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# A MICHIGAN STATE UNIVERSITY EXTENSION STUDY OF THE HEALTH UTILIZATION PATTERNS AND HEALTH CONCERNS OF MICHIGAN LATINOS

By

**Melissa Anne Elafros** 

#### **A THESIS**

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#### **ABSTRACT**

## A MICHIGAN STATE UNIVERSITY EXTENSION STUDY OF THE HEALTH UTILIZATION PATTERNS AND HEALTH CONCERNS OF MICHIGAN LATINOS

By

#### **Melissa Anne Elafros**

Every region of the United States has experienced significant growth in the Latino population in recent years. Between 2000 and 2006, the number of U.S. Latinos grew to comprise nearly 15% of the nation's population (US Census Bureau 2006:n.p.). Latinos are the largest minority group, yet have the worst health outcomes of any group despite the health benefits purportedly offered by the "Latino Paradox". U.S. Latinos also experience substantial inequities in health care services. Previous research has examined the health utilization patterns of Latinos nationwide or in select areas of the United States. Only two published studies have asked Latinos to report their health concerns.

The purpose of this pilot study was to examine the health utilization patterns and health concerns of Michigan Latinos compared to Latinos from other studies. Data was collected using a written questionnaire and focus group interviews. The results of this study were unclear about how the health utilization patterns of Michigan Latinos compared to the same patterns of Latinos in previous studies. This was largely due to the small sample size of this study. The health concerns of Michigan Latinos somewhat resembled the concerns of other U.S. Latinos. Michigan Latinos were often more concerned about social problems (drugs, alcohol, etc.) than about specific illnesses.

This study highlighted some of the challenges of working with the Latino population in Michigan. It also reinforced the need for more research to design effective, culturally-appropriate holistic health programs for Latinos in the future.

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#### CHAPTER I

#### INTRODUCTION

#### **Statement of Problem**

Every region of the United States has experienced significant growth in the Latino population in recent years. Between 2000 and 2006, the number of U.S. Latinos grew to comprise nearly 15% of the nation's population (US Census Bureau 2006:n.p.) At 44.2 million, Latinos are now the largest ethnic minority group within the United States (US Census Bureau 2006:n.p.). Because of high immigration and fertility rates, the U.S. Latino population is projected to continue to grow. By the year 2050, Latinos are expected to constitute 25% of the U.S. population (Amaro and de la Torre 2002:525).

Latinos are now the largest ethnic minority group; yet, they also have the worst health outcomes of any subgroup of the U.S. population. This is despite the health benefits purportedly offered by the "Latino Paradox". The substantial disparities in health status between Latinos and non-Latinos in the United States are well documented. The rates of disease diagnosis for cervical cancer, stomach cancer and sexually transmitted diseases are substantially higher among Latinos than among non-Latino whites (Center for Disease Control 2007:262; Howe et al. 2006:1719; Parker et al. 1998:39). Latinos also have higher death rates for conditions such as chronic liver disease, diabetes mellitus and HIV (Center for Disease Control 2004b:2330; Center for Disease Control 2007:196; Burke and Schur 1999:1452; Obiri et al. 1998:843).

U.S. Latinos experience substantial inequities in access to health care services.

Latinos more often lack a regular source of care than do non-Latino whites (Angel, Angel

and Markides 2005:1268; Documét and Sharma 2004:8; Durden and Hummer 2006:1326; Center for Disease Control 2004a:2332; Callahan, Hickson and Cooper 2006:631; Fiscella et al. 2002:55; Guendelman and Wagner 2000:185; Kaiser Family Foundation 2004a:4; 2004b:3; Weinick, Zuvekas and Cohen 2000:42). Latinos are also less likely to access preventive care than are non-Latino whites (Center for Disease Control 2004a:2331). They are significantly less likely than are non-Latino whites to visit a doctor's office and are more likely to visit a community clinic (Durden and Hummer 2006:1326; Kaiser Family Foundation 2004a:4; 2004b:3). Latinos are also more likely than are non-Latinos to report not being able to obtain medical care when they need it (Center for Disease Control 2004a:2332).

Previous research examined the health utilization patterns of Latinos nationwide and in certain areas of the United States. Those studies revealed some of the barriers preventing Latinos from accessing adequate health services. Health professionals have used those studies, along with disease diagnosis rates, to predict the health concerns for the Latino population. Only two published studies have actually asked Latinos what their health concerns are. No study has specifically focused on Michigan's Latino population.

#### **Purpose of the Study**

This research was part of a pilot study conducted by Michigan State University Extension (MSUE) as a follow-up to MSUE's Healthy Hispanic Project (HHP). HHP began in 2003 as an educational outreach program targeting breast and cervical cancer screening rates in Michigan Latinas. HHP was a "promatora" outreach program; MSUE provided training and educational materials to one female member of the Latino

community in four Michigan counties. These trained community members then educated others in their community about breast and cervical cancer and provided social support to encourage more Latinas to undergo screening for these types of cancer. MSUE-trained women quickly became a valuable resource to Michigan Latinos. Once community members trusted these women, they were approached with numerous other health concerns. Through the HHP, MSUE identified some of the unmet health needs in Latino communities around the state.

Tthis pilot study is the first step required to officially characterize the needs of Michigan's Latino population. The goal of this pilot study is to start to examine the health utilization patterns and health concerns of Michigan's Latino population. The long-term goal of this research is to provide MSUE with the knowledge necessary to design culturally-appropriate, holistic health promotion programs in the future.

#### **Importance**

This study is the first known work to determine the needs of Michigan's Latino communities from their own perspectives. It will focus on the permanent Latino population that is often ignored during policy development and health program design. This study attempts to challenge the popular stereotypes of Latinos in the United States that depict them as socially unimportant migrant workers and undocumented immigrants. This project also attempts to use scientific neutrality to address the challenges presented when addressing health care concerns in a diverse cultural group.

Furthermore, this study is beneficial to MSUE. With offices in every Michigan County, MSUE is proud of its ability to work with local residents to improve

communities around the state. By working with MSUE County Staff, this study strengthens the trust between MSUE and Michigan's Latino communities. By highlighting the needs of an underserved population, this study will help further the development of MSUE's culturally-appropriate educational programs in the future.

#### **Overview of Subsequent Chapters**

Chapter II contains a summary of the demographics of the Latino population in the United States and Michigan. It also contains a review of the literatures on the disparities between the health status of Latinos and non-Latinos, Latino health care access and utilization patterns, and key determinants of health care access and utilization among Latinos. Chapter II includes studies regarding known Latino health concerns as well as the methods preferred by Latinos for obtaining health information. Chapter II concludes with hypotheses derived from the literature for analysis in this study. Chapter III presents the methodological design and procedures for the pilot study. Chapters IV and V contain a presentation of the results obtained during administration of the written questionnaire and focus group interviews, respectively. Chapter VI discusses the findings from this study's hypothesis tests. This final chapter also includes the limitations of this pilot study's findings as well as recommendations for future research.

#### CHAPTER II

#### A REVIEW OF THE LITERATURE

The review of literature for this study is divided into seven sections. First, I describe demographic trends in the growth of the Latino population over the past ten years in the United States and, more specifically, in Michigan. Second, I review existing findings on the health disparities between Latinos and non-Latino whites in the United States and Michigan. Third, I highlight trends in Latinos' health care access and utilization. Fourth, I review studies that examine key determinants of health care access and utilization among Latinos. Fifth, I examine what the existing literature says about the health concerns of the Latino population. Sixth, I review current findings regarding the Latinos' preferred methods for obtaining health information. Finally, I present hypotheses derived from this literature for analysis in this study.

#### **Growth of the Latino Population**

Between 2000 and 2006, the number of Latinos in the United States grew to comprise nearly 15% of the nation's population (US Census Bureau 2006:n.p.). At 44.2 million, Latinos are now the largest ethnic minority group in the United States (US Census Bureau 2006:n.p.). 58.5% of this population has Mexican ancestry (Kayitsinga et al. 2007:n.p.). Puerto Ricans are second largest subgroup of this population, accounting for 9.6% of the Latino population (Kayitsinga and Post 2007:n.p.).

Latinos reside in all 50 states, with different subgroups of the population inhabiting different regions. 55.3% of the Mexican population lives in the West, while another 31.7% resides in the South (Guzmán 2007:2). In comparison, 60.9% of Puerto

Ricans live in the Northeast with another 22.3% in the South (Guzmán 2007:2). 10.7% and 9.6% of the Mexican and Puerto Rican populations, respectively, inhabit the Midwest (Guzmán 2007:2). Most Latinos reside in urban areas, with only 6.6% inhabiting rural areas (Kayitsinga and Post 2007:n.p.). 74% of those residing rural areas around the United States are Mexican (Kayitsinga and Post 2007:n.p.).

The U.S. Latino population is also younger on average than the overall population. The average age for the Latino population is 27.3 years, in comparison to 36.4 years for the general population (US Census Bureau 2006:n.p., Guendelman and Wagner 2000:182). In 2000, 33.7% of the Latino population was under the age of eighteen, in comparison to 24.6% of the general population (US Census Bureau 2006:n.p.). In 2006, 10.6% of Latinos were under the age of five (US Census Bureau 2006:n.p.). This is 3.8% more than the general population (US Census Bureau 2006:n.p.). Because of the higher fertility rate of U.S. Latinos (3.0 children per Latino woman in comparison to 1.8 children per non-Latino white woman), the disproportionate age structure of the population is anticipated to continue (De Vita 1996:14). As a result, researchers expect the Latino population to continue to grow faster than other subgroups of the U.S. population (De Vita 1996:14; Guzmán 2001:2; Kayitsinga and Post 2007:n.p.).

The percentage of the U.S. population that is Latino is increasing in every state except for Hawaii (Guzmán 2001:4). Between 1990 and 2000, the U.S. Latino population grew by 57.9%, compared with a 13.2% increase during this time period for the entire U.S. population (Guzmán 2007:2). By the year 2050, Latinos are expected to constitute 25% of the U.S. population (Amaro and de la Torre 2002:525). Subgroups of

the Latino population have increased at different rates in recent years. From 1990 to 2000, the Mexican American population increased by 52.9%, while the Puerto Rican population in the United States increased by only 24.9% (Guzmán 2007:2).

The characteristics of Michigan's Latino population follow national trends. In 2000, 323,877 Latinos lived in Michigan (Kayitsinga and Post 2007:n.p.). 70.4% were Mexican and 10.4% were Puerto Rican (Kayitsinga and Post 2007:n.p.). The remaining 19.2% were Central American (2.9%), South American (2.5%), Cuban (1.4%), Dominican (0.3%) or from some other area (12.1%) (Kayitsinga and Post 2007:n.p.). Compared to the U.S. Latino population, a larger percentage of Michigan Latinos reside in rural areas – 16.6% of Latinos in Michigan reside in rural areas in comparison to 6.6% of Latinos nationwide (Kayitsinga and Post 2007:n.p.). However, like Latinos nationwide, the majority of Michigan Latinos in rural areas are Mexican (73.9%) (Kayitsinga and Post 2007:n.p.).

The growth of Michigan's Latino population also parallels national trends. Michigan's Latino population grew by 50.3% between 1990 and 2000, a slightly smaller increase than the national trend of 57.9% (Kayitsinga and Post 2007:n.p.). Michigan's Latino population is also much younger than the general population of Michigan. The average age of Michigan's Latino population is 23.1 years compared to 32.6 years for the general Michigan population (Kayitsinga and Post 2007:n.p.). 36.9% of Michigan's Latino population is under the age of 18, in comparison to 25.9% for the general population (Michigan Census Bureau 2005:n.p.). Furthermore, 12.3% of the Latino population is under the age of 5, in comparison to 7.5% for the general population (Michigan Census Bureau 2005:n.p.). Scholars expect the growth of the Latino

population in Michigan to continue (Kayitsinga and Post 2007:n.p.). To respond to the growth of the Latino population both nationally and in Michigan, public health officials and other scholars are working to address the health needs exhibited by the Latino population.

#### **Latino Health Disparities**

Medical scholars and health practitioners have clearly documented the health disparities between Latinos and non-Latinos. The following death rates are higher for Latinos than for non-Latino whites (all death rates are out of 100,000 people): chronic liver disease and cirrhosis (14.0 versus 9.2), diabetes mellitus (32.1 versus 22.3), and HIV (5.3 versus 2.3) (Center for Disease Control 2004b:2330, 2007:196; Burke et al. 1999:1452; Obiri et al. 1998:843). Latino children also have higher death rates than non-Latino white children. "Mexican American girls younger than 1 year (559.4 per 100,000) and between the ages of 1 and 4 years (29.5) have higher death rates than their non-Latino White counterparts (544.6 and 27.0, respectively)" (Amaro and de la Torre 2002:525).

The rates of disease diagnosis are higher for U.S. Latinos than for non-Latino whites. Latinas have disproportionately high rates of cervical cancer – 12.6% in comparison to 6.5% for non-Latino whites (Center for Disease Control 2007:262; Howe et al. 2006:1719; Parker et al. 1998:39). Health practitioners also diagnose Latinos with stomach cancer at more frequently (15.6% for men and 9.6% for women) than they diagnose non-Latino whites (9.1% for men and 4.0% for women (Center for Disease Control 2007:262; Howe et al. 2006:1719). Sexually transmitted diseases affect the Latino population at higher rates (Center for Disease Control 2006:n.p.). Over two times

more Latino children under the age of thirteen are diagnosed with AIDS than are non-Latino whites in the same age group (Center for Disease Control 2007:259). The prevalence of obesity is also significantly higher within the Latino population (Flores et al. 2002:86; Whiteaker and Orzol 2006:580). Twice as many Mexican women over the age of 20 are overweight or obese than are non-Latino white women (73.2% to 37.1%, respectively) (Center for Disease Control 2007:305).

Medical scholars and health practitioners have observed similar health disparities within Michigan's population. According to the Michigan Department of Community Health (n.d.:n.p.), Latinos are disproportionately affected by cancer and diabetes. 8.5% of the Latino population has diabetes mellitus, in comparison to 7% of non-Latino whites (Michigan Department of Community Health n.d.:n.p). Sexually transmitted diseases are also more prevalent among Latinos than they are among non-Latino whites in Michigan. The rates of chlamydia and gonorrhea for 15-19 year olds are three and four times higher, respectively, for Latinos than for non-Latino whites (Michigan Department of Community Health 2007b:6). The rate of HIV infection for Latinos is 201 per 100,000 people, while for non-Latino whites it is only 78 per 100,000 people (Michigan Department of Community Health 2007a:98). Fourteen percent of Latino high school students in Michigan are overweight or obese compared to ten percent of non-Latino whites (Michigan Department of Education 2005:4). In many cases, Michigan's Latino population exhibits worse health indicators than do Latino populations in other states. Similar to the national trend, the infant mortality rate for Latinos in Michigan is much higher than it is for non-Latino whites (11.2% to 5.5%, respectively) (Michigan Department of Community Health 2007a:101). However, this disparity is greater in

Michigan than it is nationally and, despite intervention efforts, it has increased over the past five years (Michigan Department of Community Health 2007a:101).

#### **Latino Health Care Access and Utilization**

In order to understand the health disparities between Latinos and non-Latino whites, numerous scholars have examined Latinos' interaction with the health care system. Most researchers employ national survey data for their analysis. For example, two studies analyze the Agency for Healthcare Research and Quality's Medical Expenditure Panel Survey, which collects data from noninstitutionalized U.S. civilians regarding health care use and coverage, demographic characteristics, income, and employment status (Weinick et al. 2000,2004). Weinick et al.'s first paper (2000) analyzes trends in health care utilization between Latinos and non-Latinos, while the second (2004) analyzes trends in health care utilization between Latino subgroups. The Center for Disease Control and Prevention (CDC) employs the Behavioral Risk Factor Surveillance System surveys from 2000-2002 for their analysis (2004a, 2004b). Two studies draw from National Health Interview Surveys from 1999-2001 and 1999-2002, respectively (Durden and Hummer 2006; Callahan et al. 2006). One study employs the 1994 Commonwealth Fund Survey of Minority Health (Guendelman and Wagner 2000) while three others design and conduct their own surveys (Documét and Sharma 2004; Kaiser Family Foundation; 2004a 2004b). Most of these surveys are cross-sectional and draw sampling frames using a multistage area probability design (Callahan et al. 2006; Durden and Hummer 2006; Weinick et al. 2000, 2004). Despite differences in source data, the studies generally agree on a few points.

Many scholars find that Latinos lack a regular source of care more often than do non-Latino whites (Angel, Angel, and Markides 2005:1268; Documét and Sharma 2004:8; Durden and Hummer 2006:1326; Center for Disease Control 2004a:2332; Callahan 2006:631; Fiscella et al. 2002:55; Guendelman and Wagner 2000:185; Kaiser Family Foundation 2004a:4; 2004b:3; Weinick et al. 2000:42). In 1994, only 58.6% of Latinos had a regular doctor, compared to 79.9% of non-Latino whites (Guendelman and Wagner 2000:185). This disparity increased until the late 1980s and has remained fairly constant since then. Weinick et al. found that in 1979, 19.9% of Latinos lacked a usual source of care (Weinick et al. 2000:41). This percent grew to 28.0% in 1987 and to 29.5% in 1996. Weinick et al. offer no explanation for this initial increase and subsequent leveling off.

Latinos typically access different types of health care services than do non-Latino whites. Possible causes for these differences are discussed in the next section. Latinos are significantly less likely to access preventive care than are non-Latino whites (Center for Disease Control 2004a:2331). Guendelman and Wagner (2006:186) found that only 50.5% of Latinos report using preventive care compared to 65.6% of non-Latino whites. Latinos are significantly more likely than are non-Latino whites to not have had the following preventive care tests: blood cholesterol (49% versus 40%), blood pressure (22% versus 8%) and clinical/physical breast exam (32% versus 20%) (Kaiser Family Foundation 2004a:5). Scholars attribute these disparities to the strong positive correlation between a regular source of care and the use of preventive services (Guendelman and Wagner 2006:186; Kaiser Family Foundation 2004a:4; Weinick et al.

2000:40). Researchers have also associated health care insurance with increased preventive care use (Guendelman and Wagner 2006:189).

When health care is obtained, Latinos access different services than do non-Latino whites. Latinos are much less likely than are non-Latino whites to receive outpatient-based services (Weinick et al. 2000:41; 2004:317). All subgroups of the Latino population are significantly less likely than are non-Latino whites to visit a doctor's office or an HMO for their immediate health care needs (Durden and Hummer 2006:1326; Kaiser Family Foundation 2004a:4, 2004b:3). Instead, Latinos are more likely to visit community clinics than are non-Latino whites (Durden and Hummer 2006:1326; Kaiser Family Foundation 2004a:4; 2004b:3). Studies report conflicting findings about whether Latinos visit emergency rooms more often than do non-Latino whites (Durden and Hummer 2006:1326; Kaiser Family Foundation 2004b:3). Studies have attributed the differences in sources of health care to cost. I will explain this further in the next section of this literature review.

Latinos are more likely than are non-Latino whites to report not having any medical visits in a calendar year (38% versus 10%, respectively) (Kaiser Family Foundation 2004b:3). This suggests that Latinos are meeting their health needs through other means. Studies have shown that Latinos are more likely than non-Latino whites to use herbal medicine (23.6% to 12.3%) (Garcés, Scarinci, and Harrison 2006:383; Guendelman and Wagner 2006:185; Harrison and Scarinci 2007:37). Members of the Latino population also employ home remedies, although not significantly more often than non-Latino whites (Guendelman and Wagner 2006:185; Harrison and Scarinci 2007:37). Latinos will also seek health care in their native country, where it is often less expensive.

One study from Alabama notes that parents will take their sick children to Mexico for health care instead of obtaining it in the United States (Harrison and Scarinci 2007:37).

Physicians and researchers have examined Latinos' perceptions of the availability and quality of health care in their area. Latinos are more likely than are non-Latinos to report not being able to obtain medical care when it is needed (32% versus 25%) (Center for Disease Control 2004a:2332). They also have more difficulty than do non-Latino whites obtaining care from specialists when they need it: 22% versus 12% (Kaiser Family Foundation 2004b:3). Latinos are more likely than non-Latino whites to report a lack of health care choices (Guendelman and Wagner 2006:185). Possible explanations for these perceptions are in the following section. When Latinos obtain health care, studies report conflicting findings regarding patient satisfaction. Two studies state that a greater percentage of Latinos than non-Latino whites report being dissatisfied with the quality of treatment they received (Documét and Sharma 2004:8; Kaiser Family Foundation 2004a:5), while one study reports that 95% of Latinos report being "satisfied" or "very satisfied" with the care received (Saint-Germain, Bassford and Montano 1993:353).

#### **Factors Influencing Health Care Access and Utilization**

Studies have repeatedly cited the following five factors as influencing Latino health care access and utilization patterns: health insurance, country of origin, English fluency, legal status, and income. These factors contribute to each of the health care patterns reported in the previous section. Therefore, researchers and Latinos often cite them as barriers to obtaining care.

#### Health Insurance

The presence of and type of health care insurance influences the availability of health care. Scholars find that Latinos are more likely than any other ethnic group to be uninsured (Callahan et al. 2006:629; Keiser Family Foundation 2004a:2; 2004b:2; Flores et al. 2002:88). Nationally, 42% of Latino adults are uninsured (Keiser Family Foundation 2004b:2), and 27% of Latino children lack health insurance (Flores et al. 2002:88). In Michigan, 26.6% of the Latino population lacks health care insurance, a statistic which is more than double that of the non-Latino white population in the state (Michigan Department of Community Health 2007a:93). Additionally, a greater percentage of Latinos than non-Latino whites have Medicaid as their only option for insurance (Callahan et al. 2006:631; Fiscella et al. 2002:55; Kaiser Family Foundation 2004a:2; 2004b:2). 12% of Latinos use Medicaid compared to 6% of non-Latino whites (Kaiser Family Foundation 2004a:2).

Scholars have repeatedly stated that Latinos who lack health insurance are more likely to also lack a usual source of health care (Callahan et al. 2006:629; Documét and Sharma 2004:9; Garcés et al. 2006:381; Weinick et al. 2000:49; 2004:318). Through statistical modeling, Guendelman and Wagner (2000:186) find that the possession of health insurance is the variable that most significantly enables health care utilization by Latinos. Latinos are more likely than are non-Latino whites to delay seeking care because they lack health care insurance (30% versus 19%, respectively) (Kaiser Family Foundation 2004a:3). Another study examines Latinos' perceptions regarding quality of care in terms of health insurance. Latinos perceive that lacking health insurance leads to poor quality health care (Martinez and Carter Pokras 2007:904). This could be based on

the limited number of clinics that accept patients without health insurance and even patients with Medicaid.

#### Country of Origin

The second factor influencing health care utilization for the Latino population is country of origin. Country of origin has been repeatedly tied to insurance status, regular patterns of healthcare utilization and types of care used (Callahan et al. 2006:629; Durden and Hummer 2006:1330; Weinick et al. 2004:316).

Most studies find that a greater percentage of Mexican Americans are uninsured than Puerto Ricans, Cuban Americans, or non-Latino whites (26.8%, 12.9%, 20.9%, and 8.9%, respectively) (Durden and Hummer 2006:1328; Callahan et al. 2006:629). Durden and Hummer (2006:1330) speculate that a greater percentage of Mexican Americans could lack health insurance because of the higher rates of unemployment, lower levels of income, and lower levels of education that exist in the population when compared to other Latino subgroups. Interestingly, Mexican Americans are less likely to obtain government-sponsored insurance than are Puerto Ricans (22.0% versus 28.6%), yet both groups are significantly more likely to receive government aid than are non-Latino whites (8.8%) (Durden and Hummer 2006:1328). I will discuss possible causes of this disparity later.

Access to health care and the type of care obtained also differs by nativity.

Mexican Americans are more likely than are Puerto Ricans and non-Latino whites to lack a usual source of care (32.3% versus 27.4% and 23.4%, respectively) (Callahan et al. 2006:631; Durden and Hummer 2006:1326). Researchers similarly attribute this disparity to a lack of health insurance (Durden and Hummer 2006:1334). According to

Durden and Hummer (2006:1326), Mexican Americans are less likely to visit a private doctor's office than are Puerto Ricans and non-Latino whites (67.1% versus 70.1% and 81.8%, respectively). On the other hand, Mexican Americans are more likely to visit community clinics than any other Latino subgroup or non-Latino whites (Durden and Hummer 2006:1326). Using statistical modeling, Durden and Hummer (2006:1338) suggest that socioeconomic-status variables (education, family income, employment status, and insurance status) and immigration status are largely responsible for such differences.

#### English Fluency

Numerous studies discuss a third factor that influences health care access and utilization: language. English fluency for the Latino population varies with generation as well as country of origin. According to a recent report by the Pew Hispanic Center, the percent of Latinos who speak English very well grows by generation. Only 23% of first generation Latino immigrants speak English well, in comparison to 88% of second generation and 94% of third generation Latinos (Pew Hispanic Center 2007:2). The Pew Hispanic Center (2007:5) also found that English reading skills almost always lag behind speaking ability. Latinos' country of origin is also correlated with English fluency. More immigrants from Puerto Rico and Cuba than from Mexico say they speak English well (52% and 31% versus 16%, respectively) (Pew Hispanic Center 2007:11). More Mexican immigrants than Cuban and Puerto Rican immigrants report speaking little to no English (71% versus 57% and 35%, respectively (Pew Hispanic Center 2007:11).

Researchers have correlated fluency in English with the ability to obtain care, the presence of a regular source of care, the use of preventive services, health insurance

status, as well as patient satisfaction with health services. Inability to speak English has been repeatedly cited as a barrier to receiving any type of health care (Fiscella et al. 2002:56; Flores et al. 2002:88; Garcés et al. 2006:381; Harrison and Scarinci 2007:39; Kaiser Family Foundation 2004a:5; 2004b:3; Martinez and Carter-Pokras 2006:905; Saint-Germain et al. 1993:353). Spanish-speaking Latinos are less likely to have a usual source of care when compared to English-speaking Latinos and non-Latino whites (18.2%, 12.9% and 9.8%, respectively) (Fiscella et al. 2002:55). They are also significantly less likely to have undergone preventive care treatments, such as mammograms in the past year, when compared to English-speaking Latinos (27.0%) versus 45.0%) (Fiscella et al. 2002:56). Research shows that health education materials in health care settings are rarely available in Spanish, or, if available, they are often poorly translated (Flores et al. 2002:88; Martinez and Carter-Pokras 2007:905). Because most Latinos have weaker abilities in reading English than related speaking abilities, most cannot understand the written information being presented (Pew Hispanic Center 2007:5).

Language has also been shown to affect health insurance status. Spanish-speaking Latinos are more likely than English-speaking Latinos to have insurance through Medicaid (19.5 % versus 8.7 %) (Fiscella et al. 2002:55). However, this number is deceiving. Flores et al. (2002:88) finds that information about Medicaid is only distributed to 26% of Spanish-speaking Latinos that are eligible for the program. For this reason, Spanish-speaking Latinos are more likely to lack insurance than are English-speaking Latinos. English fluency also influences patients' satisfaction with care. Latino patients often struggle to communicate their needs and feel as though doctors do not

understand them. Latino patients and physicians have repeatedly cited a lack of translators as a significant barrier to health care (Kaiser Family Foundation 2004a:3; 2004b:5; Martinez and Carter-Pokras 2007:905). Furthermore, Latinos report that they are more likely to experience discrimination because of their language status (Pew Hispanic Center 2007:2) and often receive lower quality service as a result (Amaro and de la Torre 2002:527; Flores et al. 2007:88; Kaiser Family Foundation 2004b:5). *Legal Status* 

The fourth factor influencing health care access and utilization is immigration status. Studies that include legal status and U.S. citizenship have shown that those variables considerably affect access to a usual source of health care. Patients who lack proper legal documentation are often hesitant to visit physicians (Durden and Hummer 2002:1333; Garcés et al. 2006:381; Martinez and Carter-Pokras 2007:905). Berk and Schur (2001) attribute this hesitation to a fear that they will be denied access to necessary medical care. Similar disparities are also present between Latinos who possess visas versus those who obtain U.S. citizenship. Latinos who do not have U.S. citizenship are more likely than those who do have citizenship to lack health insurance as well as usual source of health care (Callahan et al. 2006:631).

The challenges presented by English fluency, as previously discussed, intensify the effect of immigration status on obtaining health care services. Latinos who are foreign-born but obtain U.S. citizenship are more likely than non-U.S. citizens to report speaking English very well or pretty well (52% versus 25%) (Pew Hispanic Center 2007:15). Therefore, those that do not have U.S. citizenship and do not speak English fluently are the most likely to struggle obtaining health care.

#### Income

The fifth barrier to health care access and utilization by Latinos is income. A greater percentage of Latinos than non-Latinos have a household income of less than \$20,000 a year (Callahan et al. 2004:630; Durden and Hummer 2006:1327; Guendelman and Wagner 2000:183). 22.8% of Latinos in the United States live below the poverty line, compared to 7.7% of the entire population (Da Vita 1996:37; U.S. Census Bureau 2000:n.p.). Differences in income are also apparent between subgroups of the Latino population. Puerto Ricans are more likely to be live in poverty than any other subgroup of the Latino population. 25.8% of those with Puerto Rican heritage earn less than \$20,000 a year compared to 24.1% of those with Mexican heritage(Callahan et al. 2006:630; U.S. Census Bureau 2000:n.p.). Differences in income are also apparent in terms of English fluency. Fiscella et al. (2002:55) find that a greater percentage of Spanish-speaking Latinos live in poverty (41.9%) compared to English-speaking Latinos (19.8%) and non-Latino whites (12.0%).

Lower income levels have been associated with a decreased use of the health care system and preventive care, as well as with lacking health insurance. The cost of doctors' appointments, regardless of insurance status, is frequently mentioned by Latinos as hindering access to the health care system (Garcés et al. 2006:381; Gundelman and Wagner 2000:187; Harrison and Scarinci 2007:38; Kaiser Family Foundation 2004a:3; Martinez and Carter-Pokras 2006:905; Saint-Germain et al. 2006:353). Through statistical modeling, Weinick et al. (2000:49) find that having a lower income level accounted for 23% of the disparity between Latinos and non-Latino whites in the presence of a usual source of health care. Lower income levels also contribute to the

disparity seen in health insurance status between Latinos and non-Latino whites (Durden and Hummer 2006:1333; Documét and Sharma 2004:9).

#### **Health Concerns**

Four published articles examine the health concerns of U.S. Latinos. To create a targeted research agenda, public health officials wrote two articles focusing on health priorities for those working with Latinos (Amaro and de la Torre 2002; Flores et al. 2002). These two articles derive health priorities for segments of the Latino population based on previously published health disparities between Latinos and non-Latino whites. Amaro and de la Torre (2002) discuss the national public health needs for Latinas, while Flores et al. (2002) discuss physicians' health priorities for Latino children according to the Latino Consortium of the American Academy of Pediatrics Center for Child Health Research. Neither of these articles consults members of the Latino population.

The remaining two published articles present studies that sought U.S. Latinos' health concerns from the perspective of members of the Latino population (Harrison and Scarinci 2007; Martinez and Carter-Pokras 2007); both use focus groups to rank health priorities held by the Latino population in Alabama (Harrison and Scarinci 2007) and in Baltimore, Maryland (Martinez and Carter-Pokras 2007). Harrison and Scarinci (2007) examine Latino parents' health concerns for their children. The most commonly mentioned health problems for Latino children in Alabama are upper respiratory infections, fevers, ear infections, asthma and gastrointestinal problems (Harrison and Scarinci 2007:37). Parents also mention concerns about headaches, dental problems and developmental problems for their children. Martinez and Carter-Pokras (2007) identify

health concerns for four different segments of the Latino population in Baltimore, Maryland. The findings for each of these groups are in Table 1 below.

Table 1: Top Health Concerns of Latinos in Baltimore, Maryland

	(Martinez and Carter-Pokras 2007:903)
Older	1. "Bone-related disease" (arthritis/osteoporosis)
	2. Heart (hypertension/cholesterol)
Older Women	3. Stress/mental health (nervios)
vv omen	4. Respiratory problems (allergies/asthma), diabetes (glucosa),
	influenza, AIDS
	1. Diabetes
	2. Hypertension (presión)
Women	3. Eye problems (la vista)
	4. AIDS, cancers (breast and uterine), influenza (virus de la
	gripe), gastritis, hearing/dental, stress/mental health
	1. Alcohol and drug abuse
	2. Mental health
Men	3. STDs
	4. Violence and domestic issues, respiratory problems
	(allergies/asthma), nutrition (hypertension/cholesterol)
Parents (for children)	1. Ear infections
	2. Asthma
	3. Lead poisoning
	4. Stomach viruses, fevers, coughs

Martinez and Carter-Pokras (2007) also conduct focus groups with health providers serving Latinos to determine provider health concerns for the entire population. Providers rank the following four areas, in order of importance, as the top priorities for improving Latino health: (1) neonatal and pediatric care, (2) preventive care for chronic disease, (3) diabetes and heart disease, and (4) dental, alcohol/substance abuse, and anxiety/mental health (Martinez and Carter-Pokras 2007:903). Provider perspectives on Latino health priorities are similar to the health priority ranking of Latinos themselves. However, such health care provider assessment misses the acute needs of the population.

For example, health care providers did not mention Latino parents' concern about lead poisoning for their children.

#### **Obtaining Health Information**

Public Health professionals use various modes of communication to provide health information to the public. Researchers note that Latinos find different sources of health information to be useful when compared to non-Latino whites and blacks. For this reason, health messages distributed through certain communication channels are not as effective with Latinos as they are with other racial/ethnic groups. Two studies look specifically at the U.S. Latino population's opinions regarding sources of health information. Williams et al. (2007) examine the preferences of Latino residents in Durham County, North Carolina, while O'Malley, Kerner and Johnson (1999) examine Latinos' most frequently used sources of health information in New York City. Both use random-digit dial telephone surveys.

Like non-Latino whites and blacks, members of the U.S. Latino population find physicians to be the most useful and most frequently used source of medical information (Williams et al. 2007:395; O'Malley et al. 1999:200). However, Latinos find health departments to be a significantly more useful source for obtaining health information than do non-Latino whites and blacks (88.8% versus 43.6% and 68.0%, respectively) (Williams et al. 2007:395). More Latinos find churches and community centers to be relevant sources for health information than do non-Latino whites and blacks (churches: 70.1% versus 23.2% and 63.4%, respectively; community centers: 86.4% versus 26.8% and 60.5%, respectively) (Williams et al. 2007:395). Latinos are also more likely to use

the radio and television to obtain health information (74.8% and 81.5%, respectively) than are non-Latino whites (34.9% and 52.3%, respectively) and blacks (62.7% and 81.4%, respectively) (Williams 2007:395). Latinos are slightly less likely to use the internet for health information than are either non-Latino whites or blacks (59.5% versus 66.1% and 63.8%, respectively) (Williams 2007:395). Some of these preferences may be due to the language in which the health information is available. Latinos may also prefer certain forms of media, like radio and television, to others, such as those available on the internet, because they are already integrated into their daily lives and their use does not incur additional costs. Interestingly, Latinos are also more likely than other ethnic groups to report not being able to obtain any health information (O'Malley et al. 1999:200). Health messages specifically designed to target the Latino population may, in fact, not be reaching them at all.

#### **Hypotheses Examined in This Study**

At 44.2 million, the Latino population is currently the United States' largest ethnic minority group. Yet, scholars find that they have some of the worst health outcomes and most limited access to healthcare of all ethnic groups, despite the existence of the purported "Latino Paradox" (Documét and Sharma 2004:5). Latinos are disproportionately affected by preventable diseases, injury, and death in comparison to non-Latino whites (Center for Disease Control 2004b:2330). Latinos also represent the largest percentage of individuals in the United States without health insurance and a regular source of health care (Documét and Sharma 2004:5). Scholars have begun to understand these disparities by using national survey data to analyze U.S. Latinos' health

care utilization patterns and the factors that affect these patterns. A few researchers have also identified the health concerns of Latinos in specific regions of the United States. Public health officials have then worked to improve the health status of Latinos in these regions using this information. Unfortunately, no published studies analyze the health concerns and health care utilization of Latinos residing in Michigan. Therefore, this study examines the general health care utilization patterns and health concerns of Michigan Latinos compared to Latinos from existing studies. In the process, I examine two general hypotheses.

H1: The health utilization patterns of Michigan Latinos are similar to those of other U.S. Latinos from existing studies. Within the first general hypothesis, I test six more specific hypotheses related to family income and bilingualism.

#### H1a: Income and visits to the county health department or community clinic

U.S. Latinos are disproportionately affected by poverty. 22.8% of Latinos in the United States are living in poverty, compared to 7.7% of the general population (Da Vita 1996:37; U.S. Census Bureau 2000:n.p.). Previous studies have associated lower income levels with a decreased use of the health care system (Weinick et al. 2000:49). Latinos with lower income levels often cite the cost of private doctors' appointments as justification for visiting a county health department or community health clinic to receive care (Garcés et al. 2006:381; Gundelman and Wagner 2000:187; Harrison and Scarinci 2007:38; Kaiser Family Foundation 2004a:3; Martinez and Carter-Pokras 2006:905; Saint-Germain et al. 2006:353). Therefore, I

hypothesize that increased family income decreases the percentage of health care visits to the county health department or community health clinic.

#### H1b: Income and visits to a private doctor's offices

Lower income levels have also been associated with a decreased use of preventive care from private doctors' offices (Garcés et al. 2006:381; Gundelman and Wagner 2000:187; Harrison and Scarinci 2007:38; Kaiser Family Foundation 2004a:3; Martinez and Carter-Pokras 2006:905; Saint-Germain et al. 2006:353). Due in part to income levels, Latinos are significantly less likely than are non-Latino whites to visit a doctor's office or an HMO for their immediate health care needs (Kaiser Family Foundation 2004a:4; 2004b:3; Durden and Hummer 2006:1326). Therefore, I hypothesize that increased family income increases the percentage of health care visits to a private doctor's office.

#### H1c: Income and health insurance status

I also hypothesize that **family income is positively related to the possession** of insurance.

#### H1d: Language and visits to the county health department or community clinic

The U.S. Latino population is characterized by varying degrees of English fluency (Pew Hispanic Center 2007:2). Fluency in English has been associated with the ability to obtain health care as well as the type of care obtained (Fiscella et al. 2002:56; Flores et al. 2002:88; Garcés et al. 2006:381; Harrison and Scarinci

2007:39; Kaiser Family Foundation 2004a:5; 2004b:3; Martinez and Carter-Pokras 2006:905; Saint-Germain et al. 1993:353). Language is frequently cited as a barrier to care, forcing Latinos to obtain services at county health departments and community clinics where translators may be available (Kaiser Family Foundation 2004a:3; 2004b:5; Martinez and Carter-Pokras 2007:905). Therefore, I hypothesize that Spanish-only families have a higher percentage of health care visits to the county health department or clinic than do bilingual families.

#### H1e: Language and visits to a private doctor's office

Spanish-only Latinos are less likely to have a usual source of care in comparison to English-speaking Latinos and non-Latino whites (18.2%, 12.9% and 9.8%, respectively) (Fiscella et al. 2002:55). They are also significantly less likely to have undergone preventive care treatments, such as mammograms in the past year, compared to English-speaking Latinos (27.0% versus 45.0%) (Fiscella et al. 2002:56). Therefore, I hypothesize that Spanish-only families have a lower percentage of health care visits to a private doctor's office than do bilingual families.

#### H1f: Language and health insurance status

Scholars have shown that information about obtaining insurance through Medicaid is only distributed to 26% of eligible Spanish-only Latinos (Flores et al. 2002:88). For this reason, Spanish-only Latinos are more likely than are English-speaking Latinos to lack health care insurance. Therefore, I hypothesize that

bilingual families are more likely to have medical insurance than Spanish-only families.

# H2: The health concerns of Michigan Latinos are similar to those reported in existing studies.

Two published studies describe the health concerns of Latinos in the United States (Martinez and Carter-Pokras 2007; Harrison and Scarinci 2007). This study will expand on both by determining the health concerns of members of Michigan's Latino population in four Michigan counties through focus groups and written questionnaires. Focus group questions ask about the health concerns of the Latino community as well as parents' concerns for the health of their children. I hypothesize that the health concerns of Michigan Latinos will be similar to those provided by Latinos in previous studies.

#### CHAPTER III

#### STUDY DESIGN AND PROCEDURES

This chapter describes the methodological procedures for this investigation of Michigan Latinos' health concerns and patterns of utilization of health resources. This study specifically explores the health needs of Michigan Latinos and the related extent that the current health care system addresses those needs. It is a joint project between the graduate student Primary Investigator (me) and Michigan State University Extension (MSUE). The research team consisted of two MSUE employees, the focus group moderator, and me. Data was gathered for this study via written questionnaires and focus group interviews. The sections below describe the sampling procedures, quantitative data and qualitative data gathering instruments, the administration procedures for both instruments, confidentiality safeguards, and potential limitations. This study earned exemption status from Michigan State University's Human Research Protection Programs on December 17, 2007.

This is a cross-sectional research study of the health concerns and health utilization patterns of Michigan's Latino population. Individual Latinos are the unit of analysis. This study employs both individual written questionnaires and in-depth focus groups interviews to examine the health concerns and experiences of Michigan's Latino population. The written questionnaires ask about individual health concerns and individuals' utilization of the health care system. The focus group interviews serve multiple purposes. The data gathered during focus groups describes the health needs of the Latino community; therefore, this data should closely correlate with the individuals'

needs reported on the written questionnaires. Focus group interviews also help elicit the attitudes and beliefs of the Latino community regarding available health care resources.

# **Sampling Procedures**

This study's target population is the adult Latino population currently residing in Michigan. The research team selected the five following counties for participation in this study: Lenawee, Ingham, Saginaw, St. Joseph, and Van Buren. Table 2 shows the size of the Latino population in each of these counties in comparison to each county's overall population.

**Table 2: The Latino Population in Selected Michigan Counties** (Kayitsinga 2007:n.p.)

County	Ingham	Lenawee	Saginaw	St. Joseph	Van Buren	Michigan
Total Population (2000)	279,320	98,890	210,039	62,422	76,263	9,938,444
Rural/Urban	Urban	Urban	Urban	Rural	Urban	
Total Latino Population (2000)	16,190	6,884	14,075	2,488	5,634	323,877
Percent of Population that is Latino	5.8%	7.0%	6.7%	4.0%	7.4%	3.3%
Percent Population Change (1990-2000)	-0.93%	7.50%	-0.91%	5.62%	8.13%	6.47%
Percent Latino Population Change (1990-2000)	16.75%	19.89%	6.32%	78.05%	59.99%	37.76%

These counties reflect the varying presence of Michigan's Latino population. The research team included Ingham County in this study because of the size of its Latino population and its status as a national refugee resettlement location for Cubans. We included St. Joseph and Van Buren County because of the large percent change in the Latino population between 1990 and 2000 in both counties. We selected Saginaw County because, although the size of the general population decreased slightly over the past ten years, the size of the Latino population has increased significantly. All but one of these counties is urban, which reflects the proportion of Michigan Latinos residing in urban areas.

The research team also selected these counties because of the relationships that exist between MSUE and the Latino populations in each county. Lenawee and St. Joseph Counties both participated in MSUE's Healthy Hispanic Project. The MSUE County Offices in Saginaw and Van Buren have also worked closely with the Latino population in the past. However, during the study, we noticed that Saginaw County no longer had a working relationship with its Latino population. For this reason, we conducted only one focus group in Saginaw. The research team then added Ingham County to the study to collect more quantitative data because of its proximity to MSU and the personal connections the research team had with members of the local Latino population.

Once the research team had selected the five counties, one of the MSUE employees on the research team contacted the MSUE County Office in each county to identify an MSUE employee who had worked with the Latino population. This employee served as the main contact for that county. Contact employees helped identify a date and

location for each focus group. In St. Joseph and Van Buren Counties, our employee contacts deferred to a Latino community leader for recruitment.

We utilized a nonprobability sampling design to enlist participants into this research study. The use of probability sampling techniques in this study was impractical because Latinos in Michigan have come to distrust most efforts to collect data about their communities. This distrust has grown due to recent discussions and legislation regarding illegal immigration. Therefore, recruitment for the study occurred through referral sampling. MSUE employees or Latino community leaders (as was the case in St. Joseph and Van Buren Counties) contacted members of the Latino community whom they believed would participate in the research study. The MSUE employee or community leader then asked those individuals for the contact information of other Latinos they believed might participate. This snowball recruitment process continued until eight to ten men and eight to ten women in each county agreed to participate. The goal was to have five to eight participants in each focus group session. This number of participants has been listed as the ideal size for conducting focus groups, although focus groups may include up to fifteen participants (Morgan 1998:77).

Referral sampling identified Latinos in four different Michigan communities who would willingly share their personal health concerns and health care experiences with the research team. The research team asked the MSUE employees and community leaders doing recruitment for this study to identify a larger number of individuals with families in order to have a more thorough discussion about family and community health needs.

This sampling method, however, is limited since it does not representatively sample members of Latino communities. In Lenawee and St. Joseph Counties, recruitment for

this study occurred primarily at Spanish-speaking Catholic churches. Therefore, individuals at those locations who do not attend masses were not informed of the study. Also, by limiting the sample size to a number conducive for focus group interviews, the response rate for the written questionnaire is less than ideal. Therefore, qualitative data must be interpreted with caution.

# **Quantitative Data Gathering Instrument – Written Questionnaire**

The research team gathered quantitative data via a written questionnaire of individual Latinos. I designed the questionnaire to gather data from respondents about their health needs and those of their families, as well as their access to and utilization of health care services. The questions asked about personal opinions regarding the health system, family dynamics regarding health care decisions and discussions about health, insurance status, and stressful life events that may affect health. I also asked a range of socio-demographic and economic questions. Most questions were closed-ended, although two questions, regarding health concerns of the participant's family and any general comments the participant wanted to add, were open-ended. I translated the questionnaires into Spanish and then translated responses back into English. A graduate student from MSU's Spanish department checked the accuracy of each questionnaire question and the responses. To improve the reliability and accuracy of questions, during pretesting, I also administered the questionnaire to native Spanish speakers. Appendices A and B contain the English and Spanish versions of the written questionnaire, respectively.

### **Administration – Written Ouestionnaire**

All quantitative data was collected during February and March 2008. The first round of written questionnaires was collected in conjunction with the focus group interviews. Focus group participants completed the questionnaires before beginning discussion on the focus group questions. The second round of written questionnaires was completed March 17-31, 2008. The research team distributed questionnaires to the MSUE employee who recruited study participants in Lenawee County. We selected Lenawee County because of its large turnout during initial data collection. We also distributed questionnaires to a popular Mexican store in Ingham County. We selected Ingham County because of its proximity to MSU. Unfortunately, written questionnaires distributed in Ingham County were returned incomplete.

# **Qualitative Data Gathering Instrument – Focus Group Interviews**

The research team gathered qualitative data via focus group interviews with Latino community members. The MSUE members of the research team and I designed these questions. Focus group questions asked participants about their health concerns, the health care system's ability to address those concerns, and their behaviors related to seeking health information. More specifically, we asked participants how they obtain health information and their preferred sources of information. Questions asked participants about the general health concerns in their community and their concerns related to the health of their children and other adults in their household. The research team asked where members of the Latino community could go to get health issues addressed as well as where they get help for their own health concerns and concerns for

their children and others. By asking where Latinos could go and where they actually do go to address their health needs, area health services are revealed as well as the barriers to these services. I translated focus group questions from English to Spanish and had a native speaker translate them back to English to ensure accuracy. To improve validity, I also gave the focus group questions to native Spanish speakers who would not be participating in the study. Appendices C and D contain the English and Spanish versions of the focus group questions, respectively.

# **Administration – Focus Group Interviews**

All qualitative data collection also occurred in February and March 2008. I conducted a male and a female focus group interview in Lenawee County, St. Joseph County and Van Buren County and one female focus group in Saginaw County for a total of seven focus groups. Focus groups occurred on weeknights in Lenawee and Saginaw Counties. Focus groups in St. Joseph and Van Buren Counties occurred on a Saturday; the male focus groups took place in the morning, while the female focus groups took place in the afternoon. I arranged backup dates for all focus groups in case of inclement weather. Those dates had to be used for St. Joseph and Lenawee Counties. A native Spanish speaker conducted all focus groups in the language preferred by focus group participants. According to those preferences, all focus groups were conducted in Spanish, except for Saginaw County which was conducted in English. At each focus group, copies of the consent form and written questionnaire were available in both languages for participants.

Three members of the research team attended each focus group: the focus group moderator, one of the MSUE employees, and the graduate student Primary Investigator

(me). An MSUE State Leader proficient in focus group moderating trained all members of the research team using a moderator guide adapted from a similar study performed by Iveris L. Martinez and Olivia Carter-Pokras of Latinos in Baltimore, Maryland (Martinez 2007). A single moderator, a visiting professor from Cuba in the MSU Spanish Department, conducted each of the focus groups. The remaining members of the research team took notes throughout the focus groups.

The research team audio-taped all focus group interviews. A native speaker, who is a certified Spanish translator for the Ingham County Circuit Court, transcribed and translated these data files into English. The Primary Investigator checked each document for validity after it was complete. I identified very few errors in the transcripts.

At the beginning of each focus group session, the research team distributed food from a local restaurant to participants as they arrived. Twenty to thirty minutes were allotted for participants to eat, during which they also talked among themselves. The research team allowed participants to select their own seats around a table and placed a placard with an alphanumeric code in front of each participant. The research team used this alphanumeric code – a combination of a letter representing the county (either "L", "S", "J" or "V") and a number – to refer to specific participants throughout the focus group interview.

The remainder of the focus group sessions followed a predesigned moderator guide, which can be found in Appendix E. After eating, the research team thanked participants for coming. We provided information about MSUE and the project to participants before administering the consent form. This form, available to participants in both English and Spanish, was approved by MSU's Human Research Protection

Program. The consent form was not required by the Human Research Protection

Program; however, we chose to include it to reassure participants that we were not hiding anything from them. The focus group moderator read the consent form aloud to participants and gave them an opportunity to ask questions before signing it. Appendices F and G contain the English and Spanish versions of the consent form. The research team did not associate the consent forms to assigned alphanumeric codes in any way.

The focus group moderator then verbally administered the written questionnaire to participants to account for any literacy issues. English and Spanish versions of the questionnaire were available. All focus group participants in Lenawee, St. Joseph and Van Buren Counties selected the Spanish version of the written questionnaire, while participants at the Saginaw County selected the English version. The questionnaire required twenty to thirty minutes to complete. The Primary Investigator then collected the questionnaires and wrote the participants' alphanumeric codes on their questionnaire. This was done so that the responses to focus group questions would be connected to the collected questionnaire data.

After the questionnaire was administered, the focus group moderator conducted a discussion covering the focus group questions. Participants were asked about their health concerns, where they obtain health information, and finally, about the health care system and its ability to meet their needs. Discussions on individual focus group questions ranged from ten to twenty minutes each, for a total time spent of fifty minutes to an hour and ten minutes. The moderator guide provided prompts for the moderator to use for each question as a last resort if participants did not readily have responses to the questions. The moderator used these prompts more frequently during focus groups with

men than during focus groups with women; this could be a result of cultural norms.

Typically Latino men do not discuss health, especially with non-family members.

When discussion on the focus group questions was complete, the focus group moderator offered participants the opportunity to share any additional information regarding health and health care with the research team. This typically lasted from five to twenty minutes. Female participants generally had more to share with the research team than did male participants. I then thanked the participants for their time and offered them a small gift from MSUE. The gift consisted of materials currently used by MSUE in other educational programs: a Spanish calendar about healthy eating for children, a Spanish cookbook, a liquid measuring cup, a sponge, and a magnet listing important health-related phone numbers in their area. I designed the magnet specifically for this study.

# **Confidentiality Safeguards**

The research team took steps throughout the entire study to ensure participants' confidentiality. The research team was unaware of who would be participating in the study prior to the initiation of each focus group interview. Initial contact and reminder phone calls were done by the MSUE staff member or alternatively by the community leader doing recruitment. During the second round of data collection for the written questionnaire, the research team distributed the questionnaires to the MSUE employee in Lenawee County and to the owner of a Mexican store in Ingham County. We never met those that completed the questionnaires during this stage. Furthermore, the research team never collected any contact information from participants. Participants' names only appeared on the consent forms for this study; they were never tied to any data collected.

The research team gave each focus group participant a placard with an alphanumeric code at the initiation of each focus group interview. The research team used this code to identify study participants throughout all data collection and analysis. This code appeared on the top of participants' questionnaires and was associated with their responses to focus group questions on written transcriptions. I elected not to assign alphanumeric codes to the Lenawee County study participants who completed the written questionnaire, but did not participate in focus groups.

At the beginning of each focus group interview, the focus group moderator asked study participants to share a bit of information about themselves or their families with the rest of the group. To ensure participant confidentiality, any names mentioned during the interview were permanently deleted from audio files before transcription using an Olympus Digital Wave Player. Therefore, the names of participants never appear in any collected data.

#### **Potential Limitations**

The study used a small sample size drawn via referral sampling of adult Latinos in Michigan. The research team administered the written questionnaire to 61 participants and asked 45 participants the focus group questions. Study participants were drawn from only four counties in Michigan. As such, we may consider this a pilot study. It may later provide the foundation for a larger MSUE study about the health concerns and health utilization patterns of Latinos in Michigan.

The data collected during this study is also limited in that it depends on study participants to be forthcoming with their needs and habits regarding health care.

Participants may not trust the research process, so their responses may not have been completely forthcoming.

#### **CHAPTER IV**

### ANALYSIS OF QUESTIONNAIRE DATA

This chapter presents an analysis of the data collected from the written questionnaires. Data was analyzed using SPSS 16.0. An alpha value of 0.1 was assigned for these statistical analyses. Because this is a pilot study to examine the extent to which trends in Michigan Latinos are similar to those for other U.S. Latinos, 0.1 is a sufficient compromise between statistical significance and statistical power.

### **Demographics**

Table 3 below depicts the number of written questionnaires and focus group interviews completed in each county.

**Table 3: Qualitative and Quantitative Data Collection in Each County** 

	Number of Questionnaires	Percent of Total Questionnaires	Number of Focus Group Participants	Percent of Total Focus Group Participants
Lenawee	33*	55.0%	18	40.0%
Saginaw	6	10.0%	6	13.3%
St. Joseph	13	21.7%	13	28.9%
Van Buren	8	13.3%	8	17.8%
<b>Total Study</b>	60	100.0%	45	100.0%

<sup>\*</sup> In Lenawee County, 18 questionnaires were collected during the first round of data collection and the remaining 15 were collected during the second round of data collection.

Table 4 on the following page provides basic demographic data about study participants drawn from the written questionnaire. Questions 8 through 16 on the questionnaire asked study participants about the following: gender, age, country of origin, language, education, how long they have lived in the United States, family structure, and income.

		Number of	Percent of
		<b>Participants</b>	Participants
Gender	Male	20	33.33%
	Female	40	66.67%
	Average: 20-29 yrs.	22	36.67%
Age	Youngest: under 20 yrs.	2	3.33%
	Oldest: 60-69 yrs.	4	6.67%
-	Mexico	42	70.00%
<b>a</b>	Puerto Rico	10	16.67%
Country of	United States	6	10.00%
Origin	Honduras	2	3.33%
	Guatemala	1	1.67%
	Average: 8-12 yrs.	•	-
Education	Least: never attended	2	3.33%
	Most: college or more	10	16.67%
	Spanish-only	35	58.33%
Language	English-only	3	5.00%
	Bilingual	23	38.33%
	Average: 18.8 yrs.		<u> </u>
Time in	Shortest: 6 mo.	1	1.67%
U.S.	Longest: 64 yrs.	1	1.67%
	Average: \$20,000-\$29,000	13	21.67%
Income	Minimum: < \$20,000	26	43.33%
	Maximum: > \$50,000	3	5.00%
	Average: 4.35 people	-	
Family	Least: live alone	1	1.67%
Size	Most: 10 people	1	1.67%
	Average: 1.66	_	-
Number of	Least: no children	20	33.33%
Children -	Deast . no chilaten	20	33.3370

# **Hypothesis 1: Latino Health Utilization Patterns**

The first hypothesis tested in this study states that the health utilization patterns of Michigan Latinos are similar to those of other U.S. Latinos from existing studies. Within this general hypothesis, six more specific hypotheses regarding the effect of family income and language fluency on types of health care utilized and health insurance status are tested. Table 5 below shows the type of health services obtained by participants in 2007 (question 5 on the written questionnaire).

Table 5: Percentage of Total Health Care Visits to Each Location by County

County	Emergency Room	County Health Department	Community Clinic	Private Doctor's Office
Lenawee	8.97%	29.11%	17.84%	44.07%
Saginaw	19.14%	20.35%	30.68%	29.82%
St. Joseph	7.14%	29.82%	27.69%	36.44%
Van Buren	32.14%	24.11%	41.15%	15.33%
All Counties	11.57%	27.70%	24.21%	36.51%

Table 6 below shows the health insurance status of study participants (question 6 on the questionnaire). Participants often selected more than one type of insurance to describe the health coverage for their family; therefore, percents do not equal 100.

Table 6: Health Insurance Status of Participants by County

County	Employer	Purchases Own	State Program	Medicaid	Medicare	Any Insurance
Lenawee	18.2%	15.2%	18.2%	24.2%	15.2%	51.5%
Saginaw	66.7%	16.7%	16.7%	83.3%	16.7%	83.3%
St. Joseph	23.1%	15.4%	23.1%	30.8%	30.8%	69.2%
Van Buren	0.0%	0.0%	0.0%	25.0%	0.0%	25.0%
All Counties	21.7%	13.3%	13.3%	31.7%	16.7%	55.0%

The number of uninsured in this study is higher than both the national average for Latinos (42%, (Keiser Family Foundation 2004b:2)) and the Michigan average for Latinos (26.6%, (Michigan Department of Community Health 2007a:93)). The number of participants receiving Medicaid is also higher than the national average (12% (Kaiser Family Foundation 2004a:2).

H1a: Income and Visits to the County Health Department or Community Clinic

There was not a statistically significant relationship between income level and the number of visits to county health departments or community clinics (r=-.118,  $\alpha$ =.369). I anticipate that with a larger sample size, this correlation may become statistically significant. However, this study does not support Hypothesis 1a.

H1b: Income and Visits to a Private Doctor's Office

Data from this study show that questionnaire respondents with higher income levels are significantly more likely to visit a private doctor's office (r=.314,  $\alpha$ =.015). This is in accordance to what previous studies have shown. Thus, this study supports Hypothesis 1b.

H1c: Income and Health Insurance Status

There is also no statistically significant relationship between family income level and health insurance status (r=.207,  $\alpha$ =.112). This is also likely due to the sample size of this study. Therefore, this hypothesis is not supported.

Hld: Language and Visits to the County Health Department or Community Clinic

Study participants who spoke only Spanish at home are not significantly more likely to visit to visit county health departments and community clinics (r=.162,  $\alpha$ =.216). Similarly, there is no significant relationship between being bilingual and the number of visits to county health departments or community clinics (r=-.202,  $\alpha$ =.122). Therefore, this hypothesis is not supported by this study. This may also be due to the small sample size of this pilot study

# H1e: Language and Visits to a Private Doctor's Office

Participants who spoke only Spanish are significantly less likely to visit a private doctor's office to receive health care (r=-.260,  $\alpha$ =.045). There is also a statistically significant relationship between speaking both Spanish and English and visiting private doctors' offices. Bilingual participants in this study are significantly more likely to have visited a private doctor's office in 2007 (r=.292,  $\alpha$ =.024). Therefore, this study supports this hypothesis.

# Hlf: Language and Health Insurance Status

There is no statistically significant relationship between language and health insurance status. Spanish-speaking respondents are not less likely to have health care insurance (r=-.153,  $\alpha$ =.244). Furthermore, bilingual respondents are not more likely to have health care insurance (r=.152,  $\alpha$ =.248). This is contrary to the findings of previous studies. A larger sample size may elucidate a relationship between language fluency and health insurance status for Michigan Latinos.

# **Other Quantitative Findings**

Table 7 below contains a summary of other quantitative findings from this study.

Table 7: Responses to Other Questions on the Written Questionnaire

How well does the current health care system meet your needs and the needs of your family?

your needs and the nee	as of your raining.					
Average Response	nse "It meets some of our needs"					
Standard Deviation	0.847					
How often do you and health and health care		out				
Average Response	"Sometimes (3 to 4 year)"	4 times a				
Standard Deviation	1.240					
In 2007, did you or you the following?	ır family worry abo	ut any of				
Unemployment or change in employment status	35 participants	58.3%				
Housing access or housing conditions	17 participants	28.3%				
Food availability	19 participants	31.7%				
Health insurance	26 participants	43.3%				
Quality of health care services	13 participants	21.7%				
Discrimination	11 participants	18.3%				
Availability of transportation	15 participants	25.0%				
Income	35 participants	60.0%				
Total number of health						
Average Response	0.77					
Standard Deviation	0.871					
Total number of non-h	ealth worries (0-6)					
Average Response	2.05					
Standard Deviation	1.692					

# **Notable Findings**

This study illustrated previous findings regarding factors that influence Latinos' health care utilization patterns. In accordance to previous research, study participants' country of origin influences the type of health care services they receive. Mexican respondents are less likely to have visited a private doctor's office in 2007 to receive health care (r=-.223,  $\alpha$ =.087). Puerto Rican respondents, on the other hand, are more likely to have visited private doctors' offices in 2007 (r=.320,  $\alpha$ =.013) and less likely to have visited county health departments and community clinics (r=-.223,  $\alpha$ =.086). This is consistent with previous findings about Latino health care utilization patterns (Durden and Hummer 2006:1326).

This study also noted that Latinos' country of origin influences their health insurance status. Although a significant difference was not observed in the percent of Mexicans and Puerto Ricans with health insurance as noted in previous studies, largely due to small sample size, this study did reveal a difference in the type of insurance possessed. Puerto Ricans were more likely than any other subgroup of the Latino population in this study to obtain health care insurance through a state or county-sponsored program (r=.219,  $\alpha$ =.092). This is consistent with previous findings (Durden and Hummer 2006:1328).

Finally, this study reaffirms previous findings regarding the importance of health insurance in relation to satisfaction with health services. Latinos with any type of health care insurance are more likely to report that the health care system meets a greater number of their and their family's health care needs (r=.339,  $\alpha=.008$ ). This is consistent

with Martinez and Carter-Pokras finding (2007:904) that the possession of health care insurance leads to greater satisfaction with the health care system.

#### **CHAPTER V**

### **ANALYSIS OF FOCUS GROUP DATA**

This chapter presents an analysis of qualitative data collected in seven focus groups in four different Michigan counties. The research team asked focus group participants about four topics in the following order: (1) where members of their community obtain information about health and health care; (2) community health concerns; (3) their health concerns for community youth; and (4) where the community obtains health care. Discussions regarding where Latinos obtain health care also revealed barriers to care in their community.

Forty-five Latinos participated in the focus group interviews. This is a portion of the same population that completed written questionnaires in the previous chapter.

Therefore, demographic data for this sample is very similar to that provided in the Chapter IV.

### **Analysis**

The responses for each question were coded into categories for analysis. I coded the individual responses to focus group question 2, regarding participants' health concerns for the Latino community and Latino youth, into four broad categories: chronic, contagious, social, and mental-psychological. I designed these categories to coincide with popular perceptions about each health concern.

Table 8 on the following page depicts the illnesses that I included in each of the four categories. The health concern "cultural norms" describes the belief that Latino men

feel that they cannot discuss their health with others or seek health care without appearing weak. The health concern "health systems barriers" describes a common concern regarding the inability to obtain health care when it is needed.

**Table 8: Categories Used to Classify Latino Health Concerns** 

Category	Included Health Concerns
Chronic	Asthma, blood pressure, cholesterol, diabetes, epilepsy, migraines, arthritis, kidney failure, skin problems, Parkinson's disease, dental, vision
Contagious	Common illnesses, STDs, AIDS, respiratory infections, vaginal and urinary tract infections
Social	Behavioral problems, cultural norms, health systems barriers, preventive care, obesity/nutrition, misuse of over the counter medication, teen pregnancy, preterm delivery, drugs, alcohol, smoking, health education.
Mental-Psychological	Mental health concerns, stress/depression, developmental disabilities

Participants often provided more than one response to each question. Therefore, in some instances, the percentage that a topic was mentioned exceeded 100. I analyzed the responses to each focus group question by county to determine if health concerns and available resources differ around the state. I analyzed the barriers to obtaining health care services by county for the same reason.

### **H2: Latino Health Concerns**

The second hypothesis examined in this study states that the health concerns held by Michigan Latinos are similar to those held by U.S. Latinos in previous studies. Data for this hypothesis was provided by the second focus group topic. The first question under this topic asked about community health concerns – "What do you think people in

this Hispanic/Latino community are worried about in terms of health?" – while the second question asked about health concerns for community youth – "For those of you who have kids under the age of 18, what are you worried about when it comes to their health?".

Health Concerns for the Latino Community

Table 9 below shows the health concerns for Latino communities by county.

**Table 9: Latino Community Health Concerns by County** 

	Lenawee	Saginaw	St. Joseph	Van Buren	All Counties
Social	27.8%	100.0%	61.5%	37.5%	48.9%
Chronic	44.4%	33.3%	46.2%	50.0%	44.4%
Contagious	50.0%	33.3%	7.7%	0.0%	22.2%
Cancer	27.8%	16.7%	7.7%	25.0%	20.0%
Mental-Psychological	11.1%	16.7%	30.8%	0.0%	15.6%

The top three types of concerns for Latinos in Michigan are social, chronic, and contagious illnesses. Saginaw and St. Joseph Counties consider the illnesses coded as social concerns to be the most significant. Specifically, Latinos in Saginaw County are most concerned about obtaining preventive care (50.0%), followed by obesity/nutrition (33.3%), and health system barriers (33.3%). St. Joseph County Latinos, on the other hand, are most concerned about health system barriers (23.1%), and preterm delivery (23.1%) in their community. Van Buren County Latinos place more emphasis on chronic conditions, like asthma (50.0%) and diabetes (50.0%). Lastly, Lenawee County considers contagious illnesses, such as AIDS and STDs (38.9%), to be the largest community health concern followed by chronic illnesses, such as blood pressure, heart problems, and diabetes.

The health concerns mentioned by Michigan Latinos in this study are similar to those mentioned by Maryland Latinos (Martinez and Carter Pokras study 2007).

Therefore, this data supports Hypotheses 2. Although Latinos in this study do not directly mention domestic issues as a community health concern, community violence, which is coded with domestic issues in Martinez and Carter-Pokras' study (2007:903), was mentioned by focus group participants. It is coded here as a behavioral issue (13.3%).

This study, however, deviates slightly from previous findings. Michigan Latinos place more emphasis on social health concerns than do Latinos in previous studies. Michigan Latinos mention concerns regarding social issues such as: obesity/nutrition (24.4%), health system barriers (13.3%), and access to preventive care (13.3%). Nutrition is mentioned as a minor concern for Latino men in Martinez and Carter-Pokras' study (2007); the remaining concerns are not mentioned.

# Health Concerns for Latino Youth

Table 10 below shows the health concerns held by parents for Latino youth.

Table 10: Latino Health Concerns for Community Youth by County

	Lenawee	Saginaw	St. Joseph	Van Buren	All Counties
Social	44.4%	33.3%	107.7%	50.0%	62.2%
Contagious	44.4%	0.0%	38.5%	0.0%	28.9%
Chronic	5.6%	66.7%	38.5%	0.0%	22.2%
Mental-Psychological	11.1%	0.0%	23.1%	12.5%	13.3%
Cancer	11.1%	0.0%	0.0%	0.0%	4.4%

Once again, participants in St. Joseph County consider social health concerns the most pressing issue for their community. Every member of the St. Joseph focus groups mentioned a social health concern at least once. Latino parents in St. Joseph express the most concern about the following: providing health education to community youth (30.8%), the use of drugs, smoking and alcohol (23.1%), and youth behavioral issues

(23.1%). Van Buren County parents also express the most concern about social health issues for community youth. They are most concerned about drug use, smoking, and alcohol in their community (25.0%).

Latino parents in Lenawee County express equal concern about social and contagious health issues for youth. They are most concerned about social issues such as drug use, smoking, and alcohol (16.7%), as well as the misuse of over-the-counter medications (11.1%). Yet, Lenawee parents also express marked concern about contagious illnesses such as AIDS/STDs (5.6%), common illnesses (cough, flu fever, throat and ear infections) (5.6%), and respiratory infections (5.6%).

Lastly, Latino parents in Saginaw County are most concerned about dental (33.3%) and vision (33.3%) services, which are classified as chronic conditions. They also express concern about obesity in Latino youth (33.3%). Interestingly, parents in Saginaw County do not express concern for their children regarding contagious or mental-psychological health concerns or cancer.

The health concerns of Latino parents in Michigan for their children mirror the concerns held by Latino parents in previous studies. This adds further support to Hypothesis 2. Latino parents in Michigan mention nearly all of the concerns held by Latino parents in Alabama (Harrison and Scarinci 2007:37). Unlike Alabama Latinos, study participants did not express concern regarding childhood gastrointestinal illnesses. Michigan Latinos also hold most of the same concerns held by Maryland Latinos (Martinez and Carter-Pokras 2007:903).

However, the focus of Latino parents in Michigan differs slightly from other Latinos. Parents in previous studies place more emphasis on contagious and chronic

health issues, while parents in this study express more concern regarding social issues. This may be a result of the personal characteristics of study participants. We may have interviewed more parents with older children instead of parents with younger children.

# **Other Qualitative Findings**

Remaining focus group questions ask about behaviors related to seeking health information and the health care system's ability to meet participants' health care needs. Discussion regarding the health care system reveals the Latinos' help-seeking behaviors in each county as well as the barriers preventing access to health resources resources. I coded these data and examined them by county.

# Sources for Health Information

Table 11 below presents the sources that Michigan Latinos most frequently use obtain health information.

Table 11: Michigan Latinos' Sources for Health Information by County

	Lenawee	Saginaw	St. Joseph	Van Buren	All Counties
TV/News & Radio	44.4%	50.0%	69.2%	37.5%	51.1%
Doctors	16.7%	50.0%	61.5%	12.5%	33.3%
Friends & Coworkers	27.8%	16.7%	38.5%	12.5%	26.7%
Relatives	22.2%	33.3%	15.4%	12.5%	20.0%
Print Media (Paper, Magazines, Books)	16.7%	16.7%	7.7%	25.0%	17.8%
Work & School	16.7%	16.7%	15.4%	12.5%	15.6%
Internet	11.1%	33.3%	7.7%	12.5%	13.3%
Health Locations (Clinics, Hospital & Health Departments)	5.6%	50.0%	7.7%	12.5%	13.3%
Pamphlets & Brochures	11.1%	0.0%	23.1%	12.5%	13.3%
Church	11.1%	0.0%	7.7%	0.0%	6.7%

The sources for health information used by Michigan Latinos are consistent with those used by Latinos in previous studies. Most participants say they use television/news and radio as their primary source of health information because it is convenient and easily accessible (51.1%). Although it is a primary source of health information, they explain that often it is not very useful. Most Latino communities receive only one Spanish channel – Telemundo, a Miami-based station – so if an illness is not a national problem, they do not hear about it. Doctors are the second most popular source for health information (33.3%), followed by friends and coworkers (26.7%). Previous studies fail to mention the importance of "word of mouth" in Latino communities as exhibited in this study.

### Help-Seeking Behaviors

Table 12 below displays the help-seeking behaviors of Michigan Latinos in regards to health and health care by county.

Table 12: Help-Seeking Behavior of Michigan Latinos by County

	Lenawee	Saginaw	St. Joseph	Van Buren	<b>All Counties</b>
Self-Care, Do Nothing	50.0%	100.0%	46.2%	50.0%	55.6%
Community Clinic, Health Department, After Hours Clinic	33.3%	66.7%	38.5%	25.0%	37.8%
Private Doctor's Office	16.7%	33.3%	53.8%	37.5%	33.3%
Mexico	38.9%	0.0%	38.5%	25.0%	31.1%
Hospital	16.7%	16.7%	23.1%	37.5%	22.2%

The help-seeking behaviors of Michigan Latinos are similar to those reported in previous studies. The most popular method for obtaining care in this study is self-care

(55.6%). Traditional home remedies mentioned by focus group participants include: cinnamon tea or tequila for cough and alcohol baths for chills. The second most popular method for obtaining health care is visiting a community clinic, the health department, or an after-hours clinic (37.8%). This is consistent with the findings from previous studies (Durden and Hummer 2006:1326; Kaiser Family Foundation 2004a:4; 2004b:3). Michigan Latinos also said that they frequently travel to Mexico for medical care or obtain help from relatives in Mexico (31.1%). One woman in St. Joseph County explained that because she often suffers from bronchitis, she will ask anyone traveling to Mexico to bring back penicillin for her. This behavior is consistent with past research findings (Harrison and Scarinci 2007:37).

#### Barriers to Health Care

Table 13 below displays the barriers encountered by Michigan Latinos when accessing health care.

**Table 13: Barriers to Accessing Health Care by County** 

	Lenawee	Saginaw	St. Joseph	Van Buren	<b>All Counties</b>
Insurance Status/Cost	88.9%	66.7%	92.3%	50.0%	80.0%
Language	38.9%	16.7%	69.2%	87.5%	53.3%
Discrimination	22.2%	33.3%	84.6%	50.0%	46.7%
Time	27.8%	50.0%	46.2%	37.5%	37.8%
Fear	16.7%	66.7%	23.1%	12.5%	24.4%
Transportation	16.7%	16.7%	46.2%	12.5%	24.4%

The barriers to obtaining health care for Michigan Latinos are identical to those in previous studies. The most commonly cited barrier to care in Lenawee and St. Joseph County is health insurance status/cost (80.0%). Participants find that even with health insurance, the cost of health care is too expensive. Latinos say that they will either forgo

care or drive as far as Detroit or Toledo to obtain less expensive care. This is consistent with previous findings (Kaiser Family Foundation 2004a:3).

Latinos in Van Buren County had the most problems with language (87.5%). Spanish-only participants expressed their frustration regarding their inability to communicate their health care needs and comprehend prescribed treatments:

"My English is not so good... I know that... so, you try to explain to them and they say: "I don't understand you... I don't understand you"... and you are in a lot of pain and they keep saying, "No. I don't understand you." (Male in St. Joseph County).

This is also consistent with previous findings (Fiscella et al. 2002:56; Flores et al. 2002:88; Garcés et al. 2006:381; Harrison and Scarinci 2007:39; Kaiser Family Foundation 2004a:5; 2004b:3; Martinez and Carter-Pokras 2006:905; Saint-Germain et al. 1993:353). Focus group participants stressed the need for bilingual physicians and staff at local hospitals and clinics.

Latinos in Lenawee and St. Joseph County are the only ones who mentioned immigration status as a barrier to care. The research team chose not to direct the conversation towards immigration in order to preserve the trusting relationship that exists between MSUE and the Latino communities. Latinos in Lenawee and St. Joseph Counties said that many members of their communities are undocumented and are working under false names in order to protect their family. These people rarely seek out or receive health care in fear that it may jeopardize their families:

"The existing problems with the undocumented are preventing the people from receiving the necessary health services...without this, they wouldn't

fear to go and ask the teacher: "Where can I get assistance because I don't know how to feed my children?" But you don't do it because what if they come to your house? Oh God!" (Woman in St. Joseph County).

Numerous focus group participants matter-of-factly stated that, because of recent legislation regarding illegal immigration, there is no safe place for Latinos, legal or illegal, to obtain health care in their area.

### **CHAPTER VI**

#### **DISCUSSION**

The previous two chapters provided the major findings for this study. The present chapter will focus on discussing these findings in terms of the original hypotheses, the study's limitations, and suggestions for future research.

Two hypotheses were tested in this study. The first hypothesis, consisting of six more specific hypotheses, states that the health utilization patterns of Michigan Latinos are similar to those of other U.S. Latinos from existing studies. In this hypothesis, the effects of income and language on utilization patterns were examined. The second hypothesis suggested that the health concerns of Michigan Latinos are similar to those reported in existing studies.

#### **Hypothesis 1: Latino Health Utilization Patterns**

The Effects of Income on Health Utilization

The first three specific hypotheses of Hypothesis 1 (H1a, H1b, and H1c) examine the effects of income on Latino health utilization patterns. I correlated responses to questions 5, 6, and 16 from the written questionnaire to test these hypotheses. Family income level is not significantly correlated to the percentage of all health care visits that are to county health departments or community clinics (r=-.118,  $\alpha$ =.369), therefore Hypothesis 1a is not supported. However, Latinos with higher family income levels are more likely to visit a private doctor's office to receive health care (r=.314,  $\alpha$ =.015). This

is in accordance to what previous studies have shown. Thus, this study supports Hypothesis 1b. Finally, data shows that a positive correlation exists between family income level and insurance status, but this relationship is not statistically significant  $(r=.207, \alpha=.112)$ . Hypothesis 1c is not supported by this study. This could primarily be due to the small sample size.

### The Effects of Language on Health Utilization

The remaining three specific hypotheses of Hypothesis 1 (H1d, H1e, and H1f) examine the effects of language fluency on Latino health utilization patterns. I analyzed responses to questions 5, 6, and 11 on the written questionnaire to test this hypothesis. This study shows that Michigan Latinos who speak only Spanish are not significantly more likely to visit county health departments and community clinics to receive health care (r=.162,  $\alpha$ =.216). Similarly, there a significant relationship does not exist between being bilingual and the number of visits to county health departments or community clinics (r=-.202,  $\alpha$ =.122). Therefore, Hypothesis 1d is not supported by this study. Interestingly, Spanish-speaking Latinos are significantly less likely to visit a private doctor's office to receive health care (r=-.260,  $\alpha$ =.045). On the other hand, bilingual participants in this study are significantly more likely to have visited a private doctor's office in 2007 (r=.292,  $\alpha$ =.024). Thus, Hypothesis 1e is supported by this study. Lastly, there is no significant relationship between English fluency and health care insurance status (r=.152,  $\alpha$ =.248). Hypothesis 1f is not supported by these findings. A larger sample size may elucidate a relationship between language fluency and health insurance status for Michigan Latinos.

### **Hypothesis 2: Latino Health Concerns**

The second hypothesis examines the health concerns of Michigan Latinos. I analyzed data drawn from the second topic discussed during the focus group interviews for this hypothesis. This topic specifically asked about health concerns for the Latino community and for Latino youth. I coded this data into four broad categories —chronic, contagious, mental-psychological, and social — and analyzed it by county.

### Health Concerns for the Community

The top three categories of health concerns for Michigan Latinos are social, chronic, and contagious illnesses. These categories include nearly all of the health concerns mentioned by Latinos in previous studies. Therefore, this data supports Hypothesis 2. However, Michigan Latinos express more concern regarding social health issues than do Latinos in other areas. They state concerns regarding obesity, health system barriers, and preventive care that are not mentioned in previous studies.

### Health Concerns for Youth

Latino parents in Michigan express the most concern about illnesses that are classified as social problems or contagious illnesses. These concerns mirror those held by Latino parents in other areas. Latino parents in Michigan mention nearly all of the concerns held by Latino parents in Alabama and Maryland (Martinez and Carter-Pokras 2007:903; Harrison and Scarinci 2007:37). This adds further support to Hypothesis 2. However, Michigan Latinos also place more emphasis on social issues than parents in previous studies. This may be a result of the family structure of focus group participants.

We may have interviewed more parents with older children, who normally have more socially-based health problems than parents with younger children, who are more at risk for contagious illnesses.

#### Limitations

Because this research is intended to be a pilot study, the small sample size limits the ability to generalize the results of the gathered data for the entire Michigan Latino Population. Also, because of the small sample size, certain health care trends that exist in Michigan's Latino population may not have been detected that are apparent in previous studies. Relationships between income, health insurance status, and language may become apparent with a larger sample size. A larger sample size may also increase the significance of reported correlations.

The data gathered during this study relies on the trusting relationships between MSU Extension County Staff and each county's Latino population. In Lenawee County, where MSU Extension staff work very closely with the Latino population, we had a very high turnout for both the survey and focus group interviews. In other counties, such as Saginaw County, we learned that MSU Extension's relationship with the Latino population, especially Spanish-only members of the population, was nearly nonexistent. This hampered the data collection process as well as the extent to which study results can be generalized to the county's Latino population.

#### **Recommendations for Future Research**

The primary limitation to this study is its small sample size. Therefore, this research should be replicated on a larger scale in order to truly characterize the habits of

Michigan's Latino population. In addition, more Michigan counties should be included to provide a more in depth sample of the state's Latino population. Also, the sampling methodology should be altered to provide a more representative sample of Michigan Latinos. If possible, probability sampling should be employed.

Future research with Michigan Latinos should include a more in-depth written questionnaire to better characterize the socioeconomic status of Michigan's Latino population. This will permit researchers to better determine which variables have the most impact on Latino health utilization patterns. Furthermore, future researchers should employ multivariable analysis to better characterize the role of these variables. This was not done in this study because of time and my limited statistics background.

Finally, attention should be given to given to individual questions on the written questionnaire. For example, in question 5, participants should be provided with a better description of the different health care locations. Because health resources vary in each county, participants may have been unsure what the research team meant by a community clinic. In question 16 on the self-administered survey, researchers should include a category for an income level of less than \$20,000 dollars a year in order to further stratify results.

#### **Conclusions**

This pilot study serves as a promising first step towards determining the health care utilization patterns and health concerns of Michigan Latinos. It helps to illuminate numerous unmet needs in a population that is often overlooked by health professionals and policy makers alike. Michigan State University Extension will be able to use this

data as a starting point so that they may begin to design more culturally appropriate health promotion programs for Michigan's Latino population. This study also provided the Latino community an opportunity to voice their needs and their concerns. This was the first step MSUE needed to take in order to begin improving the health status of Latinos in Michigan.

"We would like to thank you more than anything, because you gave us the opportunity to unite our requests and listen to what the community needs...Thank you very much!" (Male in St. Joseph County)

**APPENDIX** 

## APPENDIX A

# SELF-ADMINISTERED SURVEY, ENGLISH VERSION

# **Hispanic Health Project**

To help improve the health of Latinos in Michigan, Michigan State University Extension is working with members of Latino communities like yours to understand your healthcare concerns, needs and experiences. Your participation in this project will help Michigan State University Extension and Latino community leaders develop programs to meet these needs. The following questions on this short survey ask about your health, your family's health and how often you use the healthcare system. Your answers to these questions are completely confidential.

For Questions 1-4, select the ONE answer that best describes your situation.

1.	In your opinion, how well does the current healthcare system meet your needs and the needs of your family?			
	☐ It does not meet our needs at all.			
	☐ It meets some of our needs.			
	☐ It meets many of our needs.			
	☐ It meets all of our needs.			
2.	What are your family's current healthcare needs? Please be as detailed as possible.			
3.	How often do you and your family talk about health and healthcare?			
	☐ Rarely (Once or twice a year)			
	□ Sometimes (3 to 4 times a year)			
	☐ Frequently (Once a month)			
	☐ A lot (Every other week or so)			
4.	In some families, the person who decides whether or not to go see a doctor or get medical help for their family is not the person who actually goes to the doctor. For example, in some families, the father will decide that his child needs to go to the doctor's office, but the mother will be the one to take the child. Which of the following BEST describes your family?			
	☐ I make the decisions, and I also carry them out.			
	☐ Someone else makes the decisions, but I carry them out.			
	☐ I make the decisions, but someone else carries them out.			
	☐ Someone else makes the decisions, and someone else carries them out.			

Please continue on the next page.

Question number 5 asks about the healthcare experience of everyone in your home. For each question part, please give the number of times each item happened this year. Estimates are okay.

5.	In the year 2007, how many times did you or your family			
	Visit the emergency room?			
	Visit the county health department?			
	Visit a community healthcare clinic?			
	Visit a private doctor's office?			
6.	Which statement or statements below describes your family's type of healthcare insurance? Please check all that apply.			
	☐ My family does not have insurance.			
	☐ I don't know what type of insurance my family has.			
	☐ My family receives insurance benefits through my or my spouse's job.			
	☐ My family purchases our own insurance from a private company.			
	☐ My family receives insurance through an insurance program from the state or count			
	(examples include My Child and the Ingham County Health Plan.)			
	☐ My family receives Medicaid.			
	☐ My family receives Medicare.			
7.	Various social circumstances can have an impact on our lives. Changes in these circumstances can also affect our health, both in good or bad ways.			
	In 2007, did you or your family worry about any of the following? Please check all that apply.			
	☐ Unemployment or a change in employment status			
	☐ Housing access or housing conditions			
	☐ Food availability			
	☐ Health insurance			
	☐ Quality of healthcare services			
	☐ Discrimination			
	☐ Availability of transportation			
8.	How long have you lived in the United States?			
9.	Including yourself, how many people live with you at home?			
10.	How many people living at your home are under the age of 18?			

Please continue on the next page.

11.	What l	anguage do you regularly speak at home?
		Spanish
		English
	_	Spanish and English equally
		Neither Spanish nor English
12.	What i	s the highest level of schooling you have completed?
		Completed up to eighth grade
		Completed some high school (9 – 12 grades)
		Graduated from high school, or have GED
		Completed some college
		College graduate or more
13.	What c	country is your family originally from?
14.	What i	s your gender?
		□ Male
		□ Female
15.	How o	ld are you?
		Under 20 years old
		20 – 29 years old
		30 – 39 years old
		40 – 49 years old
		50 – 59 years old
		60 – 69 years old
		70 years or older
16.	How m	nuch money does your family make every year?
		Less than \$20,000 a year
	[ ]	\$20,000 - \$29,999 a year
		\$30,000 - \$39,999 a year
		\$40,000 - \$49,999 a year
		More than \$50,000 a year
17.		e anything else you would like to share about your healthcare concerns, needs and ences that has not been asked?

## **APPENDIX B**

# SELF-ADMINISTERED SURVEY, SPANISH VERSION

# Proyecto de Salud del Servicio de Extensión de MSU

Para mejorar la salud de la comunidad Latina de Michigan, el programa de salud del servicio de Extensión de Michigan State University está trabajando con miembros de su comunidad para así poder entender sus preocupaciones sobre la salud, necesidades y experiencias. Su participación en este proyecto ayudará a Michigan State University y su programa de Extensión, y también a los lideres de su comunidad a desarrollar programas que puedan prestar atención a todas sus preocupaciones. Esta encuesta tiene preguntas que tratarán temas tales como su salud, la de su familia y ver cada cuanto Ud. hace uso del sistema de salud. Su respuesta es totalmente confidencial.

#### Para las preguntas 1-4, escoja UNA respuesta que describa por completo su situación.

- 1. En su opinión, califique la calidad del sistema de salud para su tratamiento y el de su familia:
  - a. El sistema no atiende nuestras necesidades.
  - b. El sistema atiende algunas de nuestras necesidades.
  - c. El sistema atiende muchas de nuestras necesidades.
  - d. El sistema atiende todas nuestras necesidades.
- 2. ¿Cuáles son las necesidades de la salud de su familia? De todo tipo de detalles.
- 3. ¿Cada cuanto o con que frecuencia usted y su familia hablan acerca de su salud y del cuidado de la salud?
  - a. Nunca
  - b. Raras veces (Una o dos veces al año)
  - c. A veces (Tres o cuatro veces al año)
  - d. Con frecuencia (Una vez al mes)
  - e. Bastante (Dos veces al mes)
- 4. En algunas familias, la persona que decide si se va a visitar al doctor o recurre por ayuda médica es precisamente la persona que no va a visitar al doctor. Por ejemplo, en algunas familias, el padre decide si el niño/a necesita visitar al doctor, pero la madre es la persona que lleva a su hijo/a al consultorio. De todas estas frases, ¿Cuál describe por completo a su familia?

	Yo hago la decisión médica y también la ejecuto o cumplo.
	Otra persona hace la decisión, pero yo la ejecuto o cumplo.
$\Box$	Yo hago la decisión, pero otra persona la ejecuta o cumple.
	Otra persona hace la decisión y otra persona la ejecuta o cumple.

Por favor continúe con la encuesta en la siguiente página.

Estas preguntas tratan las experiencias que su familia haya experimentado. Para cada pregunta, mencione el número de veces para cada situación (en este año). También puede estimar sino recuerda exactamente.

5.	En el 2007, cuantas veces usted y su familia  ¿Visitaron la unidad de cuidado intensivo?  ¿Visitaron el departamento de salud del condado?			
	¿Visitaron una clínica comunitaria?			
	¿Visitaron el consultorio de un doctor por cuenta propia?			
6.	¿Qué afirmación/es describen por completo el seguro medico de su familia? Rellene todas casillas que califiquen.			
	a.			
	b.			
	c.	Mi familia recibe beneficios médicos por medio propio o de mi con	yugue.	
	d.	Mi familia paga y recibe un seguro medico por medio de una comp	añía privada.	
	e.	Mi familia recibe beneficios médicos por medio de un programa est		
		condado. Por ejemplo: "My Child" y "the Ingham County Health P	lan."	
	f.	Mi familia recibe Medicaid.		
	g.	Mi familia recibe Medicare.		
	cunstancias į	tancias sociales pueden impactar nuestras vidas. Los cambios de estas pueden afectar nuestra salud ya sea de forma positiva o negativa.  7, ¿Usted o su familia se preocupo por lo siguiente? Rellene todas las		
	a.	Desempleo o cambio de su trabajo		
	b.			
	c.	Acceso a alimentos		
	d.			
	e.			
	f.	Discriminación		
	g.	Disponibilidad de los medios de transporte		
	h.	Ingresos, salario		
8.	¿Por cuánto	o tiempo ha vivido en los Estados Unidos?		
9.	¿Cuántas p	ersonas viven en casa? (Inclúyase usted mismo)		
10.	0. ¿Cuántas personas son menores de 18 años? (Que viven bajo su techo)			

7.

Por favor continúe con la encuesta en la siguiente página.

11. ¿Que idiomas se hablan regularmente en casa?		
	a.	Español
	b.	Ingles
	c.	Español e Ingles
	d.	Ninguno de los dos
12 · Curl	1	
12. ¿Cuar e		nivel más alto de educación que usted tiene?
	a.	č
		Terminé hasta el octavo grado.
		Terminé parcialmente la preparatoria o "high school" (grados del 9 al 12).
		Me gradué de la preparatoria o "high school", o tengo un diploma de GED.
		Estudié en la universidad.
	I.	Terminé un post-grado, maestría o doctorado.
13. ¿De qu	e pa	ús es su familia originaria?
14. ¿Cuál e	es su	sexo o género?
	Ma	asculino
	Fei	menino
15. ¿Cuánt	os a	ños tiene usted?
	a.	Menos de 20
	b.	Entre 20 y 29
	c.	Entre 30 y 39
	d.	Entre 40 y 49
	e.	Entre 50 y 59
	f.	Entre 60 y 69
	g.	Más de 70
16. ¿Cuánt	o di	nero gana su familia anualmente?
Ü		Menos de \$20,000 al año
	b.	Entre \$20,000 y \$29,999 al año
	c.	Entre \$30,000 y \$39,999 al año
	d.	Entre \$40,000 y \$49,999 al año
	e.	Más de \$50,000 al año

17. ¿Usted tiene alguna inquietud o pregunta acerca de sus preocupaciones, necesidades y experiencias médicas o de algo que no se haya mencionado?

## **APPENDIX C**

# FOCUS GROUP QUESTIONS, ENGLISH VERSION

#### **Focus Group Questions**

- 1. Topic: Sources of Health Education
  - a. How do you get information about health?
    - i. Probing/prompting....Family? Friends? Internet? Word of mouth? Media TV, Radio, Magazines? Doctors?
  - b. How do you prefer to get information about health (health concerns, general health issues, and being healthy)?
- 2. Topic: Health concerns
  - a. What health concerns do people (Hispanic/Latino) you know have?
  - b. What are your health concerns for your children?
  - c. What are your health concerns for other family members in your home?
  - d. Are there any other health concerns you can think of that have not been mentioned?
- 3. Topic: Accessing Health Care System (HCS)
  - a. Do you feel you have places to go or people to see who can help you with health concerns/issues? (resources)
  - b. What do you do about the health concerns just mentioned? For yourself? For your children? For your family?
  - c. Do you know what others use?

## APPENDIX D

# FOCUS GROUP QUESTIONS, SPANISH VERSION

#### Preguntas Para Entrevistas En Grupo

- 4. Primer Tema: Fuentes para la educación sanitaria
  - a. ¿Como se informa usted acerca de la salud?
    - i. ¿Usted le pregunta a un familiar, amigo, el internet, o por medio de los consejos que le da gente?
      ¿Medios de comunicación, la radio, las revistas o un médico?
  - b. ¿Usted como prefiere obtener información acerca de la salud, de sus preocupaciones/inquietudes sanitarias, problemas mas generales y también para estar sano y fuerte?
- 5. Segundo Tema: Preocupaciones/inquietudes sanitarias
  - a. ¿Que tipo de preocupaciones sanitarias tienen los Hispanos/Latinos?
  - b. ¿Cuales son las preocupaciones sanitarias de sus hijos?
  - c. ¿Cuales son las preocupaciones sanitarias para otras personas que viven en su casa?
  - d. ¿Usted tiene algún tipo de inquietud o preocupación que no se haya mencionado?
- 6. Tercer Tema: Evaluación del sistema de salud o "Health Care System (HCS)"
  - a. ¿Usted conoce lugares o personas que puedan ayudarle con el fin de resolver sus inquietudes o preocupaciones sanitarias? (Recursos)
  - b. ¿Que hace usted para usted mismo, sus hijos y su familia cuando hay que prestar atención a las inquietudes que se han mencionado?
  - c. ¿Usted sabe lo que hacen otras personas al respecto?

## **APPENDIX E**

## FOCUS GROUP MODERATOR GUIDE

#### Hispanic Health Project - Moderator Guide for Each Focus Group

1) Please help yourself to food. This is our way of thanking you for coming today.

1) Buenas noches. Nos daría mucho gusto que pasen y se sirvan de comer, por favor.

## I. INTRODUCTION (2-4): 5 min

#### 1) People:

a)Dora –professor at Michigan State. Working with MSU Extension on this project. I am excited to be talking with you today about healthcare.

b)Melissa – a student at Michigan State and Kimbirly – who works for Extension helping to design programs to meet the needs of communities in Michigan; will be taking notes in the back of the room and helping out, but they will not be part of the conversation tonight.

#### 2) Purpose of study/ proposito de este estudio:

a) \*This study is Conducted by Michigan State University Extension, which is a department at Michigan State University that assists communities and families around Michigan through educational programs.

\* Este es un estudio conducido por MSU Extensión que es un departamento de MSU que avuda a las comunidades y familias de Michigan con programas educativos.

- b). \*This study that you are participating in today is to help MSU Extension understand how to help improve health for Hispanic families in Michigan. We have 90 minutes to talk today. To ensure we stay on time let's try and keep our short, and let everyone have a turn.
- c)Once again thank you so much for coming. Your opinions are very important to us today. You will be able to tell us how to best help families like yours. That is important to us.
- d)We will be tape recording our conversation today. This is so we can make sure we get *everything* you say because all of it is important to us. Please ignore the tape recorder over there.

#### 3. Consent Form/ Formulario de permiso

- a) Important form required by Michigan State University that shows you have been told about the focus group and you are willing to participate.
- b) Talks about why we need your help with this study and what exactly we will be doing today.
- c) Copies are in English and Spanish.
- d) Run through each paragraph:
- e) Why we're here already talked about but to cover one more time...(you can read)
- f) Risks and benefits to participating talking about health to some people can be personal. Please don't feel that you have to answer every question if you don't want to.

You can leave at any time. But it is important to us that you are here. After tonight, we will be able to better understand how we can work with and help Hispanic communities in Michigan.

- g) As we stated before, we will be recording our conversation today, by signing this form, you are giving us permission to do this. If you decide you do not want to be recorded, you can leave at any time.
- h) Everything is confidential we will not use your names in anything. You will be given a number to put in front of you and that is how we will always refer to you. No one else will know what you say today besides us.
- i) Please ask us any questions that you have throughout our conversation today.
- j) If you take a few moments to read this paper and sign it at the bottom, we can move onto the survey.

#### II. SHORT SURVEY / ENCUESTA (10 minutos)

- a) Just a few pages.
- b) To help us better understand who is here with us tonight.
- c) Not asking for your name referred to by the number in front of you.
- d) Giving you a survey will get all of those basic routine questions out of the way so we can have more time to talk.
- e) Please ask us any questions that you have. If you get stuck on a question let us know. We are happy to help clarify.

# III. GUIDELINES (ON NEWSPRINT IN ENGLISH AND SPANISH) / LAS REGLAS O NORMAS PARA HACER MAS PRÁCTICA, FÁCIL Y CÓMODA NUESTRA CONVERSACIÓN (2 minutos)

- a. Want to set a few guidelines for our talk today. That way everything runs smoothly and hopefully everyone will feel comfortable enough to share their experiences. Is that okay? (nods...)
- b. Please talk one at a time so we can get everyone's opinion.
- c. Please be polite everyone's opinion is very important to us. We would like to be able to provide programs that can help everyone.
- d. There is no right or wrong answer to the questions we are going to be talking about today if your opinion is different than the person next to you. That's great! Please tell us what you think.
- e. Please speak slowly and clearly so we and everyone else here can understand your opinion. It's also important for the tape recorder and for the people taking notes they are a little slow Ha! Ha!
- f. Again, please ask questions about anything you don't understand.

#### IV: ICEBREAKER/ PARA ROMPER EL HIELO (3 MINUTOS)

- 1. Thank you for coming again. I'm really excited to get talking.
- 2. I know you just filled out a survey, but let's tell each other a bit about ourselves a second. Just so we all know who is here. We'll just go around the room and if you could tell the group something about you or your family that would be great.

#### V. GROUP QUESTIONS/ TEMAS PARA CONVERSAR (total: 60 minutos)

**TEMA 1. (20 minutos)** 

Everybody ready! ©

- \* We are going to begin our discussion talking about where you get information about health and health issues.
- \*Vamos a comenzar nuestra conversación hablando sobre CÓMO/ DE QUÉ MANERA ustedes se informan sobre los asuntos generales de la salud.
- 1. Let's say you heard that some type of sickness is going around. Where would you go to get more information about that?
- 1. ¿Generalmente cómo usted se entera sobre las enfermedades nuevas que hay en su comunidad?

Probing/prompting....

- a) )Who would you talk to? No-one? Family? Friends? Doctors? Co-workers? Companeros de trabajo
- b) Where else would you go to get information? Internet? TV, Radio, Magazines?

- 2. If you had a person health concern; where would you go to get more information about that?
- 2. Si usted está interesada en conocer sobre algunos asuntos de salud, cómo o dónde busca información?

#### Probing/prompting....

- a) Who would you talk to? No-one? Family? Friends? Doctors? Co-workers?
- b) Where else would you go to get information? Internet? TV, Radio, Magazines?
- 3. Where would you go to get more information about how you can keep from getting sick in the future?
- 3. Pero si necesitara más información porque usted piensa que usted está enferma, ¿entonces dónde o cómo busca información más precisa?

#### Probing/prompting....

- A) Who would you talk to? No-one? Family? Friends? Doctors? Co-workers?
- B) Where else would you go to get information? Internet? TV, Radio, Magazines?
- 4. Now that we have talked about all of the people and places you go to get health information (like....examples they used) let's talk about which ones are your favorites.
- a) If given a choice, where would you prefer to get information?
- a) Finalmente, ¿cuál de estés formas es usted favorita? ¿Cuál de usted prefiere?
- b) How would you feel about having someone from your community come to your home to answer questions or talk about your concerns.
- b) ¿Cómo se sentiría usted si pudiera tener todo de esta información por medio de forma de personal de su comunidad que pueda ir a su casa para responder a sus preguntas? ¿Sería bueno para usted tener alguien de su comunidad que vaya a su casa para contestar todos de sus preguntas y ayudarle?

c) Thank you so much for all of your answers. We really appreciate them. Let's keep going.

#### TEMA 2 (20 minutos):

\*MSU Extension wants to learn about the health concerns of Hispanic/Latino communities in Michigan.

\*Extension de MSU Quiere conocer acerca de las preocupaciones sobre la salud que tienen las comunidades hispanas/ Latinas de Michigan

1. What do you think people in this Hispanic/Latino community are worried about in terms of health?

(¿Qué asuntos de la salud le preocupa a la gente en esta comunidad hispana/ Latina?)

a)Prompting: Your friends? People at your church? People in your neighborhood? b)Prompting: heart disease, diabetes, obesity, cancer...

2. For those of you who have kids under the age of 18, what are you worried about when it comes to their health?

(¿Qué les preocupa sobre la salud de sus hijos menores de 18 años?)

a)Prompt: Do you worry about them getting sick? If so, how?/ Les preocupa que se vayan a enfermar? ?Cómo o de qué podrían enfermarse?

- 3. What are you worried about when it comes to the health of other family members in your home?
- (¿Que les preocupa sobre la salud de otros miembros de su familia?)
- a)Prompt: Your husband or wife, your sisters, brothers, mother, aunt, etc.
- 4. Are there any other health concerns you can think of that have not been mentioned.
  - (¿Les preocupa algún otro asunto de la salud del que no hemos hablado?)

That was great. Thank you for all of your comments. They're very helpful. Let's keep going. Vamos a continuar.

#### **TEMA 3. (20 min)**

- \*Now we are going to talk about what you do when you get sick, when you feel sick, or when you are worried about getting sick.
- \* Ahora vamos a hablar sobre Lo que hacen ustedes cuando se enferman, creen que están enfermos o se preocupan de poder enfermarse.
- 1. Is there a place that you feel comfortable going to when you are worried about your health, your kid's health or someone else's health?
- (¿Hay algún lugar donde va y se siente bien atendido cuando cree que esta enfermo usted o algún otro miembro de su familia?)

If yes – where do you go?  $Si = \frac{1}{6}$ Cuáles son esos lugares?

a)Prompts: Do you go to the doctor? A clinic? Do you use home remedies/take care of it yourself? Usas remedies, medicina de la casa Do you get help from friends or family?

Recibe ud. Ayuda de su famlia?

If no – why not?

2. What are some **reasons that would keep you from going to get help** from one of these places?

(¿ Tiene ud. Algunas razones para no ir a esos lugares? ¿Hay algunos rezones por las que usted u otro miembro de su familia no pudiera ir a esos lugares para ser atendido?)

a) Prompts: Time of day they are open? Horario. It costs too much? They don't speak your language? You don't have insurance? Seguro medico/seguranza

#### 3. If you can't go to these places, what do you do?

(Si usted u otro miembro de su familia se enfermara y no pudiera ir a alguno de esos lugares, entonces Que haría?)

a)Prompts: Do you go to the emergency room? Van a la sala de emergencia? Do you use home remedies/take care of it yourself? Do you get help from friends or family?

#### 4.Are there other options besides these?

(Además de esas posibilidades . ¿Tiene usted otras opciones?)

5. What do you think other Hispanics/Latinos in your community do when they're sick or worried that someone else may be sick?

(¿Qué piensa usted que hacen otros miembros de su comunidad Latina cuando ellos u otros miembros de sus familias se enferman?)

#### **VI. CLOSING / CIERRE (10 minutos)**

- 1. Do you have anything else you would like to share with us? Do you have any other health concerns we did not talk about?
- 1. ¿Tiene usted algo más que quiera decirnos? ¿Alguno otro asunto del que usted quiera hablar? ¿Otros inquietudes sobre la salud?
- 2. Do you have any questions for us?
- 3. Thank you very much for all of your help. We learned a lot. We really appreciate it.
- 4. We will be finishing things up here you can stay for a bit, or feel free to leave.
- 5. Thank you again for all of your help. We really enjoyed talking to you tonight and we are excited to work with you in the future.

## **APPENDIX F**

# FOCUS GROUP CONSENT FORM, ENGLISH VERSION

#### **Hispanic Health Project**

#### **Purpose and Procedures**

We would like to invite you to take part in a research study to help improve the health of Latinos in Michigan. Michigan State University Extension is working with Latino communities like yours to understand your healthcare worries, needs and experiences. You have been asked to join this study because of your close ties and connection with the local Latino community. From this study, we hope to learn what is important about health for Latino families in Michigan and figure out the best way to offer information and help families. You will be asked to complete a 10-minute survey, and then you will join a group of 5 people who will talk about Latino health for approximately 90 minutes. We are asking permission to audiotape you during this group interview.

#### **Risks and Benefits**

Some of the possible risks include brief stress or embarrassment through talking about your healthcare worries, needs and experiences. Your input could help improve health services within your community.

#### **Voluntary Participation**

The information in this consent form is provided so that you can decide whether you wish to participate in this study. Your participation in this study is voluntary. This means that you may choose not to participate at all. If you do chose to participate, you may refuse to answer certain questions and are free to withdraw from this study at any time without penalty. If you withdraw from this study, we will destroy your survey and will not utilize what you say in the group interviews.

#### **Confidentiality**

The information you share will be confidential. The surveys and audiotapes will be kept in a locked area in the project office at Michigan State University for no more than 3 years. A backup copy of this information will be kept in a secure area at the principal investigators residence. When the project is over, all audio files, notes taken during the interviews, and surveys will be destroyed. Only the project staff and Institutional Review Board (IRB) will be able to see this information. We are not asking for your name and will only identify you by the number on the top of the survey. By request, you may receive a copy of our research findings. Any information about you will be kept confidential to the maximum extent allowable by law.

## **Contacts**

If you have any questions about your role and rights as a research participant, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Director of MSU's Human Research Protection Programs, Dr. Peter Vasilenko, at 517-355-2180, FAX 517-432-4503, or e-mail <a href="mailto:irb@msu.edu">irb@msu.edu</a>, or regular mail at: 202 Olds Hall, MSU, East Lansing, MI 48824. If you have any questions about this study, please contact Marvin Cato, Principle Investigator, by phone at 517-432-7686 or by e-mail catomarvin@anr.msu.edu.

CONSENT STATEMENT			
I voluntarily agree to participate in this study.			
Participant Signature	Date		

# **APPENDIX G**

# FOCUS GROUP CONSENT FORM, SPANISH VERSION

#### Proyecto para la Salud de los Hispanos

#### Propósito y Procedimientos

Nos gustaría invitarle para que sea parte de una investigación, esta tiene como propósito mejorar la salud de los latinos en Michigan. El Programa de Extensión está trabajando con su comunidad para poder entender sus necesidades y experiencias de la salud. A Ud. se le ha pedido que participe en este estudio ya que tiene lazos y conexiones muy fuertes con la comunidad latina. Nosotros esperamos que por medio de este estudio podamos aprender mas acerca de la salud de los latinos en Michigan y así, poder ofrecer información y ayuda a varias familias. Se le pedirá que haga una encuesta en breve (de diez minutos) y que discuta por noventa minutos la salud de los latinos en grupos de cinco personas. Nos gustaría pedirle permiso para que podamos grabarle en audio.

#### Riesgos y Beneficios

Algunos riesgos que Ud. podría experimentar durante este proyecto posiblemente incluir estrés o vergüenza cuando se trata de compartir algunas de sus preocupaciones, necesidades y experiencias de la salud. Su opinión podría mejorar los programas de salud en su comunidad.

#### Participación Voluntaria

La información de este formulario es dada para que usted decida si quiere participar en este proyecto o no. Su participación en este estudio es voluntaria. Es así como Ud. puede rechazar la participación. Si Ud. participa, Ud. puede rechazar alguna pregunta y retirarse en cualquier momento sin ningún tipo de consecuencia. Si Ud. se retira del estudio, nosotros no usaremos su encuesta, ni sus comentos durante la discusión en grupo.

#### **Confidencialidad**

La información que Ud. de será confidencial. Las materiales del proyecto - las encuestas y cintas - se guardarán en un área muy segura (de Michigan State University) por un periodo de tres años. Una copia extra de estés cosas será guardada en un lugar seguro de la residencia del director. Cuando este proyecto llegue a su fin, todos los materiales serán eliminados. Las personas que están involucradas en este proyecto y el Institutional Review Board (el grupo interno de Michigan State University que asegura la seguridad de investigaciones) serán las únicas que tendrán acceso a esta información. A Ud. no se le va a preguntar su nombre; por lo tanto será identificado por medio del número que esta al principio de la encuesta. Si Ud. lo desea, Ud. podría pedir por una copia de los resultados de este estudio. Toda su información se guardará de forma confidencial y por medio de lo establecido por la ley.

#### **Contactos**

Si Ud. tiene algún tipo de pregunta acerca de su papel y derechos como participante, o si le gustaría poner una queja acerca de este proyecto, Ud. puede contactar de forma anónima al director del Institutional Review Board, Señor Peter Vasilenko, al 517-355-2180, FAX 517-432-4503, o por e-mail <u>irb@msu.edu</u>, o correo: 202 Olds Hall, MSU, East Lansing, MI 48824. Si Ud. tiene alguna pregunta acerca de este estudio por favor póngase en contacto con Marvin Cato, Investigador Principal, por teléfono al 517-432-7686 o por e-mail catomarvin@anr.msu.edu

#### FORMULARIO DE PERMISO

Yo acepto participar de forma voluntaria en esta investigación/estudio.		
Firma del participante	Fecha	

LIST OF REFERENCES

#### REFERENCES

- Angel, Ronald J., Jacquelin L. Angel, and Kyriakos S. Markides. "Stability and Change in Health Insurance Among Older Mexican Americans: Longitudinal Evidence from the Hispanic Established Populations for Epidemiologic Study of the Elderly." American Journal of Public Health 92(8):1264-1271.
- Berk, Marc L. and Claudia L. Schur. 2001. "The Effect of Fear on Access to Care among Undocumented Latino Immigrants." *Journal of Immigrant Health* 3(3): 151-156.
- Burke, James P., Ken Williams, Sharon P. Gaskill, Helen P. Hazuda, Steven M. Haffner and Michael P. Stern. 1999. "Rapid Rise in the Incidence of Type 2 Diabetes from 1987 to 1996: Results from the San Antonio Heart Study." *Archives of Internal Medicine*. (159) 1450-1456.
- Callahan, S. Todd, Gerald B. Hickson, and William O. Cooper. 2006. "Health Care Access of Hispanic Young Adults in the United States." *Journal of Adolescent Health* 39(5): 627-633.
- Center for Disease Control. 2004a. "Access to Health-Care and Preventive Services Among Hispanics and Non-Hispanics--United States, 2001-2002." *Journal of the American Medical Association* **292**(19): 2331-2333.
- Center for Disease Control. 2004b. "Health Disparities Experienced by Hispanics--United States." Journal of the American Medical Association 292(19): 2330-2331.
- Center for Disease Control. 2006. STD Surveillance 2006: Trends in Reportable Sexually Transmitted Diseases in the United States, 2006. Atlanta, GA: CDC. Retrieved February 10, 2008 (http://www.cdc.gov/std/stats/trends2006.htm).
- Center for Disease Control. 2007. *Health, United States, 2007.* Washington, DC: National Center for Health Statistics. Retrieved February 24, 2008. (http://www.cdc.gov/nchs/data/hus/hus07.pdf#summary).
- De Vita, Carol J. 1996. "The U.S. at Mid-Decade." Population Bulletin 50(4):2-48.
- Documét, Patricia I. and Ravi K. Sharma. 2004. "Latinos' Health Care Access: Financial and Cultural Barriers." *Journal of Immigrant Health* 6(1): 5-13.
- Durden, T. Elizabeth and Robert A Hummer. 2006. "Access to Healthcare Among Working-Aged Hispanic Adults in the United States." *Social Science Quarterly* 87 (5): 1319-1343.
- Fiscella, Kevin, Peter Franks, Mark P. Doescher, and Barry G. Saver. 2002. "Disparities in Health Care by Race, Ethnicity, and Language among the Insured: Findings from a National Sample." *Medical Care* 40(1): 52-9.

- Flores, Glenn, Elena Fuentes-Afflick, Oxiris Barbot, Olivia Carter-Pokras, Luz Claudio, Marielena Lara, Jennie A. McLaurin, Lee Pachter, Franciso Ramos Gomez, Fernando Mendoza, R. Burciaga Valdez, Antonia M. Villarruel, Ruth E. Zambrana, Robert Greenberg and Michael Weitzman. 1998. "The Health of Latino Children: Urgent Priorities, Unanswered Questions, and a Research Agenda." Journal of the American Medical Association 288(1): 82-90.
- Garcés, Isabel C., Isabel C. Scarinci, and Lynda Harrison. 2006. "An Examination of Sociocultural Factors Associated with Health and Health Care Seeking among Latina Immigrants." *Journal of Immigrant Health* (8)377-385.
- Guendelman, Sylvia and Todd H. Wagner. 2000. "Health Services Utilization Among Latinos and White Non-Latinos: Results from a National Survey." *Journal of Health Care for the Poor and Underserved* 11(2):179-194.
- Guzmán, Betsey. 2001. *The Hispanic Population: Census 2000 Brief.* Washington, DC: U.S. Census Bureau. Retrieved February 10, 2008 (http://www.census.gov/prod/2001pubs/c2kbr01-3.pdf).
- Harrison, Lynda and Isabel Scarinci. 2007. "Child health needs of rural Alabama Latino families." *Journal of Community Health Nursing* **24**(1): 31-47.
- Henry J. Kaiser Family Foundation. 2004a. Racial and Ethnic Disparities in Women's Health Coverage and Access to Care: Findings from the 2001 Kaiser Women's Health Survey. Washington, DC: Henry J. Kaiser Family Foundation. Retrieved February 10, 2008 (http://www.kff.org/womenshealth/upload/Racial-and-Ethnic-Disparities-in-Women-s-Health-Coverage-and-Access-to-Care.pdf).
- Henry J. Kaiser Family Foundation. 2004b. Uninsured and Underserved: The Health Care Experiences of Latinos in the Nation's Capital. Washington, DC: Henry J. Kaiser Family Foundation. Retrieved February 10, 2008 (http://www.kff.org/minorityhealth/upload/PDF-Uninsured-and-Underserved-The-Health-Care-Experiences-of-Latinos-in-the-Nation-s-Capital.pdf).
- Howe, Holly L., Xiaochen Wu, Lynn A.G. Ries, Vilma Cokkinides, Faruque Ahmed, Ahmedin Jemal, Barry Miller, Melanie Williams, Elizabeth Ward, Phyllis A. Wingo, Amelie Ramirez, and Brenda K. Edwards. 2006. "Annual report to the Nation on the Status of Cancer, 1975-2003: Featuring Cancer Among U.S. Hispanic/Latino Populations." *Cancer* 107(8): 1711-42.
- Kayitsinga, Jean and Lori Post. 2007. "Working Paper Series: Latino Population Trends & Projections." East Lansing, MI: Julian Samora Research Institute. Retrieved February 6, 2008 (http://www.jsri.msu.edu/RandS/research/drs/dr01.html).

- Martinez, Iveris L. 2007. E-mail Correspondance. East Lansing, MI. November 8.
- Martinez, Iveris L. and Olivia Carter-Pokras. 2006. "Assessing Health Concerns and Barriers in a Heterogeneous Latino Community." *Journal of Health Care for the Poor and Underserved* **17**(4): 899-909.
- Michigan Department of Community Health. n.d. "Hispanic/Latino American Fact Sheet." Lansing, MI: MDCH. Retrieved February 6, 2008 (http://www.michigan.gov/mdch/0,1607,7-132-2940\_2955\_2985-109439--,00.html).
- Michigan Census Bureau. 2005. "Single Year of Age, Race, Sex, and Hispanic Origin: Six race Categories Retrieved February 24, 2008 (http://www.michigan.gov/documents/hal\_lm\_census\_arsh0005\_167097\_7.xls).
- Michigan Department of Community Health. 2007a. "Critical Health Indicators Topic: Health Disparities." Lansing, MI: MDCH. Retrieved February 10, 2008 (http://www.michigan.gov/documents/mdch/44\_HlthDispar\_198947\_7.pdf).
- Michigan Department of Community Health. 2007b. "State of Adolescent Sexual Health in Michigan White Paper." Retrieved on February 24, 2008. (http://www.michigan.gov/documents/mde/FINAL-SAASH1-25-08\_224834\_7.pdf).
- Michigan Department of Education. 2005. *Michigan Youth Risk Behavior Survey: Weight and Nutrition Fact Sheet*. Lansing, MI: MDE. Retrieved February 10, 2008 (http://www.michigan.gov/documents/mde/\_NEW\_2005\_YRBS\_Fact\_WN\_1760 55\_7.pdf).
- Obiri, Godwin U., E. James Fordyce, Tejinder P. Singh and Susan Forlenza. 1998. "Effect of HIV/AIDS Versus Other Causes of Death on Premature Mortality in New York City, 1983-1994." *American Journal of Epidemiology* 147(9) 840-845.
- O'Malley, Ann S., Jon F. Kerner, Lenora Johnson. 1999. "Are We Getting the Message Out to All? Health Information Sources and Ethnicity." *American Journal of Preventive Medicine* 17(3)198-202.
- Parker, Sheryl L., Kourtney Johnston Davis, Phyllis A. Wingo Lynn A.G. Ries, and Clar W. Heath. 1998. "Cancer statistics by race and ethnicity." CA A Cancer Journal For Clinicians (48):31-48.
- Pew Hispanic Center. 2007. English Usage Among Hispanics in the United States.

  Washington, DC: Hakimzadeh, Shirin and Cohn, D'Vera. Retrieved April 2, 2008 (http://pewhispanic.org/files/reports/82.pdf).

- Saint-Germain, Michelle A., Tamsen L. Bassford and Gail Montano. 1993. "Surveys and Focus Groups in Health Research with Older Hispanic Women." *Qualitative Health Research* 3(3): 341-367.
- US Census Bureau. 2000. Poverty Status of the Population in 1999 by Sex, Age, Hispanic Origin, and Race: March2000. Retrieved March 28, 2008 (http://www.census.gov/population/socdemo/hispanic/p20-535/tab14-1.txt).
- US Census Bureau. 2006. "S0201: Selected Population Profile in the United States: Hispanic or Latino (of any race). Retrieved February 10, 2008 (http://factfinder.census.gov/servlet/IPTable?\_bm=y&-geo\_id=01000US&-qr\_name=ACS\_2006\_EST\_G00\_S0201&-qr\_name=ACS\_2006\_EST\_G00\_S0201PR&-qr\_name=ACS\_2006\_EST\_G00\_S0201T&-qr\_name=ACS\_2006\_EST\_G00\_S0201TPR&-reg=ACS\_2006\_EST\_G00\_S0201:400;ACS\_2006\_EST\_G00\_S0201PR:400;ACS\_2006\_EST\_G00\_S0201T:400;ACS\_2006\_EST\_G00\_S0201TPR:400&-ds\_name=ACS\_2006\_EST\_G00\_&-lang=en&-format=).
- Weinick, Robin M., Elizabeth A. Jacobs, Lisa Cacari Stone, Alexander N. Ortega and Helen Burstin. 2004. "Hispanic Healthcare Disparities: Challenging the Myth of a Monolithic Hispanic Population." *Medical Care* 42(4): 313-320.
- Weinick, Robin M., Samuel H. Zuvekas, and Joel W. Cohen. 2000. "Racial and Ethnic Differences in Access to and Use of Health Care Services, 1977 to 1996."

  Medical Care Research and Review 57 Suppl 1: 36-54.
- Whitaker, Robert C. and Sean M. Orzol. 2000. "Obesity among US Urban Preschool Children: Relationships to Race, Ethnicity and Socioeconomic Status." *Archives of Pediatrics & Adolescents Medicine* **160**(6) 578-584.
- Williams, Jason E., Kevin J. Anstrom, Joëlle Y. Friedman, and Kevin A Schulman. 2007. "Racial/Ethnic Variation in Perceptions of Medical Information Sources in Durham County, North Carolina." *North Carolina Medical Journal* **68**(6) 391 398.

