guardadas en un lugar seguro y sellado

Usted puede escoger no contestar algúna o todas las preguntas. Cualquiera pregunta que tenga usted, sera contestada. Puede retirarse del estudio a cualquier tiempo sin ninguna consecuencia hacia usted. No hay riesgos en su participación de este estudio.

El proposito completo de este estudio es ayudar a enfermeros que aprendan acerca de los valores culturales mexico-americanos. Esta informacion se podra usar en planear servicios de salud que serían adecuados a las necesidades del mexico-americano.

Puedo obtener mas informacion de Dr. Mary Koithan en 626-2506. Si tengo preguntas con respecto a mis derechos como un sujeto de investigación, yo puedo llamar a la oficina del Comite de Sujetos Humanos 626-6721.

Gracias.

_____ _____

Investigadora Fecha

_____

Numero de Telefono

Appendix D

Demographics and Interview Guide

Demographics:

Name_____

Phone #_____

Sex____ Age____

Marital Status _____Married ____Single ____Divorced ___Widow(er) ___

Education_____

Employment_____Health Insurance___yes___no

Mexican-American:

1st generation_____ 2nd generation_____3rd generation_____

Primary language_____English ____Spanish

Religion_____

Interview guide:

Grand Tour Questions:

1. Tell me about getting care for your diabetes.
2. Tell me about what kinds of things that you do to take care of yourself because of your diabetes.
3. Is there any special belief or ritual (specific behaviors, practices, dietary) you do to deal with your illness?
4. What do you do to help from getting any further problems with your illness?

More specific questions based on Leininger's Conceptual Model

Religion domain

1. How does religion or faith affect what you do to care for your hypertension?
2. How does religion or faith affect what you do to prevent further problems from your illness?

Kinship/ social domain

1. Who helps you in dealing with your illness?
2. What role does your family or neighbors have in dealing with a health problem?
3. Do you do anything special (special activities or behaviors) to treat /care for your Diabetes because of family members or because of a relationship you are in?

Cultural Domain

1. Are there any special foods or herbs that you use to deal with your illness or to prevent it from getting worse?

Miscellaneous:

1. How do you see your health at this time?
2. Are there any difficulties you encounter in seeking help for health problem?

Demograficos:

Nombre_____

Numero de telefono _____

Sexo _____ edad _____

Casado _____Soltero _____divorciado _____ viudo _____

Educacion _____

Empleo _____

Seguro de salud _____si _____no

Mexico-americano
_____ primera generación_____ segunda generacion ____tercera generacion

Idioma Primaria_____ingles _____espanol

Religión _____

Preguntas para la entrevista:

Preguntas Mayores:

1. Cuenteme como obtiene cuidado para su enfermedad (diabetes o alta presion).
2. Cuenteme que cosas hace usted para cuidarse sobre su enfermedad (diabetes o alta presion).
3. ¿Hay alguna creencia, practica o comidas que usted usa para ayudarle con su enfermedad?
4. ¿Qué hace usted para prevenir más problemas o complicaciones con su enfermedad?

Las siguientes preguntas estan basadas en el Modelo Conceptual de Leininger

El dominio de la Religión

1. Cómo le afecta su religion o su fe en lo que usted hace para cuidar su alta presion?
2. ¿Cómo le afecta su religión o su fe en lo que usted hace para prevenir problemas adicionales de su enfermedad?

El dominio del parentesco/el dominio social

1. ¿Quién le ayuda a tratar con su enfermedad?
2. ¿Qué papel tienen su familia o los vecinos en tratar problemas de salud?
3. ¿Hace usted algo especial para tratar o cuidarse de su Diabetes a causa de su familia o a causa de una relación en la que usted está en?

El Dominio cultural

1. Hay algún alimento o hierbas especiales que usted usa para tratar con su enfermedad o para prevenir que se empeore?

Variado:

1. ¿Cómo ve usted su salud en este tiempo?
2. ¿Hay alguna dificultad que usted encuentra en buscar ayuda para problemas de salud?

REFERENCES

American Diabetes Association (1998) Standards of medical care for patients with diabetes mellitus. Diabetes Care Vol. 21, Suppl. 1, pp.523-531.

Aguirre-Molina, M., Ramirez, A. & Ramirez, M. (1993). Health promotion and disease prevention strategies. Public Health Reports, Vol.108 (5), pp.559-564.

Ailinger, R. L. (1988) Folk beliefs about high blood pressure in hispanic immigrants. Western Journal of Nursing Research, 10 (5), pp.629-636.

Alexander, Sr. J., Beagle, C., Butler, P., Dougherty, D.A., Andrews Robards, K.D. (1986). Transcultural care theory. In A. Marriner (Ed.) Nursing Theorists and Their Work (p.144-158). St. Louis, MO: C.V. Mosby Company.

Banta, H.D. (1987) Health care costs : technology and policy. In C.J. Schramm (Ed.) Health Care and Its Costs (p.252-274). New York:W.W.Norton & Co.

Bassford, T.L. (1995). Health status of Hispanic elders. Clinics in Geriatric Medicine,11(1), pp.25-35.

Becerra, R.M. & Iglehart, A.P. (1995). Folk medicine use: diverse populations in a metropolitan area. Social Work in Health Care, 21 (4), pp.37-51.

Bolen, J.C., Rhodes, L., Powell-Griner, E.E., Bland, S.D., & Holtzman, D.(2000) State-specific prevalence of selected health behaviors, by race and ethnicity –Behavioral Risk Factor Surveillance System, 1997. CDC, MMWR Surveillance Summaries, March 24, 2000/49 (SS02), pp.1-60.

Bodnar, A. & Leininger, M.(1995) Transcultural nursing care of American gypsies. In M. Leininger (Ed), Transcultural Nursing Concepts, Theories, Research and Practice, (pp.445-66) New York: McGraw-Hill, Inc.

Burk, M., Weiser, P.C., & Keegan, L.(1995).Cultural beliefs and health behaviors of pregnant Mexican-American women: implications for primary care. Advanced Nursing Science, 17(4), pp.37-52.

Cameron, C. & Luna, L. (1996). Leininger's transcultural nursing model. In J.J. Fitzpatrick & A.L. Whall (Ed.), Conceptual Models of Nursing: Analysis and Application (p.183-197). Stamford, CT: Appleton & Lange.

Caudle, P. (1993). Providing culturally sensitive health care to hispanic clients. Nurse Practitioner, 18 (12), pp.40-51.

CDC Media Relation: Facts about Diabetes, September 1998 [On-line] Available: Website: http://www.cdc.gov./od/oc/media/fact/diabetes.htm

Chavez, L.R., Hubbell, F.A., Mishra, S.I. & Valdez, R.B. (1997) The influence of fatalism on self-reported use of papanicolaou smears. American Journal Of Preventive Medicine Vol. 13(6),pp.418-423.

Cohen, J.A. (1991) Two portraits of caring: a comparison of the artists Leininger and Watson. Journal of Advanced Nursing, 16, pp.899-909.

D'Arrigo, T. & Keegan, A. (2000) Diabetes and latinos- a community at risk. Diabetes Forecast, vol.53 (6) p. 43.

Delgado, J.L. (1995) Meeting the health promotion needs of hispanic communities. American Journal of Health Promotion, Vol. 9(4), pp.300-311.

Delgado, J.L., Johnson, C.L., Roy, I. & Trevino, F.(1990) Hispanic health and nutrition examination survey: methodological considerations. American Journal of Public Health, Vol.80, pp. 6-9.

De Paula, T., Lagana, K. & Gonzalez-Ramirez, L.(1998) Mexican-Americans. In J.G. Lipson, S.L. Dibble, & P.A. Minarik (Ed.), Culture and Nursing Care (p.203-221).San Francisco, CA: UCSF Nursing Press.

DeSantis, L. & Ugarriza, D.N. (2000) The concept of theme as used in qualitative nursing research. Western Journal of Nursing Research. 22(3), pp351-372.

Diabetes in Arizona. [On-line]Available: Website: http://www.hs.state.az.us/diabetes/stats/stats.html.

Diabetes Stats in US. [On-line] Available: Website: http://www.cdc.gov/diabetes/pubs/facts98.htm.#prev.

Flaskerud, J.H. & Calvillo, E.R.(1991). Beliefs about AIDS, health, and illness among low-income latina women. Research in Nursing & Health, 14,pp.431-438.

Flores, E.T. & Mata, A.G.(1995). Latino male attitudes and behaviors on their spouses' and partners' cancer-screening behavior: focus group findings. Journal of the National Cancer Institute Monographs. (18), pp.87-92.

Flores, G., Bauchner, H., Feinstein, A.R. & Nguyen, U.D.T.(1999). The impact of ethnicity, family, income, and parental education on children's health and use of health services. American Journal of Public Health, 89(7), pp.1066-1070.

Furino, A. & Munoz, E. (1991). Health status among hispanics: major themes and new priorities. JAMA, 265(2), pp.255-257.

Ginzberg, E. (1991). Access to health care for hispanics. JAMA, 265(2), pp.238-241.

Gomez, G.E. & Gomez, E.A. (1985). Folk healing among hispanic americans. Public Health Nursing, 2 (4), pp.245-249.

Gonzalez-Swafford, M.J. & Gutierrez, M.G.(1983). Ethno-medical beliefs and practices of mexican-americans. Nurse Practitioner, November/December, pp.29-34.

Gordon, S.M. (1994). Hispanic cultural health beliefs and folk remedies. Journal of Holistic Nursing, Vol. 12 (3), pp.307-322.

Harris, P. & Moran, R. (1987). Managing Cultural Differences. Houston: Gulf Publishing Co. p.190.

Healthy People 2000 Fact sheet. [On-line]. Available: Website: http://www.web.health.gov/healthypeople.

Higginbotham, J. C., Trevino, F. M., & Ray, L. (1990).Utilization of curanderos by Mexican-Americans: prevalence and predictors, findings from HHANES 1982-84. American Journal of Public Health, Vol.80,Supplement, pp.32-35.

HIV/AIDS Surveillance report. [On-line] Available: Website: http://www.cdc.gov/hiv/stats/hivsurv97.pdf

Holloway,I.& Wheeler, S. (1996) Qualitative Research for Nurses . Cambridge: Blackwell Science (p81-95).

Kosko, D.A. & Flaskerud, J.H. (1987). Mexican-American, nurse practitioner, and lay control group beliefs about cause and treatment of chest pain. Nursing Research, 36,(4), pp.226-230.

Leininger, M. M (1978). Transcultural nursing: concepts, theories and practices. New York : John Wiley & Sons.

Leininger, M.M. (1985). Transcultural care diversity and universality: a theory in nursing. Nursing and Health Care, 6, pp.209-212.

Leininger, M.M.(1988). Leininger's theory of nursing: cultural care diversity and universality. Nursing Science Quarterly, pp.152-160.

Leininger, M. M.(1991). The theory of culture care diversity and universality. Culture Care Diversity and Universality.NLN Publications . pp5-68.

Leininger, M. M (1995). Phillipine-americans and culture care. In M. Leininger (Ed) Transcultural Nursing, Concepts, Theories Research and Practices (pp349-62) New York: McGraw-Hill, Inc.

Leininger, M.M. (1996). Cultural care theory, research, and practice. Nursing Science Quarterly, 9(2), pp.71-78.

Leininger, M.M. (1997). Overview of the theory of culture care with the ethnonursing research method. Journal of Transcultural Nursing, Vol. 8(2) pp.3-52.

Lipson, J.G. & Steiger, N.J.(1996) Self-Care Nursing in a Multicultural context. Thousand Oaks, California: Sage Publications, Inc.

Mahon, J., Mcfarlane, J., Golden, K.(19910 De madres a madres: a community partnership for health. Public Health Nursing, 8 (1),pp. 15-19.

Marsh, W.W. & Hentges, K. (1988) Mexican folk remedies and conventional medical care. American Family Practice, 37(3), pp.257-261.

McFarland, M (1995) Culture care theory and elderly Polish-Americans. In M. Leininger (Ed), Transcultural Nursing Concepts, Theories, Research and Practices (pp 401-24) New York: Mc Graw-Hill, Inc.

Meleis, A. (1981). The Arab –American in the healthcare system. American Journal of Nursing, June, pp.1180-1183.

Mikhail, B.I. (1994) Hispanic mothers' beliefs and practices regarding selected children's health problems. Western Journal of Nursing Research, 16(6), pp. 623-638.

Modiano, M.R., Villar-Werstler, P., Meister, J., Figueroa-Valles, N. (1995) Cancer in hispanics: issues of concern. Journal of the National Cancer Institute Monographs, No. 18, pp.35-38.

Morgan, C., Park, E., & Cortes, D.E. (1995). Beliefs, knowledge, and behavior about cancer among urban hispanic women. Journal of the National Cancer Institute Monographs, No.18, pp.57-63.

National Center for Chronic Diseases Prevention and Health Promotion. July 2000. [On-line] Available: Website: http://www.cdc.gov/nccdph/diabetes.htm

National Council of La Raza. February 1997. Diabetes Among Latinos. pp 1-20. Washington, DC.

Northam, S. (1996). Access to health promotion, protection, and disease prevention among impoverished individuals. Public Health Nursing, 13(5), pp.353-364.

Novello, A. C. , Wise, P. H., & Kleinman, D.V. (1991). Hispanic health: time for data, time for action. JAMA, 265(2), pp.253-255.

Pender, N.J. (1996). Health Promotion in Nursing Practice. Stamford, Connecticut: Appleton & Lange. (p34)

Perez-Stable, E.L., Sabogai, F., Hiatt, R. A. & McPhee, S. (1992) Misconceptions about cancer among latinos and anglos. JAMA, Dec. 9, Vol.268 (22), pp.3219-3223.

Pousada, L. (1995). Hispanic –american elders: implications for health-care providers. Clinics in Geriatric Medicine, 11(1), pp.39-50.

Ramirez, A.G., Villareal, R., Suarez, L., Flores, E.T. (1995) The emerging hispanic population: a foundation for cancer prevention and control. Journal of the National Cancer Institute Monographs, No.18, pp. 1-9.

Rehm, R. S. (1999). Religious faith in mexican-american families dealing with chronic childhood illness. Image: Journal of Nursing Scholarship,31(1) pp.33-38.

Risser, A.L., & Mazur, L.J. (1995). Use of folk remedies in a hispanic population. Arch Pediatr Adolesc Med, 149,pp.978-981.

Rodriguez, S. (July 1995). Hispanics in the United States: an insight into group characteristics. [On-line] Available: http://www.hhs.gov/about/heo/hgen.html

Rosenbaum, J. & Carty, L. (1996) The subculture of adolescence: beliefs about care, health and individuation within Leininger's theory. Journal of Advanced Nursing, 23, pp.741-746.

Scholz, J. (1990). Cultural expressions affecting patient care. Dimensions in Oncology Nursing, IV(1), pp. 16-26.

Shamansky, S.L., & Clausen, C.L. (1980) Levels of prevention: examination of concept. Nursing Outlook, 28 , pp.104-108.

Shanahan, M. & Brayshaw, D.L. (1995). Are nurses aware of the differing health care needs of the Vietnamese patients? Journal of Advanced Nursing, 22, pp.456-464.

Snow, F.L.(1983). Traditional health beliefs and practices among lower class black americans. Western Journal of Medicine,139, pp.820-828.

Solis, J., Marks, G., Garcia, M., & Shelton, D. (1990) Acculturation, access to care, and use of preventive services by Hispanics: findings from HHANES 1982-84. American Journal of Public Health, Vol. 80, pp. 11-18.

Spradley, J.P. (1979). The Ethnographic Interview . Orlando, Florida: Harcourt Brace Jovanovich College Publishers.

Stern, M., Pugh, J., Gaskell, S. & Hazuda, H. (1982) Knowledge attitudes, and behavior related to obesity and dieting in mexican americans and anglos: the san antonio heart study. American Journal of Epidemiology. 115 (6) , pp.917-927.

Streubert.H. & Carpenter,D. (1995). Qualitative Research in Nursing. Philadelphia: J.B. Lippincott Company.

Suarez,L., Nichols, D.C., & Brady, C.A. (1993). Use of peer role models to increase pap smear and mammogram screening in mexican-american and black women. American Journal of Preventive Medicine, Vol.9 (5), pp.290-296.

Tortolero-Luna, G. Glober, G.A., Villareal, R., Palos, G., & Linares, A.(1995). Screening practices and knowledge, attitudes, and beliefs about cancer among hispanic and non-hispanic white women 35 years old or older in Nueces County, Texas. Journal of the National Cancer Institute Monographs, No.18, pp.49-56.

Urdaneta, M.L. & Krehbiel, R. (1989). Cultural heterogeneity of Mexican-Americans and its implications for the treatment of diabetes mellitus type II. Medical Anthropology, Vol. 11, pp. 269-282.

US Bureau of the Census. *The Hispanic population in the United States*. March 1997 Update.

US Bureau of the Census, *Population Projections of the United States by Age, Sex, Race and Hispanic Origin: 1990-2050, Current Population reports*, February 1996.

US Renal DataSystem (USRDS) 1999 Annual data report. National Institute of Health, National Institute of Diabetes and Digestive and Kidney diseases. Bethesda,MD.

Villarruel, A. & Leininger, M. (1995). Culture care of Mexican-Americans. In M.Leininger (Ed), Transcultural Nursing: Concepts,Theories, Research & Practices. (pp.365-382), New York: MCGraw-Hill,Inc.

Wenger, A.F. (1993). Cultural meaning of symptoms. Holistic Nurse Practitioner, 7(2), pp. 22-35.

Zaldivar, A. & Smolowitz, J. (1994). Perceptions of the importance placed on religion and folk medicine by non-mexican-american hispanic adults with diabetes. The Diabetes Educator, 20(4), pp.303-306.