HOW TO STAY HEALTHY IN A MEXICAN IMMIGRANT COMMUNITY:

THE ROLE OF WOMEN'S KNOWLEDGE

by

ANNA WALDSTEIN

(Under the Direction of Elois Ann Berlin)

ABSTRACT

Undocumented migrants from Mexico find themselves in low-paying, high-risk occupations when they move to the United States. They are ineligible for most forms of public assistance and usually do not speak English. Because people who live in poor environments with limited access to resources often suffer from poor health we would expect undocumented migrants to be an unhealthy population. However, Mexicans living in the United States have health profiles equal to or better than middle-class American citizens. Researchers of this epidemiological paradox have suggested that certain aspects of Mexican culture may protect against the negative health outcomes associated with poverty, low levels of education and barriers to the mainstream American health care system. While diet, family support and a few specific health behaviors have been investigated as explanations for the paradox, surprisingly little attention has been paid to Mexican health beliefs and practices.

To fill this gap in the literature I conducted an ethnographic study of women's medical knowledge in a Mexican immigrant community in Georgia. In both Mexico and Mexican communities in the United States women are responsible for maintaining the health of their families. Mexican women encourage members of their families to

engage in health promoting behaviors, make diagnoses of sick family members and prescribe effective home remedies. The herbal medicines that women bring from Mexico to the United States treat illnesses before they become serious and contribute to good overall health. Mexican women also learn how to navigate the mainstream American health care and social services systems. Finally, women maintain and expand social networks in the United States. The social networks that make undocumented Mexican migration to the United States possible also provide social support and access to information, which are critical for maintaining health.

INDEX WORDS: Migration, Mexican immigrants, Georgia, Hispanic health paradox, Medical anthropology, Ethnopharmacology, Explanatory models, Home remedies, Ethnomedicine, Social networks, Women

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DEDICATION

To my mom, for always taking care of me when I was sick and to the members of my father's family who migrated to the United States and worked so hard to create a place for our family in this country.

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Chapter 1: Introduction

Migration, Poverty and Health

According to the most recent census, Hispanics[1] are now the largest minority group in the United States, composing 12.5% of the population. This diverse group of people is expected to represent 25% of the American population by 2050 (Iannota 2003). Currently, people of Mexican descent make up 63% of the Hispanic population in the United States (Morales, et al. 2002). While many Hispanics are born here immigration from countries all over Latin America is increasing quickly and accounts for much of the Hispanic population explosion. According to the 1997 Current Population Survey more than one-third of people of Mexican descent living in the United States were born in Mexico (Morales, et al. 2002). In actuality, the number of Mexican nationals living in the United States may be even higher due to underreporting of undocumented immigrants. The pattern of migration from Latin America to the United States is changing, as an ever increasing number of immigrants are settling in parts of the country that don't have long histories of Hispanic occupation (Hernández-León and Zúñiga 2000). Georgia is one such area with a new but rapidly growing Hispanic population, which more than doubled during the 1990s. As in the rest of the United

[1] The term *Hispanic* is loosely defined as people of Spanish-speaking origin from Latin America, the Caribbean or Europe and describes a population that encompasses a wide diversity in terms of socioeconomic status, race, country of origin, migration experiences and United States citizenship status (Iannota 2003). Aguirre-Molina and Molina (1994) suggest that Hispanic more accurately refers to people living in or emigrating from Spain or Portugal and in Latin America people of European ancestry (i.e. aristocrats). They propose that the term *Latino,* which emphasizes indigenous Latin American origins is racially and linguistically neutral and should be used in social science research. However, in this dissertation I use the term Hispanic for two reasons. First, it is still the most common term used in the public health literature, from which this work draws heavily. More importantly, while my research participants describe themselves as "*Mexicanas*" they use the term "*Hispanos*" to refer to immigrants from other Latin American countries. It seems that the experience of being a Spanish speaker living in a part of the United States where few people speak anything other than English has helped shape the identities of my research participants.

States, the majority of Georgia's Hispanic residents are migrants from Mexico (Wallace 2001).

While migration has become an integral part of modern globalization, it is as old as human society. Unfortunately, morbidity and mortality are associated with both voluntary and forced migration. Most migrants have had to adapt to poor ecological and economic conditions at home and abroad that limit their autonomy. These environments also put them at increased risk of disease and/or death. In many parts of the world migrants become isolated and suffer infectious and chronic illnesses, work-related injuries and depression (Carballo and Nerukar 2001). For example, in a study of Hispanics living in their own countries and those who had moved to the United States, Munet-Vilaro (1999) found that immigrants had the highest rates of depression. This finding was related to difficulties with language and feelings of loss and isolation.

Migrants get sick for many reasons; they receive little medical care and often find themselves living and working in poor (i.e. overcrowded, unsanitary, toxic) environments that are associated with malnutrition. Moreover, discrimination against migrants in host societies contributes to unhealthy lifestyles and the migration experience itself is inevitably a source of great stress (Bruhn 1997). Female migrants may face extra challenges related to reproductive health, cultural practices and attitudes toward women (Carballo and Nerukar 2001). In a study of women who had migrated to Canada from Asia, Africa, Europe and South America Meadows, et al. (2001) found that their most pressing health concerns included women's health, physical and emotional trauma from the home country and refugee camps and loss of family networks. Adaptations to life in Canada impacted on their health through altered food consumption patterns, decreased socioeconomic status and increased

depression and feelings of loss. Immigrant women from Latin America who have moved to the United States have higher rates of depression than their male counterparts. Traditional Hispanic roles for women (i.e. homemaker and mother) are jeopardized in the United States when women have to enter the work force to help make ends meet. This can create stress and conflict, especially if men are not culturally prepared to deal with changing gender roles (Munet-Vilaro 1999).

Standard of living, quality of life and other socio-environmental factors are critical determinants of health in a community (Molina, et al. 1994). In most situations, lower socioeconomic status is associated with reduced life expectancy and higher overall mortality rates, including higher infant mortality rates (Syme and Berkman 1976). It is also associated with the 14 major cause-of-death categories in the International Classification of Diseases (Link and Phelan 1995). Most Hispanics in the United States are poor, which makes it likely that they live in communities with high unemployment and poor housing, schools, social welfare and healthcare facilities (Molina, et al. 1994). They are also one of the most educationally disadvantaged groups in the United States and are more likely to work in low-skilled, lower-paying positions (Iannota 2003).

Hispanic immigrants who do find work in the United States are overrepresented in hazardous occupations and industries, such as factory and agricultural work and construction, which puts them at greater risk for occupational health problems (Friedman-Jimenez and Ortiz 1994; Morales, et al. 2002). This is especially true of people of Mexican descent (Morales, et al. 2002). Sweatshops in the garment industry contain ergonomic, airborne and climatological hazards and workers frequently suffer back, neck and shoulder injuries, carpal-tunnel syndrome, contact dermatitis, asthma and bronchitis (Friedman-Jimenez and Ortiz 1994). Likewise, poultry processing plants are

kept at cold temperatures and are associated with high rates of occupational injury (Griffith 1995). In agricultural work laborers are at great risk of accidents and pesticide related illnesses. Employers commonly fail to voluntarily provide healthy and safe working conditions and current legislation does not effectively prevent employers from firing workers who become sick from the job (Friedman-Jimenez and Ortiz 1994).

Migrating to the United States without a visa or work permit further increases threats to health because migrants who do so have few legal rights to social welfare and healthcare services in this country. Poorly educated Mexicans with little or no skills comprise a far greater percentage of apprehensions and expulsions at the southern United States border than other national or occupational groups, suggesting that they make up the greatest percentage of migrants who attempt to cross. The growing supply of and demand for low-skilled Mexican workers contributes to Mexicans remaining a group with low socio-economic status in the United States (Escobar-Latapi 1999). As Heyman writes "conspiracies to avoid the law oblige undocumented workers to work harder than other workers, even other immigrants, creating a significant class effect" (Heyman 2001:134). Publicized threats and news coverage of deportations create a climate of fear among undocumented immigrants, which makes them super-exploitable (Wilson 2000). Indeed, there has been a notable decline in wages paid to Mexican immigrants over the last century (Feliciano 2001).

Undocumented migrants from Mexico and Central America are generally viewed as lawbreakers who occupy jobs that belong to American citizens and make excessive use of public assistance programs. This stereotype has lead to government and public support for reducing migration through unilateral measures such as border vigilance and the construction of walls, curtains and fences, although these measures

have consistently failed in the past. These measures restrict all migrants' access to health care, which contributes to the spread of disease (Bronfman 1998). Massey and Espinosa (1997) have argued that repressive United States migration policies and prejudice against undocumented migrants are creating a new marginalized population that is unhealthy and poorly educated, with little stake in the future and way of life of this country.

The Hispanic Health Paradox

Given the low socioeconomic status of Hispanics in this country, it is not surprising that they have higher rates of diabetes (Bernal and Perez-Stable 1994; Carter-Pokras 1994; Iannota 2003; Vega and Amaro 1994), gall bladder disease (Carter-Pokras 1994; Gutierrez-Ramirez, et al. 1994), stomach, esophageal and liver cancers (Gutierrez-Ramirez, et al. 1994), chronic liver disease (Perez-Stable, et al. 1994) infectious diseases, including tuberculosis, sexually transmitted diseases and AIDS (Vega and Amaro 1994), childhood injury (Mull, et al. 2001) and obesity (Perez-Stable, et al. 1994; Vega and Amaro 1994) than the general American population.[2] However, despite disparities in employment, education and level of poverty Hispanics have lower age-adjusted mortality rates than African Americans and many Anglo Americans.[3] Hispanics of Cuban and Mexican descent also have lower rates of morbidity (Iannota 2003). This phenomenon, commonly known as the "Hispanic health paradox," "Latino mortality

[2] Many of these conditions are also common in Mexico. For example, in 1990 malignant neoplasms and diabetes became three of the five leading causes of death in Mexico (Wolpert et al. 1993). Aguilar-Salinas et al. (2003) estimate that the Mexican diabetes prevalence rate in adults is 8.18%. However, Rodríguez-Saldaña et al. (2002) reported that the prevalence of diabetes in a population of 785 public servants aged 65 and over from Mexico City was 15.1%. Although tuberculosis mortality in Mexico decreased by 6.7% annually between 1990 and 1998, the number of new cases has increased, indicating the persistence of disease transmission in the population (Baez-Saldaña et al. 2003). The rate of HIV seroprevalence for adults in Mexico is 0.06% and growing (Valdespino-Gomez et al. 1995).

[3] In this dissertation I use the term *Anglo American* to refer to American citizens of European ancestry. Although Americans of European ancestry come from all over Europe they have become Anglophones (speakers of English) as

paradox" or simply the "epidemiological paradox" has been documented extensively in the public health literature.

According to most government statistics the health of Hispanics (including both migrants and non-migrants) in this country is more favorable than that of other ethnic groups in terms of life expectancy, adult mortality and infant mortality. In 1999, the projected life expectancy at birth for Hispanic men and women was 75.1 and 82.6 years respectively compared to 74 and 80.3 years for American men and women of European descent (Morales, et al. 2002).[4] The 10 leading causes of death among Hispanics are heart diseases, malignant neoplasms, accidents, cerebrovascular diseases, homicide, diabetes, pneumonia, HIV infection, chronic liver disease and conditions generated in the perinatal period. Chronic obstructive pulmonary disease, suicide and atherosclerosis are among the 10 leading causes of death for Anglo Americans, but not for Hispanics (Vega and Amaro 1994).[5]

Data from 15 states show that the age adjusted death rate for Hispanics between 1979 and 1981 was lower than that of Anglo Americans and significantly lower than the rate for African Americans. A study of death rates in 1988 from 26 states and the District of Columbia show that among 15-44 year olds the death rate for Hispanics is greater than that of Anglo Americans but lower than the rate for African Americans. Hispanic and Anglo Americans have similar death rates among 1-14 year olds and 45 year olds, while older Hispanics have much lower death rates than their American counterparts (Vega and Amaro 1994). Data from the National Health Interview Survey

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part of the American experience. Again, language is ever salient in the lives of Mexican migrants residing in the United States. The terms Anglo American and Hispanic reflect the linguistic differences that distinguish these two populations.

[4] In 1990 life expectancy in Mexico was 69 years (Wolpert et al. 1993).

[5] Chavez Dominguez et al. (2003) report that atherosclerosis is responsible for at least one quarter of all deaths in Mexico.

from 1986-1990 have also been used to compare death rates among Hispanic, Anglo and African American populations and have shown that overall age-standardized mortality was again highest in the African American group and lowest for Hispanics (Liao, et al. 1998). The 1995 age-adjusted, all-cause mortality rate for the Hispanic population was 18% below that of Anglo Americans.

Among Hispanic subgroups the overall age-adjusted mortality rate was lowest among people of Mexican descent. Moreover, the relative risk of death is lowest among foreign-born Hispanics, followed by Hispanics born in the United States and then other Americans (Morales, et al. 2002).

Morbidity (i.e. a departure from a state of physical and/or mental well-being that results from disease or injury) is another major demographic measure of health. It is more difficult to identify than mortality, because the recognition of an ailment is an event that is based on the subjective interpretation of symptoms by patients and their families (Trotter 1981). Nevertheless, there is a growing body of research that indicates lower levels of morbidity in Hispanic populations of the United States. One of the earliest studies that suggested Hispanics had better health status than their socioeconomic profile would predict was published in 1980. Data collected by the Human Population Laboratory in Alameda County, California was used to compare several health status indicators among Anglo Americans, African Americans and Mexican Americans.[6] Mexican Americans reported less disability, fewer chronic conditions and fewer symptoms than the overall population. Socioeconomic status was a poor predictor of

[6] While the terms *Mexican* and *Mexican immigrant* are used to describe people born in Mexico, a *Mexican American* is someone who is second generation and up (Weigers and Sherraden 2001). The term *Chicano,* which refers to all people of Mexican descent who were raised in the United States but identify with their Mexican heritage (Aguirre-Molina and Molina 1994) is not generally used in the southeastern United States. "People of Mexican descent" include Mexicans, Mexican immigrants, Mexican Americans and Chicanos.

health and accounted for less than two percent of the variance in health status among the three populations (Roberts and Lee 1980).

Most of the public health literature that supports the existence of the Hispanic health paradox is based on data from the Hispanic Health and Nutrition Examination Survey (HHANES). In 1977 The National Academy of Public Administration was contracted to do the first National Health and Nutrition Examination Survey (NHANES). Hispanics were selected to be surveyed separately as a special population group that could be compared to the general United States population. The HHANES was designed to look at diabetes, hypertension, heart disease, gall stones, dental disease, otitis media and hearing problems, kidney disease, liver function, depression, immunization status, nutrition-related conditions, food consumption patterns, obesity, alcohol consumption, dental health, digestive diseases, environmental exposure, insurance coverage, health services utilization, self-assessment of health and acculturation. Data were collected using direct physical examinations, diagnostic testing, anthropometry, laboratory analyses, and interviews. The survey did not use a national probability sample, but included about 76% of Hispanics living in the United States in 1980. The sample included 9,455 Mexicans in Arizona, California, Colorado, New Mexico and Texas, 2,125 Cubans in Florida and 3,535 Puerto Ricans New York, New Jersey and Connecticut ages 6 months to 74 years (Delgado, et al. 1990).

Based on HHANES data researchers have found that rates of cardiovascular disease and related factors among Hispanics are similar to or lower than those of Anglo Americans (Vega and Amaro 1994).[7] Pappas, et al. (1990) compared the three HHANES populations with NHANES data and found that Mexicans, Cubans and Puerto

[7] Heart disease is one of the leading causes of death in Mexico (Chavez Dominguez et al. 2003).

Ricans have significantly lower levels of hypertension than African or Anglo Americans, though Geronimus, et al. (1990) question the validity of the HHANES blood pressure data. More recent data from the third National Health and Nutrition Examination Survey (NHANES III), which over sampled Mexican and African Americans for comparative purposes, also suggests that Mexican Americans have a slightly lower prevalence of hypertension than Anglo Americans and a significantly lower prevalence than do African Americans. However, 49% of Mexican Americans over the age of 70 have hypertension (Richardson and Piepho 2000).[8] Hispanics also have lower overall rates of most types of cancer (Gutierrez-Ramirez, et al. 1994; Vega and Amaro 1994). However, because Hispanics tend to seek professional treatment when they have more advanced cancers, their survival rates are lower (Gutierrez-Ramirez, et al. 1994).

Maternal and infant health and infant mortality in particular are powerful indicators of the general health status and well-being of a population (Giachello 1994b; Weigers and Sherraden 2001). Low birth weight is defined as less than 2,500g and is the strongest predictor of infant mortality (Weigers and Sherraden 2001). People of Mexican descent have one of the highest birth weight-specific fetal and neonatal mortality rates for low birth weight babies of any ethnic group in the United States (Scribner and Dwyer 1989). However, they also have one of the lowest risks of having a low birth weight baby of any population for which data are available. This makes the overall infant mortality rate for Mexicans comparable to Anglo Americans and half that of African Americans (Iannota 2003; Scribner and Dwyer 1989). Using 1982-1983 Illinois vital records and 1980 United States Census income data Collins and Shay (1994) found a low rate of low birth weight infants born to mothers of Mexican descent that was not

[8] The prevalence of hypertension in Mexico is 30% in the 20-69 year-old population. Sixty percent of the 15million

accounted for by traditional risk factors such as low education, late or no prenatal care, high parity or single motherhood. Furthermore, Notzon et al. (1992) demonstrated that, when altitude was controlled for, babies born in Mexico City followed the birth weight patterns of the Mexican-American "public health enigma."

Current Explanations for the Paradox

Because the Hispanic health paradox challenges the traditional biomedical model that explains increased health risks associated with ethnicity in terms of genetic differences or socioeconomic status (Scribner 1996) it is only natural that public health researchers and social scientists have sought to explain it. Abraido-Lanza and Dohrenwend (1999) used data from the National Longitudinal Mortality Study Public Use File (Release 2, October 1995) to test two hypotheses that might explain lower mortality rates among Hispanics in the United States. The healthy migrant hypothesis proposes that only healthy people migrate from Latin America to the United States. However, Hispanics born in the United States also have lower mortality rates than Anglo Americans. Research showing that acculturation as measured by language is a better predictor of low birth weight than nativity and ethnic identification, further indicates that the Hispanic health paradox does not represent a healthy migrant effect (Scribner 1996).

The "salmon-bias" hypothesis (named after the migratory patterns of wild salmon) suggests that many Hispanic immigrants retire to their home countries after working in the United States for a period of time and are thus not included in American mortality statistics. Such individuals would become "statistically immortal" and create an artificially low Hispanic mortality rate. But Abraido-Lanza and Dohrenwend (1999)

Mexicans who have hypertension are not aware they have it (Velazquez Monroy et al. 2002).

found that family is so highly valued in Hispanic populations that families established in the United States reduce return migration. This premise holds even among Mexican immigrants who have relatively easy access to their country of origin. Lacking support for either hypothesis Abraido-Lanza and Dohrenwend (1999) suggest that cultural differences in health behaviors may explain why Hispanics have lower mortality rates than Anglo Americans. Other studies also attribute Hispanic women's favorable pregnancy outcomes to an extended family that values pregnancy and childbearing and fosters good prenatal health practices (Giachello 1994b; Iannota 2003).

The positive health status of the Hispanic population, relative to its socioeconomic profile may in part be attributable to culturally prescribed avoidance of certain risk factors. For example, several studies suggest that Hispanics consume more carbohydrates, protein and fiber and less total and saturated fat than non-Hispanics (Morales, et al. 2002). A telephone survey of 652 Hispanics from Mexico, Central and South America and the Caribbean and 584 Americans of European descent found that Hispanics consume less alcohol than their Anglo counterparts. Hispanic women were also the least likely group to smoke (Perez-Stable, et al. 1994). However, Hispanic men in all three HHANES populations had significantly higher smoking rates than Anglo American men, though Mexicans were found to smoke less than Cubans and Puerto Ricans (Haynes, et al. 1990). Low-fiber/high-fat diets, excessive consumption of alcohol and smoking are all linked with numerous health problems, including heart disease and cancer.

Further evidence that culture is the most plausible explanation for the Hispanic health paradox stems from research that suggests the favorable health profile of Hispanics disappears with acculturation, even as English language skills and income

increase. While anthropologists have not agreed upon a precise definition of acculturation, in the public health literature it is usually defined as the process by which one group of people adopts the cultural traits of another group, either consciously or unconsciously (Molina, et al. 1994). Acculturation is different from assimilation, which is a process where members of one culture become fully integrated into the cultural, social and political life of a new culture (Burnham, et al. 1987).

While difficult to measure, there are several published scales available that assess acculturation in Hispanic populations in terms of language use, ethnic identity, social ties with Americans and length of residence in the United States (see Burnham, et al. 1987; Marin, et al. 1987). The standard definition of acculturation implies that as individuals move from one cultural orientation to another, they lose the first as the second is acquired. More complex theories of acculturation suggest that individuals may simultaneously retain one ethnic identity while they learn a new culture's traditions and values, but this is rarely reflected in the current literature (Morales, et al. 2002). Moreover, as it is currently defined, acculturation does not measure core beliefs and practices regarding health (Molina, et al. 1994). There have been no systematic analyses of whether all dimensions of acculturation are equally relevant to health outcomes and it is not fully clear how acculturation influences health (Cobas, et al. 1996). For example, it has been found that Anglo-oriented acculturation is associated with depression in Mexican Americans, but lack of acculturation has also been associated with depression in Hispanics (Munet-Vilaro 1999).

Despite current gaps in our understanding of the exact nature of acculturation, several studies have found that it is a correlate of socioeconomic position. Hispanic immigrants who are more acculturated have higher levels of education and income

and are more likely to use primary health care services (Molina, et al. 1994). Yet consistent with the general Hispanic health paradox there is ample research that suggests the overall health of recent (i.e. less acculturated) immigrants is better than that of earlier arrivals (Morales, et al. 2002). Using data from NHANES III Sundquist and Winkleby (1999) found that Mexican immigrants had the best cardiac profile compared to English and Spanish speaking Mexicans born and raised in the United States. Another study done with NHANES III data found that gall bladder disease prevalence was lower among Mexicans born in Mexico, than among people of Mexican descent born in the United States (Tseng, et al. 2000). Likewise, rates of cancer, high blood pressure and teen pregnancy all increase with acculturation (Vega and Amaro 1994).

It seems that over time Hispanic immigrants adopt many aspects of American culture, including some which benefit and others that threaten their health (Iannota 2003; Morales, et al. 2002). Crespo, et al. (2001) found that Mexicans whose primary language is English engage in more leisure-time physical activity than those who speak only Spanish. In this case, acculturation has a potentially positive health effect associated with exercise habits. Acculturation is also associated with a decrease in smoking among Hispanic males (Marin, et al. 1989; Morales, et al. 2002). On the other hand, acculturated women smoke more than women who have been in the United States for shorter periods of time (Marin, et al. 1989). There is also evidence that Hispanic men and women who were born in this country consume more alcohol (Morales, et al. 2002), are more likely to use illicit drugs (Amaro, et al. 1990) and eat poorer diets (Guendelman and Abrams 1995) than their less acculturated counterparts. All three of these behaviors contribute to increased morbidity and mortality.

Furthermore, infant mortality and low birth weight also increase with acculturation (Vega and Amaro 1994). Women who migrate from Mexico have better birth outcomes than Mexicans born in the United States (Iannota 2003). There is evidence that women who are more "Mexican oriented" (i.e. speak Spanish, identify themselves as Mexican and were born in Mexico or had a parent born in Mexico) are less likely to have low birth weight babies than women of Mexican descent who adhere to American cultural forms (Scribner and Dwyer 1989).

The epidemiological paradox does not hold for all Hispanic subgroups equally and appears to hold most strongly for people of Mexican descent, who also average the lowest socioeconomic status among the Hispanic subgroups. Compared to other Hispanic groups, Mexicans are also least likely to see a physician (Morales, et al. 2002; Solis, et al. 1990), be hospitalized (Morales, et al. 2002), use preventive health services (Morales, et al. 2002; Perez-Stable, et al. 1994) or visit an American dentist (Ismail and Szpunar 1990). Scribner writes that "Mexican American ethnicity is a marker of a Mexican cultural orientation that is defined by behavioral norms that can account for their favorable health status" (Scribner 1996:304). He cites low levels of smoking and drinking and a healthy diet as contributing factors to low rates of low birth weight, infant mortality, lung cancer, heart disease and chronic respiratory disease among people of Mexican descent. Social networks and other survival strategies (such as pooling incomes and providing mutual support in childcare, care of sick family members and domestic duties) also alleviate some of the stress associated with low income and may have protective effects on health (Iannota 2003).

Furthermore, people of Mexican descent tend to acculturate more slowly than other Hispanic groups, which may explain why they have better health outcomes

despite lower levels of education and income. Nevertheless, protective health behaviors of Mexican immigrants have been observed to decline after five years of residence in the United States (Iannota 2003). "Cultural aspects that provide some protection against the effects of poverty, low educational status, and low use of health services should be defined and encouraged" (Carter-Pokras 1994:73). Research is also needed to develop possible strategies for retaining protective factors while acquiring English language skills, education and greater ability to navigate American institutions (Iannota 2003).

Research Problem

This research adds to current explanations of the Hispanic health paradox by investigating the role Mexican immigrant women play in keeping their families healthy. In Mexico women are responsible for the health of other family members and are most likely to make the initial decisions regarding family heath care (Logan 1983). Likewise, among Mexican Americans it is virtually always the wife or mother who makes the initial assessments of symptoms (Bruhn 1997). Mexican American women also determine what should be done when family members become sick. They have explicit ideas about what behaviors lead to good or poor health and are almost solely responsible for the nutrition of family members because they regulate the diet and prepare the food (Kay 1977). Mexican immigrants are no exception to this pattern. In a study of undocumented Mexican families of low socioeconomic status, Chavira-Prado (1992) found that women play key roles as economic subsidy, subsistence and health-care providers. When family members are sick women draw on their information networks to find health services, facilities, providers and programs. Women recommend, administer, monitor and modify medications and home remedies. They also

accompany family members to see doctors, dentists and other health care providers. Family members pay close attention to their advice, demonstrating that women's health care roles play a central part in family survival (Chavira-Prado 1992). Despite the fact that the role of women as health care providers for families of Mexican descent has been well documented, researchers of the Hispanic health paradox have not focused their attention on women.

Furthermore, while diet, family support and a few specific health behaviors have been investigated as explanations for the paradox, surprisingly little attention has been paid to Hispanic health beliefs and practices. This dissertation is a case study of Mexican immigrant health that is designed to fill these two gaps in the literature on the Hispanic health paradox. Specifically, I studied women's knowledge of health, sickness and medicine in a recently established Mexican immigrant community in Georgia. My research was guided by two major questions. First, I sought evidence of the Hispanic health paradox in this somewhat atypical community by asking the question; do low-income, first generation Mexican migrants to Georgia consider themselves healthy? The second question focused on a possible explanation for the paradox; how do women help keep undocumented Mexican families healthy, despite sub-standard living conditions, poor access to cash and cultural/linguistic barriers to the mainstream healthcare system? In particular, I was interested in how Mexican women living in Georgia conceptualize health and medicine, as well as how beliefs about disease etiology and the nature of medicines influence the utilization of available health care resources in an urban, industrial context.

Outline of this Work

This dissertation is heavily influenced by three theoretical approaches in medical anthropology; medical ecology, critical medical anthropology and ethnomedicine. Medical ecology and critical medical anthropology are both concerned with the causes of sickness in different societies. While the former considers the proximate, environmental determinants of health the latter focuses on political, economic, historical and social forces that ultimately lead to disease and illness. Despite their differences, both approaches remind us that health and sickness can be understood only if they are studied holistically. According to the ethnomedical approach, in order to comprehend the range of experience humans have with health and sickness we need to understand these concepts from other points of view. In other words, my primary concern was how *Mexican* women define health and sickness and what *they* consider appropriate responses to ill-health. The theoretical background of the study is discussed more fully in chapter two, along with the research methods. Chapter three describes the history and development of migration from Mexico to the United States, including a discussion of migration patterns in my research community. This chapter, inspired by critical medical anthropology outlines the emergence of migration networks, which both make undocumented migration possible and provide the social support systems that appear to be essential to migrant health. Following one of the fundamental theoretical models in medical ecology, the physical, biological and socio-cultural environments of the study community are described in chapter four.

Chapter five is concerned with health and sickness in the study community, beginning with emic definitions of health. This chapter also includes data on the health status of research participants and their families, their advice for staying healthy and

explanatory models of common health problems in the community. Chapter five ends with a brief discussion of different health care resources that are available to research participants. The next two chapters discuss these resources in more detail. Chapter six describes the most popular medicines (herbal and other home remedies as well as pharmaceutical preparations) used by Mexican immigrant women. I include my research participants' understandings of what these medicines do and how they work, as well as scientific literature on their actions and effects. Chapter seven focuses on the care of sick individuals, including services provided by the mainstream American medical system and family and social support networks. The last chapter summarizes the major findings of this work and discusses the conclusions that can be drawn from the data and their significance for the Hispanic health paradox and medical anthropology.

Chapter 2: Theory and Method

Theoretical Background

In the first review article of the field, Scotch (1963) does not define medical anthropology. Instead, he writes that medical anthropologists are people working in medical settings, or on problems of health and illness. Since the early 1960s medical anthropology has been defined and redefined many times. However, most medical anthropologists would probably agree that the field includes all formal anthropological activities concerned with health, disease and medicine (c.f. Foster and Anderson 1978). More simply, medical anthropology is the study of the causes and consequences of sickness[9] in humans. To answer my research questions I draw on three of the major theoretical perspectives in medical anthropology; medical ecology or the biocultural approach, critical medical anthropology and ethnomedicine.

Medical Ecology and Critical Medical Anthropology

Medical ecologists are interested in the proximate causes of disease, especially local environmental factors. Definitions of "environmental factors" may vary from one medical ecologist to another, but generally they refer to physical, biological and cultural aspects of the ecosystems of which a given human population is a part (Armelagos et. al. 1992; McElroy and Townsend 1996). Adaptation is an important concept in medical ecology. It is seen as a process by which a given population responds to disease stressors from the local environment (McElroy 1996). An ecological

[9] Generally, in medical anthropology the term "disease" refers to pathological states, whether or not they are culturally recognized and are the arena of the biomedical model. An "illness," is a person's perception and experiences of socially disvalued states, including (but not limited to) disease (c.f. Kleinman 1980). This dichotomy implies that

perspective is employed to consider the interaction of the population, the insult and the environment at the core of the disease process. That is, medical ecology sets health and disease within a system of mutually interacting organic, inorganic and cultural environments (Armelagos, et al. 1992; McElroy and Townsend 1996).

A typical example of medical ecology theory is a working model of ecology and health proposed by McElroy and Townsend. In this model the environment is divided into three parts; biotic, abiotic (i.e. non-living or physical) and cultural. These parts are interdependent and continually interact with one another. When one considers the three parts as a single unit one has "a model of an ecosystem, a set of relationships among organisms and their environments" (McElroy and Townsend 1996:18). McElroy and Townsend suggest that disease is the result of a chain of factors that relate to imbalances in the ecosystem and use the model to better understand how the environment affects human health.

In contrast, critical medical anthropologists argue that it is more important to look at the *ultimate* causes of disease. That is, historical, social, political and economic factors that have influenced local human environments and lead to disease in human populations. Critical medical anthropology draws heavily on political economy, which is inspired by the Marxist tradition and world system's theory. Political economy studies in medical anthropology include the social production of sickness as it relates to ecological conditions, the labor process and underdevelopment, as well as medicine in capitalist and socialist societies (Morsy 1990). Cohen (1989) describes how human health has changed throughout the process of cultural evolution. It is clear that political and economic forces dictate how resources are distributed and drastically

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nonbiomedical systems do not address physiological manifestations of ill-health. Kleinman uses sickness (a less loaded

alter the environment. Both of these activities have a serious impact on human health. Critical medical anthropologists feel that it is the responsibility of medical anthropology to identify global political and economic factors that make people sick and work to alter them.

While both medical ecology and critical medical anthropology are primarily focused on why people get sick in various societies, in this study I apply them to answer different questions about health and medicine. The ecological model that McElroy and Townsend (1996) developed to better understand the causes of disease in different environments is also useful for understanding human responses to sickness, particularly the use of medicinal plants (Waldstein 2000). Thus, knowledge of the physical, biological and sociocultural environments of my research site are essential for a complete understanding of Mexican immigrant home remedies and other health care resources. Likewise, instead of using a critical medical anthropology approach to identify conditions that lead to sickness in migrant populations, this research looks at social, political, economic and historical forces that help explain good health in a low-income, undocumented immigrant community.

Ethnomedicine

As described in the previous chapter, Mexican women are responsible for maintaining the health of their families. The primary proposition of my dissertation research is that the positive health profile of Mexican immigrants, despite their low socio-economic status results from the knowledge of health, sickness and medicine that Mexican women possess. In medical anthropology, ethnomedicine is concerned with the ways health, sickness and medicine are thought about in different cultures. Here I

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term) as a blanket term to label events involving disease and/or illness.

use an ethnomedical approach to investigate the medical knowledge of my research participants and to determine how this knowledge fits in with the broader ecological and sociopolitical context of the research community to keep its members healthy.

While both medical ecology and critical medical anthropology make etic assessments of health and sickness, the ethnomedical approach has been used to understand theories of disease causation from an emic or insider's perspective. Foster's (1976) distinction between *personalistic* and *naturalistic* etiologies is one of the more useful models for understanding the causes of sickness in ethnomedical systems. Personalistic theories about sickness are based on the idea that volition or intervention (often from a super-natural source) is directed at the individual who becomes ill. They are generally seen as irrational in terms of biomolecular science and fall into three categories; mystical, animistic and magical. Fate, ominous sensation, contagion and mystical retribution (e.g. breaking taboos) are mystical theories. Soul loss and spirit aggression are animistic and sorcery and witchcraft are magical (Murdock, et al. 1978). Naturalistic causes are those sources of ill health that are the product of natural events and/or substances. Naturalistic theories of disease causation are often based on observable phenomena and are not supernatural. They include the "germ theory," humoral theory (Foster 1994), pollution beliefs (Green 1997), etc. The two types of etiologies are not mutually exclusive in any medical system and the perceived cause of a single illness episode can change from naturalistic to personalistic.

Traditionally, in medical anthropology more attention has been paid to personalistic and supernatural aspects of non-biomolecular medical systems. This relates to the history and development of medical anthropology and the ethnomedical perspective in particular. Many of the pioneer studies in ethnomedicine (e.g.

Ackerknecht 1942; Fabrega and Silver 1973; Turner 1976) were based on the assumption that non-western medical systems attend primarily to psychological and spiritual concerns. Before medical anthropology was a formal field, ethnographers like Evans-Pritchard and Pitt-Rivers sparked an interest in the medical beliefs of exotic cultures by including information about them in their general ethnographies. Ackerknecht was one of the first researchers to focus on medical beliefs in so-called primitive societies. One of his major contributions was his argument that indigenous medical beliefs are not hodge podges of superstitions, but rather are part of organized medical systems. Early medical ethnographers spent their time cataloguing indigenous pharmacopoeia and describing individual medical beliefs and practices (Ackerknecht 1942). Ackerknecht realized that these medical beliefs and practices had to be analyzed more in depth and as they relate to other parts of indigenous societies, especially religion.

However, Ackerknecht also firmly believed that all indigenous healing systems are irrational. That is, not based on empirical observation. Indigenous medical practices are symbolic and successful only because they address psychosocial needs (Ackerknecht 1942). Ackerknecht (1946) even went on to deny the rational basis of the use of medicinal plants, arguing that when indigenous peoples occasionally discover biologically active species, it is through some sort of natural human instinct. Thus, naturalistic beliefs and practices, which by nature are rational, do not exist. Ackerknecht's attitudes and arguments were picked up by Turner (1976), who argued that Ndembu healing is entirely symbolic. Even after Foster made the distinction between personalistic and naturalistic beliefs and practices, medical anthropologists continue to perpetuate Ackerknecht's legacy.

Despite the definition of concepts such as ethnocentrism and cultural relativity, it seems that anthropology has not been able to shake the idea that indigenous peoples are "pre-scientific" and incapable of empirical observation. Traditional healers continue to be called "good psychologists," perhaps even better than our own. According to (Kleinman and Sung 1979), traditional healers are effective because 1. many diseases are self-limited (i.e. the patient attributes recovery to treatment by a healer, but would have recovered had no treatment been sought at all), 2. because psychological states that healers address can influence biological conditions and 3. because people in non-western cultures have different definitions of efficacy. Again, naturalistic theories are ignored because they are empirical. If researchers do not appreciate the fact that people in indigenous societies are capable of finding biologically active medicines, how can we expect them to realize that some theories of disease causation are empirical? Though it is also possible that some medical anthropologists focus on supernatural theories of disease causation to show that, while they appear not to be scientific in the biomolecular sense, they are in fact rational. For example, Alexander and Paredes (1998) argue that while the Creek practice of putting necklaces made of *Solanum carolinense* beads on their infants to sooth teething discomfort and upper respiratory symptoms seems to be purely magical, the plant does contain active compounds that may be absorbed through the skin.

More recently a growing interest in the "empiricist" ethnomedical approach has drawn attention to naturalistic causes of sickness. For example, Ortiz de Montellano (1982) describes how the physical (naturalistic) causes of illness were conceived in Aztec medicine. Ortiz de Montellano argues that in Aztec medicine, while the initial causes of disease may involve magico-religious beliefs, the process of disease follows

physical pathways. Knowledge of ethnophysiological concepts also increases our understanding of rational and naturalistic theories of causation. Green (1997) suspects that the "invisible snake" concept is fundamentally important for an anthropological understanding of illness causality beliefs in southern Africa. In this region belief in an invisible snake, living inside the body that somehow demands purity of the body it inhabits, is quite common. Green (1997) argues that belief in an invisible snake reflects the importance of naturalistic pollution beliefs and is also an empirical measure of these beliefs. He also proposes a hypothesis that pollution related illnesses are roughly equivalent with contagious diseases, in the biomedical sense of the term. Berlin, et al. (1993) studied Highland Maya ethnoanatomical/physiological beliefs about an alleged "culture-bound syndrome" *me'winik*. Through a combination of anthropological and biomedical techniques they were able to demonstrate a correlation of *me'winik* with biliary disease. A naturalistic cultural model for high blood pressure, based on Ojibway conceptions of physiology has also been described (Garro 1988).

While medical anthropologists of all theoretical persuasions have been interested in the causes of sickness, the study of how sickness is treated is largely confined to ethnomedicine. Like emic theories of the causes of sickness, healing strategies can generally be classified as personalistic and naturalistic. The treatment of personalistic illnesses is the specialty of the shaman, who conducts healing ceremonies aimed at appeasing angered gods or spirits, counteracting the influence of witches or other shamans, etc. Treatments of conditions resulting from naturalistic causes are likely to be pragmatic and empirical. They usually involve medicinal preparations of plant or animal substances, prescribed by shamans, herbalists, physicians and/or patients themselves. Most medical systems contain a mixture of personalistic and naturalistic

strategies and often a combination of strategies will be used in treating illnesses of either etiology (Cosminsky 1977). Buckley (1985), Chavunduka (1994), Ortiz de Montellano (1990) and Snow (1993) are good examples of ethnomedical monographs, which address both personalistic and naturalistic aspects of their respective medical systems. Berlin and Berlin (1996) may be seen as a response to the heavy emphasis on the personalistic aspects of highland Maya ethnomedicine. The Berlins focus solely on the naturalistic use of medicinal plants in the Chiapas highlands.

My research builds on ethnomedical literature that emphasizes the empirical basis of traditional medical systems (see for example Barsh 1997). The goal of this work is to demonstrate that while some Mexican beliefs about sickness and healing are personalistic and/or magical, the majority of the medical knowledge possessed by Mexican migrant women is based on rational observation that is passed from one generation to the next. Moreover, the home remedies that women bring from Mexico to the United States are effective in a naturalistic sense.

Methodology

To answer my research questions I employed a case study strategy. Case studies are appropriate for answering "how" or "why" questions asked about a contemporary set of events that the investigator has little or no control over. Although case studies are a distinctive form of empirical inquiry, many investigators consider case study research as less desirable than experiments or surveys. One of the greatest concerns is that case studies provide little basis for scientific generalization. However, a case study is analogous to a single scientific experiment, which must be replicated in order to be considered a scientific "fact." A case study, like an experiment is generalizable to theoretical propositions, not to populations. The goal is to expand and generalize

theories rather than enumerate frequencies for statistical generalizations (Yin 1994). Thus, a case study design is appropriate for an investigation of how Mexican migrant women keep their families healthy and why Mexican immigrants have better health profiles than their socioeconomic and legal status in this country would predict. Although my fieldwork was confined to a single Mexican migrant neighborhood, this study contributes to current understandings of how cultural beliefs and practices explain the Hispanic health paradox.

Unlike an experiment that divorces a phenomenon from its context so attention can focus on only a few variables, the case study method is used to study a contemporary phenomenon within its real-life context where there are many more variables of interest than data points. Case studies benefit from the prior development of theoretical propositions that guide data collection and analysis. They rely on multiple sources of evidence that can be triangulated and can include both qualitative and quantitative methods (Yin 1994). "In-depth ethnographic studies of household factors influencing health are essential if statistics from broader surveys are to be fully understood" (Mull, et al. 2001:1082). Because most of the previous research on the Hispanic Health paradox, as well as migration from Mexico to the United States is based on large-scale surveys with probability samples, my approach relies on qualitative methods.

Moreover a number of ethnographic studies of immigrants have emphasized the advantages of qualitative research. For example, Hondagneu-Sotelo (1994) suggests that intensive participant observation and interviews enable researchers to gain insights into the everyday activities and motives of immigrants, so that knowledge is derived from the perspectives of the principal actors as well as established theory. In a study of

social networks and health among Guatemalan immigrants Menjivar (2002) interviewed 26 women and did participant observation in homes, clinics, stores and churches. "Focusing on a small number of people in-depth over a period of time sheds light on the complex interactions between broader forces and the lives of immigrants at a particular point in time and space so as to understand how larger forces affect social situations" (Menjivar 2002:445). The specific qualitative methods that I used in my research are described in the last section of this chapter.

Research Site

The research for this study was done in Athens, Georgia (figure 2.1). Athens is located northeast of Atlanta and is home to approximately 90,000 residents (Adams et. al. 1997). Much of Athens's economy depends on students who attend the University of Georgia and several small area colleges. The service industry is the largest employment sector in Athens providing over 40% of its jobs. Other industries in Athens include poultry processing, construction, printing, stonecasting and manufacturing of wood products, plastics and rubber products, fabricated metal and machinery. Catholic Social Services has estimated that the Hispanic population of Athens is in excess of 10,000. Like the rest of Georgia most of the Hispanic population of Athens are migrants from Mexico (Wallace 2001). The majority of migrants from Latin America reside in close-knit barrios that are relatively isolated and on the outskirts of town (Adams et. al. 1997). These neighborhoods include trailer parks (Highway 129, Highway 441, Oak Bluff), apartment complexes (Kathwood, Pinewood North and South, Springcourt) and duplex subdivisions (North Place, Los Duplex, Los Nuevos Duplex).

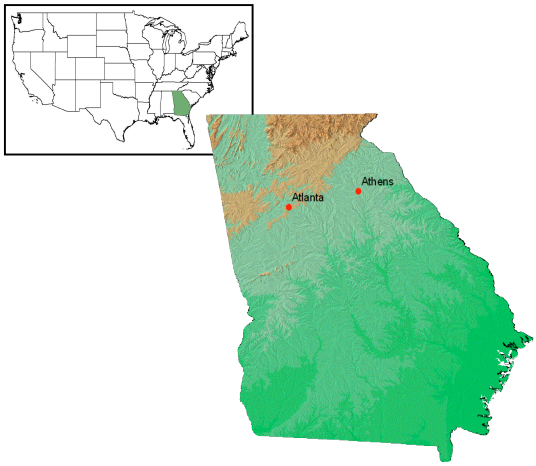

Figure 2.1. Map of Georgia showing the location of Athens, by Bill Jurgelski.

After exploring the Hispanic community of Athens it became apparent that Los Duplex was an ideal site for researching Mexican women's knowledge of health, sickness and medicine. Nearly three quarters of the neighborhood's 131 residences are occupied by Mexican tenants and over half of these households include women and children. As its Spanglish name suggests Los Duplex is a subdivision of duplexes and a few single occupancy dwellings (figure 2.2). The neighborhood was built in 1974 and originally inhabited by African Americans. The property had multiple absentee owners who weren't diligent about maintenance and upkeep. Eventually the neighborhood fell into disrepair. By the early 1990s the federal government was prepared to seize all structures in the subdivision due to high levels of drug activity. Before this happened an Atlanta based property development and management company bought and improved the community. The new landlord repainted and re-landscaped the neighborhood and built some new houses in 1995. Since the mid 1990s Los Duplex has transitioned from an African American neighborhood to a Mexican barrio.

Figure 2.2. "Los Duplex" was built in 1974. Most of the units in the subdivision are one-floor duplex apartments that are sided and roofed with vinyl.

In 1997 a community center was established in Los Duplex by faculty from the School of Social Work at the University of Georgia (figure 2.3). The center was modeled after the settlement house concept, which was an idea developed in the early 20th century for supporting immigrants as they adapt to new ways of life. Since it opened, the center-known by residents as "La Escuelita"- has offered a variety of programs like English as a Second Language classes, nutrition and parenting discussion groups and after school activities and homework help for neighborhood children. In June of 2001 the University pulled-out of the community and the center was taken over by the Boys and Girls Clubs of Athens. Under its new leadership La Escuelita has continued to offer English classes for adults in addition to its after school program. The space is also used for the occasional Salsa class and semi-annual community-wide events like church yard sales.

La Escuelita has had a strong positive impact on the neighborhood and has helped cultivate a sense of community among the residents, who come from many different parts of Mexico and have had a variety of life experiences. However, Los Duplex is a low-income neighborhood. Most men and women in the community are employed by poultry processing plants and other types of factories where they work long hours in difficult environments for low wages. Single men who live in Los Duplex and men who are in the United States without their families tend to work hard during the week but drink heavily on the weekends. This has led to tension in the community between families and all male households, as well as occasional violence.

Figure 2.3. "La Escuelita" (the little school) is run by the Boys and Girls Clubs of Athens and provides after school homework help to neighborhood children. La Escuelita also serves as a community center for Los Duplex and offers a variety of programs for adults as well as children.

Research Participants

Because women are the focus of my study the selection of research participants was restricted to the 51 Los Duplex households that include adult women. I began my fieldwork by volunteering at La Escuelita. This provided an opportunity to collaborate with the director, who has worked with the Mexican community for over five years and to meet a number of families in the neighborhood. Through my role as a volunteer "teacher" at La Escuelita I was able to recruit women from 12 households to participate in the study. I recruited women from an additional 12 households by asking research participants to introduce me to friends and family that might be interested in the research and invited women from another four to participate, who I met on my own. Together these 28 households are made up of 47 men, 52 women, 31 boys and 26 girls (figure 2.4).

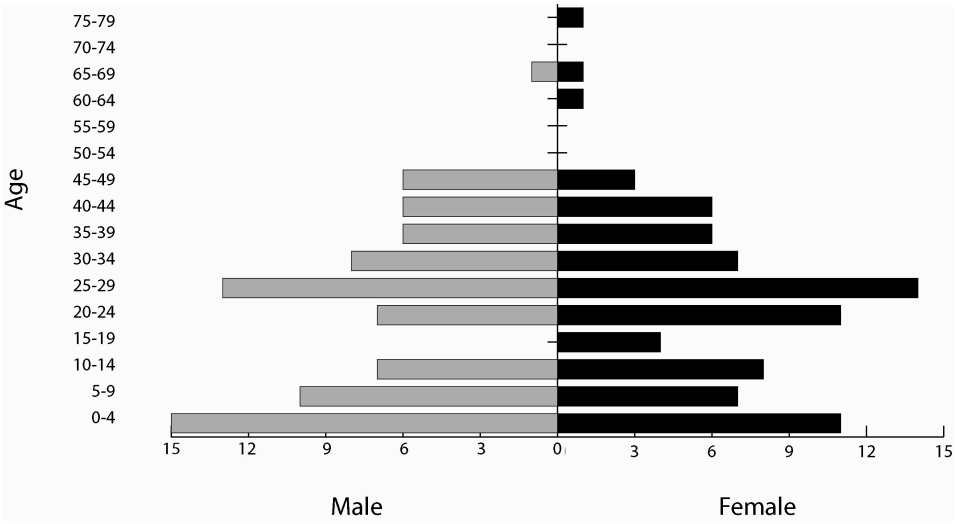

Figure 2.4 "Population Pyramid for 28 Families in Los Duplex"

At least one adult woman from each of the 28 households participated in one or more of the formal data collection activities that I carried out. According to the terms of permission granted by the Human Subjects Office of the Institutional Review Board to conduct this research, each woman who agreed to participate signed a consent form, written in Spanish. While I have never recorded any information about the immigration status of any of the Mexicans I have met in Athens, Los Duplex is known for having a significant population of undocumented individuals. At first, I was concerned that undocumented women would be afraid to give written consent. However, only one of the women who expressed a desire to take part in the study declined to participate when she found out she had to sign a written document to do so. I read the consent form with all participants, explaining the purpose of my dissertation research, risks and benefits of participation and contact information of myself, my advisor and the director of the Human Subjects Office. I also explained that signing the consent form would protect their anonymity, by serving as a contract that allows me to maintain confidentiality. While the young mother mentioned above was afraid *la migra* (immigration police)[10] might somehow get a hold of her name if she signed anything, all of the other women who went through the prior-informed consent process signed the consent form willingly and freely.

In fact, it was only after the study period ended that I ever heard another Mexican mention *la migra*. Although I never asked for or recorded specific information about how undocumented migrants from Mexico gain employment in Athens several informants talked openly about obtaining forged legal documents and working under

[10] Throughout this work I use various Spanish terms in the text to better capture the feelings and experiences of my research participants. All Spanish words are written in italics and defined only the first time they are used. Definitions of Spanish words used in the text are also included in a glossary in the appendix.

other people's names (i.e. using their social security numbers) during interviews. No one could tell me when it last was that employers of illegal workers in Athens were busted by immigration police, though some thought they might have heard of raids in nearby counties. While it has been noted that in some parts of the United States undocumented Mexicans stay away from public health facilities for fear they will be reported to immigration authorities (Smith 2001), residents of Los Duplex seem remarkably unconcerned about the possibility of this happening. My research participants routinely patronize public and private health care facilities in Athens and many even frequent the county Department of Family and Child services to apply for Medicaid, food stamps and other forms of public assistance (though usually unsuccessfully).

Because many residents of Los Duplex feel secure in the barrio, at least as far as their immigration status is concerned, I was able to eventually establish a high level of confidence with the women who participated in my research. However, the small number of women I recruited on my own, compared those recruited through the community center reflects a pervasive wariness toward Americans who have not been introduced by a trusted relative, friend or institution. For this reason, it was more fruitful to use a snowball sampling technique than a random one.

Methods

All of the data for this dissertation study were collected in Los Duplex between April 2002 and June 2003. During my 13 months of fieldwork I employed several different methods to collect various types of data useful for answering my research questions. These methods included a neighborhood census, participant observation and structured, freelist, pile sort, unstructured and semi-structured interviews. All of my

work in Los Duplex, with the exception of conversations with the director of La Escuelita, was conducted entirely in Spanish. A description of each method is presented below. Procedures used to analyze data are discussed in more detail in later chapters.

Census

In May of 2002, shortly after I began volunteering at La Escuelita, the director asked me to pass out flyers for the summer program to all the households in the neighborhood that include children. As I contacted occupants from all 131 of the subdivision's residences I recorded the number of American, Mexican and vacant households. Of the 96 units inhabited by Mexicans I was also able to calculate the number of all-male households and the number of families who live in Los Duplex. This informal census was repeated at the end of the study period.

Structured Interviews

Formal data collection began with a structured interview protocol, designed to elicit basic demographic and health information. Structured interviews allow anthropologists to make comparisons across different people and different groups. In this sense "structured" means that everyone in the sample answers the exact same questions (Bernard 1988). I wrote the interview questions (a combination of *closed* or *fixed alternative* questions, where the respondent is presented with questions and must choose from a set of responses and *open ended* questions that allow responses to be shaped by things the informant considers important) in Spanish. I then worked with two key informants and members of their families to make sure they were well-written and appropriately understood by native speakers of Mexican Spanish. I pre-tested the interview protocol with contacts made through Catholic Social Services and administered the final draft to 37 women from Los Duplex. The structured interview

included questions about the types of communities respondents emigrated from, migration experience, motivations for migrating, employment histories, household compositions and satisfaction with life in the United States, Athens and Los Duplex. Respondents were also asked if they had an interest in herbal medicines and other home remedies.

The rest of the structured interview focused on health, beginning with a self-evaluation of respondents' health status and that of other members of their households and the collection of family health histories. Kleinman et. al. (1978) suggest that perceived self-assessed health describes an individual's overall experiences of sickness, illness or general discomfort. It is an indicator of subjective health status and psychological outlook. Although they may not always match the results of detailed clinical evaluations, self-reported assessments of health often predict mortality, specific disease status and disability (Angel, et al. 2001). In their study of social and economic support and health Angel et al. (2001) asked survey respondents two questions that were designed to elicit a self-assessment of overall health; 1. would you say that your health is excellent, very good, good, fair or poor and 2. would you say that your emotional health is excellent, very good, good, fair or poor? Bruhn (1997) goes further and argues that self-rated health is the most powerful predictor of subsequent illness among adults. There is also a positive relationship between parental perception of children's health status and children's actual health status (Bruhn 1997). Assessment of health status was followed by questions concerning experiences with the mainstream medical system of Athens and the use of different types of medicines in the home.

Participant Observation and Unstructured Interviews

Participant observation is essential to effective anthropological fieldwork and characterizes most ethnographic research. This method combines participation in the daily lives of the people one is studying with the maintenance of professional distance that allows adequate observation and recording of data (Fetterman 1989). Participant observation is basic to all other more formal research techniques and provides validation for data that is gathered by such specialized methods (Pelto and Pelto 1978). The development of participant observation is generally attributed to Bronislaw Malinowski. As he describes in his first ethnography on Trobriand Island society, the most elementary foundation of ethnographic fieldwork is living with the people one is studying. Through natural social intercourse anthropologists get to know the people they study (including their customs and beliefs) far better than when they are paid informants. Moreover, there is a crucial series of phenomena that cannot be recorded by formal interviews, but must be observed in their full actuality. Such phenomena include daily routines, bodily care, food preparation and consumption, informal conversation and social life and passing sympathies and dislikes between individuals. It is also important for ethnographers to periodically put aside their recording devices and join in what is going on (Malinowski 1961).

Ideally, the anthropologist as participant observer lives and works in the community of study for an extended period of time (at least six months) and uses the local language (Fetterman 1989). While I took my evening meal and slept in an apartment in the center of Athens that I shared with my significant other for most of my research, my long days were spent in Los Duplex, conversing in Spanish with research participants and engaging in various forms of participant observation.

Volunteering at La Escuelita not only helped me meet neighborhood mothers willing to be interviewed, but allowed me to begin participant observation activities as well. The summer program began shortly after the start of my research, which meant that volunteers worked with the neighborhood children five days a week, for several hours a day. Much of that time was spent at the neighborhood playground, located behind La Escuelita but open to all residents. Volunteers supervised summer program kids alongside mothers and grandmothers who went to the playground with their toddlers. La Escuelita also hosted three community-wide events during the study period. While not nearly as elaborate, exciting or well-attended as the fiestas I have experienced in Mexico, these events included yard sales, live music and food and were a great opportunity for volunteers and neighborhood residents to mingle. They also made for the perfect situation to observe social interactions among different members of the community.

After spending several months conducting structured interviews and doing participant observation at La Escuelita, I had cultivated strong relationships with several key-informants, including a first-time expectant mother named Teri (37, rural Michoacán, *niñera*-babysitter).[11] Teri moved to Athens from rural South Carolina in September 2002. She had many close relatives in Los Duplex who advised her that she could receive free medical care at the local public hospital. Her husband had a steady and relatively lucrative job in South Carolina, so Teri arrived in Los Duplex by herself and took over the lease of one of her brothers who was returning to Mexico. Although two other brothers and their families lived in the neighborhood, Teri became a

[11] Each woman who participated in my research was given a unique pseudonym. Only pseudonyms are used in this dissertation. As each research participant is introduced in the text her age, region of origin and current occupation are presented in parentheses after her pseudonym.

bit apprehensive about living alone toward the end of her pregnancy. Around the same time I decided that my research would be strengthened if I had the opportunity to actually live in the neighborhood for a little while. Teri and I both appreciated the serendipity of our situations and I moved in with her for about six weeks. During this time I got a "behind the scenes" look at life in the community.

While I was living in Los Duplex my neighbors quickly figured out that I could be very useful to them as an interpreter and translator. I began accompanying research participants to English speaking institutions that they frequent, usually components of the local health care system. Throughout the rest of my study I went with seven research participants to 23 doctor appointments at the public hospital, the local free clinic, the Public Health Department clinic, a private obstetrics and gynecology specialist and a private pediatrician. I also accompanied four women to the County Department of Children and Family Services and an additional five to other social service and charitable organizations. I assisted several other women in their search for work by helping them fill out applications and showing them the bus route that connects Los Duplex with the center of town. Through these activities I learned more about the daily lives of Mexican women in Athens, especially how they interact with American health care and welfare workers. My neighbors also invited me to take part in their social lives. During my study I attended seven birthday parties, one baptism party, three baby showers and one Mary Kay demonstration. These events provided further opportunities to study social interactions and collect preliminary data on social networks in Los Duplex.

Participant observation activities were complemented by many informal discussions of health hazards in the chicken factories, how to avoid colds and the flu

and home remedies for back pain, infections, fevers and other "cold" maladies. Additionally, I conducted unstructured interviews with five key informants about life in Mexico, border-crossing experiences, learning about herbal medicines, humoral theories of sickness, folk illnesses, pregnancy and encounters with doctors and hospitals in Athens. Social and kinship relationships among Los Duplex residents were also discussed during these conversations and interviews, in order to verify observations made at social events. Together these data were used to model social networks in Los Duplex. Questions asked during unstructured interviews were open ended and more often than not spontaneously generated. I had the opportunity to take notes during unstructured interviews with some key research participants. For others that were unplanned it was necessary to take notes afterwards at the first possible opportunity.

Cognitive Methods

Twenty-five women completed freelist interviews, in which they were asked to name all of the sicknesses and all of the herbal medicines they know. These data were analyzed using ANTHROPAC (Borgatti 1992). Anthropologists generally use freelisting for several reasons. They are perhaps most often used to help anthropologists learn the items that belong in a given domain. For example, I was interested in learning the sicknesses that are recognized and herbal remedies that are used in Los Duplex. Freelist data were analyzed to identify the four most common herbal remedies in Los Duplex. These plants were one of the foci of the semi-structured interviews. Freelisting is also used to find "competent" informants. That is, informants who know a lot about the topic of study. In general, it is assumed that a group of research participants who produce lists that are similar to one another are the most knowledgeable. According to this logic, people who produce lists that don't match any others probably don't know

what they're talking about. While not the only criteria that influenced my selection of informants for semi-structured interviews, the estimated knowledge of each respondent, as calculated using the ANTHROPAC consensus analysis function, was an important factor in this decision.

I also conducted pile sort interviews with 13 women who were asked to arrange 24 cards with the names of medicines written on them into groups and 23 cards with the names of sicknesses written on them into groups. Pile sorts are useful for gauging how similar items in a particular cultural domain are to one another (Borgatti 1996). My main objective for doing pile sort interviews was to gain a broader understanding of how study participants categorize medicines used in the home. The data from these interviews were used to test the hypothesis that the distinction between "natural" (i.e. herbal) and pharmaceutical medicines is culturally meaningful to Mexican immigrants. Pile sorts of sicknesses were also used to better understand how Mexican women conceptualize and experience ill-health.

Semi-structured Interviews

Data from freelist and unstructured interviews were used to develop a series of semi-structured interview protocols on definitions of health and knowledge of medicines used at home. Semi-structured interviews are more flexible than questionnaires or structured interview schedules. The majority of questions in a semi-structured interview are open ended. That is, informants are free to form their own unique responses to questions. Anthropologists generally conduct semi-structured interviews by using the same set of questions with each informant. However, the anthropologist may also ask follow-up questions about certain responses an individual informant provides. This makes semi-structured interview data more difficult to compare across informants, but

also richer and deeper (Bernard 1988). I did most of these interviews with individual informants. However on two occasions I interviewed small groups of family members at one time. Semi-structured interviews were tape-recorded depending on the preference of each informant and lasted between 30 and 60 minutes.

Thirteen women were selected for the health interview. As described above, the estimated knowledge scores derived from consensus analysis of freelist data were factored into my decisions about who to interview. However, eight women with high estimated knowledge scores (.87 or higher on at least one freelist) were excluded from the semi-structured interview sample for various reasons. One research participant who was not included in the sample received a high score on the medicinal plant freelist because she listed only one plant, which happened to be the most prototypical. Three other women with high scores moved out of Athens before I began the semi-structured interviews. The remaining four declined to participate because of their busy work schedules. This left me with eight high scoring participants. To increase my sample size I included two women with slightly lower estimated knowledge scores and another three who did not participate in the freelist interview, but talked extensively about health and home remedies during unstructured interviews. In the health interviews, research participants were asked to describe healthy and sick people, discuss why people get sick and reflect on what people can do avoid sickness and maintain health. These interviews also included questions about navigating the mainstream health care system of Athens. I was especially interested in any ideas research participants had for improving health care services so they better meet the needs of the city's growing Hispanic community.

Nine of the women who were involved in the health interviews also participated in the medicine interviews (the other four declined to do a second interview because of work and family obligations). These interviews included general questions about the perception and use of herbal remedies and pharmaceutical medications, but were mainly focused on building folk models of the actions of common home remedies. That is, shared understandings of what home remedies do to restore the body to a state of health. Folk models of the actions of home remedies include information on: 1. signs and symptoms treated, 2. treatment goals, 3. desired pharmacological activity, 4. preparation and administration methods, 5. physical sensations produced by medicines, 6. expected outcomes of therapy and 7. secondary effects of treatment. Information was collected for five herbal remedies (chamomile, mint, rue, basil and *gordo lobo*) two non-herbal home remedies (baking soda and Vicks Vapo Rub) and three commercial pharmaceuticals (Tylenol, aspirin and Alka Seltzer).

Summary

This chapter describes the theoretical and methodological background of this research. My work draws on three major theoretical perspectives in medical anthropology (medical ecology, critical medical anthropology and ethnomedicine) to examine the ecological, social, historical, economic, political and ethnomedical factors that help Mexican immigrants stay healthy, despite low socioeconomic status and other barriers to medical services. During 13 months of fieldwork, I conducted a case study of a Mexican immigrant community in Athens, Georgia and used a variety of qualitative methods (participant observation, freelist, pile sort, unstructured, semi-structured and structured interviews) to gather data on women's knowledge of health, sickness and medicine.

Chapter 3: Migrating to the United States

A Brief History of Migration from Mexico to the United States

In 1848 the Treaty of Guadalupe Hidalgo ended the United States-Mexican war. Inhabitants of the land that was taken from Mexico were left to choose between relocating south of the Rio Grande or remaining in what was now the American Southwest and becoming United States citizens (Johnson 2001). Although the first Mexicans to become legal residents of the United States were not migrants, the politics surrounding their incorporation into American society were prophetic of future migration policies. For as Johnson (2001) describes, while the Treaty of Guadalupe Hidalgo attempted to protect the rights of Mexicans living in the region, American citizens of Mexican descent never enjoyed full membership rights in this society.

Few Mexicans migrated to the United States before 1900 but late 19th century American economic interests in Mexico set the stage for "the largest sustained flow of immigrants anywhere in the world" (Cerrutti and Massey 2001:187). During the last quarter of the 19th century American companies built railroads in Mexico and invested capital in mining and smelting. These modernization projects had a profound effect on Mexico's agricultural system and displaced large segments of the peasant population. Railroads made possible the development of semi-feudal haciendas, which is where Mexican wealth was concentrated. Land expropriation laws effected the legalized transfer of free peasant village holdings to nearby haciendas at the same time a switch from subsistence to cash crops resulted in food shortages that forced people to rely on costly imported staples. Displaced peasants had to move from villages to towns and

cities and became a growing labor pool for Mexican aristocracy, textile manufacturers, henequen plantations, railroads, mines and oil operations. Underemployment and unemployment interacted with the internal demand for labor to cause northward migration from central Mexico along the railroads. This reconfiguration of demographic patterns in Mexico was the first step toward migrations to the United States (Gonzalez and Fernandez 2002). Indeed, after the completion of the main lines of the Mexican railroad in 1895 a small but growing number of Mexican peasants crossed their country's northern border to work in American mining, railroads and agriculture (Feliciano 2001).

By the beginning of the 20th century the United States effectively controlled the Mexican economy, as 1,117 American based companies and individuals had invested some $500 million in Mexico. Mexican labor began to enter the United States in large numbers (2,600 people) in 1905 (Gonzalez and Fernandez 2002). Seasonal migration to the southwest agricultural areas increased after the Mexican revolution in 1910 (Feliciano 2001) and by 1911 at least 50,000 undocumented Mexicans crossed the border annually (Gonzalez and Fernandez 2002). However, Gonzalez and Fernandez (2002) caution that while the revolution in 1910 probably increased transnational migration it did not create it. During the first two decades of the 20th century migration from Mexico was largely unregulated by the United States government (Feliciano 2001). Mexicans were not seen as a threat because they did not desire to become citizens and composed only six tenths of one percent of total legal immigration between 1900 and 1909 and less than four percent throughout the 1910s (Sheridan 2002).

However, after the end of the First World War American citizens who returned from overseas had difficulty finding jobs and began to view Mexicans as competitors.

The general American public's concern about Mexicans revolved around three issues; labor competition, public health and the integrity of the democratic system (Mexicans were thought of as inferior and racially unfit for democracy). After the Immigration Act of 1924 was passed Congress started to listen to concerns about Mexicans and began an effort to institute immigration quotas for western hemisphere countries (Sheridan 2002). Migration from Mexico virtually stopped during the great depression (Feliciano 2001; Gonzalez and Fernandez 2002). In 1929 illegal entry into the United States was made a criminal offense, followed by massive deportations of more than 350,000 Mexicans between 1931 and 1934 (Feliciano 2001).

In the 1940s, Mexico began borrowing money from American banks to develop irrigation projects and transportation systems. This made the growth of United States controlled agriculture in northern Mexico possible and created more population shifts to that area (Gonzalez and Fernandez 2002). By 1942 enough Americans went back overseas to fight in World War Two that American agriculture suffered a labor crisis. To remedy this situation Presidents Franklin Delano Roosevelt and Manuel Avila Camacho created the Bracero Program, which lasted from 1942 to 1964 and allowed temporary workers from Mexico to come to the United States to work in a number of industries, especially southwestern agriculture (Murata 2001). The Bracero Program required employers to provide free housing and transportation and inexpensive meals (Feliciano 2001). The program also allowed Mexican villages with no previous migration history to incorporate recurrent migration as an economic strategy (Wilson 2000). An unexpected result of the Bracero Program however, was a subsequent wave of illegal migration of unprecedented proportions that continued through the 1970s and 1980s (Feliciano 2001). Under the Bracero Program many legal temporary workers became

illegal immigrants by staying on in America or making a second trip across the border without papers (Murata 2001). Women also began to cross the border illegally during the Bracero period (Wilson 2000). Although the Bracero Program allowed temporary laborers to legally work and live in United States, growing concern about undocumented migrants led to repressive immigration policies, such as the1954 Operation Wetback that rounded up and deported both Mexican immigrants and United States citizens of Mexican ancestry (Johnson 2001).

Between the 1930s and 1960s both documented and undocumented Mexicans workers became an "ideal" labor force for the United States because they were either recurrent seasonal migrants or "target earners" involved in temporary migration systems (Wilson 2000). As Heyman (2001) points out, undocumented workers have been tolerated in many parts of the United States as long as they keep quiet, work hard and go home. However, in the 1960s several economic, social and legal changes lead to greater migration of wives and children, as well as unmarried women. Such changes included 1. the adoption of Green Revolution technologies that lead to pressure on women to enter the Mexican work force, 2. the end of the Bracero program that lead employers to aid their former employees in arranging legal permanent residence for themselves and their families and 3. the maturation of migration networks linking specific Mexican communities to sites of destination within the United States (Wilson 2000). Also, by the 1960s Mexico was so far in debt that its economic policies (dictated by American creditors) once again resulted in massive economic and demographic dislocation that contributed to an additional increase of migration to the north. At the same time growth of *maquiladora* (industrial factory) industries further made the border

states of Mexico into magnets for the poor, unemployed masses (Gonzalez and Fernandez 2002).

In 1965 Congress passed Immigration and Naturalization Act Amendments that abolished national origins quotas and established a preference system that gave priority to immigrants who had relatives in the United States or who possessed certain needed skills. However it also included the first ceiling on Western Hemisphere immigration at 120,000 immigrants a year. In 1970 another immigration bill (H.R. 17370) was submitted that established a unified worldwide ceiling on immigration (instead of separate Western and Eastern hemisphere ceilings) but gave special non-quota status to Canada and Mexico. Although the 1970 bill appeared to be an attempt to liberalize migration from Mexico, in 1971 the Committee on the Judiciary introduced employer sanctions as a means of solving the illegal immigration "problem" (Murata 2001). In recognition of the fact that none of this legislation actually reduced the number of undocumented Mexicans entering this country or prevented them from being exploited, the 1986 Immigration Reform and Control Act instituted further sanctions against employers who knowingly hire undocumented workers, increased resources to border control and granted amnesty to many illegal migrants in the United States (those who lived in this country since 1982 and those who worked at least 90 days in agriculture between 1984 and 1986). The amnesty resulted in massive legalizations of 2.3 million Mexicans (Donato 1993) and reaffirmed the principal of family reunification (Wilson 2000).

Eight years later, the North Atlantic Free Trade Agreement (NAFTA) was implemented on January 1, 1994 and hailed as a way to reduce illegal immigration from Mexico by creating jobs in Mexico. Unfortunately, NAFTA has not generated

enough jobs at sufficient wages to reduce illegal immigration. In fact, the post-NAFTA era is characterized by higher levels of Mexican emigration due to increasing consumer expectations and falling industrial wages (Manning and Butera 2000). It would seem that NAFTA promotes undocumented migration because it reinforces market consolidation in Mexico, which brings about social and economic changes that generate migration (Massey and Espinosa 1997). Moreover, changing patterns of economic development accelerated by NAFTA have produced new flows of Mexican immigration to areas with no pre-existing Mexican population like the American midwest and deep south (Manning and Butera 2000). Gonzalez and Fernandez (2002) view NAFTA as the culmination of America's efforts to economically dominate Mexico and write that "one hundred years of U.S. empire building has produced what 300 years of Spanish rule could not accomplish: the complete inability of the Mexican nation to produce enough to feed its own people. The migratory consequences are staggering: Millions will be forced to leave Mexico's countryside in the next decade" (Gonzalez and Fernandez 2002:55).

The pendulum of public opinion on illegal immigration has continued to swing widely in the post-NAFTA era. In 1996 proposition 187 in California spearheaded anti-immigrant legislation that restricted undocumented immigrants' access to schools, health care and social services and required educators and social service workers to report undocumented people to the Immigration and Naturalization Service. The anti-immigrant trend culminated in the passage of the 1996 Illegal Immigration Reform and Immigrant Responsibility Act (Hines 2002). This legislation, along with the Personal Responsibility and Work Opportunities Reconciliation Act of the same year, has exempted both legal and illegal immigrants from federally funded welfare benefits.

Illegal immigrants are eligible only for emergency medical aid, short-term in-kind disaster relief, in-kind community services, public health immunizations and treatment of communicable diseases (Wilson 2000).

However, after the 1996 Acts passed people started to realize they were too harsh and the climate for immigrants grew more favorable. This change was also due to the rapid increase of Hispanics and other immigrants seen in the 2000 census and to an alliance between industry, labor and immigrants that resulted from economic growth in the United States. Even labor unions changed their position and started organizing for undocumented workers. In 2001 the Immigrant Fairness Restoration Act was passed to repeal mandatory detentions. Mexicans were also allowed to apply for permanent residence in the United States and didn't have to go back to Mexico to do so (Hines 2002).

Presidents Bush and Fox met shortly before September 11, 2001 to discuss another temporary guest worker program. There were also plans in the works for helping undocumented Hispanic students go to college. Unfortunately, the terrorist attacks on the United States changed everything. Instead of liberalizing laws, people called for stricter immigration policies in the name of national defense. Bush increased the Immigration and Naturalization Service budget and background checks of all people crossing our southern border are now required. Currently, fewer Mexicans are migrating to the United States and some are going back to Mexico (Hines 2002). Nevertheless, anti-immigrant sentiment is resurging among the American public.

Although the events of September 11, 2001 set back legislative reforms, some still believe that a temporary worker program could reduce illegal immigration (Hines 2002). It is not known how many Mexicans are currently crossing the border illegally to look for

work in the United States. Estimates in the literature are based on either quantitative demographic methods or speculation. Speculative estimates tend to be larger (around 5 million) and therefore receive the most attention. In contrast, most estimates based on quantitative demographic methods range from 1.5 million to 2.5 million (Durand and Massey 2001). Regardless of the actual number of Mexicans crossing the border illegally they have enough of a presence to distract border patrols from pursuing violent criminals (Hines 2002).

Why and How Mexicans Migrate to the United States

None of the legislation that I have just described, be it liberal or restrictive, has significantly slowed the flow of migration from Mexico to the United States. Patterns of migration and the forces that drive them have been well studied by sociologists and anthropologists. This section describes why and how Mexicans cross the border into the United States, without proper documentation.

People engage in international migration for many different reasons; they may be aware of wage differentials between their home communities and destination areas, they may be recruited by foreign employers, they may be afraid for their safety due to political unrest at home or economic changes in their communities may have eroded traditional means of subsistence (Massey, et al. 1994). Since the beginning of the 20th century a "push-pull" model, based on conventional supply and demand economics has been the dominant theory used to explain migration from Mexico to the United States. The Mexican Revolution of 1910 is considered the principal push factor, although many others are also recognized. The pull factors include high wages and demands for labor in the United States (Gonzalez and Fernandez 2002). According to this neoclassical economics perspective migrants make cost-benefit analyses when

they decide whether or not to migrate (Massey and Espinosa 1997). In the 1970s the push-pull thesis came under critical scrutiny as a neoclassical artifact and new models, such as new economics theory, segmented market theory, world systems theory and social capital theory have been proposed (Gonzalez and Fernandez 2002). The new economics theory is most similar to neoclassical economic models. However, the variables that explain migration are not wages, but measures of risk and the need for and access to capital. In contrast, the segmented labor market theory proposes that international migration is caused by a demand for immigrant labor that is intrinsic to industrial societies (Massey and Espinosa 1997).

World systems theory sees capitalism as disruptive to the semi-periphery and periphery because it brings about social and economic transformations that displace people from traditional livelihoods and force them into international labor markets (Massey and Espinosa 1997). For example, Dinerman's (1982) study on the migration process in two rural communities of Michoacán found that since 1960 both communities have undergone changes in local infrastructure, agricultural production, social organization and education. More specifically, there was a shift from subsistence agriculture to livestock production and cash cropping. This led both communities to depend more on tourists and urban consumers and in one community migration greatly increased. These local changes are largely a response to decisions made by regional and national policy makers. Development in the region has brought the two communities into the national and international economy and has raised consumption levels and standards of living. At the same time, agricultural and other economic policies have reduced the ability of households to maintain higher consumption levels (Dinerman 1982). When workers in Mexico are displaced, land is concentrated and

production is mechanized, international migration becomes the best way for many households to insure themselves against threats to family income. This subsistence strategy also allows people to gain access to scarce capital. It goes hand in hand with economic development (Massey and Espinosa 1997).

Social capital theory has received the most attention in the anthropological and sociological literature on Mexican migration. Social capital refers to the potential value of social relationships (Massey and Espinosa 1997). It is a contested and complex concept and different forms of social capital include obligations and expectations of support, information potential, informal social control and civic engagement (Cattell 2001). In the case of Mexican migration, ties to current or former migrants can be used to reduce the costs of migration and increase the likelihood of finding a good job in the United States (Massey and Espinosa 1997; Wilson 2000). Apparently, this form of social capital is abundant in Mexico as "national surveys indicate that about half of adult Mexicans are related to someone living in the United States" (Massey and Espinosa 1997:989). Social capital theory posits a direct connection between migrant social networks and the costs and benefits of migration. According to the theory, migration becomes self-perpetuating over time as social networks expand (Massey and Espinosa 1997). The maturation of migration networks has been extremely important in the processes of increasing and sustaining migration flows (Wilson 2000).

In addition to studying the forces that initiate and perpetuate migration from Mexico to the United States, social scientists have also investigated who migrates. Early research suggested that migration followed one general pattern; married male pioneers migrate first to find work, after earning a certain amount of money they return to their communities of origin and spread information about migration, which enables

single men and women, as well as wives and children of some pioneer migrants to join the migration stream. Pioneer migrants inevitably experience cost and risk because they are unfamiliar with life and language in the United States (Massey, et al. 1994). However, they eventually become acquainted with American society and employment opportunities. Reciprocal obligations they share with non-migrant kin and friends lead them to offer housing, loans and information about jobs, which lower the costs and risks associated with migration (Wilson 2000). Although being a pioneer migrant is difficult, Dinerman (1982) found that the decision to migrate has little to do with the personalities of the individuals who make the journey to the United States. Instead, the decision to migrate occurs at the household level. Households take advantage of the migration option if they have the means to do so. While there is greater diversity in the demographic and legal status of migrants than this prototypical pattern suggests, enough individuals fit the stereotype of undocumented male workers to perpetuate it (Durand and Massey 2001).

In 1994 Massey, Goldring and Durand attempted to shed light on the diversity within migration flows by introducing the "migration prevalence ratio" (i.e. the number of people with migration experience divided by the total number of people alive for any community in any year) as way of standardizing the study of migration patterns of different communities at different stages of migratory development. Using data from 19 Mexican communities they examined the demographic, social, economic and geographic character of migration as it becomes established as a viable economic option in a given community. The authors argue that migrants' characteristics (sex, age, documentation, economic status, goals for migration, etc.) don't describe migration flows, but instead represent a phase in their development. The results of the

study support the empirical observations of early investigators, but suggest that as migration becomes entrenched in a community the pattern of who migrates changes.

Durand and Massey (2001) further suggest that inconsistencies in the literature about migration patterns are the result of broad generalizations based on individual community studies. By considering factors such as the age of the migration stream and distribution of resources that characterize different communities they are able to show that migration doesn't always follow the same pattern. For example, many studies suggest that illegal migrants from Mexico are predominantly middle class. That is, wealthy enough to afford to pay *coyotes* (guides hired to facilitate undocumented border crossings) and purchase false work permits but not so wealthy that undocumented migration is unattractive (Massey, et al. 1994; Wilson 2000). However, the class composition of a migration stream at any point in time is determined by its age and the degree of inequality in the distribution of productive resources in the community. As migrant networks grow and social capital builds migration becomes possible for poorer Mexicans (Durand and Massey 2001; Wilson 2000).

Likewise, the age of a community's migration stream, as well as the niche in the American occupational structure in which the community's migrants first became established, influences the demographic and legal profile of migrants. Communities that send a large number of women and children to the United States have long histories of migration. As migrants specialize in American labor to the exclusion of other economic pursuits they are more likely to settle in the United States. These settlements become secure, Spanish-speaking environments that help families adapt to life in America. Older migration streams also include higher numbers of legal migrants who obtained papers before immigration laws became as strict as they are today. Migrants

who work in agriculture are also predominantly legal (former Braceros and their families) while those working in urban areas are mostly undocumented. Family migration is more greatly associated with the agricultural sector because children can do some agricultural tasks and contribute to household income. In contrast, urban jobs tend to pay less and city rents are high, so the migration of wives and children lowers family income in urban areas (Durand and Massey 2001).

The stereotype of male dominated migration flows is also largely attributable to a paucity of female scholars in migration research, as even male investigators who wish to include women in their studies usually have minimal access to them as research subjects (Goodson-Lawes 1993). Female migration from Mexico to the United States is increasing. In fact, "contemporary Mexican undocumented immigration is characterized by a significant presence of women and entire families" (Hondagneu-Sotelo 1994:19). Using data from San Diego and Los Angeles counties and comparing 1970-1974 and 1990-1992 Mexico departure cohorts, Marcelli and Cornelius (2001) found strong evidence that rates of migration for men and women are starting to converge. Moreover, it appears that in the early 1990s Mexican females headed for Los Angeles county outnumbered Mexican males. Yet women migrants are poorly studied because it is assumed they are passive to male migratory decisions (Cerrutti and Massey 2001). To remedy this situation and provide a more complete picture of migration from Mexico to the United States a number of social scientists have done ethnographic and quantitative studies that focus on women and migration.

Ethnographic evidence suggests that, since 1990, migration by Mexican women has been mediated by kinship networks. Young single women are encouraged by older siblings to come to the United States to take care of children and help with

housework. Married women come to reunite with husbands and older women migrate to care for grandchildren (Marcelli and Cornelius 2001). In her study of gender and migration Hondagneu-Sotelo (1994) used qualitative research methods to identify three distinct patterns of long-term migration; 1. family stage migration, in which a husband migrates before his wife and children, 2. family unit migration, in which members of a nuclear family migrate together and 3. independent migration, in which single men and women migrate independently. She also found that gender organizes migration. Households with high patriarchical domination lead to family stage migration, while families who migrate as a unit are characterized by shared decision-making and access to wives' social networks. Immigration also reconstructs gender relations, including patterns of family authority. Women tend to become more autonomous and assertive as they gain migration experience and assume more active roles in decision-making processes (Hondagneu-Sotelo 1994). However, women do not enjoy migration induced increases in personal authority equally. For younger women who have not built up social status in rural Mexico, migration leads to an experience of a kind of freedom (to choose where to live, work, etc.) not commonly available to them at home. In contrast, to older women who are independent in Mexico, migration to the United States may represent a loss of control over the basic aspects of life (Goodson-Lawes 1993). Similar gender role transformations and increased autonomy for women have also been documented among Iranian immigrants living in Sweden (Darvishpour).

Quantitative research on women and migration has also yielded some interesting results. Donato (1993) used data for from a survey of 10 communities in Mexico and five Mexican migrant communities in the United States to investigate the determinants of female migration. She found that subsistence strategies used by

different households influence the likelihood of female migration. Family land ownership reduces the chances of migration for women because they are caretakers of land and livestock. However, in families that own businesses in Mexico, men usually stay home to run the business and women migrate to look for work. A woman's likelihood of migration also increases with education and decreases in households that include many adult members (Donato 1993). Using data from the Mexican Migration Project, which is a survey of households in 50 Mexican and 50 United States communities, Cerrutti and Massey (2001) examine the social conditions surrounding male and female migration and consider the degree to which moves are independent of or contingent on the movement of other family members. They found that in most households males migrate first while females follow parents or husbands and that 25% of men and 40% of women are introduced to international migration by a parent. Husbands' migration is an economic decision related to human and social capital, while wives tend to migrate more for social or family reasons than for economic ones. Nevertheless about half of wives work in the United States, as well as most daughters over age 15. The possession of legal papers is more important in promoting female out-migration than it is for males. Finally, unmarried sons and daughters show similar patterns of out-migration and have strong ties to human and social capital as well.

The feminization of Mexican migration is strongly related to a trend toward more permanent settlement in the United States (Marcelli and Cornelius 2001). There are many reasons why this is so. Women consolidate settlement by cultivating community-wide social ties, finding employment in relatively stable, year-round jobs and using institutional forms of assistance (Hondagneu-Sotelo 1994). Those who have children born in this country are especially likely to settle here (Marcelli and Cornelius 2001).

Because such children are United States citizens they are eligible for public assistance like Medicaid, the Women Infants and Children program (WIC) and sometimes food stamps. This makes settlement in the United States a little easier. Whether a wife migrates before, with or after her husband her presence removes the strongest incentive most men have for short trips to the United States (Lindstrom 1996). A study conducted in "Carpet City" Georgia revealed that most of the households in the city's rapidly growing Mexican population were families. Over three quarters of the survey respondents desire to live in Carpet City for at least the next three years and one fifth of female respondents were from families who own a home in Carpet City (Hernández-León and Zúñiga 2000).

While family migration has become more common, the presence of Mexican women in the United States is not the only thing that encourages migrants to join permanent settlements here. The accumulation of human and social capital deters return migration to Mexico (Massey and Espinosa 1997) as does the development of social networks (Lindstrom 1996). Finding employment in an urban area lowers the chances of return to Mexico for undocumented migrants, especially if the job requires special skills (Massey and Espinosa 1997). Yet undocumented people in some rural areas stay in the United States longer than they would like to because crossing the border is costly and risky (Lindstrom 1996). Possessing assets (car, house, business, etc.) in the United States also increases the likelihood that a Mexican does not intend to go home (Reyes 2001). The current economic system in Mexico is also promoting a permanent migration system, based on a lack of economic opportunities in the communities where migrants come from and permanent jobs in the cities and towns where they go (Roberts, et al. 1999). There is some evidence that if a household is

doing well in Mexico, members may migrate to the United States more permanently to build capital to invest back home (Lindstrom 1996; Reyes 2001). It would seem that the greater the household resources before migration, the longer migrants stay in the United States (especially if they are undocumented) (Reyes 2001). However, when migration networks mature and people of all social classes have a chance of making it in the United States poor, landless migrants may end up settling here because they have little to return to in Mexico (Wilson 2000). Or they may stay in the United States for shorter periods of time because they know they'll have to engage in circular migration and there's nothing to invest in back in Mexico (Lindstrom 1996).

Although changes in agricultural practices on both sides of the border are undermining the temporary migration system that has characterized the past (Roberts, et al. 1999) people still return to Mexico. Implied in every decision to enter the United States is a corresponding decision to stay or return home (Massey and Espinosa 1997). In a study based on data from the Mexican Migration Project, Reyes (2001) found that most Mexicans return to their home communities within five years of arriving in the United States. They return to Mexico because American dollars go further there and because they just want to go home (Lindstrom 1996). It is not surprising that feelings of homesickness are present in populations of people who live in places they were not raised in. Mexicans share the desire to return home with migrants in other parts of the world. For example, the majority of migrants in a 300 household survey in a squatter settlement in Lilongwe, Malawi indicated that they intend to return to their villages of origin. Despite temporary settlement in the city, villages are still considered home (Englund 2002). Certain occupations in both Mexico and the United States also seem to promote temporary migration. While urban areas have a variety of year-round jobs

(Lindstrom 1996), agricultural work is often seasonal. This explains why migrants who engage in farm work return sooner than those employed in the urban sector (Reyes 2001). Finally, women do not always lead to permanent settlement because many strategically secure savings for investment purposes at home (Reyes 2001). This keeps families with businesses in Mexico tied to Mexico. The chances of return migration also increase with land and home ownership in Mexico (Massey and Espinosa 1997).

In addition to other changes in migration patterns over the last 100 years "transnational" migrant communities have begun to emerge in North America. Transnationalism is a new concept that concentrates on continuing relations between immigrants and their home communities and on how back-and-forth traffic creates complex social fields (Portes, et al. 2002). Roberts, Frank and Lozano-Ascencio (1999) define transnational communities as groupings of immigrants who routinely participate in relationships, practices and norms that include both places of origin and destination. Transnational communities present people with alternatives to committing themselves exclusively to either the new society or the old.

The Mexican government has promoted transnational migration in place of permanent out-migration as a response to the potential loss of financial contributions (i.e. remittances and investments) to local and national development. This is accomplished by increasing migrant loyalty through the establishment of organizations like the Program for Mexican Communities Abroad (Roberts, et al. 1999). Moreover, shortly after NAFTA was ratified the Mexican government allowed its citizens to become United States citizens while maintaining Mexican nationality, recognizing the transnational identity of migrants (Johnson 2001). However, inexpensive and extensive telecommunication links and the large, relatively permeable border have permitted the

growth of transnational businesses based in the United States (Roberts, et al. 1999). Transnational entrepreneurs are part of the elite in terms of education and are more likely to be documented (Portes, et al. 2002).

In some areas of Mexico where migration is integrated into the local culture young men assume they will migrate in preparation for marriage. Many also expect to go to the United States frequently throughout their lives as family needs and personal circumstances change (Kandel and Massey 2002). Households that aren't doing well in Mexico are likely to rely on short periods of migration to the United States (Reyes 2001). The shift from agricultural work to urban occupations further increases the odds that a migrant will undertake another trip across the border, as does having a family that has lived in the United States or children born there (Massey and Espinosa 1997). Each act of migration leads to changes in individual motives, social structures and cultural values. The more a person migrates, the more pressure family members and friends put on him or her to take them to the United States and migration networks expand. Every new migrant added to the network reduces the costs and risks of migration, which in turn induces additional people to join.

Eventually a culture of migration may form that is distinct from the culture of both origin and destination communities. Origin communities may be seen as places of leisure and migrants may invest in infrastructure that reflects this (Massey, et al. 1994). As young Mexicans see their friends, family and neighbors improve their socioeconomic circumstances through working in the United States and hear stories of adventure they acquire aspirations that lead them psychologically to invest less in Mexico and more in migration. This increases the odds that they will leave school and eventually migrate themselves (Kandel and Massey 2002). Based on survey of 7,061 students in grades 6-12

in various communities in Zacatecas, Kandel and Kao (2002) found that cultural values in support of migration are transmitted primarily within family and kinship networks rather than more broadly within sending communities.

A final area of study within the migration literature considers what parts of Mexico migrants come from and where they go once they've crossed the border. The "historic region" of emigration to the United States includes Aguascalientes, Colima, Durango, Guanajuato, Jalisco, Michoacán, Nayarit, San Luís Potosí and Zacatecas. In 1924 it was estimated that 54.5% of all Mexican migrants to the United States came from Jalisco, Michoacán, Guanajuato and Coahuila. From the 1920s through the 1980s Jalisco, Michoacán, Guanajuato and Zacatecas are consistently in the top eight sending states. Since 1970 there has been a decline of migrants from the historic and border region and an increase of immigrants from Mexico City and the south of Mexico (especially Guerrero, Oaxaca and Chiapas) (Marcelli and Cornelius 2001).

Several theoretical models have been put forth as explanations for how migrants decide where to go. The "Immigration Market" model is associated with Borjas and uses a neo-classical economic approach. Potential migrants are wealth maximizers who enter an immigration market with different host destinations that have unique costs and benefits. Individuals make a decision to emigrate or not based on comparisons of different areas' costs and benefits. The "Stage Migration" model was first developed by Ravenstein in 1885, using census data on migration in and between England, Scotland and Ireland. The pattern is that migrants from rural areas move to rural towns that are abandoned by people moving to commercial and industrial core centers. In the "Chain Migration" model prospective migrants learn of opportunities and receive aid from previous migrants. This concept has been widened to "Network Migration," which

occurs in both internal and international migration and is related to social capital theory (Wilson 1994). Wilson (1994) tested these three theories with data from a *rancho* (a small agricultural community made up of several extended families) in Jalisco and found that migrants decide where to go in the United States based on the availability of network aid and preferred type/availability of work.

The types of migration networks that develop further influence where migrants end up once they've crossed the border. A single community may have a broad network that extends to several different towns in the United States. Places with work are anchoring points of networks, through which information is passed by word of mouth. The first people to land jobs help others from their home community or region to get them too. Acquaintances with weak ties provide information bridges about employment opportunities between denser network clusters and as networks expand new strong ties are formed through marriage and *compadrazgo*. In contrast, clustering of people from a single community in a specific place and center of employment is due mainly to strong ties (Wilson 1998).

Since the Immigration Reform and Control Act was passed in 1986 Mexicans have been venturing out of the southwest and have been settling in "untraditional" places like the Midwest and deep south. In 1990, the population of "Carpet City," Georgia, which is home to production and corporate operations of the top national and world carpet manufacturers was 93% white, four percent black, less than half a percent Asian and two percent "other." The 1990 Census reported 2,321 Hispanics in the county Carpet City is located in. By 1997 it was estimated that the county had 45,000 Hispanics (mostly of Mexican origin). Ethnographic observations and current numbers of Mexican children enrolled in school suggest that family migration and

settlement are significant features of the Mexican community. Mexican families in Carpet City tend to be young and in over 50% of households both men and women work. The poultry plant provides many immigrants entry into the local labor market, the carpet industry employs mainly immigrants as well and there is also a growing number of immigrant owned shops and businesses in the city. The authors identified three migratory waves to Carpet City. The first wave (1965-1986) consisted of trail-blazing men. A second post-Immigration Reform and Control Act wave (1987-1992) included some women and the third wave (1993-1998) was made up of more women than men who came from Mexico or another state. It appears that after 1986 Georgia became the most important destination for people making their initial move from Mexico ((Hernández-León and Zúñiga 2000).

In her study of immigrant populations and occupational structures in American cities, Linton (2002) found that immigrants either create specific jobs for themselves or go to areas with high labor market demand for specific jobs. The findings suggest that the size of the immigrant job sector is the result of change in a city's relative number of immigrants, not the other way around. There is some labor market competition between immigrants and American citizens but it occurs mostly outside the immigrant job sector (Linton 2002). Many cities in north Georgia have a high demand for labor as 10 of the top 14 poultry producing states are in the south. The poultry industry was drawn to the region in the 1950s and 1960s by a resident labor force of poorly educated African Americans and "hillbillies." Evangelical Christianity, racism and anti-union sentiments of the south kept workers docile and loyal to the plants. However, the civil rights movement increased educational opportunities that decreased worker tolerance for authoritarian labor control. At the same time, northern industries moved

to the south and attracted its labor force to their factories. Poultry processing became more industrialized and dangerous to meet a growing demand for poultry that began in the 1980s and plant owners found that immigrant labor was the best way to keep up with increased line speed and other production pressures (Griffith 1995). Mexicans and other migrants from Latin America were in a position to fill this labor vacuum. Escobar-Latapi (1999) has argued that if one immigrant population were barred from the United States, another group would take its place. It seems that migrants will also replace populations of American workers.

Sadly, it is no surprise that most Americans have not welcomed Mexican migrants with open arms. Migration leads to situations in which host communities experience as much culture shock as their new comers (Waldstein 2003). Like all forms of ethnocentrism, prejudice and discrimination against immigrants feeds on cultural misunderstandings and propaganda. Threats (both realistic and symbolic) in particular have been found to lie at the heart of prejudice (Stephan, et al. 1999). Moreover, in a cross-national study of attitudes toward illegal aliens Ommundsen, et al. (2002) found that in the United States and Europe attitudes toward illegal immigrants involve evaluations along three conceptual factors; costs and benefits to society, whether there should be open borders and free flow of immigrants and civil/human rights.

In 1997 foreign-born Mexicans residing in the United States made up only 2.7% of the total population (up from 1.7% in 1990 and 1% in 1980). The small percentage of Mexican immigrants in the United States suggests that concern about their numbers stems from their characteristics and geographic concentration (Marcelli and Cornelius 2001). Social scientists have noticed that increased family migration is especially threatening (Heyman 2001; Wilson 2000). Negative reactions to undocumented

immigration focus on the use of public resources and institutions by immigrant women and children (Wilson 2000). However, in their analysis of 25 migrant communities in Mexico and the United States Massey and Espinosa (1997) found that high wages and social welfare do not attract migrants from impoverished areas of Mexico. Instead migration is initiated in rural Mexican communities that have undergone development and industrialization, which raises local wages, draws women into manufacturing and creates a need for capital that is filled through international migration.

Taking a Marxist perspective Wilson (2000) argues that anti-immigrant legislation is aimed at re-separating the processes of production and reproduction/maintenance. Threats of massive deportations are meant to scare women and children back to Mexico. Restrictions on welfare benefits are meant to deny any government subsidy for reproduction and maintenance of the foreign born workforce and their dependents. Militarization of the border makes crossing more dangerous and it is hoped that while men will still cross they will discourage their wives and children (Wilson 2000). Yet at the same time policies meant to decrease the number of migrants entering the United States seem to end up increasing the number of immigrants (including women and children) who live here (Reyes 2001) and wreaking havoc on border environments (McIntyre and Weeks 2002). The modest effects of border enforcement and employer sanctions in deterring undocumented migration are offset by the more powerful effects of human and social capital accumulation the arise out of the migration process itself (Massey and Espinosa 1997).

The Los Duplex Case Study

As shown in figure 3.1, nearly half of my research participants (15) are from Michoacán. Five are from Guerrero, four are from Mexico City and three are from

Hidalgo. Mexico State, Nyarit, Puebla and Guanajuato are each home to two women. Morelos and Tamaulipas are each home to one. There are almost equal numbers of women from the countryside (19) and urban centers (18), though eight of the women who grew up in rural communities also lived in Mexican cities before migrating to the United States.

Figure 3.1. This map shows the Mexican states that my research participants come from. Numbers indicate the number of women who come from each state.

Five women in my sample come from small towns and 13 lived on *ranchos*. During unstructured interviews I talked to four women about what life was like for them in these rural areas. Doña Tina (63, rural Guerrero, *niñera*) was one of six children of a poor *campesino* (peasant) couple. In 1955, she married a man from one of the 60 or so other families on her *rancho*. Doña Tina's description of her home reminded me of life

in the highlands of Chiapas, only a Mestizo version of it. The community has no state services or public institutions save for a primary school and two churches (one Catholic, one Protestant). Members of the community work in the mango orchards of the *rancho* and grow corn and other subsistence crops. Other items must be purchased in the market of the nearest small town. One must also travel to town to receive professional health care. Doctors from town may make a rare house call for a severe case, but there are no doctors living on the *rancho*, nor are there pharmacies or clinics of any sort. There are still midwives on Doña Tina's *rancho* but they are disappearing as more and more women go to town to give birth.

Josefina (42, rural Michoacán, *pollera*-poultry factor-worker) and Elena (39, Mexico State, *pollera* worker) have spent parts of their lives on *ranchos* of similar size in Michoacán. These *ranchos* also had no doctors so people relied on medicinal plants harvested near their homes when they got sick. Knowledge of the appropriate use of these plants is passed from parents and grandparents to children and grandchildren. Luci (27, rural Puebla, *pollera* worker) came from a *rancho* in Puebla that is home to less than 100 people who make their livings growing corn, beans and other subsistence crops. Her community has more services than Doña Tina's, including both primary and secondary schools, a church and a Sunday market. The *rancho* is a 45-minute car ride from the nearest town and there is a car that makes two runs to town and back a day. However, most people travel by horseback. Again, there are no hospitals or clinics nearby so people use a lot of local medicinal plants. There are no doctors on the *rancho* but there are bonesetters.

The other half of my research participants grew up in urban areas. Four were from Mexico City, seven were from smaller cities and eight described their homes as

large towns. Although there's a vast difference between the largest city in the world and Yari's (37, urban Michoacán, waitress) hometown of a few hundred thousand in Michoacán these urban centers all have the complete suite of Mexican professional medical institutions (i.e. clinics, private doctors, hospitals, pharmacies). The availability of mainstream Mexican medicine in cities and large towns seems to have eroded neither women's knowledge, nor use of medicinal plants and other home remedies. Twelve of the 25 women who did freelist interviews about medicinal plants were from rural areas. The number of medicinal species included in the freelists of rural women ranged from three to nine, averaging 5.9 plants per list. The lengths of the 13 urban women's freelists ranged from one to eleven species, with an average of 6.1 plants per list. The average estimated knowledge scores (derived from the plant freelist data) of rural and urban women are also quite similar; 0.83 and 0.80 respectively. Moreover, I asked all 37 women who participated in the structured interviews to rate how often they use herbal remedies when they, or members of their households are sick on a scale of zero (never) to four (always). Women from urban areas reported more frequent use of herbal medicines than the rural women did (table 3.1).

Table 3.1. Frequency of herbal remedy use by Mexican Immigrant women from rural and urban areas.

Rating	Rural Women	Urban Women
0 (never)	4	1
1 (almost never)	3	1
2 (sometimes)	8	11
3 (often)	4	3
4 (always)	--	2

While a third of my research participants did not work outside the home in Mexico, regardless of whether they came from a rural or urban area, the sizes of their communities of origin pattern what occupations are open to women. Women in the rural areas are most likely to work in agriculture if they work outside the home, though one found work as a secretary, one as a domestic/nanny and one preparing and selling food. In contrast, women who grew up or spent time in cities have engaged in a variety of occupations, including secretary (3), shopkeeper (5), employee of someone else's small business (3), housekeeping (3), salon (1), gas company (1) and dental assistant (1).

One afternoon when I was watching some kids on the swings behind La Escuelita I ran into Yari's nephew. We chatted for a while about neighborhood happenings and somehow got onto the topic of work. When I asked how he could stand the long hours and overtime he just looked at me with a smile and matter of factly replied "Well, we come here to work." I found that most of my research participants shared this reason for migrating to the United States. Twenty women who I surveyed stated that finding work was the primary reason for venturing across the border. Another seven explained that while they came here to be with their husbands or other family members rumors of abundant jobs were a big selling point. Only 10 research participants migrated to Georgia to take care of their families and had no intention of working (although six of these women ended up entering the workforce after arriving in the United States). The decision to migrate to Athens was strongly related to kinship ties. Thirty-three women had a husband or other family member living in Athens prior to their own arrival and four women chose Athens as their destination in the United States because they had friends in the area. Although Teri left her husband temporarily because she was

pregnant and knew that Athens had good and relatively inexpensive medical services, she also chose Athens because she has three siblings who live there with their families.

The Mexican population of Athens is predominantly male. About half of the Mexican households in Los Duplex are made-up of 8-10 young men who are either single or have come to the area without their families to work in labor-intensive jobs. However there are also a growing number of families with three or four generations of relatives moving into the neighborhood. In 2001 Elois Ann Berlin (a professor of anthropology at the University of Georgia) led a group of students in a class research project in Los Duplex. The class surveyed 190 people in 42 households and found only five individuals over the age of 44. My research participants belong to 28 different households that are comprised of 156 people in total. Of these 156 individuals 12 were 45 years or older, four over the age of 60. I hypothesized that the immigration of families to Los Duplex would follow a general family stage migration pattern that would take place over the course of a few years. I expected young husbands to arrive first as a group of brothers and cousins, followed by new wives and mothers who would bring children and more adult siblings and cousins, while elderly parents and grandparents would be sent for last.

While over half (21) of the women surveyed were involved in family stage migration, migrants in only 13 households were lead by a male pioneer. The three women that I interviewed who were over age 60 followed their adult daughters to Georgia and three others came to Athens as single women because they had sisters living there. Two of the married women in my study actually came to the United States before their husbands. One took her daughter to Athens and lived with friends in a nearby county until the harvesting season in Michoacán was over, her husband joined

her and they set up their own household in Los Duplex. The other migrated with her adult daughters and was joined by her husband almost two years later. In addition to family stage migrants, about one third (13) of the women who I interviewed migrated to Athens as part of a family unit and three decided to come to the United States independently. While all three of the latter came to Athens because they had friends already living there, two were single mothers and one left her husband and adult children in Mexico.

Both the academic literature and the popular media are full of horror stories about crossing the border from Mexico into the United States without the proper papers. While I was living in Chiapas in 2001 the Mexican government required all buses heading north to play a public service video about the perils of crossing the border illegally. The *telenovela* (Mexican soap opera) that I watched in Chiapas had a character who migrated illegally despite protests from his wife and teenage daughter. He ended up dying alone, in the desert, cursing himself for not listening to his family and begging God to forgive him. For these reasons I never asked any of my informants to tell me what crossing the border is like, as such trauma was not the focus of my research. However, several women talked about the experience openly and I recorded a few of their stories in my field notebook.

One fall evening in 2002 I was visiting Yari when coverage of some Mexicans who had died in the Arizona desert came on the news. As we watched a video clip of undocumented migrants climbing the wall outside of Phoenix and fleeing from the border patrol, Yari pointed at the television and proudly exclaimed (in Spanish) "I did that, that was me. I did that, that's how I got into the United States." She and her eight year-old daughter were lucky that the border patrol didn't single them out and had a

reputable *coyote* waiting for them on the other side. Yari's mother Santos (69, urban Michoacán, *ama de casa*-homemaker) had a less exciting, but nonetheless arduous border crossing experience, which she described to me one night while we were waiting in the emergency room. Santos visited her daughter twice while she was living in California in 1991. Both times she crossed the border *mojado* ("wet-back" style). That is, by wading across the Rio Grande. This time she traveled from Michoacán to the border by car with a *coyote* and another elderly woman. They went to an official check-point where Santos met a young, documented family. She became friendly with them during the long wait and the family invited her to try to cross with them. The border patrol never asked Santos if she had a visa and she crossed with the family to the other side where another *coyote* was waiting to help her onto a bus to Georgia. Despite the relative ease she experienced at the check-point, Santos feels that the trip was hard on her health. The stress of the journey made her high blood pressure worse and she was put on blood pressure medication by a health department doctor shortly after her arrival in Athens.

While Yari and her family were able to accumulate enough savings to pay for a *coyote* who was willing to drive Santos all the way to an official border check-point, young, able bodied adults usually make at least part of the journey on foot. For example, the first time Teri migrated to the United States she flew from Mexico City to Chihuahua with her sister-in-law Elena and Elena's teenage daughter and infant son. They then walked six hours through the desert to the border and like Yari attempted to climb the wall. Elena and her children made it across the first time but Teri was apprehended and sent back. In fact, she crossed and was sent back two more times before she was finally able to meet up with Elena and the children on the other side. I

asked Teri if the border patrol mistreated her and she told me that she was lucky. They weren't bad they just sent her back to Mexico. Sometimes they can be very bad but in Teri's experience she feels they tend to go easier on women. After they were reunited the group made their way to the airport in Phoenix and boarded a plane to Atlanta. Teri described the journey through the desert as long and difficult but they had a good guide and a good guide (which costs around US$1800) can be the difference between life and death.

In June of 2002 Teri returned to Mexico to visit her parents, even though she was four months pregnant at the time. Although she was concerned she would have trouble crossing the border again her second crossing went very smoothly. Teri traveled to Ciudad Juarez with Oralia (28, urban Morelos, *pollera* worker) and her eight year-old daughter. They dressed up and put on make-up and walked over the bridge with only one small bag each. No one stopped them or asked them any questions. Immigration and Naturalization Service officers don't check everyone and decide to arrest and deport or let undocumented people go voluntarily. These decisions are based on perceived moral worth, national stereotypes and apparent social class (Heyman 2001), as Teri and Oralia's experience demonstrated. Once across the border, they hired a car in El Paso and made their way to another town in Texas where they stayed for a few weeks with Teri's nephew. Then they caught a bus back to Athens. When I asked Teri why crossing was easy for some people and lethal to others, she was quick to tell me that it's never easy- "sometimes its not as dangerous, but it's not easy."

Most of my research participants (29) were on their first trip to the United States and the remaining eight were all on their second. For all participants current trip duration ranged from six months to 13 years, with an average of 3.9 years. The women

who I interviewed had mixed feelings about life in the United States and most had both good and bad things to say about it (table 3 2). Twenty-five mentioned that they like living in the United States because there are work opportunities that pay better than most jobs in Mexico. One specified that she especially liked the fact that both men and women work in the United States. Nine women said they felt more secure in the United States than they did in Mexico and believe that laws offer more protections to the individual here. The United States was seen as a pretty place with lots of parks and green areas by seven women and four explained that they liked living here because it is cleaner. Seven women perceive that one can live better and more comfortably here and can afford to buy cars. Better schools, medical services, infrastructure (roads, climate control), stores, social services and entertainment opportunities were all mentioned by a few women as advantages of living in America. Only one said she liked the people.

Table 3.2. Advantages and disadvantages of living in the United States, according to Mexican Immigrant women.

Advantage	Frequency	Disadvantage	Frequency
More work opportunities	15	Racism and discrimination	11
Higher standard of living	11	Higher cost of living	6
The United States is safer	9	Poor public transportation	5
Higher wages	8	Low quality food	3
Nice environment	7	Limited freedom	3
The United States is cleaner	4	Undocumented status	2
Better schools	3	Cultural differences	2
Better medical services	2	Factory work	1
Better social services	2	Climate	1
Both men and women work	1		
Americans are nice	1		

In fact, the most commonly mentioned disadvantages of living in this country were racism and discrimination. Two women also talked about problems being an

undocumented worker in the United States, such as living in fear of *la migra* and not being able to visit Mexico. The high cost of living in the United States, the language barrier and poor public transportation systems were all mentioned by several women. Other complaints included a lack of personal freedom, an excess of fattening food, the climate, difficult factory jobs that provide no health benefits and cultural differences.

As shown in table 3.3, my research participants had mostly good things to say about Athens, which was commonly described as a quiet and beautiful town. Nine women said they liked Athens because there are good stores. Abundant jobs and no discrimination were each mentioned by two women. But another two felt there is a lot of discrimination against Mexicans in the poultry plants. However, the biggest complaint with Athens is that things are spread out and there's no good public transportation.

Table 3.3. Positive and negative aspects of Athens, Georgia, according to Mexican immigrant women.

Positive Aspects	Frequency	Negative Aspects	Frequency
It's a pretty town	15	Poor public transportation	9
It's a quiet town	11	Racism	2
There are good stores	9	Rent is expensive	2
There is no discrimination	2	Low quality food	2
There are a lot of jobs	2	There aren't many jobs	1
It's a clean town	1	Poor schools	1
There are nice houses	1	There are no fiestas	1
It's inexpensive to live here	1	Red clay	1
There are good restaurants	1		
There are night clubs	1		
There is gender equality	1		

Although most women were generally satisfied with their lives in Athens 19 said that Mexico (either their home community or another town) was the place in the world that they would most like to live. Eight desire to live permanently in Athens and six

would like to live in another part of the United States. Two women wish to live overseas and two couldn't decide where they would most like to live.

Summary

This chapter reviews the history of Mexican migration to the United States, current theories that explain this migration and information on the migration experiences of my research participants. Understanding the social, historical, economic and political forces that perpetuate migration from Mexico to the United States helps situate immigrant ethnomedicine in its appropriate context. Migration from Mexico to the United States has increased steadily over the past century. American economic activities in Mexico have created conditions that promote international migration. Efforts to control undocumented migration (such as the Bracero program and the 1986 Immigration Reform and Control act) seem only to increase it. Social scientists have developed several theories to explain undocumented migration. Most research suggests that migration networks and the build-up of social capital have made undocumented migration possible for millions of Mexicans. Migration networks also help determine where migrants go after they've crossed the border.

Like many Mexican communities in the United States, most of the Mexicans who live in Los Duplex are male. However, the undocumented migration of Mexican women and children is increasing quickly and Los Duplex is no exception to this pattern. Women and children follow or accompany husbands, fathers, siblings and friends to Los Duplex. A few of my research participants even migrated to Georgia without or before their husbands. Although there are disadvantages to life in the United States, most women have good things to say about life in America and are happy with their decision to migrate.

Chapter 4: The Los Duplex Environment

The Physical and Biological Environment

Los Duplex takes up an area of land roughly 1/10th of a square mile in a hilly part of the northwest corner of Athens. The subdivision is bounded by a thin wooded buffer zone on the north and east sides and *carretera* (highway) on the west and south sides (figure 4.1). The whole neighborhood slopes down toward the east. The land is Georgia red clay that is mixed with sand in some spots and covered with a thin layer of topsoil. A drainage ditch runs from north to south through the eastern half of the subdivision's interior. Its depth ranges from three feet on the northern end to 10 inches at the southern tip. After a good rain there's usually flooding in and around the ditch.

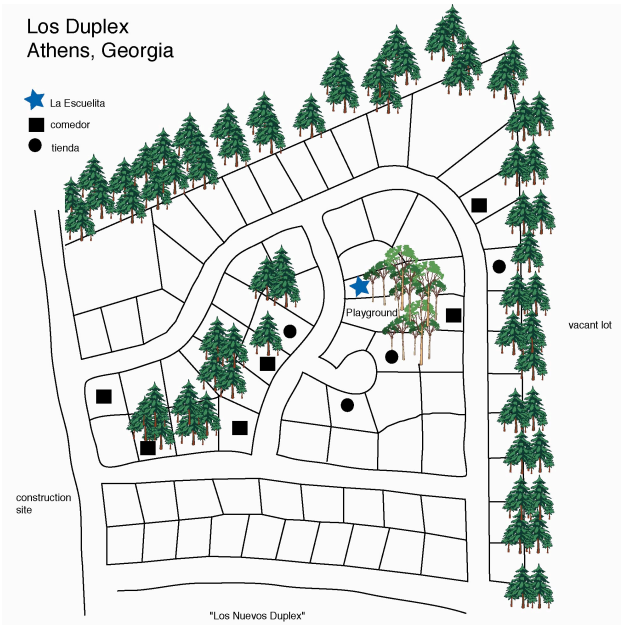

Figure 4.1. This map of Los Duplex shows the location of the playground, La Escuelita and "small businesses" that existed at some point during my fieldwork.

All the buildings have small front and back yards that are, with rare exception covered with grass. Some lots also have ornamental hedges and trees on them. Lawns and hedges are mowed and trimmed regularly by the property manager and tenants are encouraged to keep small gardens around their homes. Gardening is a pass-time for many women in Los Duplex and over 10% of the subdivision's Mexican households kept small vegetable, flower and herb gardens throughout the study period.

Figure 4.2. The property manager of Los Duplex encourages residents to keep small gardens in front of their homes.

Chiles were the most common vegetables grown, followed by tomatoes. A few families also planted corn and banana trees. Yerbabuena was the most common medicinal plant grown in Los Duplex, one of my research participants had a basil garden in front of her apartment and three others have collections of more delicate perennial medicinal plants that they pot and keep inside during the winter (figure 4.2). Because Los Duplex is an older neighborhood it's environment includes a fair amount of mature

trees (various pine and oak species). There are two wooded areas in the interior of the subdivision that the kids are afraid to walk through unaccompanied after dark.

The human inhabitants of Los Duplex share their environment with domesticated dogs and chickens, feral cats and wildlife, such as birds, squirrels, lizards and insects. Fear of dogs is common among the Mexican children of Los Duplex and the adults are ambivalent toward them at best. However, the superintendent who is Mexican keeps a dog, as well as several of the neighborhood's African American families. Chickens are the most common domesticated animals kept by Mexican households and are valued for both eggs and meat. Families periodically purchase chicks at *La Pulga* (a local flea market that has taken on a distinctly Mexican character over the past five years) and keep them in cages in their yards. When the chicks get a little older they are allowed to roam around the house but are herded back in their cages if they stray too far. Little kids are curious about the chicks and try to play with them. Parents usually discourage this because the kids are sometimes too rough with them. Full grown chickens are allowed to run freely though the neighborhood and although they tend to stay clear of the road they have been rounded up by animal control on occasion. Cats are more numerous in the neighborhood than dogs but only one Mexican woman who I met in the neighborhood kept a cat as a pet. Feral cats tend to congregate in the northeast corner of the subdivision and live off small rodents and human trash. People in Los Duplex don't have too much direct interaction with the area wildlife. However, boys will sometimes catch frogs and bugs and on one occasion some 12-year old girls rescued a baby squirrel that fell out of a tree. Cockroaches are a problem in some apartments and flies are ubiquitous in the summer, apparently attracted by a nearby horse farm.

Climate

Athens is 600 to 800 feet above mean sea level and because of its geographic location, the city is sheltered from much of the extreme weather of the winter season. Nevertheless, the winters are much colder than what most migrants have experienced in Mexico. Many people find Georgia summers more intense as well. I began my fieldwork in the spring when the climate of Athens is its most pleasant. During this season the region may get a fair amount of rain (March is the wettest month with an average of 5.46 inches of rain), but the temperature is warm enough to feel comfortable. Spring doesn't last long in Georgia and the summer heat arrives by the end of May. Temperatures range from 85-105 degrees Fahrenheit throughout the summer, which lasts until the middle of September. While it is still very humid between May and September, Georgia suffered a drought for several years prior to my research. Average rainfall drops to well below four inches a month during the summer. The fall lasts only two months and it gets colder and wetter quickly. October is characterized by extreme vacillations between hot, sunny days and cold, rainy ones. Over the previous seven years there has usually been snow or an ice storm in late December or early January. The average temperature ranges from 33 to 53 degrees Fahrenheit in winter but it is not uncommon for temperatures to drop below freezing or rise above 70 degrees Fahrenheit. By mid-March it starts to warm up again.

The Living Environment

When I first started working in Los Duplex all three roads that cut through the interior of the subdivision had speed bumps on them. These were removed however, when the streets were repaved about half way through the study period. There are no sidewalks in the neighborhood but the roads have broad shoulders that are easy to

walk on. Streets and driveways are full of cars, heavily in some areas. Only one of the 28 households involved in the study did not have a car and the rest averaged 1.5 vehicles. Three yards of single male households had cars in them that were being worked on. There is one motorcycle in the neighborhood that belongs to an African American man. Bicycles (and tricycles, bigwheels and plastic cars) are frequently seen in the yards of households with kids. Kids don't lock-up their bicycles and they may be picked up by another when left unattended. Most kids remember to bring borrowed bikes back to where they found them, but La Escuelita staff members have had to teach them to ask permission before riding off with someone else's bike. When the weather is tolerable (spring-early summer and fall) the people of Los Duplex spend a lot of time outside. Many apartments have seating (plastic chairs, back seats from cars, picnic tables) on the front patio. Patios and yards of households with kids are also littered with toys. There is not much garbage in the streets, yards or wooded areas, with the exception of beer bottles and periodic debris from La Escuelita activities on the playground. I have never seen the property manager or city picking up trash so I suspect residents are conscientious about keeping their neighborhood clean.

The 97 or so residences in Los Duplex that Mexicans live in come in three floor plans. Eighty are two bedroom duplex apartments (figure 4.3), in which the front door opens to a large living room with a dining area off to the right. If you walk through the dining area you reach the galley kitchen with a backdoor at the end that opens to a small concrete patio. To the left of the dining area is a hallway with a bathroom and small bedroom to the right, a large bedroom on the left and a sizable linen closet at the end. Both of the bedrooms have standard size closets as well. Seventy-eight of the ranch style duplexes have vinyl siding and roofing and two appear to be made of brick.

There are four brick town house-style duplexes in the neighborhood, with six apartments occupied by Mexicans (figure 4.4). In these apartments the front door opens to a landing with two steps down into a living room, with a kitchen off the back and a staircase leading up to two bedrooms and a bathroom. On the back wall of the kitchen there is a sliding glass door that leads out to a wooden deck. Nine of the rest of the Mexican households in Los Duplex are single occupancy, vinyl-sided houses (figure 4.5) with front doors that open into one large living, dining and cooking room. Off the middle of the left side of the room is a hallway with a bathroom and small bedroom on the right and two small bedrooms on the left. The remaining two units make up a unique looking and slightly larger ranch-style duplex that is sided with wood. I have never been inside these apartments.

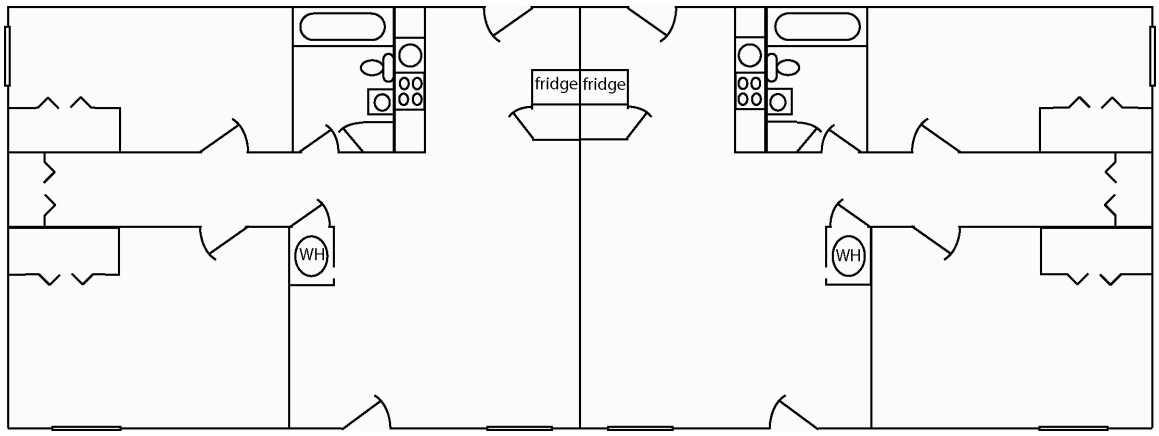

Figure 4.3. Floor plan of one-story duplex apartments (not to scale).

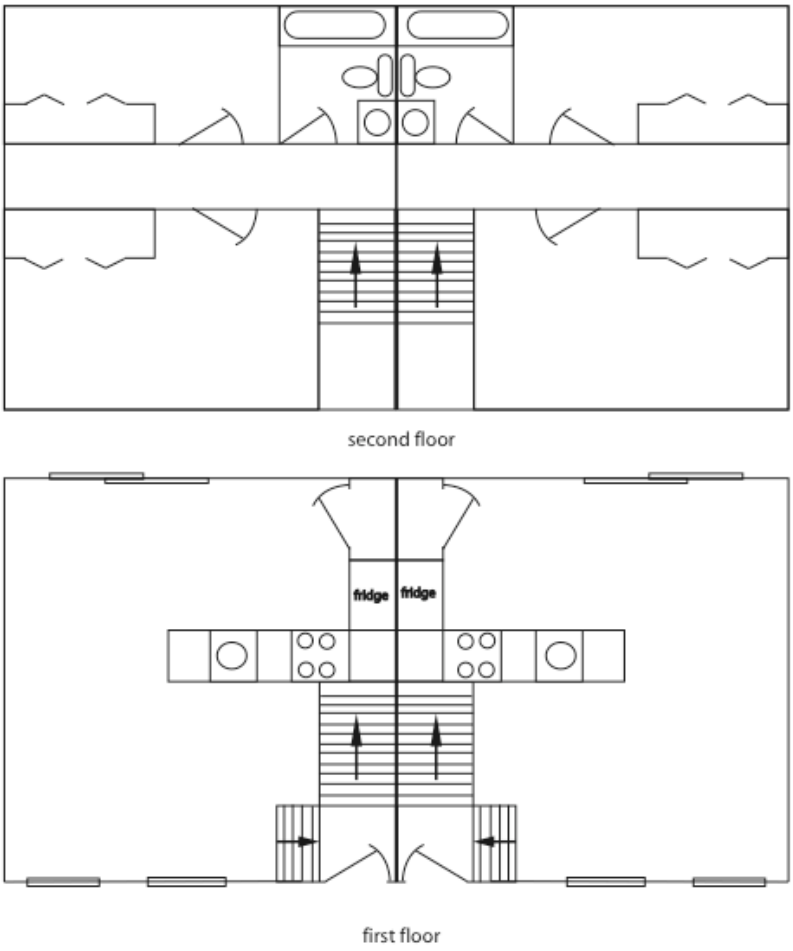

Figure 4.4. Floor-plan of two-story duplex apartments (not to scale).

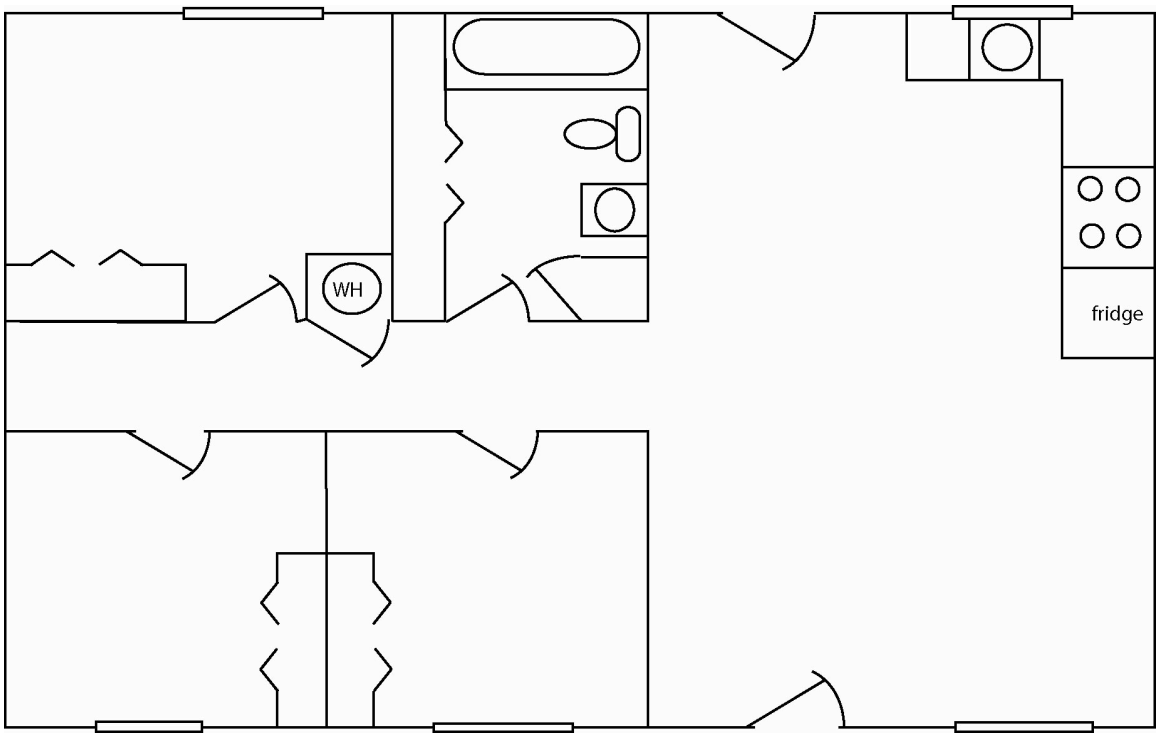

Figure 4.5. Floor plan of single-unit dwelling (not to scale).

With rare exception all Mexican households in Los Duplex have a standard suite of living room furniture that includes, at minimum, a couch and an entertainment center. Many living rooms also have chairs and/or loveseats, coffee and/or end tables and shelving. A few have bookcases. On top of the entertainment center, even in the poorest of Los Duplex households, sits a television and usually a stereo. In addition, family photos, knick-knacks and embroidered or crocheted doilies adorn most entertainment centers (figure 4.6). In the homes of children living spaces are full of toys; matchbox cars and action figures for boys and Barbie dolls and educational toys for girls. At times, these toys cover the entire living room floor. In some homes the living room is also used as a workspace for computers and sewing machines. During the study period between four and eight households served as *tiendas* (small stores) that

sell various items, including sodas, candies, chips, prepackaged tortillas, canned goods, cigarettes and telephone cards, which are displayed on walls, tables and shelves near the front door.

Figure 4.6. The entertainment center is the focal point of the living area of Los Duplex households.

In the dining areas of all Los Duplex households is at least one table and set of chairs. Several residents have a microwave oven on the dinner table because they don't have room for one in the kitchen. In some households the dining area is also a workspace. During various portions of the study period between three and six women operated small *comedores* (small restaurants run out of Mexican homes) out of their kitchens. These women prepare food in their kitchens and on their patios to sell on the weekends. On Friday, Saturday and Sunday nights customers eat at the dinner table and additional tables may be set up in the living area. When I was living in Chiapas I ate at several *comedores* of this style.

All of the units in the neighborhood come with a refrigerator, electric stove with grease hood, sink and dishwasher (often broken) in the kitchen. There are washer/dryer hook-ups in all kitchens as well and eleven of the households included in my sample have clothes washers and dryers. Women who operate *comedores* use the space intended for laundry machines to store large gas grills, griddles and steamers. Despite the small size of Los Duplex kitchens there is a fair amount of cabinet space that is used to store dishware, drinking vessels and cookware. The typical set of cooking equipment in a Los Duplex kitchen consists of a metal *comal* (griddle), several large stainless steel soup pots, frying pans and sauce pans, cooking spoons and spatulas, various cutlery and one or more cutting boards. All kitchens, except those in the single occupancy dwellings also have small closets in them that are used to store dried goods. Cleaning supplies are stored under the sink and trash is kept outside on the patio or deck.

Sleeping arrangements vary with the size and social composition of households and in large families the common living space also serves as a sleeping area. Bedrooms all have at least one full size bed and several of the large ones have two. When closet space is scarce bedrooms are also furnished with dressers and wardrobes to hold clothing. A number of parents kept cribs for their infants in the bedrooms, but more often than not they were storage space for baby accessories-diapers, rags, bibs, toys, etc. Although some bedrooms are densely packed with clothes and entertainment, baby care and luxury items the ones that I saw were clean and organized. Mothers of infants spend a fair amount of time in the bedrooms during the day watching their babies nap, but in households with older children bedrooms were used only by members who work third shift.

Bathrooms all have a small linen closet, vanity sink, mirrored medicine cabinet, toilet and bath with shower. The states of repair of these fixtures are as varied as the quality of the kitchen appliances. Although bathrooms in many units have not been renovated since the neighborhood was first built and are worn and stained many women try to make them look nice with paint and decorative items. They are also cleaned regularly with commercial products from the Mexican groceries.

While yards and the outsides of dwellings are maintained and painted regularly, the property managers do not re-paint the insides of the apartments between tenants. Nor have they replaced the original 1970s carpets that are still found in many units, though tenants are allowed to rip them out and re-carpet or install linoleum on the floors as long as they cover the expenses and do the work themselves. Nevertheless, housewives and most working mothers make deliberate efforts to decorate their families' apartments in an aesthetically pleasing manner. I noticed three distinct decorating styles in the homes I visited. Fourteen apartments that I visited had white walls, neatly painted and decorated with religious prints and pictures of children (figure 4.7). Many also had plastic plants and *cuadras* (sets of wall decorations that some Mexican women in Athens sell through various direct sales companies). Ten of these units were carpeted with relatively new, though invariably stained tan pile carpets while the other four were floored with institutional beige linoleum.

The walls of nine apartments were painted with vivid shades of teal, green, peach, pink and blue and decorated with *cuadras* and family photos (figure 4.8). Six were decorated with fake plants as well and floored with the beige linoleum. The other three had dark institutional carpets on the floors and in the winter had real plants that are intolerant of cold. The third style, which was found in five households, was the most

spartan (figure 4.9). It included white walls that had obviously not been painted in many years and were decorated with only a few family photos and calendars from local Mexican grocery stores and restaurants. These apartments were also floored with old, dark institutional carpets.

Figure 4.7. The most common decorating style among the family households of Los Duplex includes festively decorated white walls.

Figure 4.8. Brightly colored walls are also popular in Los Duplex

Figure 4.9. The apartments of the poorest households in Los Duplex go unpainted and undecorated, but still have televisions and stereos.

The Cultural and Social Environment

Community Life

Los Duplex is a low-income, working class neighborhood. Most men and women in the community work in poultry processing plants and other types of factories (table 4.1). In addition to factory work some men find jobs in construction or stone-casting and a few women work in local Mexican restaurants and businesses or as housekeepers for hotels. As an alternative to these largely backbreaking jobs many women in Los Duplex also work in the informal economy. Some earn extra income by babysitting neighborhood children who are too young to go to school. Others sell miscellaneous convenience items. Until the property owners stepped in during fall 2002 selling food like tacos, gorditas and tamales from the home was another lucrative income-generating activity and the primary source of income for a number of families in Los

Duplex. When I started fieldwork in April 2002 food was prepared and sold on the weekends by five households in Los Duplex. By August at least two other women moved into the neighborhood and opened their own food vending businesses.

Twelve of the households in my sample are made up of extended families. Nine extended family households include two (and rarely more) adult siblings with their spouses and children. Two include three generations of relatives and one is composed of two cousins and their families. Nuclear families (i.e. one or both parents and their children) are the next most common form, found in 10 of the households in the sample. People from more than one family lived in the remaining six households. Half of these multi-family households included two or more friends from the same community in Mexico while the other three were nuclear or extended families that took on a single male "border."

Table 4.1. Occupations of Men and Women in 28 Los Duplex families.

Occupation	Men	Women
Agriculture	2	--
Babysitting	--	5
Construction	4	--
Cookie Factory	--	2
Disco	--	1
Food Vending	--	4
Home Making	--	6
Housekeeping (Hotel)	--	2
Poultry Factory	27	26
Record Store	--	1
Restaurant	2	2
Stonecasting	5	--
Taxi Driving	1	--
University Golf Course	1	--
Wal-Mart Freezer	2	--
Looking for Work	3	3

Household income depends on the number of working adults in a given home. Due to the level of risk involved, the poultry factories actually pay a reasonable hourly wage (US$7.00-US$9.00 per hour) compared to the cost of living in Athens. The work is also full-time (eight hours a day, five days a week) although plants have been known to close early on occasion. Other factories pay a bit less than the *polleras*, but construction work and stonecasting are competitive with them. Housekeeping and restaurant jobs pay about US$6.50 an hour. Of the occupations in the informal economy, food vending is by far the most lucrative and some women have been able to support their entire households by preparing and selling food on the weekends alone. Teri worked as a food vendor during the six weeks I lived with her and I was able to observe the whole operation closely. She spent roughly US$100 each week on ingredients and netted an average profit of US$150-US$250 in weekend food sales. The sale of convenience items brings in considerably less, about US$60-US$100 per week. Childcare is the least profitable home business of all, relative to the amount of work involved as the going rate is only US$45-US$50 per child, per week.

Aside from metropolitan Atlanta, the cost of living in Georgia is lower than in most parts of the United States. For residents of Los Duplex, rent (US$425 per month) and utilities (US$100-US$200 per month) are their greatest expenses. The cost of food obviously varies with household size but is the next greatest expense for most families. Nuclear and extended families tend to shop, cook and eat together, while food is usually purchased and prepared separately by each family group in a multi-family household. Most women, even those who work outside the home try to cook for their families on a regular basis. The three women who I had the chance to go grocery shopping with on at least one occasion bought mostly unpackaged foods like fruits,

vegetables, dried beans, cheese and meat and spent about US$50-US$60 on an average week's groceries for their families. The maintenance of automobiles (which may or may not include auto insurance) is another significant expense for many families. Clothing, household items and some foods are generally purchased at *La Pulga*, as well as small discount (dollar) stores. Wal-Mart is considered a more upscale place to purchase such items and on the few occasions I accompanied my research participants there they dressed up and put on make-up.

Because Los Duplex is a rental community none of its residents own their homes. Thus cars are the only major assets possessed by my research participants and their families. Families that include at least two members with full-time employment are able to save enough money to buy a used car or truck within the first year of migrating to Athens. Occasionally, Mexicans will finance new cars under their work names (i.e. the names of the people from whom social security numbers were purchased). As the husband of one of my research participants explained to me, one of the only benefits of being an undocumented worker in this country is the ability to stop making such car payments when resources become tight without fear of ruining one's credit. Aside from car loans the people of Los Duplex do not commonly purchase anything on credit. An exception is one household that is headed by a man who was granted amnesty under the Immigration Reform and Control Act of 1986. About a year before my study began, while in between jobs this man took out a loan for several thousand dollars with a local credit agency. By the time I finished my research the family was still in debt and could not run from it, since the man had used his real name.

Despite the relatively low cost of living in Georgia many families in Los Duplex periodically have trouble making ends meet. Generally this happens when one or

more members of a household are in between jobs. While factory work is fairly steady it is not unheard of for workers to be laid off or lose their jobs unexpectedly. Extended families are a great source of help during these times but sometimes women find it necessary to seek out some form of *ayuda* (public assistance or charity donation). By far, the most common form of public assistance among my research participants was Medicaid for children born in the United States. Athens Regional Medical Center has also helped support many families through its surprisingly well-funded low-income assistance program. The program covers all hospital expenses for eligible applicants for one year and can be reapplied for on a yearly basis as needed. I have never met anyone from Los Duplex who applied for the program and was turned down. The service was taken advantage of by all 13 women who gave birth just before or during my study as well as two others who I accompanied the emergency room, the husband of one of my research participants who was hospitalized for a heart attack and another who became an outpatient of the hospital's diabetes clinic. The hospital also employs social workers (some bilingual) who help new mothers enroll their children in Medicaid and the Women, Infants and Children (WIC) program and put single moms in touch with other social workers.

However, renewing Medicaid applications (which must be done every year) involves an appointment at the county Department of Family and Child Services, which is always a very frustrating experience that requires the help of an outside interpreter. New clients must make an appointment to talk to a county social worker on one of the two days a week that are set aside for new cases. At the initial appointment clients meet with their assigned caseworkers who help them fill out application forms for the type of assistance they are seeking (usually Medicaid and food stamps). Clients are

told what supporting documents (birth certificates, proof of residence, paycheck stubs, etc.) their applications require and are given a deadline for turning them in. Applications can take up to two months to process and contacting social workers to check on the status of an application is virtually impossible due to their heavy case loads. Notification of acceptance or refusal is sent by mail (in English). Medicaid applications are almost always accepted but Mexican immigrants are not eligible for food stamps in Georgia unless a member of the household is a legal resident of the United States.

Church organizations that offer assistance to families in need are numerous in Athens and generally do not discriminate based on faith or immigration status. Catholic Social Services is arguably the most important source of support for the Hispanic population of Athens. They offer interpretation and translation services, English classes at several different locations throughout Athens, job search assistance and limited legal counseling services. Catholic Social Services also operates a small thrift store and refers clients to area churches that donate small amounts of money to families who have trouble paying their bills. There are also two emergency food banks in Athens that require referrals from a licensed social worker, which are fairly easy to come by. The food banks make generous donations to eligible families, but they include a lot of American packaged goods that many Mexicans are unfamiliar with. Moreover, churches and food banks rarely have someone on staff who speaks Spanish so Mexican families must find bilingual Americans (friends, anthropologists or Catholic Social Services volunteers) to help them access these forms of assistance.

Los Duplex is not only a poor community, but also has the reputation of being one of Athens's "bad" neighborhoods. For this reason it has been the focus of Social

Work students and local missionaries since the mid 1990s and the local paper has covered several successful projects. In 1999, the playground was built behind La Escuelita, which gave both children and their families a place to play and gather. University students have also worked with residents on improving the appearance of the community. Vandalism, especially graffiti is common in Los Duplex so to prevent their homes from being tagged two households had murals of *La Virgen* (the Virgin of Guadalupe, the Patron saint of Mexico) painted on them (figure 4.10). Two years have passed since they were painted and the vandals have respected them.

Figure 4.10. The patron saint of Mexico discourages vandalism.

Recently however, Los Duplex has been portrayed in the newspaper as a violent, crime-infested place. This reputation is not unfounded and nearly all the women I interviewed complained about alcohol induced rowdiness and noise on the weekends. The life of a man who has migrated to the United States without family is difficult and

lonely. Single migrants work hard during the week and party just as much during their time off. For most Mexican men this involves alcohol and for some, other drugs. In the United States, where guns are not hard to find, arguments have been known to turn deadly. Gunfire is commonly heard late at night in Los Duplex on Fridays and Saturdays. While it is usually just drunks making noise with their firearms, stray bullets are dangerous, especially in a neighborhood where lots of children play outside. A few months after the study period ended there was a fatal shooting in front of La Escuelita one Saturday afternoon. Since the speed bumps were removed there have also been problems with people driving too fast and some women also complained about the absence of sidewalks.

In addition to tensions between family and single male households, there have also been periodic problems between tenants and the property owner. One of the most intense conflicts involved the food vendors. During the beginning stages of my fieldwork I interviewed four women who made their livings selling food. They invited me to stop by and sample their wares some Friday, Saturday or Sunday night. When I took them up on their offers I was stuck by how out in the open food vending in Los Duplex was. Knowing that preparing food to sell from the home violates American zoning and health codes, I asked my informants if the property manager or police ever gave them any trouble. They told me that the landlord had known about food vending for over two years and that he had even bought food from them on Friday afternoons, when he was in the neighborhood working late. However, in September 2002 the food vendors all received a notice from the property owner- written in English- that informed them that if they did not stop selling food immediately they would be fined and evicted. This caused quite a stir in the neighborhood. Several women ignored the notice and

continued to sell food. Two weeks later they found warrants posted to their front doors. They were required to either pay the owners a fine of $300 or show up in court and be evicted.

Rumors quickly spread that the property was under new management and it was a new landlord who had sent out the notices. I knew that the property had not changed hands. But I was surprised by the landlord's sudden change of heart. So I talked to him about it. He admitted to allowing small-scale food vending to go on in the community for a while, but explained that he thought the sale of food was starting to cause other problems in the neighborhood. He went on to describe how he showed up in Los Duplex one Saturday night and found the streets and yards completely full of parked cars. Recognizing the potential hazards of this situation and associating the traffic in the neighborhood with the sale of food, the landlord felt he had no choice but to aggressively shut down all food vending operations. Imposing steep fines was the only way he knew how to convince his tenants to obey the law.

This situation caused a lot of hardship in the community. One family couldn't pay the fines and had to leave the neighborhood. In another household a diabetic man with circulation problems in his legs had to look for work in a chicken factory when his wife had to stop selling food. What made the situation even more difficult for community members to understand was that they didn't realize they were breaking the law. While preparing and selling food at home violates health codes and zoning regulations in most parts of the United States, this is not the case in Mexico. Most streets in Mexican cities, towns and villages of all sizes are colorful mixtures of homes and businesses. Communities aren't parsed into separate residential and commercial zones like they are here. When I lived in Jalapa, Veracruz there was a doctor's office next

door to my house, a convenience store across the street and a pizza place on the corner. In San Cristóbal de las Casas, Chiapas I lived in an apartment between a mechanic and a small pharmacy. Across the street there was a restaurant and two little groceries. Even when I lived in a Mayan town there was a bar next to my house and a little pharmacy/convenience store on the next block. In general these businesses are operated out of people's homes.

Residents of Los Duplex must sign a lease agreement to rent a duplex or house in the community and it does warn that preparing and selling food on the premises is against the law. But the landlord hasn't translated the lease into Spanish. Food vendors in Los Duplex had no idea that there's a law prohibiting their way of supporting their families. Preparing and selling food from the home is a common occupation for women in Mexico. When Los Duplex residents migrated to Georgia it never occurred to them that this practice might be against the law. When I explained why selling food at home is against the law in Georgia women were quick to acknowledge that the landlord had the right to ask them to stop. And they were willing to follow the rules. But they were less forgiving about the aggressive approach the landlord took to enforcing the law. He handled things the way he did because he didn't realize his tenants were unfamiliar with the concept of zoning. He also believed the food vendors caused traffic problems and encouraged other violations by attracting customers from outside the community.

Despite the hazards that arise from both Mexican neighbors and cultural misunderstandings with Americans two thirds of my research participants had good things to say about living in Los Duplex. Four women felt that Los Duplex was a very pretty neighborhood with lots of trees and green areas for children to play in and two

went so far as to call the neighborhood quiet. The location of Los Duplex was also seen as an advantage because it is close to Hispanic stores, parks and laundromats. However, the most commonly cited benefits of living in the subdivision were La Escuelita and the Mexican cultural orientation of neighborhood, which both help foster a sense of community in Los Duplex despite all the tension. During the course of the study period three community wide events took place on the playground. The first was a Cinco de Mayo party sponsored by La Escuelita. While this event was mainly focused on the neighborhood children their families were all invited and a few actually showed up. More popular among neighborhood women was a yard sale organized and run by several local churches. Members of participating congregations donated items, which were set up and sold behind La Escuelita. The community event that most resembled the *fiestas* (festivals) that I attended in Mexico was also sponsored by a local Baptist church. Again, this gathering was mostly for the benefit of the neighborhood children who enjoyed face painting, games and a moonwalk, but also included a live band and yard sale that attracted the most adult women I had ever seen on the playground at any one time.

Women seem to appreciate the events that outsiders organize in their neighborhood, however most of their social lives revolve around gatherings of family and friends. Baby showers and birthday parties are the most common types of celebrations in Los Duplex. While only women are invited to baby showers and birthday parties range from small get-togethers at home to large parties at rented facilities they all have three things in common; food, gifts and games. Because baby showers are supposed to be a surprise the food is planned and prepared by the hostesses (sisters and/or cousins of the guest of honor). Depending on how much the family wishes to

spend on a child's birthday party, food is either prepared by the women of the household or a neighbor is hired to cater the event. As with American baby showers, gifts include baby supplies such as clothing, blankets, bottles and toys. All of the women who were pregnant during my study were eager to know the sex of their unborn children. Thus, by the time a baby shower is thrown (sometime during the last two months of pregnancy) guests know whether to shop for a little girl or boy. Toys and clothing are common birthday gifts for children, however if it is a first birthday all of the guests are expected to give the child clothes. This way the mother has everything she will need for her son or daughter during the coming year. I went to only one birthday party for an adult and gifts were not given. At all of the parties I went to both children and adults were encouraged, if not expected to participate in a variety of games. Games are led by one or two female friends or relatives of the hostess and involve a lot of physical activity (figure 4.11). Many reminded me of things I've seen on Mexican game shows.

Figure 4.11. Games are typically played at all types of Mexican parties. Guessing the flavors of various baby foods is a game played at both Mexican and American baby showers.

While celebrations of holidays like Christmas and New Year's Eve tend to include only extended family and perhaps a few close friends, parents seem to invite everyone they know to their children's birthday parties, especially if they have rented a hall or picnic area for it. Throwing a large party strengthens ties with neighbors and appears to be more effective at expanding social networks within Los Duplex than are the community events organized by outsiders (see chapter seven for a more detailed discussion of social networks in Los Duplex). While the phenomenon of not knowing one's neighbors is increasing in American society, many Mexican families of Los Duplex have good relationships with at least some of their neighbors. Often this is the direct result of migration networks. Families are attracted to Los Duplex by members of their home communities who have already established residence in the neighborhood. Families from the same origin communities in Mexico help each other adapt to life in the United States.

In 1966 Rubel characterized the social system of a Mexican American community in the lower Rio Grande Valley of Texas, as atomistic. Visiting between households was discouraged, except by close family members and people outside the immediate family were perceived as dangerous and antagonistic. In Los Duplex I observed relationships develop between neighbors who come from completely different parts of Mexico. Sometimes children set this process in motion. Mothers become friendly with each other if their children regularly play together on the playground, at La Escuelita or at school. *Vecinos* (people who inhabit the two apartments of a duplex) also become quite friendly with each other, as do people who live a few doors down or across the street from one another. I have seen neighbors offer each other various forms of support (though not nearly as much as they give to

members of their own families). For example, men and women who drive will regularly advise neighbors who don't when they go to the store and ask them if they would like to come along or if they need anything to be picked up. On rare occasions neighbors may even go so far as to indirectly support each other financially. For example, when Gabi (28, urban Hidalgo, *pollera* worker) and her husband threw a large party for their son's baptism they hired their *vecina* Teri to cater the event because she was currently out of work and in need of cash. Eventually, Gabi and Teri developed such a close relationship (largely due to the fact that Teri cared for Gabi's son while she and her husband were at work) that I heard them refer to each other as *comadre* (co-mother) on occasion. However, this is the only case of *compadrazgo* (co-parenting) ties that developed between neighbors who did not know each other before moving to Los Duplex that I encountered.

Family Life

Kinship in Los Duplex follows the typical Mexican pattern, which is reckoned bilaterally. Kinship terms commonly used in Los Duplex include *padre* and *madre* (ego's father and mother), *abuelo* and *abuela* (ego's grandfather and grandmother), *hijo* and *hija* (ego's son and daughter), *nieto* and *nieta* (ego's grandson and granddaughter), *primo* and *prima* (ego's male cousin and female cousin), *tio* and *tia* (ego's uncle and aunt), *sobrino* and *sobrina* (ego's nephew and niece), *esposo* or *esposa* (ego's husband or wife), *suegro* and *suegra* (ego's father in-law and mother in-law), *cuñado* and *cuñada* (ego's brother in-law and sister in-law) and *yerno* and *nuera* (ego's son in-law and daughter in-law). Although Mexican culture is known for being male-dominated the women of a nuclear family tend to stick together throughout adulthood. More women followed sisters to Los Duplex than they did brothers.

Furthermore, the two elderly widows in my study came to Los Duplex to be with their daughters. As Josefina and Oralia explained to me, it is always preferable for a widow to live with her daughter's family rather than her son's because a daughter will take better care of her than will a daughter in-law.

Family has been described as the single most important cultural institution for people of Mexican descent. The residents of Los Duplex are no exception. Familism refers to a strong identification and attachment of individuals with their nuclear and extended families and strong feelings of loyalty, reciprocity and solidarity among members of the same family. Familism among Hispanics has been proposed as a possible explanation for the relative ease of adaptation of Hispanic immigrants and for the better mental health profile of Hispanics as compared to other groups. The Hispanic family is an emotional support system made up of a cohesive group of lineal and collateral relatives in which members can find help on a regular basis. Hispanic families protect their members against external physical and emotional stressors and act as a natural support system (Sabogal, et al. 1987). In a study of familism and acculturation among Mexicans, Cubans and Central Americans living in the United States Sabogal, et al. (1987) found a high level of perceived family support, regardless of acculturation levels, which they described as the most distinctive feature of Hispanic familism. However, perceptions of family obligation and family as referents decreased with increased acculturation. The authors concluded that first generation Hispanics have a well developed sense of familism even though migration can disrupt social networks and decrease contact with family members. Hispanic culture emphasizes mutual help and interdependence among family members and close friends. Hispanics also value spending time with friends and relatives, which has important

psychological benefits for relieving stress and expressing love. As described in the next chapter, the women of Los Duplex likewise feel that spending time with and supporting the members of one's family is essential for maintaining health. I also observed near constant mutual support (from a sympathetic ear to financial assistance) among members of extended families.

The Life Cycle

Because family is so important to Mexican women (see Kay 1977) being a mother and caring for children are considered qualities that, ideally every women should possess (Wallace 2001). The reactions of my research participants to my childlessness ranged from mild amusement to pity. The number of children my research participants have given birth to ranges from 0 to 12, with an average of 3.2. Large families are the norm among the older women in my study, but most of the women under 30 consider the small size of the average American family a positive thing. These women, as well as their husbands felt that two or three children were enough. A few of my younger research participants went so far as to ask me about birth control options in the United States.

Nevertheless, 13 of the women who participated in this research were pregnant or had a newborn during the course of the study and all of them received regular pre-natal care. Teri moved to Athens to receive pre-natal care at the Clínica de Mujer Hispana, a private bilingual practice. While I gave Teri rides to many of her appointments she never needed an interpreter. However, the Nurse Midwife clinic at the public hospital in Athens, which is covered by their Low Income Assistance program, was far more popular with my research participants (though only their receptionist speaks Spanish fluently). The *clínica de parteras*, as it is commonly referred

to by Mexican women, primarily serves low income Hispanic and African American women with normal/low risk pregnancies. High-risk pregnancies are referred to a private obstetrician who is affiliated with the hospital, but not covered by Low Income Assistance. Women must also see the obstetrician for ultrasounds. Patients of the Nurse Midwife clinic are seen every two to three weeks and visits usually include screening for pregnancy related diabetes, fetal heart rate and growth monitoring and counseling on various pregnancy related issues. Patients are also given pre-natal vitamins, which the pregnant women in my study were conscientious about taking. I didn't encounter any culturally proscribed dietary restrictions among pregnant women, although several explained that they had to avoid spicy and acidic foods during their pregnancies because they gave them heartburn. Women who were employed when they got pregnant continued to work until the sixth or seventh month of their pregnancies.

All of the women in my study who had a baby in Athens gave birth in the public hospital. Fortunately, these births were all normal and mothers were able to take their newborns home after spending only a couple of days in the hospital. Family members, especially sisters look after new mothers and their babies while they are in the hospital and when they return home. Newborns sleep a lot during the day, as well as at night. Sometimes they are left to sleep alone on the parents' bed during the day but usually they are placed carefully on the couch in the common area, with a fleece blanket so their mothers and/or other household members can keep an eye on them (figure 4.12). Older babies (three months to one year) spend a lot of their waking hours in car seats, other types of baby chairs or swings. Until they are able to walk, only those babies who belong to a household with new carpeting are allowed to play freely on the floor. When at all possible newborns and older babies are taken outside only when the

weather is warm and dry. If it is necessary to take infants out on a rainy day they are dressed in several layers of warm clothing and are transported in a car seat that is covered with a fleece blanket. If babies are taken outside in their car seats on days when the sun is especially strong they may be covered by a blanket as well.

Figure 4.12. Newborns spend most of their days napping on the couch.

Breast-feeding was common among my research participants, at least during the first few months of a baby's life and only three of the 13 women who had an infant during the study did not nurse them at all. Infants who are breast-fed are allowed to nurse whenever they cry from hunger. The age at which babies are weaned depends on when and if their mothers go back to working outside the home, but I never encountered a child in Los Duplex who continued to be nursed beyond one year of age. Seven mothers stayed home to care for their babies instead of returning to work and one woman was fortunate enough to share her household with her sister who

looked after her baby when she went back to work. Another new mother had a sister in a different household in Los Duplex who babysat both of her children. The other four mothers left their babies with neighbors.

Children who can walk and talk (ages 2-3) are no longer considered babies. Young children (under age 5) in Los Duplex are watched over by either a parent, an older sibling or a neighbor. Nine households that participated in my research include young children. The young children in seven of these households stay at home with at least one parent and/or older sibling during the day and the other two stay with a neighbor who makes her living as a *niñera* while their parents are at work. Married couples with young children do their best to coordinate work schedules so one parent works during the day and the other does the night shift. A few couples were fortunate enough to find jobs that allowed one spouse to work in the morning and the other to work in the afternoon.

Despite past reports of child neglect and abuse in Los Duplex I found that the parents who participated in my research were very concerned about the well-being and safety of their children. During the study period several mothers agonized over the decision to work or remain at home with their young children. Mothers who chose to work left their young children only with neighbors who were known and trusted, if a family member was not available to take care of them. Nevertheless, children are not always supervised closely enough to keep them out of trouble. For example, one afternoon while I was working with Yari, her 10 year-old daughter burst through the door and announced that two kids were missing. Confused we went outside and found that five women and two men were combing the streets of Los Duplex in search of two small boys who had somehow opened the front door and left their house while their mother,

who works the night shift at a *pollera* was napping. Shortly after we arrived on the scene another kid showed up to inform everyone that the children had been found. It seems that their older brother, who drives a van from Los Duplex to the *polleras* passed by and saw the boys alone in the front yard. Without wanting to wake his mother he picked up his brothers and took them with him. Clearly, the long and untraditional work hours that many Los Duplex mothers keep sometimes interfere with their desire to ensure the security of their children.

Young children are generally restricted to playing inside their houses (or their *niñeras*' houses) or in the yard. Kids who are looked after by older siblings may find themselves brought to a friend's house in the neighborhood or to the playground. A few especially independent young boys who live adjacent to the playground are allowed to play there unsupervised (though there are virtually always other community members or volunteers from La Escuelita around to keep an eye on them). Young kids in Los Duplex have lots of toys, especially those who are restricted to playing indoors. It was not uncommon for me to find the living room floor literally covered with toys when I arrived at the homes of families with young children. However, despite the overabundance of toys young kids are encouraged and seem to enjoy playing with cousins and neighbors of the same age group.

Older children (ages 5-12) spend most of their days at one of Athens's public elementary schools, which vary in quality and calendar. When a Los Duplex child is registered for school in Athens for the first time, parents are asked to rank the five schools on their side of town in order of preference. Even parents who have recently migrated to Athens are aware of the reputations of its various schools and know which ones have strong academic programs and good teachers. Unfortunately the best

schools have waiting lists so most Mexican children end up at the bottom ranked elementary school, which happens to have a year-long calendar. The school day begins at 8:00 in the morning and lasts until 2:00-2:30 in the afternoon.

Figure 4.13. The playground in the center of Los Duplex attracts neighborhood children, who spend much of their free time outside.

When not in school most kids are allowed to roam freely throughout the neighborhood (though a few mothers did not want their daughters to wander around without a volunteer from La Escuelita accompanying them). Aside from babysitting younger siblings, children are not expected to do much work around the house. While some girls help their mothers or aunts with housecleaning, play is encouraged during free time, as long as homework has been finished. Boys and girls tend to play separately but not always. I often observed girls playing Mexican versions of games like "Ring Around the Rosy" and "London Bridge." Boys spend much of their time riding bicycles, but girls enjoy this activity as well. La Escuelita and the playground attract most of the neighborhood children during weekday afternoons (figure 4.13). There they

receive help with their homework and can participate in various indoor and outdoor activities. Playing educational computer games is the most popular indoor pastime followed by coloring contests, board games and intermittent art classes. When the weather is agreeable most kids who go to La Escuelita prefer to play outside.

I had very little interaction with or opportunity to observe teenagers during my fieldwork. It seems that once children begin junior high school they become "to cool" to go La Escuelita. Only six of the women who participated in my research had children in junior high school and none had high school age kids. Because the population of Los Duplex is so young it remains to be seen whether students will generally finish high school (and perhaps go on to college) or drop out to work as soon as they are able. According to the director of La Escuelita, parents who migrate to Georgia with children who have already completed *la secundaria* (junior high school) in Mexico question the value of enrolling them in high school in the United States.

The teenagers of Los Duplex (especially the boys) can best be described as "youth at risk" and there is some evidence of gang activity in the neighborhood. This activity usually goes no further than spray painting gang names and symbols on La Escuelita and various residences in the neighborhood. However, I did witness a little "gang fight" one summer afternoon. Due to budget limitations the summer program at La Escuelita can only serve children ages five through 12. Thus, last summer a small group of African American pre-teens were able to attend the program, while a group of Mexican boys who were in the same grade, but age 13 and over could not. On the day of the fight I was watching the pre-teens play kick ball with one of La Escuelita's camp counselors. The game was interrupted when two of the players, who happened to brother and sister, took their sibling rivalry a little too far. We had to separate them

when they started cussing at each other, which is against the Boys and Girls club code of conduct. I was talking to the sister, trying to figure out why she was so upset with her brother when we heard the commotion. I saw the counselor running toward a pile of fighting boys and ran toward them as well. One of the African American pre-teens was on top of a Mexican teen while another African American was punching him in the face. The Mexican's friends were watching the fight and were about to jump in but the counselor broke it up before they had a chance. As the counselor was checking to see if the Mexican boy was all right the African Americans began to throw rocks at the other Mexicans. Fortunately they didn't hit any one and I was able to scare them into stopping (hell hath no fury like an angry, frightened anthropologist).

The Mexicans ran off and the counselor and I took our campers inside to try to calm them down. They claimed the Mexican boy threw the first punch, which may very well have been true but certainly did not excuse their behavior. We got word that the Mexican boys were coming back to the playground and everyone ran back outside. The Mexicans were walking in formation and all carried large sticks. The African American boys tore their shirts off and got ready to fight again, but luckily the counselor was able to stop the fight from happening. The director called the police anyway, just to make sure there would be no more trouble and they immediately sent four squad cars to the neighborhood. The pre-teens received a long lecture from the police and were suspended from the summer program for a few days. But because the Mexican boys ran off when the police showed up and were not associated with the summer program they received no punishment. After the fight one of my research participants showed up at La Escuelita to check on her six year old son. She witnessed the whole

incident and told me that the Mexican boys were responsible for the graffiti in the neighborhood, but residents were wary of informing the authorities.

While there are some troubled youths in the neighborhood the adults of Los Duplex (with the exception of single men who have problems with alcohol) can be described as peaceful, honest, hardworking people. Wallace (2001) studied Mexican women's perceptions of ideal and actual qualities of men and women and found that while women feel men who drink excessively are usually violent, unfaithful and disrespectful, they describe their own husbands as "good men." Getting married and starting a family are taken seriously by both men and women and certainly discourage the destructive behavior that is associated with teenagers and drunks in Los Duplex.

Table 4.2. Marital Status of Research Participants

Marital Status	Frequency
Single	3
Married	28
"Common Law"	2
Separated	1
Widowed	3

Twenty-eight of my research participants were currently married and another two had what might best be called a "common law" marriage (see table 4.2). The majority (26) of these women were married in Mexico and migrated to Georgia before, with, after or without their husbands. The other two came to Athens while they were still single and met their husbands here. In both cases the weddings took place in Mexico and the newly married couples returned to Athens together and set up residence in Los Duplex. Mexicans have two surnames (their father's first surname followed by their mother's first surname) and Mexican women do not change their names upon

marriage. This causes quite a lot of confusion among representatives of American public agencies and institutions because the father, mother and children of a Mexican nuclear family have different last names. The stereotype of the male dominated Mexican family is present in Los Duplex but spousal relationships appear to be changing with exposure to American culture. Because both men and women migrate to the United States to work, it's not uncommon to find men who help out with childcare and even household tasks if their wives have full-time jobs outside the home.

According to the women I interviewed a Mexican is considered elderly (*una persona grande*) when s/he is gray-haired and all of his or her children are grown. My research participants included only three elderly women. Two were widowed and lived with their daughter's families and one lived with her elderly husband, daughter and grandchildren. All four of these elderly individuals who ranged in age from 63 to 76 actively contributed to their households. The two widows came to Athens to help their daughters with childcare and household tasks. Although the elderly man went through long periods of unemployment he worked odd agricultural jobs whenever he was able. His wife was a *niñera* for several neighborhood children.

Fortunately, none of my research participants, nor members of their families died during my fieldwork. Thus, I never had the opportunity to observe wakes or funerals or talk to people about death. However, the uncle of a pre-teen girl who I knew from La Escuelita was killed in a car accident during the beginning stages of my fieldwork and after the study ended the brother of one of my research participants was murdered. In both cases, the families desired to send their deceased loved ones back to Mexico for burial and went door-to-door collecting contributions from their neighbors to cover these expenses.

Summary

This chapter has described physical, biological and cultural aspects of the Los Duplex environment, to provide further context for Mexican immigrant ethnomedical beliefs. Los Duplex is an older neighborhood, partially surrounded by mature trees. The interior of the subdivision also has a lot of plant life, including yards, gardens and wooded areas. While some of the buildings in Los Duplex are less than a decade old, most of the apartments are much older, unpainted and floored with stained, smelly carpets.

Los Duplex is a low-income neighborhood and even the more affluent Mexican households, experience periodic financial difficulties. There is some gang-activity in Los Duplex, as well as vandalism and violence caused by drunks. Still, during the week most neighborhood children are allowed to play freely outside (for there are volunteers from La Escuelita and neighbors to keep an eye on them). The family households of Los Duplex exhibit high levels of Hispanic familism and even unrelated neighbors may be called upon for favors and support during difficult times. Most people in Los Duplex also have active social lives that include various parties and occasional community-wide events.

Chapter 5: Health and Sickness

Descriptions of Health

It is essential that any attempt to understand the health beliefs and behaviors of Mexican immigrants includes an understanding of their concept of health (Bruhn 1997). Thus, the first step in determining whether women in Los Duplex consider themselves and their families healthy was eliciting their definition of what health actually is. In the public health literature good health "represents a minimum condition for full participation in most dimensions of life, including the ability to work and be steadily employed, to consistently attend school and to learn, to socialize and engage in one's community, and to participate fully in activities and relationships that create a sense of wholeness and well-being" (Iannota 2003:1). In their study of immigrant women in Canada, Meadows, et al. (2001) found that their research participants generally defined health in a holistic sense, including physical, mental and spiritual aspects. But when discussing concerns related to personal health physical factors were the most emphasized. The holistic definition of health was operationalized in terms of ability to function in their daily roles.

One of the earliest investigations of how health is defined by a Hispanic population was Schulman and Smith (1963). Their research was done among Spanish speakers in rural New Mexico and Colorado, which at the time of study was relatively isolated from the surrounding Anglo culture. The study participants included three criteria for a healthy state; a high level of physical activity, a well-fleshed body and the absence of pain. More specifically, being able to work, having good posture and strong blood and not being lazy were considered indications of good health. While

obesity was virtually absent in the community being large was associated with health and bigger people were thought of as stronger and able to do more physically demanding work. A full face with good skin tone and color was also considered a sign of good health. Even people with chronic conditions may consider themselves healthy at the moment if they are not in pain. Finally, happiness and friendliness were two additional factors associated with health.

When asked to describe a healthy person the 13 women who I interviewed about health and sickness discussed appearance, energy level and both physical and emotional feelings. While six women mentioned that a person could be sick without realizing it or showing it, nine talked about what healthy people look like. A healthy person has color in her face and is not pale. Likewise, the eyes have a healthy color and look clean. During one of the group interviews Teri (who worked at a hair salon in Mexico City) explained that "*el pelo dice cosas de salud* (the hair says things about health)." Someone with thick, shiny hair is healthy. The four other members of the group agreed enthusiastically. Most importantly, the face of a healthy person is happy and smiling.

> Anna. "*Y siempre puede saber si una persona está sana o enferma por como ve*?"
>
> And can you always know if a person is healthy or sick by how they look?
>
> Luci. "*Pues si, porque si está sana, está contenta, su cara está feliz y si está enferma, se ve triste, demarcada.*"[12]
>
> Well yes, because if one is healthy, they are content, their face is happy and if one is sick they look sad, it shows.

[12] Quotes in Spanish are taken directly from transcripts of tape-recorded interviews. Though all of my research participants are native Spanish speakers, most were not educated beyond secondary school (i.e. eighth grade). Thus, they speak a dialect of Mexican Spanish that may be considered grammatically incorrect by more educated Spanish speakers. I have paraphrased the English translations to make them more readable.

Nine women characterized healthy people as active and energetic. They have the energy and desire to go out and to work (though Josefina joked that when she feels good she doesn't want to go to work). Healthy people also walk a lot and don't get tired easily. They even have enough energy to play games and make jokes.

> Enida. *"Pues se siente mucha a..a..a energía como para actuar en cualquier actividad que uno tenga que hacer. Y ninguna necesidad de sueño. Ningún dolor. Y más de todo un buen humor."*
>
> Well, you feel a lot of uhhhh energy like for achieving in whatever activity you have to do. And you have no need to sleep, no pain. And most of all you're in a good mood.

> Yari. "*Bueno para mi una persona saludable es que todo tiempo está bien, contenta, está movimiento todo el tiempo. Porque una persona enferma todo el tiempo está cayado, no se mueve no más está sentado, no mas está sentado o acostado y una persona sana, no. Quiere estar todo el tiempo movimiento para allí para acá, jugar, hace chistes y todo."*
>
> Well, for me a healthy person is well, happy, is moving around all the time. Because a sick person is always fallen down, he doesn't move, he is sitting nothing more. Nothing more than sitting or lying down, and a healthy person isn't. They want to be moving all the time, here, there, playing, making jokes and all.

> Juana. "*Pues cuando está uno sano, pues uno está llena de vida. Tiene uno gusto de caminar de platicar de reír y buen estar de jugar. Está uno bien."*
>
> Well when one is healthy well, one is full of life. One takes pleasure in walking, in chatting, in laughing and well-being in playing. One is well.

Eight women described healthy people as free from pain, three stated they do not have any type of sickness and another two listed symptoms that they do not experience.

> Juana. "*Cuando uno está sana pues no le duele a uno ni el cuerpo, ni tiene uno ganas de vomitar uno está, está uno bien. Que está uno sana."*
>
> When one is healthy well, one's body doesn't hurt, nor does one have desires to vomit. One is, one is good. One is healthy.

> Yari. "*Bueno, no malo. No siente ningún dolor ni cuando esta no siente ningún dolor ninguna molesta ni mareos ni nada."*

> Good, not bad. You don't feel any pain, nor does this person feel any pain, any bother, nor dizziness, or anything.

Finally, all 13 women talked about the emotional state of healthy people. During one of the group interviews Lorena (21, urban Michoacán, retail sales) explained that to really know if someone is healthy you have to talk to the person to find out what kind of mood she is in. Words used to describe the mood of healthy people included *buen* (good), *alegre* (joyful), *contenta* (content), *feliz* (happy), *a gusto* (at pleasure, at ease), *tranquilo* (tranquil) and *optimista* (optimistic). One woman also noted that healthy people don't suffer from depression and another described healthy people as *llena de vida* (full of life).

> Luci. "*Se siente uno bien, anda de buen humor todo el día, no se enoja uno para nada.*"
>
> One feels well, goes about in a good mood all day and doesn't get angry about anything.

> Mari. "*Tu te das cuenta cuando la persona es, está pues está activa. En la cara - no se, es alegre.*"
>
> You realize when the person is, well is active. The face - I don't know, it's joyful.

> Raqi. "*Pues una persona saludable se supone que no tiene ninguna clase de enfermedad, y que te de bien de salud. Está feliz, la persona, que está bien no se enferman y está feliz.*"
>
> Well a healthy person I suppose that they don't have any class of sickness and that you get good health. You are happy, the person, that is good they don't get sick and is happy.

> Santos. "*Bueno, con mucho gusto, con tranquilidad.*"
>
> Well, with a lot of pleasure, with tranquility.

Health Status

Each generation of Mexican migrants that comes to Athens has distinct health issues and healthcare needs. The women in my study who were under the age of 40 consider themselves to be in good overall health. On a scale of one (horrible) to seven (excellent) most rated their health a five (table 5.1). Only two reported suffering from

any chronic condition and all stated that their health has stayed the same (20) or improved (5) since moving to the United States. Research participants were also asked to rate how often they get sick in Athens on a scale of zero (never) to four (almost always). Most of the women in this age bracket rated the frequency they get sick a "one" or a "two" (table 5.2). The most common health problems that these women encounter in Athens are *gripa* (colds) and indigestion.

Nevertheless, many women in this age group did require professional health care services on occasion. As described in the previous chapter, 13 women under the age of 40 were either pregnant or had an infant during the study period. Young mothers desired both pre- and post-natal care, as well as hospital care during their deliveries. Moreover, 13 women in this age bracket have worked in a *pollera*. I found a general consensus that working in the chicken factories has adverse health effects, particularly back and joint pain, colds and respiratory distress due to the cold temperatures at which factory floors must be kept. These conditions cause concern and lead some individuals to seek professional medical treatment.

The 12 research participants who were 40 and older rated their health slightly lower than the younger women did (table 5.1). Only three older women felt their health was better here than in Mexico, five thought it was the same and four perceived a decline in health since moving to the United States. Older women also appear to get sick more often than the younger cohort (table 5.2). In women 40 and over eight reported that they suffer a chronic illness. The illnesses reported were diabetes, heart disease, hypertension, asthma and migraine, which all require serious medical attention. Additionally, five women age forty or over work in the poultry plants and experience the same health effects as the younger women.

Table 5.1. Self-assessment of health on a scale of one to seven.

Rating	Women under 40	Women 40 and Over
1 (horrible)	--	--
2 (very poor)	--	--
3 (poor)	--	2
4 (ok)	3	5
5 (good)	20	5
6 (very good)	1	--
7 (excellent)	1	--

Table 5.2. The frequency Mexican immigrant women get sick.

Rating	Women under 40	Women 40 and Over
0 (never)	1	--
1 (almost never)	11	4
2 (sometimes)	12	6
3 (often)	1	2
4 (almost always)	--	--

All 37 women who participated in the structured interviews were also asked to rate how often their children, husbands and/or other adult household members get sick using the same five-point scale. The health of adult household members was generally perceived to be good (table 5.3). The most commonly reported health problems of adult household members were *gripas* and allergies. However, three research participants had husbands with diabetes, two had husbands with asthma symptoms, two had husbands with high cholesterol and another woman's husband suffered a heart attack during the study period. The 30 research participants who lived in Athens with children under the age of 18 perceived them to be healthy overall. Mexican children were reported to suffer common childhood ailments like *gripas*, ear infections, fevers and rashes. However, four of my research participants had children with asthma symptoms that became quite serious at times and another two reported that their sons had kidney problems.

Table 5.3. The frequency children and adult household members get sick, according to Mexican immigrant women.

Rating	Adults	Children
0 (never)	1	2
1 (almost never)	11	7
2 (sometimes)	22	16
3 (often)	3	5
4 (almost always)	--	--

Advice on How to Maintain Health

All 13 women who participated in the health interview appreciate the fact that health must be maintained. Eight talked about the importance of good dietary practices, because a good diet can help you avoid getting sick.

> Enida. "*Yo creo que con tener una buena alimentación, pues escapan muchas enfermedades. Y luego de tener una buen alimentación yo creo que no, sin buena alimentación que… que… que causa la enfermedad.*"
>
> I believe that with having a good diet, well you escape many sicknesses. And aside from having a good diet I believe that no, without a good diet that… that… that causes sickness.

Guendelman and Abrams (1995) found that women who were born in Mexico consume more protein, vitamins A, C and folic acid and calcium than both Mexican women born in the United States and Anglo Americans. For my research participants a good diet includes vegetables, fruits and plenty of water. Two women mentioned that large amounts of meat are not good for you and three suggested that taking additional vitamins is a good idea.

> Anna. "*Y como mantenerte saludable?*"
>
> And how do you stay healthy?
>
> Luci. "*Pues yo pienso que comiendo bien, dormir bien, comer cosas saludables, verduras, frutas.*"
>
> Well I think that eating well, sleeping well, eating healthy things vegetables, fruits.

> Mari. "Que tenga buenos hábitos de comida. Alimentarse bien comiendo verduras y tomando mucha agua."

That has good habits of food. Nourish themselves well, eating vegetables and taking a lot of water.

Anna. "*Y que podemos hacer para mantener la salud mas o menos y para evitar los enfermedades?*"
And what can we do to maintain our health, more or less and to avoid sicknesses?
Gabi. "*Ay pues no se, como comer mucha, tomar vitaminas, verduras.*"
Ay well I don't know, like eat a lot, take vitamins, vegetables.

The nutritional composition of the diet alone is not enough to ensure the benefits of healthy eating. One must eat foods that agree with the body and should be mindful of balancing the humoral[13] qualities of food and drink with the body's humoral condition. Two women also pointed out that it is important not to overeat.

Juana. "*Para uno estar bien necesita uno comer bien cosas que te caigan bien, está uno sana.*"
For one to be well one needs to eat good things that sit well with you, that is healthy.

Gabi. "*No tomar cosas frías. El único que hago es no tomar cosas frías y me pongo pomadas calientes, como la de la tía*."
Not drinking cold things. The only thing that I do is not drink cold things and I put on a hot pomada, like that of the aunt.

Yari. "*Pues yo digo que...una persona sana para estar sana, pues hacer ejercicios, no comer así bastante.. a que como de todo pero no, no mucho. De poco todo y que no este...pues si que no anda en... que de alguna forma no se dejen triste no mas siente uno la alegría.*"
Well I say that.. a healthy person in order to be healthy, well doing exercises, not eating so much...ah I eat everything but not, not a lot. A little of everything and not this… well if you don't go about in… a way to not leave yourselves sad, feel only joy.

[13] Humoral medicine is perhaps the most widely studied naturalistic theory and encompasses both the causes of sickness and the cures. Humoral theory is based on the work of Hippocrates, Galen and Avicena and continues to flourish in many parts of the world, especially Asia and Latin America. Contacts between India and Greece (or the Islamic world) are obvious and account for the incorporation of humoralism into Ayurveda. Humoral medicine may have been introduced to China and adapted to the traditional yin/yang system, from the Greeks or from Ayurveda (Foster 1994). There is no consensus among medical anthropologists about whether humoralism was brought to the New World by the Spanish, or was independently invented there. Currently, in most humoral systems found today, health is a state of balance between "hot" and "cold" humors. Sickness results from imbalance and treatments (foods or medicines) are designed to restore balance. In most humoral systems a healthy body at equilibrium is slightly warm. Cold is considered more harmful than heat (Foster 1994), though in Malaysia health is associated with coolness and sickness with heat (Laderman 1987).

In addition to a good diet, the women I interviewed mentioned several other behaviors that contribute to the maintenance of good health, including exercising and staying active, being in a good mood, caring for oneself and others and paying attention to the body. Five women mentioned exercise specifically and another explained that if you are active in your job and daily routine, there is no need to do additional exercises.

> Yari. "*Nosotros no mas por como decir, con la pura activación de que hacer o de eso en el día hasta las 4 de la tarde allá deja uno de trabajar ya lo trabajo por nada pero todo el día todo trabajando y eso pues eso es mucho ejercicio porque por allá los trabajos son pesados. Y por allá los trabajos son pesados entonces ya no tiene uno que hacer ejercicio en las tardes o eso, ya no mas se baña uno y descansar. Y tomar mucha agua también.*"
>
> > We, nothing more than how to say it, with purely the activities that there are to do, or in the day until 4 in the afternoon there one leaves work now having done nothing but work all day, all of it working. And this well, this is a lot of exercise because here the jobs are heavy, then, now one doesn't have to do exercise in the afternoon. Now nothing more than take a bath and relax. And drink a lot of water too.

As a population, Hispanics have been characterized in the public health literature as sedentary, because they engage in less leisure time physical activity than other Americans (see for example Morales, et al. 2002; Perez-Stable, et al. 1994). However such research is limited by the fact that it usually doesn't consider incidental, transportational and occupational activities of Hispanics living in the United States. A notable exception is a study by King, et al. (2001), which supports Yari's statement that people can get enough exercise throughout the day if they are active in their jobs. Using NHANES III data the authors found that having a physically active occupation, such as waiting tables, cleaning and working in agriculture, factories or construction decreases one's likelihood of being obese. For people who engage in little to no leisure

time physical activity, the chances of being obese can be cut in half with a physically active occupation.

Staying calm and avoiding anger contribute to good health as does thinking happy thoughts. Paying attention to the body helps one to notice signs of sickness before they become serious and allows one to eat foods and do exercises that are in agreement with the body. Elena stated that "*cuando se cuida más se enferma menos*" (when you take care of yourself more you get sick less). Like eating well, exercising, staying calm and paying attention to the body, getting enough sleep is an essential part of taking care of oneself. Three women also stressed that it is also important to enjoy the company of and care for friends and family.

Advice for maintaining health also included engaging the mainstream health care system. Five women emphasized the importance of getting regular medical check-ups, because sometimes we might be sick without realizing it.

> Enida. "*Muchas veces se nota en como se ve la persona y hay muchas enfermedades que a la vista no nos podemos que notar. Y muchas veces no nos podemos sentir hasta tener un chequeo médico.*"
>
> Much of the time you note it in how the person looks and there are many sicknesses that by sight we can't note. And many times we can't feel them until we have a medical check-up.

> Anna. "*Y para mantener la salud pues comer bien, hacer ejercicio y algo más?*"
>
> And to maintain health well eat well, do exercise and anything else?
>
> Mari. "*Umm ir al médico cheqarse regularmente con el médico.*"
>
> Umm go to the doctor, check yourself regularly with the doctor.

Some women also mentioned receiving vaccinations and listening to public health messages in the media as a way to stay healthy.

> Luci. "*No recibieran sus vacunas que se deben tomar cuando uno es pequeño para creciendo, esta persona que se enferma. Y la persona que casi no, digamos que no le hace mucho el frío, la calor la persona que desde pequeño se alimento bien, tomo muchas vitaminas, o que por*

decir este… pues si que se vacuno, tiene su vacunas que se debe de tomar."

Those who don't receive their vaccines that they should take when they're little, for growing, this person gets sick. And the person that almost never does, we say that the cold, the heat, don't do much to them, the person that since they were small ate well, took many vitamins or to say… well if one is vaccinated has their shots that they should take.

Enida. "*Hay muchas enfermedades que te las anuncian las enseñan y dicen como las puedes evitarlos y nosotros le prestan atención de que manera nos podemos cuidar."*

There are many sicknesses that they announce to you, show them and they say how you can avoid them and we pay attention to them, to the way we can care for ourselves.

Descriptions of Sickness

Although all of the women I interviewed described the differences between healthy people and sick people, during the first group interview all five women, led by Elena and Oralia wondered if there are any truly healthy people. After all as Lorena pointed out, everyone gets sick from time to time. Later, when I did an individual interview with Gabi I found that she too believes that there are no healthy people today because the modern diet is very harmful to the body.

Gabi. "*Oy no, yo pienso que no hay personas saludables."*

Oy no, I think that there are no healthy people.

Anna. "Ok y porque?"

Ok and why?

Gabi. "*Porque todas comimos puras cosas artificiales y hace daño…. Más, antes, los días antes que no comen tanta carne, tanto que por la refrigeradora o verduras refrigerado estaban sanos pero ahora no creo que hay personas sanas."*

Because we all eat purely artificial things and it does harm….Back in the days before, when they didn't eat so much meat, so much from the refrigerator or refrigerated vegetables they were healthy. But now I don't believe that there are healthy people.

Like the accounts of healthy people, Mexican descriptions of sick individuals focus on appearance, energy level, symptoms and mood. The face of a sick person is pale or yellow and the eyes are red and/or oozing. A sick person also looks tired and

has bags under her eyes. Sick people don't have the energy or the desire to do anything, including working or just talking to other people. They may even have trouble walking.

> Gabi. "*Cuando se siente mal anda uno como fastidiado, cansado, se deprime uno.*"
>
> When one feels bad one goes about bothered, tired, it's depressing.

> Luci. "*Yo cuando estoy mala me duele mucho los huesos, escalofrío, duele la cabeza, no tengo ganas de hacer nada. Ser estar sentada nada mas.*"
>
> Me, when I am sick my bones hurt me a lot, chills, headache, I don't have desires to do anything. To be sitting nothing more.

Sick people experience a variety of symptoms, depending on what it is they are sick from. When asked to describe symptoms they usually experience when they are sick the women mentioned muscle aches, bone pain, headache, sore throat, chills and dizziness.

In addition to these physical symptoms sick people commonly experience sadness and depression.

> Juana. "*Cuando una persona está enferma es de, depende en las enfermedades pero luego se sienten tristes.*"
>
> When a person is sick, it's that, it depends on the sicknesses but later they feel sad.

> Yari. "*Y tu? Como es cuando están enfermos?*"
>
> And you? How is it when they're sick?
>
> Santos. "*Pues tristes, tristes y sin ganas de hacer que hacer, sin ganas de ser platicar.*"
>
> Well, sad, sad and without desires to do what there is to do, without desires to be chatting.

Depression is especially bad for sick people because it increases morbidity and mortality risk. Somatic symptoms of depression are associated with shortened survival among people with HIV, even when baseline CD4 counts and HIV medication use are controlled for (Farinpour, et al. 2003). Depression is a risk factor for heart disease, both

etiologically and prognostically. Longitudinal studies have shown that there is a significant relationship between depression and coronary artery disease that is independent of conventional risk factors. Depression is also associated with higher mortality rates after myocardial infarction, unstable angina and coronary artery bypass grafting (Jiang, et al. 2002). Recent research suggests an association between depressive symptoms and stroke morbidity and mortality, as well (Ramasubbu and Patten 2003).

Causes of Sickness

Although the women I interviewed are not especially fatalistic, two of the most commonly cited causes of sickness (weather and bodily constitution) are things that the individual has little control over. Ten women strongly believe that the weather can make a person sick, although they did not always agree on exactly how this happens. Several stated that the cold is very bad for one's health and can lead to sore throat, cough, bronchitis and arthritis.

> Anna. "*Entonces el frío puede...*"
> Then the cold can...
> Gabi. "*afectar a las anginas.*"
> affect the tonsils.

> "Luci. *El frío a lo largo de tiempo es muy mal. Muchos digamos de con el tiempo te das te este artritis, en los manos o principios de bronquitis, mucha tos, a lo largo el frío hace mucho daño.*
> Being in the cold for a long time is very bad. Many of us say the weather gives you arthritis in the hands or the beginnings of bronchitis, a lot of cough, long-term cold does much harm.

A few women also explained how the heat reduces one's desires to go out and can make a person sick. Yari even claimed that cold weather can contribute to good health and it is the heat that causes sickness.

> Gabi. "*El calor no. Solamente se siente uno como.. el calor lo único que haces es que siente sin ganas de salir pero no enfermedad.*"

The heat no. Only one feels like.. the heat the only thing that it does is make one feel without desires to go out, but not sickness.

Luci. "*Al igual que cuando uno trabaja en un lugar caliente también te hace daño, porque también te duele en las manos. En el frío o el caliente se enferma uno también.*"

Likewise when one works in a hot place it also does harm, because also the hands hurt. In the cold or in the heat one gets sick too.

Yari. "*A veces el frío es, es bueno. A veces en el frío, si es cierto que les duele los huesos o eso por decir, a una persona que hace falta hierro o eso, pero a veces el frío es bueno porque...es como en las mañanas que salieron buen tempranito a correr, el frío, una fuerza le da mas energía. Y a veces el calor es más perezoso, más huevon. Y la mal humor pone a uno.*"

Sometimes the cold is, is good. Sometimes in the cold, yes it's true that the bones hurt or that is to say, a person that is lacking iron or something, but sometimes the cold is good because...it's like in the mornings when one goes out really early to run, the cold's a force that gives one more energy. And sometimes the heat is more lazy, more balls, and the bad mood it puts you in.

Kay (1977) also found that climate is widely believed to affect health among Mexican Americans. According to her informants, in warm climates illness is caused by absorbing additional heat, while in cold climates it is dangerous to get colder. Likewise, Clark (1959) reports that an excess of heat or cold in the body, caused by environmental conditions is thought to lead to illness. Such beliefs about weather and sickness are derived from the humoral theory of disease causation. Extremes of heat and cold do cause illness (e.g. burns, heatstroke, hypothermia, frostbite). Likewise, fevers and chills are obvious pathological signs and other conditions resemble heat (rashes, sores) or cold (pallor, clammy skin). Seasonal changes in weather are easily observed and associated with physiological maladies (Anderson 1987). Empirical observations of these phenomena no doubt influence hot/cold classification and reinforce the idea that exposure to different types of weather can make a person sick.

Further evidence for the influence of physiological conditions on humoral classifications can be found in Kay and Yoder (1987).

Six women who I interviewed explained that sickness is not caused by cold or hot weather alone but rather by sudden changes in temperature, which happens frequently in Georgia during the spring and fall seasons. When the weather is cold one day and warm the next the body may not be able to adapt to the change and becomes vulnerable to sore throat, cough and colds.

> Juana. "*Nosotros aquí se nos enfermamos cuando es cambio de la temperatura se nos enfermamos, y nos duele la garganta y nos da tos. Pero así no mas que nos enfermamos.*"
>
> We, here we get sick when the temperature changes. I know we get sick and the throat hurts us and gives us cough. But just like this, there's nothing else that we get sick with.

> Raqi. "*Bueno, este a el problema osea hay muchos diferente maneras de que la gente se enferma por ejemplo este a eso también va con el tiempo. Porque a veces hace frío, a veces hace calor muchos veces el cuerpo de la persona no resiste las dos cosas y donde ya viene que empieza la gripa o catarro son unas de las cosas principales.*"
>
> Well, this the problem you know there are many different ways that people get sick, for example this also goes with the weather. Because sometimes it's cold, sometimes it's hot many times the body of the person doesn't resist the two things and where it already comes that the colds and flu begin, they are some of the principal things.

Again, Kay (1977) also found that rapid changes in temperature, such as bathing when one is overheated, are considered especially dangerous. Kay (1977) attributes this belief to the concept of balance that is found in many medical systems. Even in mainstream American medicine, blood chemistry must remain within a narrow range of balance between acid and alkaline and fluids and electrolytes must be balanced or sickness will result.

Eight women who participated in the health interviews recognized that the weather (and other causes of sickness) does not affect everyone in the same way. For

example, Elena explained that different people are accustomed to different climates- some do better in the cold while others thrive in the heat. Every person is born with a unique body that may be sensitive to some causes of sickness and resistant to others. People who don't get sick very often are thought to have strong defenses.

> Enida. "*Yo creo que todo los organismos, cada organismo y cada persona diferente, verdad? Hay unos que tenemos más defensas para algunas cosas y otros no. Por eso muchas nos enfermamos de una cosa bien seguido, muy constante y otros pues, podemos estar en la misma ambiente y no nos enfermamos igual. Entonces las personas que son, que tienen muy baja los defensas yo creo que son más propensos de estar enfermados muy seguido.*"
>
> I believe that all the organisms, each organism and each person is different, true? There are ones that have more defenses for some things and others do not. For this reason much sickens us from a very frequent thing, very constant and others well, we can be in the same environment and we don't get sick the same. Then the people that are, that have very low defenses I believe that they have more propensity for being sick very often.

> Lorena. "*Cada cuerpo diferente y las cosas diferentes los afectan.*"
>
> Every body is different and is affected by different things.

> Mari. "*Pienso que también este depende del organismo de cada persona. Las personas pues si pueden durar hasta no se cuando es pero porque su organismo es muy fuerte o no se. Cada persona es nacido diferente.*"
>
> I think that also this depends on the organism of each person. The people well those that can last up to I don't know when, it is because their organism is very strong or I don't know. Each person is born different.

> Luci. "*Pues yo pienso que mucha gente que se enferma del frío yo pienso que no tiene suficiente defensas en su cuerpo*."
>
> Well I think that many people that get sick from cold, I think that they don't have sufficient defenses in their body.

Gabi also recognized that some sicknesses are genetic and are determined by one's family history.

> Gabi. "*A veces hay enfermedades que uno ya traer de familia, como le puedo decir, de nosotros infectados, como la diabetes, la presión pues son ya que uno las trae de familia.*"

> Sometimes there are sicknesses that one has already brought from the family, how can I say, from us infected, like diabetes, pressure, well they are what the family brings them.

Although only three women mentioned contagious sicknesses they do recognize them as an additional source of ill-health that is beyond the individual's control.

While Clark (1959) and Saunders (1954) argue that Mexican Americans regard sick people as innocent victims of malevolent forces in their environments and can do nothing to prevent getting sick, Kay (1977) found that in general, the women she interviewed attribute sickness to a disregard for certain "rules." One widespread rule is that one must be careful about what she eats. Many of the diseases discussed in Kay's (1977) study were gastrointestinal in nature and all attributed to eating the wrong foods. Likewise, many of the causes of sickness described by the women I interviewed are things that one does have some ability to control and include diet, work, smoke, not caring for oneself or for others and laziness. Nine women explained how a poor diet causes a person to get sick. For example, people who experience nutritional deficiencies are more susceptible to colds.

> Anna. "*Si, pero por ejemplo hay gente que siempre tiene gripa y otra gente no tiene y porque? Que es la diferencia?*"
>
> Yes, but for example there are people who always have gripa and other people who don't have it and why? What is the difference?
>
> Juana. "*No se. Yo creo que porque falta de alimentación. Es que otra gente le da bien seguido la gripa.*"
>
> I don't know. I believe because of a lack in the diet. That's why other people get the gripa very often.

A poor diet is one that is high in fats, sodas, sweets, chips and meat, as well as foods that are not fresh. Eating outside the home, especially "in the street" when one does not have the time or the money to cook a proper meal leads to poor dietary habits and subsequent sickness.

Yari. "*Por decir aquí, mucha gente porque como no..pues si las Americanas no les gusta hacer comida. Todo el tiempo por están así, o se enferman mas que un Méxicano, porque comen puro comida así que no les nutren ni nada, ellos por decir están gordos, pero falsos, bojos. No están..yo no come come comida tortilla, está uno gordo pero es más hizo. Entonces, como todo el tiempo pues come uno comidas y con el trabajo que uno hace porque hace uno más ejercicio. Así que porque come uno pura dulcerías por decir los niños comen puro dulce o eso ya no quieren comer le sale lombrices. Porque no mas quieren esta comiendo eso puro chips, sabritas, y dulces pues tiene bastante lombrices. A que comida sana pues no. Porque está más asisto de su estómago. Y así se enferma uno menos de la comida es nutritiva también. Y hay veces que los Americanos ora ya osea por no hacer de comer o todo de eso nos, es puro hamburguesa, pura cosas tan bojos y es uno no le gusta tortilla si?*"

> To say here, many people...well the Americans don't like to make food. All the time they're like that, or they get sick more than a Mexican, because they eat only food like this that doesn't nourish them or nothing. They, to say it, they are fat but falsely, slobs. They aren't...I don't eat and eat tortilla food, this makes one fat but it's done more often. Thus, like if one eats meals all the time and, and with the work that one does because one does more exercise. Because if one eats only sweet things, the kids they eat only candy or that they now don't want to eat and worms come out of them. Because if they want nothing more than to be eating only chips, sabritas and candies well they have plenty of worms. And the healthy food? Well no. Because it's more helpful to your stomach. And like this one sickens oneself less from the food that's nutritious too. And there are times when the Americans are not making anything to eat or all of this, it's purely hamburgers, purely things that are so bojo and this one doesn't like tortillas, yeah?

Although Mexican women generally know what they should and should not eat in order to avoid sickness, many find themselves eating poorly in the United States. As Lorena explained during one of the group interviews, it's hard not to be tempted by all the "great tasting" but unhealthy products that are so inexpensive and readily available in this country. Additionally, Juana (44, rural Michoacán, food vendor) and Yari explained how being overweight contributes to poor health, though Yari hinted that there is a difference between being fat in a healthy way and being fat due to the over-consumption of fatty, greasy foods.

Juana. "*oo. La gente se enferma, bueno nosotros nos enfermamos porque luego a veces este está uno pasado de peso y le duele a uno los pies que los talones. Que no se puede uno sentar bien le duele uno el estómago. Eso necesita uno uno mismo controlarse de comer para estar uno bien.*"

> oo. People get sick, well we get sick because sometimes that one is over weight and the feet hurt one down to the heels, I believe. That one can't feel well, the stomach hurts. This one needs to control oneself to eat in order to be well.

Yari. "*Porque con uno esta así, tan sube de peso, es puro gordura que no mas pura grasa.*"

> Because when one is like that, such an increase in weight, it's purely fatness that is nothing more than pure grease.

Four women described how the poor working conditions many Mexicans find themselves in lead to sicknesses. This is especially true of the poultry processing plants that must be kept at a cool temperature.

Luci. "*Pues yo pienso que también se enferman por, muchas veces por el trabajo, por no cuidarse. Pues no tiene la posibilidad de, muchos tiene que trabajar por decir digamos en un lugar que hace mucho frío y pues hay se enferman de sus huesos, de gripes, de principios de bronquitis. Tiene uno que trabajar y no hay muchos posibilidades de tener otro trabajo para no enfermarse.*"

> Well I think that also they get sick because, many times because of work, for not taking care of themselves. Well you don't have the possibility of… many have to work, we say in a very cold place and well there they get sick in the bones, from gripas, from beginnings of bronchitis. One has to work and there are not many possibilities of having another job that won't make you sick.

Working too much and not getting enough sleep can also cause a person to get sick.

Mari. "*Pues muchas razones. El modo de vida, cuando no comen bien, al trabajan mucho, trabajan demasiado, no duerman uno suficiente.*"

> Well many reasons. The way of life, when they don't eat well, they work a lot, they work too much, they don't sleep sufficiently.

Smoke is also recognized as a cause of sickness. Two women mentioned that spending time in environments that are filled with smoke and smog is dangerous.

Enida. "*Yo creo que como le decía de estar en un lugar con mucho humo puede afectar los pulmones. Y si no damos cuentas, de que estamos en un ambiente con humo de uno no tratar de evitarlo. Si*

sabemos mas que es un cigarrillo o cualquier otra clase de humo también afectar la respiración profundamente."

I believe that, how do I say to you, to be in a place with a lot of smoke can affect the lungs. And if we don't realize that we're in an environment with smoke one doesn't try to avoid it. If we know more that it is a cigarette or whatever other class of smoke also profoundly affects the breathing.

Luci. "*Si hay un lugares que hay mucho humo, y uno se respira y uno se contaminan los pulmones, si uno lo respira es muy mal.*"

If there are places that have a lot of smoke and one breathes and one contaminates the lungs, if one breathes it, it's very bad.

Six other women cited cigarette smoking as a cause of respiratory problems. Seven women discussed how not taking care of oneself in general leads to poor health. In addition to eating poorly and smoking cigarettes examples of not caring for oneself include drinking alcohol, not wearing a sweater when it's cold or going outside in the cold without shoes and not being vaccinated. It is also important to love and care for other people.

Enida. "Bueno pero hay muchas enfermedades que se causan sin querer uno. Verdad, sin necesistarlas sin quieren por otra persona o según los lugares donde frecuentemos."

Well, but there are many sicknesses that they cause themselves by not loving anyone. True, without needing them, without love for another person, or the places where we frequent.

Finally, if one's emotional state and outlook on life are unhealthy, physical sickness can result. Many Mexican Americans believe that strong emotional experiences, especially fright and anger, can cause an individual to get sick (Clark 1959). The women I interviewed caution that letting other people upset you, worrying about getting sick and being lazy can all lead to ill-health.

Yari. "*Porque si no más yo creo pienso lo más en que te enfermo, en que se va enfermar, más enferma uno. Porque no más está pensando en eso, entonces más enferma uno. Y si anda en activación y todo eso pues no se enferma nunca casi.*"

Because I believe if you think mostly about what makes you sick, about that which is going to make you sick, the more you get sick.

> Because, if you do nothing more than think about this, then the more you get sick. And if you go about actively and all this then you almost never get sick.

Santos. "*Pienso que uno se enferma también de flojera. O nada más esta sentado, y esta en vez de estar en activo pues también eso se enferma uno. Está con la flojera y eso se enferma uno. Y si uno está activo en el que hacer, pues te despega uno tantito y está mas tranquilo más agusto.*"

> I think that one also gets sick from laziness. Or doing nothing more than sit around, instead of being active well this also makes one sick. Being lazy, this makes one sick. And if one is active in what there is to do, well you get yourself up a bit and you are more tranquil, more comfortable.

Classification of Sickness

Bad weather, unhealthy environments, poor dietary habits, low defenses, apathy and laziness cause many different types of sickness. In one the earliest studies of health in a Mexican American community Clark (1959) reports that the people she interviewed did not have their own clear cut classification of diseases. However, she divides the sicknesses described to her by Mexican Americans into six categories; diseases of humoral imbalance, diseases of dislocation of internal organs, diseases of magical origins, diseases of emotional origins, other folk-illnesses and "standard scientific" diseases. In another study, Madsen (1964) argues that Mexican-American folk medicine generally classifies disease according to causes, rather than symptoms. The two main categories he identified were "natural" illnesses that come from disruption in the balanced of the natural world, which is controlled by God and bewitchments sent by people who use the forces of Satan.

Later, Kay (1977) found that Mexican American women classify illnesses into two major groups; bodily illnesses and emotional illnesses. Bodily illnesses are further divided into temporary, mild and serious categories. Temporary illnesses require no treatment because they are self-limited. They include common childhood illnesses, seasonal

illnesses (colds and allergies) and illnesses that result from exposure to cold. Examples of the latter include *frío de la garagnta* (cold of the throat), which is said to come from drinking very cold drinks and *reumas*, joint pains that occur when an individual overheats a joint through work and then exposes it to cold. Mild illnesses are generally avoidable and respond to simple therapy. They include sore throats, migraines, rashes, wounds and digestive disorders. If mild illnesses are not treated they can lead to more serious conditions that may be incurable. Serious illnesses are classified as painful and include *dolor de X* or *mal de X*, hepatitis and other contagious diseases, colic, *empacho* (intestinal blockage), bronchitis, pneumonia, sinusitis and chronic conditions like diabetes, heart disease and cancer. Most notable about the classification of illnesses elicited by Kay (1977) is that she found no evidence of a category of supernaturally caused disease.

I used freelists and pile sorts to develop a classification of sicknesses in Los Duplex. A total of 62 conditions were included in the lists of the 25 women who participated in freelist interviews, though only 24 of these sicknesses were mentioned by more than one interviewee (table 5.4). ANTHROPAC calculates the saliency of each item on a freelist as an average of how often and how soon items are mentioned (Borgatti 1996). The two most salient sicknesses were cancer and *gripa*. While none of the women who participated in my study had cancer themselves 10 of the women who completed a semi-structured interview reported that at least one member of their extended families suffered from this disease. As described above, *gripa* is a common sickness in Los Duplex.

Table 5.4. Frequency and Saliency of 24 Sicknesses Included in Freelists

Enfermedad	Sickness	Frequency	Saliency (Smith's S)
Cancer	Cancer	12	0.400
SIDA	AIDS	9	0.214
Corazón	Heart Disease	8	0.206
Diabetes	Diabetes	6	0.168
Gripa	Colds	6	0.245
Tos	Cough	5	0.146
Gastritis	Gastritis	5	0.156
Dolor de Cabeza	Headache	5	0.111
Calentura	Low Fever	5	0.184
Dolor de Estómago	Stomachache	4	0.106
Migraña	Migraine	4	0.077
Astma	Asthma	4	0.056
Reumas	Arthritis	3	0.051
Fiebre	High Fever	3	0.083
Diarea	Diarrhea	3	0.052
Hepatitis	Hepatitis	3	0.059
Bronquitis	Bronchitis	3	0.053
Infección del Oído	Ear Infection	2	0.020
Sarampión	Measles	2	0.034
Depresión	Depression	2	0.044
Colesterol	Cholesterol	2	0.058
Presión	High Blood Pressure	2	0.063
Tuberculosis	Tuberculosis	2	0.019
Riñones	Kidney Disease	2	0.046

Gripa and cancer appear to be prototypes of two different classes of sickness; common, minor illnesses and serious, life-threatening diseases. Multi-dimensional scaling analysis of pile sort data revealed only two well-defined clusters of health conditions (figure 5.1). One includes cancer, diabetes, AIDS and heart attacks, all five of which are among the top 10 leading causes of death for Hispanics in the United States (Vega and Amaro 1994) and the other consists of *gripa*, runny nose, cough, fever and headache. The remaining 15 conditions included in the pile sort exercise are scattered throughout the area between the two clusters. This "group" includes both chronic and acute conditions that require some form of medical treatment.

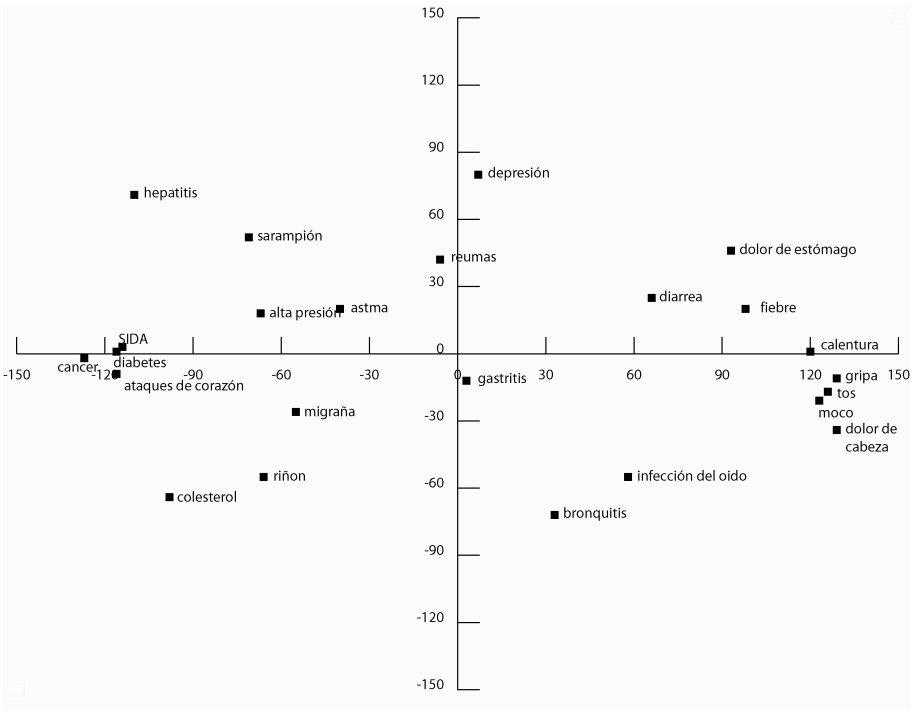

Figure 5.1. Multi-dimensional scaling plot of sicknesses.

These data suggest that the women of Los Duplex classify sicknesses into three major categories, based on severity; life-threatening conditions, conditions that require treatment but are usually not life-threatening and common conditions that may be treated with home remedies or left to clear up on their own. However, because the middle category was not well formed additional research is needed to confirm the accuracy of this classification. My data on the classification of sickness in Los Duplex bear another resemblance to Kay's (1977). None of the 62 conditions mentioned in the freelists are of magical origin, nor are any of them Mexican folk illnesses unrecognized by the mainstream medical system (although a few women discussed *empacho* and *mal ojo*- a sickness caused by looking at another person inappropriately- during unstructured interviews). Most ideas about why people get sick and beliefs about the

causes of specific conditions that I elicited during semi-structured interviews were all naturalistic as well.

Explanatory Models

While Mexican Americans recognize the symptoms of standard biomedically defined diseases, they often have their own ideas about disease etiologies (Clark 1959). Moreover, in different cultures, different illness labels may be used to describe the same signs and symptoms or the same label may be used to describe different sets of symptoms (Weller 1993). Thus, in order to fully comprehend Mexican women's responses to sickness it is important to have a clear picture of their own definitions of specific health conditions. Such ideas about sickness and healing are referred to as an "explanatory model," which is characterized by the following five elements: 1. an explanation of the presumed cause(s) of sickness, 2. signs and symptoms of the illness, 3. an explanation of the pathology and physiology involved, 4. prognosis and 5. recommended treatments (Kleinman, et al. 1978). Explanatory models are culturally determined and widely shared among members of a given culture (Weller and Baer 2001). Below I have used semi-structured interview data to compile Mexican women's explanatory models for three common conditions; *dolor de estómago, gripas* and *dolor de cabeza*. These conditions were not only identified during structured and unstructured interviews as the most common health problems experienced in Athens, but were health problems that are treated by the most popular home remedies.[14]

[14] Trotter (1981) developed a method for exploring community morbidity patterns that involves an analysis of common home remedies. Trotter assumed that when people are asked to recall home remedies, the ones they recount will be either the ones they most commonly use or that ones that treated ailments that have had a particular impact on their lives. The most frequently cited remedies are assumed to be the ones that represent a combination of common and key ailments in the community. The sample produced a core group of 70 ailments that are treated with home remedies. This group of ailments is assumed to be an ethnotypology of health problems in Mexican American communities that can or should be given home treatment as opposed to medical attention. Digestive problems were the single most prominent group of closely related ailments in the community followed by upper respiratory infections, infectious and parasitic diseases, injuries, other acute illnesses, chronic ailments and mental problems. These morbidity patterns parallel

Dolor de Estómago

Dolor de estómago refers to a variety of symptoms that an Anglo American would label upset stomach, stomachache or indigestion. This condition is generally attributed to poor eating habits, including over eating, eating too much spicy food, eating too much fatty food and eating late at night.

> Enida. "*Um Yo creo que hay veces que comemos cosas.. siempre es las cosas que comemos. Que comemos cosas muy condimentadas, con condimentos, siempre cosas que ponemos en la comida que son muy fuertes para el estómago. Y la falta de otras cosas que no comemos para que el estómago esta fuerte y así las cosas malas que ponemos en la comida.*"
>
> Um I believe that there are times that we eat things… always it's the things that we eat. That we eat things with lots of condiments, we always put things in the food that are very strong for the stomach. And the lack of other things that we eat so that the stomach is strong and the bad things that we put in the food.

> Gabi. "*El té de yerbabuena sirve para también para dolor de estómago cuando uno esta mal del estómago que comió mucho, muchas personas se lo toman con tantito relleno y ya.*"
>
> The mint tea works also for stomachache when one who ate a lot is sick in the stomach, many people take it when they're a little full and that's it.

> Luci. "*porque comes algo que te hizo daño que te caí pesado, comiste en la noche también.*"
>
> because you eat something that did you harm, that hit you hard, you ate in the night too.

In infants *dolor de estómago* is also a result of dietary intake, particularly the consumption of milk or formula that a baby is not accustomed to.

> Enida. "*Entonces en mi bebe, hay niños, yo lo comparaba en esto que hay niños que te dan según los doctores, los pediatras te dan ciertos meses para que el niño tome la formula para bebes. Y a la cierta cantidad de meses, creo que son como 8 o 10 meses de lo tiene en adelante el niño lo puede tomar la leche entera. Pero hay muchos niños que no asimilan el cambio de una leche a la otra. O hay veces que el*

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those from more conventional research. The core ailments could be further subdivided into three groups-ailments with no medical treatment, ailments that do not normally require medical treatment and ailments that have not responded to medical treatment. The author speculates that the rationale for choosing home remedies may be a process of evaluating the symptoms an ailment presents, clarifying it as a particular ailment and pursuing treatment.

niño desde chiquito no soporta la leche en su estómago. Verdad? Porque son formula y el niño no esta acostumbrada de la leche maternal."

Then, in my baby, there are kids I have compared this, there are kids that according to the doctors, the pediatricians tell you certain months for the kid to take formula for babies. And at a certain amount of months, I believe that it's like 8 or 10 months and up, the kid can take whole milk. But there are many kids that don't assimilate the change from one milk to the other. Or there are times that the kid, from the time it's really small doesn't support milk in his stomach. True? Because they are formulas and the kid isn't accustomed to the mother's milk.

Raqi. "*Un niño que se llora mucho, bueno hay dos cosas no sabemos si le duele el estómagito o la cabeza, pero por regular a los niños le duele estómagito porque a veces es cosa de comida la leche no les caí, entonces la yerbabuena se les dan tantito y erute, erute o ensucia.*"

A kid that cries a lot, well there are two things. We don't know if the little stomach hurts them or the head, but regularly the little stomach hurts the kids because sometimes it's a thing from food, the milk doesn't sit well with them, then with the mint they give them a little and they belch, they belch or dirty themselves.

In addition to the wrong types of foods *dolor de estómago* can also be caused by cold.

"Raqi. *Bueno, el dolor de estómago viene de dos cosas. A veces viene de frío y a veces viene también comer uno muchas cosas picante.*"

Well, the stomachache comes from two things. Sometimes it comes from cold and sometimes also comes when one eats a lot of spicy things.

Anna. "*Y porque es té de manzanilla buena para el dolor?*"

And why is chamomile tea good for the pain?

Juana. "*Porque es caliente y uno tiene frío en el estómago*."

Because it's hot and one has cold in the stomach.

Cold can enter the stomach if a person eats something cold or is unable to keep warm.

Juana. "*Luego a veces porque, si es en la noche porque tal vez comió uno algo de frío, o porque uno comió demás, o porque tal ves uno no se cobijan en la noche.*"

Later sometimes because, if it's in the night because sometimes one ate something cold, or because you ate too much, or because maybe you didn't cover-up at night.

However, one can also get *dolor de estómago* when the weather is warm and care is not taken to avoid humoral imbalance.

> Anna. "*Porque tiene uno dolor de estómago?"*
> Why does one have stomachache?
> Teri. "*Por la calor, hace calor y tomas agua frío en un rato es inflamado."*
> From the heat, it's hot and you take cold water, in a while it's inflamed.

Finally, *dolor de estómago* is sometimes caused by infection or "dirtiness" in the stomach.

> Anna. "*Y porque tiene uno dolor del estómago?"*
> And why does one have stomachache?
> Mari. "*No se. Pues a veces porque come algo que no le caí uno bien o tiene el estómago sucio."*[15]
> I don't know. Well sometimes because you eat something that doesn't sit well with you or you have a dirty stomach.

The major sign of *dolor de estómago* is pain in the mid to lower abdomen that is often accompanied by bloating and/or diarrhea. While improper eating was the most commonly cited cause of *dolor de estómago*, most of the women who I interviewed did not have elaborate explanations of the pathology of this condition beyond the presence of cold in the stomach. However, Enida (25, urban Guanajuato, chambermaid) did suggest that heavy foods slow digestion, which leads to pain and bloating in the belly.

> Enida. "*Y a veces comemos mucha grasas y el estómago se les hace muy difícil procesarlas. Y el estómago tarda a veces más tiempo, creo yo. Por tarda más tiempo en asimilar la comida y entonces hay veces que el estómago se queja de tener mucha comida en el estómago."*
> And sometimes we eat a lot of fat and for the stomach, it is very difficult to process them. And the stomach sometimes takes more time I believe. Taking more time to assimilate the food and then there are times that the stomach moans from having too much food in it.

[15] Kay (1977) found evidence of a condition labeled *estómago sucio*, which is characterized by constipation caused by overindulgence in food.

She went on to explain that an excess of stomach acid is also painful.

> Enida. "*Más que todo es el estómago y hay veces que los mismos fluidos del estómago te pueden dar yo digo que magrudas da mismo, los mismos ácidos en el estómago.*"
>
> Most of all it's the stomach and there are times when the same fluids of the stomach can give you heartburn, the same, the same acids in the stomach.

Dolor de estómago is a common condition and as long as the symptoms are mild, stomach pain will likely subside on it's own. However, because pain and bloating in the stomach is uncomfortable my research participants prefer to treat themselves and members of their families who suffer from *dolor de estómago* with a home remedy. Chamomile (*Matricaria chamomila*) and mint (*Mentha piperita*) teas are the most popular medicines for this condition. According to Luci it is also a good idea to take a tea for dolor de estómago so it doesn't become chronic or lead to *empacho*. Alka Seltzer and baking soda (*carbonato*) may also be used to treat stomach pain, especially if excess acid is suspected. My research participants generally agreed that chronic, excessive acid in the stomach could lead to gastritis or ulcers.

Gripas

The term "*gripa*" refers to what Americans call "the common cold," which is a type of upper respiratory infection that manifests as runny nose, sore throat, cough and/or earache. In their study of conceptions of the common cold among one Anglo American and four Hispanic populations (Baer, et al. 1999) found that among Mexicans the terms "*gripa*" and "*catarro*" are used interchangeably, while a "*resfriado*" includes more symptoms of coldness (chills, cold hands and feet, etc.). Although women in Los Duplex used all three terms to describe upper respiratory tract infections most considered *catarro* and *resfriado* different types of *gripas* (the former refers to a cold with lots of congestion and runny nose, while the latter describes a cold with achy

bones). Like many Americans, Mexican women believe that exposure to cold can lead to *gripas*. People may be exposed to cold by going outside in the wintertime or by living and working indoors in a place that is kept cold by air conditioning.

> Juana. "*O si por ejemplo como uno, cuando ese el tiempo del frío pues el clima es frío uno se enferma de la gripa, duele uno de los huesos. Y le da uno calenturitas, y resfríos.*"
> O yes for example as one, when it's the cold season well the weather is cold one gets sick from the *gripa*, the bones hurt one. And it gives one little fevers, and colds.
> Anna. "*Y cuando hace mucho calor se enferma?*"
> And when it's really hot do you get sick?
> Juana. "*Bueno nosotros aquí, cuando hace calor pues este, pongo el aire frío pero siempre se morman de la nariz y la garganta. Se enferma de la garganta cuando uno pone el aire frío.*"
> Well we here, when it's hot well, I put on the cold air but it always phelgms up the nose and the throat. You get sick in the throat when one puts on the cold air.

Rapid changes in weather from hot to cold appear to be even more likely to cause *gripas* than exposure to cold alone, especially in people who are not properly nourished. Likewise, sudden exposure to cold (i.e. running outside on a cold day without appropriate clothing) is believed to be a bad idea.

> Elena. "*El frío da gripa y el calor da gripa, duele la garganta*."
> The cold gives gripa and the heat gives gripa, the throat hurts.

> Yari. "*Por decir cambios de clima, los cambios de clima a veces hacen que den la gripa y pues eso de lo que a veces también..a veces porque los niños como que les faltan vitaminas o hierro que lo toma muy fácil la, las gripas.*"
> To say,, changes of weather, the changes of weather sometimes do it, so it gives *gripa* and well this that sometimes also.. sometimes because children lack vitamins or iron that they very easily get the *gripas*.

The signs and symptoms associated with *gripas* are the same in Los Duplex as they are in the United States generally. They include pain (head or body aches), fatigue, dizziness, congestion and cough.

Mari. "*Pues no se, yo cuando me enfermo de, por decir así de la gripa me siento mal, le duele la cabeza, siento cansada y mareada. No tengo ganas de hacer nada.*"

Well I don't know, when I get sick from, to say like this from the *gripa* I feel bad, the head hurts, I feel tired and dizzy. I don't have desires to do anything.

Raqi . "*Se siente la persona… depende que clase de enfermedad le pega la persona, si es un resfriado le duele los huesos a uno, duele en el pecho, le duele un los músculos, la cabeza, duele los ojos. Es un mal estar.*"

The person feels… it depends on the class of sickness that hits the person, if it's a *resfriado* the bones hurt one, it hurts in the chest, the muscles hurt one, the head, the eyes hurt. It's a bad way of being.

Again, ideas about the underlying pathology of *gripas* were not very detailed among my research participants. However, some pointed out that cold lowers the body's resistance. Although *gripas* are common they should be treated because if cold migrates into the chest it can lead to bronchitis.

Anna. "*Porque tiene uno congestión en el pecho?*"

Why does one have congestion in the chest?

Teri. "*Cuando tomas agua fría y tienes gripas la congestión va en el pecho.*"

When we take cold water and you have gripas the congestion goes in the chest.

Juana. "*Tal vez no se cobija uno o también le da uno la gripa se resfrío uno del pecho. O porque una vez se levanta temprano y tal vez anda uno descalzo y uno este se va el pecho porque la garganta está abierta y se va al pecho y es cuando un le da tos o tal vez enferma uno de la garganta.*"

Maybe one didn't cover up or also when one is given *gripa* it gets cold in the chest. Or because one time you get up early and maybe walked about barefoot and it goes to the chest because the throat is open and it goes to the chest and it is when it gives one cough or maybe one gets sick in the throat.

Fever may also be present in cases of *gripa* that are allowed to become serious.

Santos. "*o resfrío también la calentura da.*"

Or colds also give the fever.

The most common medicine used by my research participants to treat *gripas* was Vicks Vapo Rub (or a similar product), which is used to alleviate congestion in the head and chest. Tylenol is popular for pain and fever symptoms. Some women also give their families lime or orange juice when they are sick with gripas and two mentioned using a plant called "*gordo lobo*."[16] This plant was said to be particularly useful for coughs.

Dolor de Cabeza

While headaches may be a symptom of *gripas* people can also get *dolor de cabeza* by itself. My research participants generally attributed headaches to not sleeping well, not eating and walking around all day in the sun.

> Gabi. "*A veces aquí porque uno no duerme muy bien. Aquí nunca descansa uno normal. Por los niños más que nada que se despiertan temprano y uno llega a noche de trabajar y no duerme bien.*"
>
> Sometimes here because one doesn't sleep very well. Here one never rests normally. For the kids more than anything they wake up early and one gets home from work at night and doesn't sleep well.

> Juana. "*A mi me duele la cabeza luego a veces este porque no como algo, por ejemplo estoy así en ayunas y ya es muy tarde y no comido nada empieza a duele la cabeza. Pero también a luego a veces duele porque le va uno a la gripa, porque piensa uno mucho, porque no duerme uno bien. Es a veces pesado el cuerpo y le duele uno la cabeza.*"
>
> To me my head hurts me sometimes it's because I don't eat anything. For example if I'm here like this giving the baby the bottle and it's already really late and I've eaten nothing the head starts to ache. But also sometimes it hurts because one is going to have *gripa*, because one thinks a lot, because one doesn't sleep well. Sometimes the body is heavy and the head hurts one.

> Luci. "*Pues a veces yo pienso que el dolor de cabeza… cuando anda uno en la calle todo el día caminando, o la calor muchas veces tienes como dolor de cabeza.*"

[16] Plants from at least three genera (Verbascum, Gnaphalium and Senecio) have been given the Spanish common name "gordo lobo" and have been confused with one another, sometimes with potentially lethal results (Kay 1994).

Well sometimes I think that headache… when one goes about in the street all day walking, or the from heat many times you have like a headache.

Raqi. *"El dolor de cabeza mucho de las veces, la mayoría de veces viene por traspasarse uno. Se traspasa uno por ejemplo nosotros tenemos que comer a lo mas tarde a las 8 de la mañana. Y este si no comemos hasta las 10, 11 imaginas?"*

The headache many times, the majority of times it comes from getting off schedule. One gets off schedule, for example we have to eat at the latest at 8:00 in the morning. And if we don't eat until 10, 11 you imagine?

A few of my research participants suggested that dolor de cabeza can also be caused by *aire*.

Gabi. "*Duele mucho la cabeza, duele la cabeza y da ganas de revolver, y no sabe uno ni porque. Esa es aire y se limpiar."*

The head hurts a lot, the head hurts and gives desires to throw up, and one doesn't know why. This is aire and one cleans.

While *aire* once indicated a volitional wind causing disease in the ethnomedical literature on people of Mexican descent, the term was used by the Kay's (1977) informants to refer to abdominal gas. I found evidence of both definitions of *aire* among my research participants. Lorena explained that when people are repeatedly exposed to heat and then cold we become susceptible to *aire*. *Aire* not only causes headache, but body pain as well.

Raqi. *"Bueno lo que pasa que la espalda a veces duele cuando uno por ejemplo uno trabajando, sude demasiado que se moja uno pues trabajando en el sol. Entonces este ah, deja uno de trabajar y se seca la ropa en el cuerpo de uno. Porque luego se enfría eso mojado y le afecta uno la espalda y aire viene que agarra uno, dicen que aire también. Aire bueno, mas que todo es frío."*

Well what happens is that the back sometimes hurts when one for example one is working, sweating too much that, well one gets wet working in the sun. Then this ah, one leaves work and the clothes dry to one's body. Because later it gets cold this wetness and it affects one's back and *aire* comes that grabs one, they say that's *aire* too. *Aire* well, more than anything it's cold.

However, Teri's description of *aire* clearly indicates that she considers it intestinal gas that is produced by eating certain foods.

> Anna. "*Y porque tiene uno aire?*"
> And why does one have aire?
> Teri. "*Porque come muchos frijoles, leche te da aire. Eso no te duele pero es incomoda.*"
> Because you eat a lot of beans, milk it gives you aire. This doesn't hurt you but it's uncomfortable.

As its name suggests the major symptom of *dolor de cabeza* is pain in the head. If the condition is caused by *aire* headache may be accompanied by dizziness and nausea. Ideas about the pathology of headaches relate to a loss of blood or weak blood in the head and low blood pressure.

> Anna. "*Y porque tiene uno dolor de cabeza?*"
> And why does one have headache?
> Mari. "*A veces puede ser porque se te baja la presión y dolor de cabeza es por eso*."
> Sometimes it can be because your pressure is low and headache is because of this.

> Raqi. "*Entonces este, porque una persona que se traspasa mucho se supone que pierde, pierde pues a la sangre. O la sangre pierde fuerza. Y es cuando llega la debilidad y llega al cerebro es que viene ya dolor de cabeza.*"
> Then this, because a person that is off schedule I suppose that they lose, lose well the blood. Or the blood loses strength. And it's when the debility arrives and arrives at the brain, it's now that the headache comes.

Dolor de cabeza is considered a self-limited condition that may be treated by taking an over the counter pain reliever such as Tylenol, or lying down and resting. If headache is caused by *aire* a tincture of rue (*Ruta spp.*) may be rubbed on the body, especially if other parts of the body ache as well.

Responses to Sickness

Just as the causes of sickness and specific explanatory models collected during semi-structured interviews were naturalistic, I witnessed only two episodes of

personalistic healing during 13 months of fieldwork in Los Duplex. On the first occasion, Yari "cleansed" the mother who woke up to find her children missing (see chapter four) with a liniment made from several herbs soaked in rubbing alcohol. She later explained to me that this practice helps protect people who have suffered a scare from falling prey to *aire*.

On the day of the second event, I went to visit Teri who told me she was going to *curar* (cure) her infant daughter. The baby was suffering from a low fever and diarrhea. A few days before Teri had been to the doctor who prescribed pedialyte. Teri felt that since these symptoms had not gone away as the doctor predicted they might be the result of *mal ojo,* caused by someone who admired her child but did not touch her. Symptoms of *mal ojo* reported in the Mexican American ethnomedical literature include diarrhea, vomiting and fever and are usually cured by making signs of the cross on all parts of the child's body with a fresh egg (Clark 1959). Teri explained that *mal ojo* attracts *aire* that causes diarrhea and fever. The cure she gave her baby began with a bath in baby soap and warm water, followed by a chamomile tea rinse. After the bath Teri dressed her daughter in warm clothes and gave her some baby Tylenol. Then she took an uncooked egg and rubbed it all over the girl's body, head and face for about 15 minutes. She explained that the egg absorbs the *aire*. You have to stop and shake the egg periodically to make sure it doesn't sound too full. If it absorbs too much *aire* it can break and make a mess. Rubel (1960) also reports the use of an egg to diagnose and treat *mal ojo*.

Both of these personalistic treatments were part of a curing process that included different medicines. Indeed, virtually all of the many responses to sickness that I recorded involved naturalistic medicines recommended and administered by various

actors in the local medical system. Kleinman (1980) has proposed that the internal structures of medical systems are roughly the same cross-culturally. He defines them as local cultural systems composed of three overlapping parts: the popular, folk and professional sectors. The popular sector involves self-treatment or medicines given to a child by a parent. The folk sector involves folk/traditional healers (e.g. *curanderos*). The professional sector includes professional specialists who have graduated from formal medical schools. As in any good theoretical model these categories are fluid and all three can be present in a single medical system. However, medical anthropologists may decide to focus on only one of the three sectors. While this makes ethnomedical research more manageable, failure to consider differences between lay and specialist understandings of health and healing can lead to erroneous generalizations about medical systems (Tedlock 1987). In Los Duplex, when a Mexican woman or a member of her family gets sick she may draw on all three sectors.

Logan (1983) found that in the city of Juarez, Chihuahua, Mexico self-medication is the most frequently cited initial response to four common illness symptoms (headache, stomachache, cough and diarrhea). The popular sector is also of great importance in Los Duplex, especially in cases of common conditions. Fourteen of the women who participated in the structured interviews indicated that they use herbal and other home remedies more often than medicines recommended and/or prescribed by a physician. Another 11 stated that they use home remedies and pharmaceutical medicines with equal frequency and only12 indicated a preference for doctor recommended drugs. Semi-structured data provide evidence of a preference for home remedies, at least for mild disorders that are not considered life

threatening. Going to the doctor is generally reserved for serious ailments that do not respond to care from the popular sector.

Gabi. "*Si prefiero remedios caseros que medicamentos. Son mejor los remedios caseros no afectan al cuerpo.*"

Yes I prefer home remedies to medications. They're better the home remedies they don't affect the body.

Anna. "*Pero a veces necesita ir al médico?*"

But sometimes you need to go to the doctor?

Gabi. "*Por otras cosas, por ejemplo cuando uno trae infección en los oídos, que una cosa de grande como el dentista.*"

For other things, for example when one has infection in the ears, a big thing like the dentist.

Juana. "*Casi yo no toma medicina. Yo soy de las que no toma medicina. Hay muchas señoras que, les duele los pies-pastilla, le duele uno de la cabeza-pastilla, le duele uno el cuerpo-pastilla, y yo no. Yo si me duele la cabeza me acuesto un rato y me hecho alcohol y ya. O me duele el estómago me acuesto un té y ya. Solamente que sea muy fuerte que no me lo control ni con té, ni con remedios calientes nada, si no me puedo controlar lo que hago mejor me toma una pastilla para poder de controlar.*"

I almost never take medicine. I am one of those who doesn't take medicine. There are many señoras that, if the feet hurt them-pill, if the head hurts a pill, if the body hurts a pill and I no. Me if my head hurts me I lie down a while and I put on alcohol and that's it. Or if my stomach hurts me I lie down with a tea and that's it. Only if it's something very strong that I can't control, neither with tea, nor with hot remedies, nothing, if I can't control it with what I do, better that I take a pill for the ability to control it.

Raqi. "*Bueno para componerse uno depende la enfermedad, es un enfermedad leve, por ejemplo alguien que parezca de alergia o que parezca a un para decir si estaba sale a lo frío es un resfriado son diferentes medicinas que se van a tomar. Para alergia pues mi viejo toma tylenol cold allergy eso es para alergia. Si caso que llega una enfermedad avanzado, que me avance de no cuidarme pues tengo que ir a una clínica o ya se al hospital. Yo que tratar de evitar esa manera.*"

Well for one to get better it depends on the sickness, if it's a light sickness, for example someone that appears allergic or that appears as if they were out in the cold and it's a resfriado there are different medicines that they're going to take. For allergy well, my old man takes Tylenol cold allergy- this is for allergies. In the case that an advanced sickness arrives, that has advanced because I didn't take care of myself well I have to go to a clinic, or now I know to the hospital. I try to avoid this.

The folk sector is only minimally utilized by Mexican women in Los Duplex because there are few folk healers in Athens. The only Mexican folk healer that any of my research participants mentioned was a *sobadora* (Mexican massage therapist), who treats people with massage and the application of various "hot" salves. There are a few American herbalists in Athens but they do not attract Mexican clientele because they do not speak Spanish. This finding is similar to a study of the use of therapies and treatments outside the mainstream medical system of El Paso, Texas. Eight-three percent of the sample was classified as Hispanic. Nineteen percent of respondents saw a massage therapist, 12% saw an herbalist and only three percent saw a *curandero* (Rivera, et al. 2002).

In contrast, my research participants view Athens as a city with extensive professional healthcare resources. At least two women's clinics, two free clinics, two doctor's offices and both hospitals have interpreters on staff and the public hospital has a well-funded low-income assistance program. Despite barriers such as a lack of transportation and health insurance over three quarters of my research participants have been to a private doctor, clinic or hospital at least once. All of the women who were pregnant during the study and two who have a chronic health condition have visited a private doctor or a clinic on a monthly or weekly basis. Often professional and popular medicines are combined. While two research participants admitted to forsaking all home remedies in favor of American doctors the rest of the women I talked to continue to use home remedies in the United States, even if they also seek professional treatment.

Summary

Mexican women in Los Duplex define health, based on appearance, energy level and mood. Thirty-seven women made assessments of their own health status and the health of other members in their households. The findings on self-assessed health status described in this chapter are consistent with the Hispanic health paradox. Although Los Duplex is a low-income neighborhood, the people who live there with their families enjoy good overall health and get sick only on occasion, at least according to the women who are responsible for taking care of them. Most of the health problems that affect people in Los Duplex are mild and can be treated at home.

Mexican women play an important role in family health maintenance in Los Duplex. Their suggestions for maintaining health; eating a well balanced diet, staying active, avoiding stress and emotional upset and paying attention to the body are all things that any good doctor would recommend. In Los Duplex, Mexican women recognize many causes of sickness; some that the individual has little control over (the weather, bodily constitution) and others that can be controlled (diet, exposure to smoke, caring). They also have explanatory models for common health problems (stomachache, colds and headache) that both resemble and differ from biomedical models. When members of their families do get sick, women in Los Duplex draw on popular, folk and professional medical resources.

Chapter 6: Medicine

Recommending and/or administering medicine to sick family members is a responsibility and a skill that the women of all 28 households included in my study share. Because much of the healing occurs in the popular sector, Mexican women's knowledge of medicines is one the most important health care resources available to residents of Los Duplex. The majority of medicines used by my research participants are home remedies (*remedios caseros)*, which include both medicinal herbs and over the counter medications. However, with rare exception, prescription drugs are also used from time to time in Mexican households. Although such drugs are selected by a medical doctor, Mexican families expect women to learn how much of and how often a prescription drug should be taken and to make sure sick family members take their medicine. This chapter describes women's ethnopharmacological[17] knowledge of Mexican *remedios caseros* and American pharmaceuticals in Los Duplex.

The Local Pharmacopoeia

The first step in documenting Mexican women's knowledge of medicines was to learn the Los Duplex pharmacopoeia, which includes herbal teas and liniments, *pomadas* (salves), *pastillas* (pills), syrups and *antibióticos* (antibiotic and other prescription drugs).

All of the women who worked with me had some experience with medicinal herbs and agreed that they would like to learn more about how to grow and use them.

[17] Ethnopharmacology is a multidisciplinary field of study that employs anthropology, economic botany, pharmacology and chemistry to evaluate and understand the use of plants in non-western medical systems. Ideally,

The most common reasons given were that herbs are less expensive than other medicines, herbs are effective medicines and herbal medicines are natural. To learn which herbs are the most popular in Los Duplex I collected freelist data on medicinal plants. A total of 42 plants were included in the 24 freelists and 16 of these species were mentioned by at least two women (table 6.1).

Table 6.1. Frequency and Saliency of Medicinal Plants Included in Freelists.

Spanish Name	Scientific Name	Frequency	Saliency (Smith's S)
Manzanilla	*Matricaria chamomila*	22	0.636
Yerbabuena	*Mentha piperita*	21	0.599
Ruda	*Ruta spp.*	17	0.424
Albahaca	*Ocimum basilicum*	12	0.239
Savila	*Aloe vulgaris*	7	0.152
Oregano	*Origanum vulgare*	7	0.142
Canela	*Cinnamomum zeilanicum*	7	0.140
Epazote	*Teloxys ambrosioides*	6	0.126
Eucalypto	*Eucalyptus globulus*	6	0.104
Gordo Lobo	*Verbascum thapsus?*	5	0.099
Arnica	*Arnica montana*	3	0.093
Manrubio	*Marubium vulgare*	3	0.063
Poleo	*Satureia brownii*	2	0.052
Tila	*Tilia mexicana*	2	0.045
Estafiate	*Artemisa mexicana*	2	0.032
Cebolla	*Allium cepa*	2	0.030

The two most frequently mentioned and salient herbs, *manzanilla* and *yerbabuena* are prepared as infusions or teas for stomach problems by women in Los Duplex and other Mexican American communities (Curtin 1965; Kay 1977). These two plants were also included among the most common herbal remedies in both Clark's (1959) and Rivera, et al.'s (2002) studies. *Ruda* and *albahaca* were the third and fourth most frequently mentioned and salient herbs in the freelist data. Clark (1959) also listed these plants among the most common medicinal herbs in the community she studied

ethnopharmacology should adopt a broad ecological perspective that incorporates both biology and culture (see Etkin 1988).

and they are both included in Curtin's (1965) ethnobotanical study of New Mexico. In Los Duplex they are usually soaked in rubbing alcohol to make a topically applied liniment for aches and pains.

In Kay's (1977) study herbs were grown and/or collected by housewives or purchased in certain drugstores. However, some women felt that the herbs sold in stores are old and of poor quality (Kay 1977). During the semi-structured interviews on medicines four women brought up the fact that fresh herbs are better than dried. Fresh herbs are perceived as more potent.

Anna. *"Y que es mejor?"*
And what is better?
Gabi. "La fresca porque está más, más concentrada."
The fresh because it's more, more concentrated.

Juana. *"Si es mejor fresca, porque ella la yerbabuena así porque lleva toda la vitamina, está viva la plantita es mejor."*
Yes it's better fresh, because it the yerbabuena like this because it has all the vitamins, the plant is living, it is better.
Anna. *"Y con otras plantas es mejor de tomarlos frescos?"*
And with other plants it's better to take them fresh?
Juana. *"Si siempre las verduras toda fresca."*
Yes always the vegetables, everything fresh.

Luci. *"Hay fresca y la venden fresca y la venden seca allí de la dos manos."*
There is fresh and they sell it fresh and they sell it dry there, both types.
Anna. *"Y cual es mejor?"*
And which is better?
Luci. *"La fresca, claro que siempre es mejor la fresca."*
The fresh, sure it is always better fresh.
Anna. *"Y porque?"*
And why?
Luci. *"Porque viene natural viene de sin cortada, sin el cambio ya este seca, pues ya viene como aquí se trabajaba ya no trae el mismo que fresca."*
Because it comes natural it comes uncut, unchanged. Now if it is dry, well now it works but isn't the same as fresh.

Fortunately, some plants including *yerbabuena* and *albahaca* are easy to grow in Georgia. Other herbs are purchased at local Mexican groceries that sometimes carry fresh plant material.

Herbal medicines are an essential component of the Los Duplex pharmacopoeia, but they are not the only *remedios caseros* used. In Mexico there is a strong cultural tradition of purchasing patent medicines at pharmacies. In Logan's (1983) study, using over the counter medications was the most frequently cited form of self-medication for diarrhea, headache, cough and stomachache. I collected ethnopharmacological information on Mexican and American non-prescription medicines through unstructured and structured interviews and participant observation. Use of the two most popular of these medicines, *vaporub* and Tylenol was also documented in Kay's (1977) study. *Vaporub* is used for congestion in the chest and sinuses and Tylenol is popular for headaches and fevers in some families. One woman who I interviewed said that she preferred Advil to Tylenol, but *aspirina* (aspirin) was not very popular. *Pomadas* from Mexico are used for burns, cuts and pain. Some of my research participants also use Alka Seltzer (or simply baking soda) for certain stomach symptoms. These commercially produced home remedies are purchased at Mexican and American groceries and pharmacies.

The most common medicines prescribed to people in Los Duplex are cough syrups, anti-fungal creams, antibiotics, antihypertensives and diabetes medications. In Los Duplex, children covered by Medicaid are given more prescription medicines than adults because they go to the doctor more frequently. However, uninsured adults and children can and do get prescriptions from the free clinic, public hospital and public health department when needed. Prescriptions are usually filled at *La Eckerd* because

it is the pharmacy closest to Los Duplex and accepts Medicaid. However patients of the free clinic can get their prescriptions filled for free only at one specific pharmacy located near the public hospital.

Classification of Medicines

After I elicited the names of medicines in the Los Duplex pharmacopoeia I conducted pile sort interviews to learn how Mexican women classify home remedies. Multi-dimensional scaling analysis of pile sort data indicates that Mexican home remedies are grouped into four major categories (figure 6.1). The largest group includes the 13 herbal remedies included in the pile sort and a second group was comprised of the three Mexican *pomadas*. Logan (1983) reports that his Mexican American informants placed over the counter and herbal remedies into two discrete categories. Women in Los Duplex made a further distinction between *pastillas* and other medications purchased in grocery stores or pharmacies.

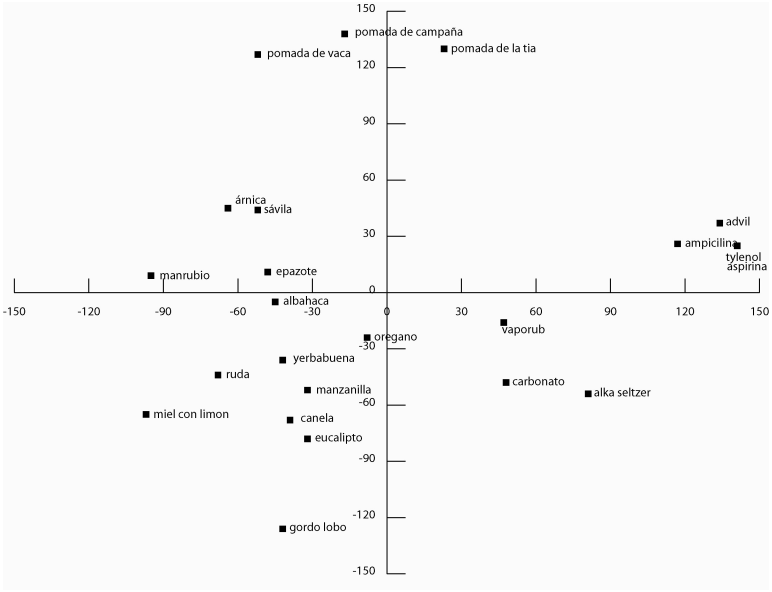

Figure 6.1. Multi-dimensional scaling plot of pile sort data on medicines shows four clusters.

Structured and semi-structured interviews on medicines revealed that women in Los Duplex consider herbal remedies and *pastillas* very different types of medicine. Most agreed that herbal medicines are safer for the body because they are natural, while *pastillas* have *químicos* (chemicals) in them that can cause side effects.

> Anna. "*Entonces las drogas pueden hacer daño, pero los tés?*"
> Then the drugs can do harm, but the teas?
> Gabi. "*No el té no no hace daño.*"
> No the tea does no harm.
> Anna. "*Y porque?*"
> And why?
> Gabi. "*Pues no se, será porque son químicos es artificial. Son químicos, el natural más bien.*"
> Well I don't know, it's because they're chemicals, it's artificial. They're chemicals, natural is better.

> Enida. "*Ohh, yo creo que la medicina natural, si podemos utilizar y sabemos en que momento utilizarla yo creo que muchas veces el organismo aceptan mucho mejor las medicinas que los antibióticos y otra medicinas que son mas fuertes, que si te cura una cosa, te dan otra. Y pues eso lo que yo oído, verdad? Hay unas medicinas que son muy fuertes debilitan otras partes de cuerpo mientras que te curan están debilitando otra parte del cuerpo. Entonces yo creo que si se puede mantener una estabilidad en la salud, en una manera mas suave se puede hacer.*"
> Ohh, I believe that the natural medicine, if we can use it and we know at what moment to use it I believe that many times the organism accepts these medicines much better than the antibiotics and other medicines that are stronger. Those that if they cure you of one thing they give you another. And well, this is what I heard, true? There are some medicines that are very strong they debilitate other parts of the body while they cure you, they are debilitating another part of the body. Then I believe that if you can maintain a stability in your health, in a gentler manner you can do it.

Pastillas are also considered potentially dangerous because they are similar to *drogas* (illegal drugs) that are addictive and mask serious symptoms.

> Anna. "*Oh y el Tylenol o Advil no hace daño?*"
> Oh and Tylenol or Advil do no harm?
> Gabi. "*Pues yo creo que si, no con el tiempo tanto Tylenol. Porque ya uno agarra como un adicto el Tylenol y eso así lo es. Es como cuando la*

gente agarro a una droga es un adición a las drogas. Hacia uno todo el tiempo toma Advil o Tylenol es como una droga que uno quiere."

> Well I believe in not taking much Tylenol for too long. Because one grabs the Tylenol like an addict and this, it's like this. It's like when people grab a drug, it's an addiction to the drugs. One takes Advil or Tylenol all the time, it's like a drug that one wants.

Enida. "*Y hay veces uno no las presta atención. Y está enfermo el cuerpo y está diciendo estoy enfermo, estoy enfermo, y duele la cabeza, duele el cuerpo. Y muchas veces tomamos pastillas para tener el dolor y el dolor esta diciendo algo más grave."*

> And there are times one doesn't pay attention. And when it's sick the body is saying I'm sick, I'm sick and the head hurts the body hurts. And many times we take pills for the pain and the pain is saying something more serious.

Juana. "*Ah porque yo conozco una comadre y ella es de, si le duele una uña- una pastilla, si le duele los pies- una pastilla, si le duele el estomago- una pastilla, si duele la cabeza- una pastilla, todo el cuerpo le duele- pastillas. Per al día, al día. Ya se le hizo como droga porque en el día se toma como unas 15 o 20 pastillas, que para la presión y que luego la otra que por, yo no se por cuantas enfermedades pero ella se toma como una 6 de una o de otra, de otra como 6 en la mañana, como otra 6 al medio día, otra 6 en la tarde. A parte es inyecta. Y yo, yo este a veces me enfermo de la presión, a veces me enfermo de otras cosas y yo no me tomo ni una pastilla."*

> Ah because I know a comadre and she is like, if a fingernail hurts her- a pill, if her feet hurt her- a pill, if her stomach hurts her- a pill, all the body hurts her- pills. But day after day. Now I know it's like a drug because in the day she takes like 15 or 20 pills, that are for the pressure and later another that's for, I don't know for how many sicknesses but she takes like six of one or another, another like six in the morning, like another six at midday, another six in the afternoon. Aside from the injections. And I, I sometimes I get sick from the pressure, sometimes I get sick from other things and I take not one pill.

The belief that herbal remedies have no side effects is found in other parts of the Americas. In Ecuador "natural medicines," defined as commercially packaged and processed herbal preparations, are generally perceived as inexpensive, easy to obtain and harmless (Miles 1998).

Folk Models of Medicinal Action

While most ethnopharmacological studies focus only on medicinal plants and the discovery of novel bioactive compounds (Etkin et. al. 1990; Johnson 1990) in this study I am concerned with plants that have already been studied by chemists and/or pharmacologists, as well as pharmaceuticals. Researching medicines with known chemical compositions, allows us to focus on the social and cultural aspects of their use (Johnson 1990; Van der Geest, et al. 1996). Moreover, I can better assess the quality of Mexican women's medical knowledge by comparing their perceptions of the effects of herbal remedies and pharmaceuticals with the effects indicated the chemical and pharmacological literature.

It has been argued that the reluctance to combine the emic perspective of ethnomedicine with the etic measures of biomolecular science is a theoretical weakness in medical anthropology. Some medical anthropologists have charged that it is not appropriate to apply biomolecular standards to ethnomedical systems, because to do so would be reductionist (Browner, et al. 1988). However, there are practical benefits of using biomedical criteria to evaluate traditional medicine. By conducting observational studies and blinded, controlled clinical trials researchers have been able to demonstrate that chiropractors are very effective in the treatment of certain spinal disorders. This finding lead Anderson (1991) to the conclusion that the lower status of chiropractors, in relation to biomedical physicians, reflects an artificial caste dynamic. That is, chiropractors are not inferior in the sense that they practice an ineffective form of healing. Likewise, the use of biomedical criteria can generate valuable new interpretations for comparative studies of human physiological processes,

the ways in which such processes are perceived and the culture-specific behaviors these perceptions produce (Browner, et al. 1988).

In fact, Browner et al. (1988) have developed a model for analyzing ethnomedical data in their own terms *and* according to the standards of biomedicine. The first step is to identify the phenomena under investigation from an emic perspective. In the second step, one determines the extent to which the phenomena described can be understood in terms of biomedical concepts and methods. Finally, the third step is to identify the areas of convergence and divergence between emically described phenomena and their biomedical understandings. In this stage biomedical concepts are not used to examine the phenomena in their own terms (as in step two), but to see if they are consistent with biomedical assumptions. This methodological framework guided my collection and analysis of data on Mexican women's folk models for the actions of medicine. I began by conducting semi-structured interviews that generated emic descriptions of what five types of medicines are used to treat, how they are perceived to work and what effects they are expected to produce. I then turned to the chemical and pharmacological literature for evidence supporting Mexican folk models of action and information on how these models are similar to and differ from the biomedical understanding and use of these medicines.

Stomach Teas

All nine women interviewed about medicines agreed that *té de manzanilla* (chamomile tea) is good for stomachaches and menstrual cramps. The tea can be given to infants to relieve colic and may even be used to help clean out their sinuses.

> Luci. *"La manzanilla pues unos, lo uso también por mi niña está pequeña, tiene 2 meses, tiene mucho moco acá. Hecho unas gotitas tibia de*

manzanilla y eso ayudar flojarse porque se le venga. Como ya no puede hacer fuerza con esa se la floja y es efectivo para uno.

Manzanilla well some, I use it also because my girl is little, she's two months old, she has a lot of mucus there. I put in a few little drops of warm manzanilla and this helps it to loosen because it comes out. Like she can't force it out, with this it flows and it's effective.

Manzanilla is also reported to be useful as an eye-wash and as an evening tonic when one has *aire* in the nerves.

Raqi. "*A veces que también para sacar aire en los nervios. Se siente uno nervioso y eso nosotros lo tomamos calientito por regular en la noche.*"

Sometimes also to take out aire in the nerves. One feels nervous and for this we regularly take it warm at night.

It can also be combined with other ingredients such as honey and used for sore throats and coughs.

Té de manzanilla is prepared by putting the plant materials in boiling water and letting them simmer for five to ten minutes. The tea is ready when it is pale yellow in color and many women add a little sugar or honey before drinking it. None of the women who I interviewed were precise with the measurements in their *té de manzanilla* recipes but the general consensus was that you boil about a cup of water and add a handful of *manzanilla*. Recommended dosage was equally imprecise but most women suggested taking a cup of the tea once a day.

The women I interviewed expressed a variety of ideas about the healing properties of *manzanilla*. Six explained that *manzanilla* is good for the stomach because it is hot (even if a cup of tea cools off before it is drunk).

Raqi. "*La manzanilla, al tomarse pues la puede tomar hasta fría pero el contenido es caliente.*"

The manzanilla, well you can take it cold but the contents are hot.

Teri described *té de manzanilla* as hot and relaxing. Enida felt that heat alone would not be enough to make *manzanilla* an effective medicine and suggested the plant also has some other property.

> Enida. "*Uh huh caliente, y yo no se realmente que propiedades puede tener la manzanilla. Pero puede tener alguna propiedad en, en, tal vez hay unas. Considero yo… Puede tener alguna cierta cantidad de algún antibiótico natural que le puede ayudar al estómago a quitar el dolor.*"
>
> Uh huh hot, and I don't really know what properties the manzanilla might have. But it may have some property in, in, maybe there are some. I consider…it may have some certain quantity of some natural antibiotic that can help the stomach in ridding the pain.

Five women agreed that when you take *té de manzanilla* you can feel it produce heat in the stomach and elsewhere in the body. This heat is thought to relieve bloating and pain.

> Juana. "*Pero, por ejemplo yo cuando me lo tomo pues siento en el estómago siento que me caí algo calientito en el estómago. Y empieza el a bajar el estómago y el dolor empieza a retira.*"
>
> But, for example when I take it well, I feel in the stomach, I feel that something a little warm fell in the stomach. And it begins to deflate the stomach and the pain begins to retreat.

> Anna. "*Y cuando toma una tasa de manzanilla como siente?*"
>
> And when you take a cup of manzanilla how do you feel?
>
> Mari. "*Oh, a mi me caí muy bien. Siento el estómago calientito y desinflamado.*"
>
> Oh, with me it sits very well. I feel the stomach warm and dis-inflamed.

Another explanation for the medicinal action of *té de manzanilla* involves its perceived ability to clean or purify the stomach.

> Luci. "*Pues yo pienso que es una yerba que limpia un poco tu estómago, y hace, yo pienso que es algo que te limpia el estómago y esa se te quite el dolor.*"
>
> Well I think that it's an herb that cleans the stomach a little, and it does, I think that it's something that cleans your stomach and this rids you of the pain.

Raqi. "*Que diciendo caliente. Lo que pasa es de que la manzanilla como toma uno purifica el el, así aunque sea dolor de caliente la manzanilla también quita ese dolor.*"

They say it's hot. What happens is that the manzanilla one takes, it purifies the, the like this even if the pain is from heat the manzanilla also rids this pain.

Finally, Raqi (36, rural Michoacán, *niñera*) explained that when *té de manzanilla* is taken for *aire en los nervios* it causes one to belch, which releases the *aire*.

Raqi. "*Bueno, el síntoma que se siente en el cuerpo cuando lo toma la manzanilla en primer lugar se siente uno bien relajado en el estómago. Y este muchas de las veces repite uno que es cuando sabe uno que es sale aire de los nervios. El aire en los nervios por lo regular cuando se toma la manzanilla agarra el estomago y eso lo que hace uno ya.*"

Well, the symptom that you feel in the body when you take the manzanilla, in the first place one feels very relaxed in the stomach. And many times one burps. That is when one knows that aire is leaving the nerves. The aire in the nerves, regularly when one takes the manzanilla it grabs the stomach and this is what it does to you.

All of the women who I interviewed about medicines agreed that *té de manzanilla* is not a dangerous medicine and is safe to use in combination with other medications. Only Raqi mentioned possible side effects that can result from taking too much tea or drinking it at the wrong time of day.

Raqi. *Y también se lo toma uno el té de manzanilla si le toma uno caliente en la mañana y luego toma uno algo frío hace daño al pecho. Por los regulares esos remedios son de la noche.*

And also one takes a manzanilla tea, if one takes something hot in the morning and later takes something cold, it does harm to the chest. Regularly these remedies are for the night.

Anna. "*Entonces si toma en la mañana es mal porque..*"

Then if you take it in the morning it's bad because..

Raqi. "*es mal porque luego toma uno cosas frías….Si tomas máximo son dos vasillo pero si en una hora te tomas 3 vasillos se atrapar de cagar como vomitadora. Es caliente pues. Y mucha también, mucha de las veces este existe un, un dolor de cabeza. Son yerbas fuertes, son remedios fuertes.*"

it's bad because later one takes cold things….Yes we take maximum are 2 glasses but if in an hour you take three glasses it causes you to shit like vomiting. It's hot. And many also, many times it gives you a headache. They're strong herbs, they're strong remedies.

While Raqi feels that herbal remedies such as *manzanilla* are strong medicines, Luci and Yari consider *manzanilla* to be harmless because it is natural.

> Anna. *"Y la manzanilla no hace daño?"*
> And the manzanilla does no harm?
> Luci. *"Yo digo que no, es una yerba natural que no causa daño a ninguna persona."*
> I say no, it's a natural herb that doesn't cause harm to any person.
>
> Anna. *"Y manzanilla hace algún daño?"*
> And the chamomile does any harm?
> Yari. *"No, no porque es de yerbas naturales así. Esa no hace algún mal. Así como medicina no le caí mal eso porque no hace mal."*
> No, no because it's from natural herbs like this. This doesn't do anything bad. Like this, as medicine it doesn't fall badly because it doesn't do bad.

The perception of *té de manzanilla* as a harmless medicine is also related to the way it is believed to pass through the body. All but one of the women I interviewed stated that *té de manzanilla* enters the body, cures what needs to be cured and leaves the body via urine. Thus, it leaves nothing behind to affect other parts of the body. Enida also suggested that *manzanilla* is easier to eliminate than *pastillas* because it contains natural elements rather than chemicals.

> Anna. *"Tengo otra pregunta de los tés porque los tés hay algo que queda en el cuerpo o sale?"*
> I have another question about the teas, because in the teas is there something that stays in the body or leaves?
> Enida. *"Yo creo que como estamos tomando nada mas pues es un té a vaso de agua y de los minerales que puede tener una planta. Pues yo creo que lo eliminamos al 100% después de que el cuerpo usa lo que necesita para curar. Creo que es más fácil de eliminar los minerales que puede tener una plantas a los químicos que puede utilizar una pastilla."*
> I believe that as we are taking nothing more than, well it's a tea, a glass of water and the minerals that a plant might have, well I believe that we eliminate it 100% after the body uses what it needs to cure. I believe that it's easier to eliminate the minerals that a plant may have than the chemicals that a pill uses.

Chamomile *(Matricaria chamomila, M. recutita* or *Chamomila recutita)* is one of the most well studied medicinal herbs in the international literature on natural products chemistry and pharmacology.[18] Chamomile contains several potent flavonoids, as well as other biologically active compounds that give this plant antibacterial, anxiolytic, spasmolytic, antioxident, anti-inflammatory, sedative and immunomodulatory properties (Ross 2001). The scientific literature supports the hypothesis that *té de manzanilla* is effective for the conditions Mexican women in Los Duplex use it to treat. For example, a prospective, double blind clinical study of diarrhea in children shows that chamomile extract treats this condition significantly faster than placebo. An ethanol (40%) extract of chamomile flowers was shown to be effective against ethanol-induced ulcers in male rates and chamomile essential oil decreases tone and peristalsis in rat small intestine and guinea pig ileum and trachea (Ross 2001).

In an *in vitro* study of the ability of chamomile and peppermint oils to transfer from stomach to plasma Szentmihályi, et al. (2001) found that most of the components of chamomile oil, except chamazulene passed through the membranes at a low pH. This suggests that chamomile exerts its effect at two different sites. Alpha-bisabolol is transferred to the plasma and may have an antispasmodic effect on muscle cells, while chamazulene remains in the stomach where it exhibits anti-inflammatory activity (Szentmihályi, et al. 2001). It appears that the anti-inflammatory effect of chamazulene may be related to the compound's antioxidant properties. Free radical reactions are implicated in a number of health conditions including inflammation. Oxygen-derived radicals are generated at inflammatory sites and aggravate active tissue damage.

[18] For a recent review of the international literature on *Matricaria chamomilla* see Ross (2001).

Chamazulene offers significant protection against lipid peroxidation *in vitro* (Rekka, et al. 1996).

The anxiolytic activity of chamomile has also been documented in the pharmacological literature. Anxiety is a subjective, emotional state of uneasiness that is unpleasant and even fearful. In mainstream western medicine benzodiazepines are the most widely used and well-studied treatments for anxiety. These drugs work by binding to an area of the gamma amino butyric acid receptor, which is the principal inhibitory system of the brain that regulates neurotransmitter receptor systems involved in anxiety. Benzodiazepines increase the action of gamma amino butyric acid, which causes a hyperpolarization that decreases the possibility of generating nerve impulses (Paladini, et al. 1999). Paladini, et al. (1999) found that flavonoids isolated from several medicinal plants including apigenin, one of the major constituents of chamomile are ligands for benzodiazepine receptors. The affinity of these compounds for benzodiazepine receptors and their anxiolytic potency can be increased through chemical modification. However, in another study apigenin did not exert an anxiolytic effect by activating gamma amino butyric acid receptors in rats, suggesting the sedative effect of chamomile is due to other compounds with benzodiazepine-like activity (Avallone, et al. 2000).

The 1998 Physician's Desk Reference (PDR) for Herbal Remedies reports no known adverse reactions or health hazards for *Matricaria chamomila* (Fleming 1998). Ross (2001) reports a study in which daily oral dosing for 13 weeks with diluted commercial preparations of chamomile produced no negative effect on rats. This suggests that manzanilla is indeed a safe drug. However, allergic reactions to topical applications of an ethanol (95%) extract and a flavonoid fraction of dried chamomile flower and oral

ingestion of chamomile tea have been documented in adult humans with allergies to chrysanthemum. Further, the development of conjunctivitis after chamomile tea eyewashes has also been recorded in patients with severe asthma and allergies (Ross 2001).

In Los Duplex *yerbabuena* is used in cooking and as a home remedy. As a medicine it is used for *dolor de estómago* and as a tonic for newborns.

> Enida. "*Ah la yerbabuena. La yerbabuena muchas veces en mi país la utilizamos como, a veces como condimentos a veces lo usamos si para la comida. Y a veces la usamos también como té. A mi me enseñaban a usar la yerbabuena como un té para los recién nacidos, mi abuelita. Yo creo que si es cierto pues mi hijo tiene un estómago bastante bueno para asimilar sus comidas y a me dijo que eso provocaba el té*."
>
> Ah the yerbabuena. The yerbabuena many times in my country we use it as, sometimes as a condiment sometimes we use it in food. And sometimes we also use it as a tea. To me, my grandmother showed me how to use the yerbabuena as a tea for newborns. I believe that it's works, well my son has a good enough stomach to assimilate his foods and I say that the tea caused this.

Te de yerbabuena is generally prepared in the same manner as *té de manzanilla*. However, Juana adds a little chocolate to her *yerbabuena*.

> Juana. "*Yo tengo la yerbabuena afuera. Yo la corto y la pongo cocer en un ollita y cuando esta cociendo le hecho un pedazo de chocolate.*"
>
> Yes. I have yerbabuena outside. I cut it and put it in a little pot to cook and when it's cooked I put in a piece of chocolate.

The recommended dosage of *té de yerbabuena* is a cup for older children and adults and two to four ounces for an infant or small child.

Like *manzanilla*, most women believe that *té de yerbabuena* is healing due to its humoral quality. However, Gabi and Juana described *yerbabuena* as *fresca*, which Baer, et al. (1999) translate as cool, while Santos and Teri classify it as a hot medicine. Juana went on to explain that she adds chocolate to her *yerbabuena* to give the tea a hot quality. The heat works with the intestines to help get them moving. Raqi explained

that *té de yerbabuena* helps the stomach because it makes you belch. The only reported side effect of *yerbabuena* was excessive belching.

Four women who I interviewed about medicines had *yerbabuena* growing in their yards, which I recognized as peppermint (*Mentha piperita)*. Pittler and Ernst (1998) review eight randomized controlled trials on the use of peppermint oil to treat symptoms of irritable bowel syndrome, one of the most common functional gastrointestinal disorders in the United States. Half of the studies analyzed demonstrated a significant positive effect of peppermint oil on symptoms of irritable bowel syndrome compared with placebo.

The usefulness of peppermint for gastrointestinal symptoms may be related to the plants anti-nociceptive and anti-inflammatory activity. In a study of the ability of nine medicinal species used to relieve pain and inflammation, hot plate thermal stimulation and acetic acid induced writhes in mice were selected to test the ability of these extracts to block the central and peripheral transmission of pain impulses. Peppermint induced a dose-dependent analgesic effect against both stimuli, indicating central and peripheral effects. Moreover, ethanol extracts of peppermint produced a dose dependent anti-inflammatory effect against acute and chronic inflammation in mice and rats. The use of peppermint to treat pain and inflammation associated with spasmodic colics is thus supported by this study (Atta and Alkofahi 1998).

An *in vitro* study conducted by Hills and Aaronson (1991) demonstrated that peppermint oil directly relaxes gastrointestinal smooth muscle by acting as a calcium antagonist. In the absence of calcium the action of the neurotransmitter acetylcholine (the major excitatory neurotransmitter in mammalian intestine) is impaired. Thus, muscle contractions will occur only if acetylcholine concentrations are high when calcium is

not present. It is likely that menthol is responsible for peppermint oil's relaxing effects on gastrointestinal smooth muscle. It is interesting to note that like chamazulene menthol does not pass from stomach to plasma *in vitro* (Szentmihályi, et al. 2001). This suggests that it menthol exerts its effects inside the stomach.

Although the women I interviewed use *yerbabuena* only for stomach ailments the plant does have other healing properties and actions. For example, while most of peppermint's biological activity is attributed to its essential oil, Inour, et al. (2002) look at non-volatile constituents and their antihistamine activity in rats. The authors separated a hot water extract of peppermint into eight components. One of the components, luteolin-7-*O*-rutinoside was associated with an inhibition of histamine release and nasal symptoms induced by antigen in rats.

Mentha piperita is contraindicated in cases of biliary duct occlusion, gall bladder inflammation, liver damage, gallstones and gastroesophagal reflux, but has no other known adverse effects (Fleming 1998).

Sodium Bicarbonate

Herbal teas are not the only remedies used for *dolor de estómago* in Los Duplex. Two of the women who I interviewed about medicines have used Alka Seltzer[19] (one frequently and one rarely) to relieve stomachache symptoms associated with eating heavy foods.

> Enida. "*Oh Alka Seltzar. El Alka Seltzar es lo que yo usaba con mayor frecuencia a lo mismo que uno utiliza eso… como muchas comidas muy cargadas de condimento o de salsas picantes. Hay veces que les toma reciente. El Alka Seltzar es, yo creo que nombre del espante es como te va ayudar aliviar las partes que se te gritan el estómago. Más que todo es el estómago y hay veces que los mismos fluidos del estómago te pueden dar yo digo que magrudas da mismo los mismos ácidos en el*

[19] The active ingredients of Alka Seltzer are sodium bicarbonate, aspirin and citric acid.

estómago. Entonces eso puede aliviar los síntomas del acidez y el dolor del estómago."

> Oh, Alka Seltzer. Alka Seltzer is that which I use with the most frequency for the same thing that one uses this… I eat a lot of foods that are very heavy with condiments or hot sauces. There are times when I took it recently. Alka Seltzer is, I believe that name of the ghost, is how it is going to alleviate the parts of your stomach that scream. Most of all it's the stomach and there are times when the same fluids of the stomach can give you heartburn the same, the same acids in the stomach. So this can alleviate the symptoms of acids in the stomach and the pain of the stomach.

Juana. *"No. Esas son buenas para muchas enfermedades. Para dolor de cabeza, para uno está un poco se focado de estómago si le cayo mal de la comida, le duele uno del cuerpo también es buena también. Pero yo no la uso porque, porque no la pongo acostumbrar. Ora ya una vez al año me toma uno, pero no la costumbro. Casi no la uso."*

> No, these are good for many sicknesses. For headache, for one that is a little focado in the stomach if some food fell badly, if it hurts one in the body it's good also. But I don't use it because, because I'm not accustomed to. One time a year I take one, but I'm not accustomed to it. I almost never use it.

However, plain *sodium bicarbonate* (*carbonato*) is a more popular home remedy for this condition, especially if there is infection or excess acid in the stomach.

Gabi. "*Carbonato, una poquita de carbonato para infección en estomago."*

> Carbonato, a bit of carbonato for infection in the stomach.

Luci. *"Si, yo digo que lo usamos cuando uno come demasiado y tiene acides toma tantito carbonato con limón es bueno para que desinflado el estómago, pero no seguido."*

> Yes, I say that we use it when one eats too much and has acids, take a little carbonato with lime it's good for deflating the stomach, but not all the time.

About two spoonfuls of *carbonato* are mixed with one cup of water (or another beverage). Some women add *yerbabuena* to this mixture. A slice of lime may also be dipped in *carbonato* and sucked to relieve swollen gums. When taken for digestive ailments *carbonato* is thought to cut fat and grease in the stomach. Luci, Raqi and Teri explained that it also causes one to belch, which releases *aire* and reduces bloating.

Raqi. "*Un rato anda uno bien agusto. También saca el aire, quita lo caliente el estómago y este eruta uno y le da hambre.*"

After a while one goes about very comfortably. Also it takes out aire, it rids that which heats the stomach and this one belches and it gives hunger. The carbonato makes you hungry.

While Gabi felt that *carbonato* was harmless and without side effects, Luci and Raqi believe that it is too strong a medicine to take everyday. Teri also cautioned that taking too much *carbonato* could burn the digestive tract.

Sodium bicarbonate is used to restore the buffering capacity of the body and neutralize excess acid in the stomach (Nursing93 Books 1993). It is a weak base that reacts almost instantly with hydrochloric acid to produce salt and water. However, it is not recommended for long-term use because it is absorbed rapidly in the gut and can cause systemic alkalosis and fluid retention (Altman 1989). Other effects of sodium bicarbonate include belching and flatulence (Nursing93 Books 1993).

Medicines for Gripas

While *gordo lobo* was mentioned by only five women who did freelist interviews (and was completely unknown to several women who completed the pile sort exercises) Luci and Yari both spontaneously mentioned it as a good medicine for *gripas* during the medicine interviews. *Gordo lobo* is purchased dry at the Mexican grocery and is used for *gripas* that include coughs and achy bones.

Luci. "*Yo tengo mucha para la tos. Mas que nada para una gripa duele de huesos y la tos siento que es muy efectoso el gordo lobo.*"

I have used it a lot for cough. More than anything for a gripa when the bones ache and there's cough, I feel that the gordo lobo is very effective.

Anna. "*Y el gordo lobo es bueno para la tos?*"

And gordo lobo is good for cough?

Yari. "*Para la tos. Cuando uno tiene muy fuerte. Con té de..dice que gordo lobo es para la tos porque también es caliente.*"

For cough. When one has a really strong one. With tea um, they say that gordo lobo is for cough because it is also hot.

Yari prepares a tea of *gordo lobo* in the same way *manzanilla* and *yerbabuena* are prepared. Luci adds eucalyptus, cinnamon, honey and lime to her *gordo lobo* tea. Both women recommended that a cup of *té de gordo lobo* be taken twice a day. Yari described *gordo lobo* as a hot medicine that somehow targets the chest, while Luci explained that the tea helps soothe a sore throat, especially if it is made with honey and lime.

> Anna. *"Todo la manzanilla, la yerbabuena y el gordo lobo, todo están caliente. Pero el gordo lobo sirve para la tos y los otros el estómago. Entonces que es la diferencia? Si todos están caliente porque el gordo lobo no sirve para el ..."*
>
> All the chamomile, the yerbabuena and the gordo lobo are all hot. But the gordo lobo works for cough and the others for the stomach. Then what is the difference? If they all are hot why doesn't gordo lobo work for...
>
> Yari. "*A veces también sirve para el dolor así tantito el gordo lobo pero el casi es así para pecho. No se porque pero es exclusivo para pecho.*"
>
> Sometimes the gordo lobo also works for pain a little bit. But it almost always is just for the chest. I don't know why but it is exclusively for the chest.

> "Luci. "*Por decir si tienes, como dolor de garganta también con eso es muy bueno, y la miel o por decir cuando tiene uno así con mucho dolor de garganta que te duele por pasar la saliva la miel bien caliente con limón eso es muy bueno, se siento alivio.*"
>
> To say if you have like, pain in the throat also this it's very good, and the honey or to say when one's throat is very sore and it hurts to swallow, very hot honey with lime is very good, one feels alleviated.

Yari cautioned that one should not drink anything cold after taking *gordo lobo* because doing so can cause hoarseness.

> Anna. *"Y cuando toma gordo lobo que hace?"*
>
> And when you take gordo lobo what happens?
>
> Yari. *"También se siento caliente pero de ese si no debe uno de tomar cosa fría porque se hace uno ronco. Y ese si es muy caliente más."*
>
> One also feels hot but with this one shouldn't take anything cold because it makes one hoarse. And this, yes it's much hotter.

Vicks Vapo Rub (and similar products made by other companies) is a more popular medicine for nasal, throat and chest congestion associated with *gripas* and was used by all of the women who I interviewed about medicines. Yari also mentioned that it is useful for achy bones and sore feet. "*Vaporub*" is usually applied topically on the chest and back and most women heat it up first by rubbing it between their hands. When Gabi's infant son is congested she also adds *vaporub* to hot *manzanilla* tea and has him inhale the steam.

> Gabi. "*Para el niño cuando está enferma de gripa lo caliento, lo caliento y se lo pongo en el pecho y en la espalda. Y le hago vapores así con vaporub y manzanilla. Se hierve la manzanilla si pone una cuchara de vaporub y ya que hierve su el vapor y eso ayuda el se le corten la moco de la nariz.*"
>
> For the boy when he's sick from gripa, I heat it and I put it on the chest and on the back. And it makes vapors like this with vaporub and manzanilla. You boil the manzanilla and put in a spoonful of vaporub and boil the vaporub and this helps it cuts the mucus of the nose?

Five women classified *vaporub* as a hot medicine. The vapors that are released by *vaporub* are inhaled and absorbed through the pores of our skin. Once inside the body the vapors cut congestion by detaching phlegm from the chest and sinuses and helping it flow out of the body.

> Enida. "*Yo creo que calor del vicks te ayuda a que la flema se juntan en los pulmones a causa de la infección se despegue del lo que es los pulmones y pues puede afluir como una mucosa más suave que al estar una infección fuerte en los pulmones.*"
>
> I believe that the heat of vicks helps you so that the phlegm that gathers in your lungs because of the infection detaches from the lungs and well, can flow like a more gentle mucus than a strong infection in the lungs.

> Mari. "*Te ayuda a descongestionar el pecho y a destaparlas las cosas cuando tiene uno vapor. El vaporub es caliente y cuando uno tiene dolor de pecho si te pones vaporub los caliente y los vapores pasan.*
>
> When one has vapor it helps you decongest the chest and uncatch the things in it. The vaporub is hot and when one has

chest pain if you put vaporub on it warms them and the vapors pass.

Because *vaporub* is applied topically it is considered a medicine with few side effects. However, Enida remarked that because it is very hot it can burn the skin and Gabi and Teri advised against bathing after using such a hot medicine. Juana also gave me a strong warning against eating *vaporub*.

Juana. "*Pues este, yo conozco una señora se murió, ella se lo comía. Porque ella se enfermaba mucho de la gripa, de muchas semanas con la gripa. Y dice que si se hechaba poquita aquí si va componer comiendo si lo más. Ese lo comía. Y le dije yo que para que se lo comía dice para curarse por al dentro de pecho. Pero no lo hacemos. Nosotros no lo hacemos. Lo usamos, pero solamente para ponerse lo en el cuerpo pero para comer no.*"

Well this, I know a woman who died, she ate it. Because she got sick a lot from gripa, many weeks with gripa. And they say if you put a little here yes you're going to get better eating it. This she ate. And I said to her why did you eat it, they say to cure inside the chest. But we don't do it. We don't do it. We use it but only for putting it on the body but for eating, no.

Both Luci and Yari use dried *gordo lobo* that they purchase at a local Mexican grocery. Dried herbs are not labeled with their scientific names, so I do not have any information on the chemical constituents or pharmacological properties of *gordo lobo*. Vicks Vapo Rub is a petroleum-based product that is marketed as a topical decongestant. It's active ingredients, camphor, menthol and eucalyptus oil are all volatile compounds derived from medicinal plants. Camphor is isolated from all parts of the camphor tree, *Cinnamomum camphora* or produced synthetically. This compound has a fragrant and penetrating odor and is very volatile in steam. It is used topically as an anti-infective and anti-pruritic agent but can cause a variety of symptoms (vomiting, vertigo, delirium, convulsions, death) if ingested (Budavari, et al. 1996). Menthol extracted from peppermint essential oil has documented antibacterial effects, even against drug resistant strains (Imai, et al. 2001; Mimica-Dukic, et al. 2003).

Essential oils from several species of eucalyptus exhibit analgesic and anti-inflammatory effects in laboratory animals (Silva, et al. 2003) and eucalyptus oil exhibited an antimicrobial activity against gram-negative and gram-positive bacteria (Harkenthal, et al. 1999).

Plants Used Topically for Pain Relief

Ruda is a medicinal plant with several applications in Los Duplex. It is used to treat *aire*, joint and muscle pain, headaches, insomnia and difficult labor and as an insect repellent. Teri and Luci talked about making a tea of *ruda* for headaches and *aire*. According to Juana, if chocolate is added the tea becomes hot enough to make labor pains stronger. However, the most common way to prepare *ruda* is to steep it in rubbing alcohol for a few days. The plant materials are then removed from the liquid and the resulting liniment may be applied topically over painful parts of the body. Juana gave me a recipe for a liniment made from *ruda*, *albahaca, estafiate, poleo, artemisa* and *alcanfor*. In her household this liniment is used for pain, but Juana explained that it is also useful to sniff the vapors it gives off when one has a headache or cannot sleep.

> Juana. "*No, no más así como copas de la botella de alcohol la compras y le quitas tantito para que puede acabar las plantitas para al dentro. Y se muere al dentro se mueren la plantita, pero en la hojita la agua se pone verde, el alcohol se pone este verde y si te duele el estomago te lo puedes utilizar por a fuera. Y cualquier cuerpo que te duele te lo puedes soltar la cara y ya se compone uno.*"
>
> No, nothing more than like this with cups from the bottle of alcohol you buy and you take out a little so that the little plants can fit inside. And it dies inside, the little plant dies, but from the little leaf the water turns green, the alcohol turns this green and if your stomach hurts you, you can use it topically. And whatever part of the body that hurts you can soothe the face and already one gets better.

Yari makes a liniment with *ruda, albahaca* and *yerbabuena* extracted in rubbing alcohol. Usually, Santos uses this liniment for her rheumatic symptoms but it can also help prevent *aire* from entering the body after a shock or fright. When her neighbor woke from a nap to find her young sons had left the house on their own (see chapter four) Yari rubbed this liniment on the mother's shoulders, neck, head and stomach. "Cleaning" the body in this manner prevents sickness by warding off *aire*. Juana and Raqi described *ruda* as a hot and relaxing medicine. The liniment is absorbed through pores in the skin and travels throughout the body via the blood stream. Again, because it is applied topically, *ruda* is considered a harmless medicine.

While freelist data suggested that *albahaca* is a very salient and well-known plant only Yari, Teri, Raqi and Juana were familiar with its use as a medicine (although Enida and Gabi had heard of other people using it medicinally). All four women who have used *albahaca* themselves prepare either with or as a substitute for *ruda* in a liniment for pain. Like *ruda, albahaca* is considered a hot plant with relaxing properties. When a liniment made with *albahaca* is rubbed on sore joints and muscles it penetrates the skin, calms the pain and makes the patient feel tranquil.

> Juana. "*Empieza a uno sentir refresco y empieza a uno sentir que se deba calmando el dolor.*"
>
> One begins to feel refreshed and one begins to feel that the pain must be calming.

None of the women who have used *albahaca* as a medicine reported any side effects, since it is used topically.

The use of *ruda* (*Ruta spp.)* to treat rheumatic joint pain and protect against supernatural forces can both be traced back to Spain (San Miguel 2003). Rue is also used as a medicine for rheumatism in Saudi Arabia and India (Al-Said, et al. 1990). The women who I interviewed purchased dried rue at local Mexican grocery stores so I am

not sure which species of *Ruta* they are using. In Spain, the term *ruda* is used to refer to several different species (San Miguel 2003). *Ruta chalepensis* contains alkaloids, tannins, flavonoids, saponins, coumarins, volatile oil, sterols and/or triterpenes. An ethanol extract of this species produced significant anti-inflammatory and antipyretic effects in mice and rats but did not exhibit any analgesic activity. This suggests its ability to relieve the pain of rheumatism is due to its anti-inflammatory activity (Al-Said, et al. 1990). *Ruta graveolens* induced both anti-inflammatory and analgesic effects in a similar study done with mice and rats (Atta and Alkofahi 1998). Rue (*Ruta spp.*) has also been shown to increase blood supply to the uterus. The essential oils of various species of rue contain rutin and metilnonilcetone, which stimulate the uterus and can cause abortion in high enough doses (San Miguel 2003). However, I found no evidence that the abortifaecent compounds in rue are absorbed through the skin in the literature.

Albahaca (*Ocimum basilicum*) is used in traditional medicine throughout out the old and new worlds. The essential oil of this plant and a chloroform extract of its leaves are active against several species of bacteria. The major constituents of basil essential oil have insecticidal activity, antiulcerogenic effects in rats, relaxant properties on tracheal and ileal guinea pig smooth muscles and are hepatoprotective. While I did not encounter any studies that supported *Ocimum basilicum's* use as an antirheumatic agent, *Ocimum sanctum* has shown anti-inflammatory and analgesic effects in laboratory studies (Holm 1999), though it is not specified whether these affects are produced by a topical application. Use of *Ocimum basilicum* is not advised for pregnant and nursing women due to its estragole content, which has mutagenic and carcinogenic effects on laboratory animals (Fleming 1998).

Pastillas

In the multi-dimensional scaling analysis of pile sort data aspirin and Tylenol occupied the same set of coordinates. However, there was a strong preference for Tylenol among the women whom I interviewed about medicines.

> Luci. *"La aspirina pues siento que es más bueno el Tylenol, como pues un dolor de cabeza que uno lo usa o un dolor de huesos, pero hace más efectivo el Tylenol."*
>
> Aspirin well, I feel that Tylenol is better, like well one uses it for a headache or a bone pain, but Tylenol is more effective.

> Anna. "Y usas aspirina?"
>
> And you use aspirin?
>
> Mari. "No. Mejor es el Tylenol."
>
> No. Tylenol is better.

Nevertheless a few women have experience with aspirin. Enida and Juana know it as a pain reliever for *dolor de cabeza*. Enida was also told about and recommended the use of aspirin in improving circulation by a doctor.

> Enida. *"También es un analgésico mucho lo usan para el dolor de cabeza. Y o he sabido que las aspirinas, no se otros analgésicos serán el mismo, pero la aspirina tratan los ojos. A mi me la recitara una vez estar tomando aspirina para poder hacer que mi circulación era mejor, verdad? Porque me afectaba la circulación de las piernas. Y entonces me salen venas muy gruesas. El doctor me aviso en el uso de aspirinas. En muy largo periodo o en mucha cantidad podían afectar la sangre."*
>
> Also it's an analgesic, many use it for headache. And I've known that the aspirins, I don't know if other analgesics are the same, but the aspirin treats the eyes. To me, they prescribed taking aspirin one time in order to be able to make my circulation better, true? Because it affected me, the circulation in the legs. And then very thick veins came out. The doctor advised me in the use of aspirins. Over a very long period of time and in much quantity they can affect the blood.

Raqi and her family aren't accustomed to using aspirin but she's heard it's good for the nerves.

> Raqi. *"La aspirina por lo regular nosotros no usamos la aspirina. La aspirina dice que es bueno para los nervios la aspirina. Cuando llego uno cansado, se baña uno y toma uno, yo he tomado 2 pastillas en la*

mañana y 2 en la noche. Que la aspirina le da fuerza al cuerpo. No sé si le da para dolor de cabeza pero si para cansarse uno, muchas de las veces, en veces le queda pegar uno afectes o no se que se le empiezan los nervios y todo es la aspirina es buena. Pero no la acostumbrados nosotros."

> Aspirin, regularly we don't use aspirin. The aspirin they say that it's good for the nerves. When one gets home tired, one bathes and takes one, I have taken 2 pills in the morning and 2 in the night. The aspirin gives strength to the body. I don't know if they give it for headache but if one is tired, many times, in times that it hits one or I don't know what starts the nerves and all it is, the aspirin is good. But we aren't accustomed to it.

Enida was the only woman I interviewed who was able to tell me what aspirin does.

Enida. "*Bueno. Me imagino que por lo mismo químico. Los mismos químicos pues atacaran de alguna manera los globolos. Para que, en el caso mío para que pues permitan que la sangre esta demasiado espesa, verdad? En globolos y en otras, de otra maneras me imagino que los, los químicos van afectar riñones por lo mismo que tomar agua. Te afectaran riñones, la sangre es, yo creo la sangre es todo en tu cuerpo. Entonces la sangre te afectara con químico, la sangre con químicos afectaran todo tu cuerpo, todo, todo todo lo que enferma tu cuerpo.*"

> Well, I imagine that it's because of the same chemical. The same chemicals, well they attack in some way the globules. Because, in my case because well they permit the blood to be too thick, true? In globules and in others, of other ways I imagine that the, the chemicals are going to affect the kidneys for the same reason that you take water. They affected your kidneys, the blood it's, I believe the blood is everything in your body. Then the blood affects you with chemicals, the blood with chemicals affect all of your body, all, all, all that sickens your body.

Aspirin is believed to cause harmful effects if it is taken too often. Enida specified that too much aspirin could damage the stomach.

Enida. "*Pero yo oído que muchas personas no pueden tomar aspirina porque es demasiado fuerte para el estómago. Me imagino que tiene muchos compuestos que le afectan demasiado el estómago, ataquen demasiado el estómago.*"

> But I have heard that many people can't take aspirin because it is too strong for the stomach. I imagine it has many compounds that affect the stomach too much, they attack the stomach too much.

Six women who I interviewed use Tylenol in their homes with some frequency and two others know how to use it but prefer herbal remedies. In Los Duplex Tylenol is used

for *dolores de cabeza y de cuerpo* (head and body aches) and fevers. All of the women who have used Tylenol follow the dosage recommended on the package. Three women pointed out that there are different types of Tylenol for children, adults and pregnant women and it is important to take the right one. While Raqi, and Gabi were unsure of what type of active ingredients are found in Tylenol Enida and Teri knew that it has analgesic properties.

> Anna. *"Porque puede quitar el dolor?"*
> Why can it get rid of the pain?
> Gabi. *"Por tanto que tiene químicos que tiene muchas más que nada tiene mucho antibiótico, mucha como tipo de droga, no? Por eso quita dolor."*
> By the fact that it has chemicals, that it has a lot more than anything it has a lot of antibiotic, a lot like a type of drug, no? Because of this it rids the pain.

Gabi felt that Tylenol is something outside the humoral classification system for medicines. However, Yari figured it must be cold because it lowers fever. In contrast, Juana believes that Tylenol is hot and it causes a person with a fever to sweat out the sickness. None of the women who I interviewed were very clear on how Tylenol works for *dolores*, they simply knew that it rids the body of pain. According to Juana and Teri, when one takes Tylenol it gets into the blood, which brings it to the part of the body that is in pain.

> Anna. *"Si toma el Tylenol para dolor de cabeza como llega a la cabeza para quitar el dolor?"*
> If you take Tylenol for headache how does it arrive at the head to get rid of the pain?
> Juana. *"Porque este, porque yo digo que si uno se lo toma es porque se va por las venas por el cerebro por eso llega a la cabeza."*
> Because this, because, what I say is, if one takes it, it's because it goes by the veins to the, for this reason it arrives at the head.
>
> *Anna. "Como llega a la mala parte del cuerpo?"*
> *How does it get to the bad part of the body?*
> *Teri. "Por la sangre."*
> By the blood.

All nine women agreed that Tylenol has potentially dangerous side effects, including allergic reactions, addiction and even death.

> Anna. *"Y el Tylenol no hace daño?"*
> And Tylenol does no harm?
> Yari. *"Pues según síntoma, no da más. Pues, si le bajan todo el temperamento. . . pues, sí es malo, porque se quedamos seco de lo frío. Debe decir con sus medidas todo el tiempo, porque más así, por a veces le toca a noche, le doy 20. Pues ya le baje todo a lo frío. Entonces queda como muerta. Entonces también es malo. La mato. Es. . . tiene uno que vale el limitado. Porque si no, es. . . es malo. Los mata uno también de lo frío que queda."*
> Well according to the symptom, don't give more. Well if it lowers all the temperament… well that is bad because we stay dry from the cold. You have to say with your measurements all the time because more like that sometimes it touches you at night, I give 20 well now it lowers everything to cold then stays like death, then also it's bad, it kills you. One has to respect the limit because if not, it's bad it also kills one from the cold that stays.

Luci attributed the side effects of Tylenol to compounds it contains that are not natural.

> Anna. *"Y el Tylenol o la aspirina hace daño?"*
> And the Tylenol or the aspirin do harm?
> Luci. *"Yo pienso que si. Yo pienso que esta bien tomarlo en de vez en cuando pero no seguido. Porque ese pues contiene otra cosas que no son muy naturales."*
> I think that, yes. I think that it's good to take them once in a while but not often. Because this, well it contains other things that aren't very natural.

Enida recommended that one take a lot of water with Tylenol to help flush out such chemicals.

> Enida. *"Umm el Tylenol yo creo que no, yo creo que toda las pastillas junto con tomarnos cuando usted es tomando muchas pastilla tienes que tomar mucha agua para que el cuerpo puede eliminar junto con que te está ayudando a quitar un dolor que está ayudando el agua eliminar también mucho, muchos químicos del cuerpo."*
> Umm the Tylenol, I believe not, I believe that all the pills together, when you're taking many pills you have to take a lot of water because the body can eliminate, together with that which is helping you to rid a pain, that the water is also helping to eliminate much, many chemicals from the body.

Tylenol (acetaminophen) and aspirin (salicylic acid) are non-steroidal anti-inflammatory drugs. These medicines act by inhibiting synthesis of prostaglandins, which have been shown to cause headache, pain and inflammation in humans. Fever is caused by prostaglandin E2 synthesis in the hypothalamus. Acetaminophen is a weak inhibitor of prostaglandin synthesis but is effective in reducing pain and fever. Aspirin has an analgesic and platelet aggregation inhibiting effect at low doses and in large doses taken over an extended period of time it is anti-inflammatory. While aspirin does reduce fever it is not recommended by many American physicians due to its association with Reye's syndrome. Aspirin is also known for causing gastrointestinal distress and can accelerate the formation of peptic ulcers. Both aspirin and Tylenol can be fatal at high doses, especially in children (Brody 1998).

Summary

This chapter has taken a closer look at Mexican women's knowledge and use of home remedies in Los Duplex. Medicines used in Los Duplex range form herbal remedies and over the counter medications that are used frequently, to prescription drugs, which are taken less often. Women in Los Duplex make a sharp distinction between herbal remedies (perceived as natural and safe) and pharmaceuticals (considered potentially dangerous and addictive). By comparing four medicinal plants, commonly used in Los Duplex with the scientific literature I have shown that women give effective remedies to sick family members. Women who do use pharmaceuticals and other non-herbal medications seem to use them appropriately, as well. Thus, the home remedies in the Los Duplex pharmacopoeia are effective in treating the most common health complaints in the community.

Chapter 7: Care

Recommending and administering medicine are far from the only things Mexican women do to keep their families healthy. They also provide several different types of care for sick individuals. As described in previous chapters women take care of their families by encouraging members to eat healthy foods, dress appropriately and get enough rest. This chapter describes the roles Mexican women play in obtaining care outside the household from both medical professionals and the broader Los Duplex community. Mexican women determine when sick family members should seek professional care, accompany them to doctor appointments and make sure they rest and take their medicines (see Chavira-Prado 1992). The women of Los Duplex have had many positive experiences with the mainstream American health care system in Athens but have suggestions for how to improve it. Women also maintain and expand social networks. Through these networks they learn how to access the professional healthcare system of Athens. Social networks are also a source of social support, which is essential to good health (Hurdle 2001).

Mexican Immigrants and the Mainstream American Healthcare System

It is generally reported in the literature that Hispanics lack sufficient access to health care services in this country due to financial, structural and cultural barriers (Chavez 1986; Iannota 2003; Morales, et al. 2002; Saunders 1954; Warda 2000). Poor communication between patients and providers, due to both linguistic and cultural issues can lead to inappropriate medical testing and use of medications (Morales, et al. 2002). Warda (2000) characterizes American health services as insensitive to linguistic,

financial and social aspects of Hispanic culture. Even where interpreters are available misunderstandings are common between American health care professionals and their Spanish-speaking patients. This is because Mexicans generally have different expectations of medical professionals than do Americans. Hispanics relate more effectively to people than to institutions and may not respond well to formal, impersonal environments. They expect health care professionals to be respectful (of themselves and their patients) and personable, which helps to establish a relationship of trust (Molina, et al. 1994; Warda 2000). Emergency room and clinic visits that are impersonal and marked by long waits and an absence of humanistic care discourage Mexican immigrants from interacting with the formal American healthcare system (Warda 2000). Mainstream American medicine also places the family in a passive role and authority in the doctor's hands, which conflicts with traditional Mexican family roles and patient control in health care (Saunders 1954). Advice is often not followed if it comes from a doctor who does not attempt to establish confidence in her Mexican patients, or fails to include patients' families in health care decisions.

According to Chavez (1986), cultural factors may add to the problem of access to health services, but are not a major barrier. Instead, he argues that access to medical care in the United States is dependent upon the ability to pay, which in turn is dependent on personal resources or the guarantee of third party payment. This explains why immigrants use few if any preventative services and suffer ill-health until it becomes severe enough to require emergency room treatment. Hispanics are the least likely ethnic group in the United States to have health insurance. Thirty five percent of Hispanics under age 65 are uninsured (compared to 11% of Anglo Americans and 20% of African Americans). Usually non-citizenship status is a barrier to

insurance coverage (Iannota 2003). In addition to linguistic, cultural and economic limitations, transportation issues are also cited in the literature as barrier to professional medical care. Low-income immigrant women are less likely to drive than their husbands (Vega, et al. 1991). Women born in Mexico tend to rely on family for transportation, who often cannot take time off from work. This makes access to medical care difficult (Morales, et al. 2002).

In my study, three of the women who did a structured interview had been to a private doctor in Athens. Thirty have been to one of the public hospital or local free clinics at least once. Moreover, twenty women have been admitted to the hospital (figure 7.1). Fifteen of the women who I interviewed have given birth to at least one child in Athens and all have taken their young children to a Spanish-speaking pediatrician's office for vaccinations. Five have taken their young children to this doctor for additional concerns. While these women are able to bring their children to the pediatrician because they qualify for Medicaid and/or Peachcare[20] parents of older children who were born in Mexico rarely take them to the doctor. In fact, only three women who I interviewed have brought such children to one of Athens's free clinics and only three women in my entire study have had a child who needed to be hospitalized. Likewise, only five women reported that other adult members of their households have been to a clinic or hospital in Athens. The following vignettes from my field notebook describe typical encounters at four health care service providers; *La Clínica de Parteras*, The Diabetes Education Clinic and the Emergency Room at Athens Regional Medical Center and the Spanish-speaking pediatrician's office.

[20] Peachcare is the state of Georgia's health insurance program for low-income children born in this country. Many Mexican families prefer Peachcare over Medicaid because Peachcare applications need to be renewed less often.

Figure 7.1. The public hospital in Athens has a low-income assistance program and a bilingual, nurse-midwife clinic.

La Clínica de Parteras

While the receptionist at *la clínica de parteras* is a native Spanish speaker, behind the door is a different story. The first two times I went to the clinic with Raqi I waited with her four year-old daughter Rubi in the waiting room. But she asked me to accompany her to the examination room when I gave her a ride to her 14-week check-up of her fifth pregnancy. The appointment was to listen to the baby's heart ("*para escuchar el corazoncito*") Raqi told me. The nurse who initially brought us back didn't speak any Spanish. She weighed Raqi, took her blood pressure and instructed her to leave a urine sample in the bathroom. When Raqi was ready Rubi and I accompanied her to the examining room where she was seen by a nurse midwife. The midwife spoke some Spanish (with a thick American accent) but was very relieved that I was there to interpret.

Because Raqi is 36 she was asked whether she wanted to see the obstetrician associated with the clinic. This doctor can best discuss the risks associated with having a baby over age 35 and will do an amniocentesis for $1500. Raqi showed some interest in seeing the doctor but explained that her family doesn't have the money for an amniocentesis. The midwife decided to do a less expensive (and less accurate) screen for birth defects to better predict whether an amniocentesis is really necessary. Then she listened to the baby's heart, which was normal and Raqi told her about some lower abdominal pain she'd been having. The midwife explained that this sort of pain is not abnormal for someone who has had several children. The muscles weaken over time. After the examination we were sent to lab for a blood sample. Raqi was not happy about this procedure but Rubi held her hand and got her through it.

Our last stop was the clinic's social worker's office, so Raqi could check on the status of her Medicaid application. The social worker was very friendly and helpful but didn't speak any Spanish. Raqi is not eligible for Medicaid but was awarded low-income assistance at the public hospital. This means that all of her (and her husband's) hospital expenses are covered for one year. Raqi also gave the social worker a Peachcare application for her daughters.

The Diabetes Education Clinic

The public hospital also has a Diabetes Education Clinic that I visited with one of my research participants and her husband. Leonilla's (44, urban Michoacán, food vendor) husband Palemon has suffered from non-insulin dependent diabetes for several years. However, unlike most Americans with this condition, Palemon is underweight. I agreed to accompany Leonilla and Palemon to the clinic to interpret for them but didn't need to because one of the hospital's interpreters was available. Still, the couple

and the hospital staff encouraged me to sit in on the appointment. While we waited for the interpreter to arrive, I helped Palemon apply for low-income assistance.

The first person we saw was the dietician. She asked Leonilla and Palemon if they have any religious or cultural dietary restrictions. Palemon explained that he doesn't eat fatty foods because a doctor told him it's bad for his diabetes. The dietician then did a 24-hour dietary recall with Palemon who typically eats canned soup for breakfast and a *comida* (midday meal) of beans, tortillas and occasionally rice. The only thing he mentioned consuming between these two meals was four diet sodas. The dietician explained that Palemon should eat only 45 grams of carbohydrates per meal because in diabetics carbohydrates cause a blood sugar increase followed by a crash over the course of only two hours. She worked with Leonilla and Palemon to come up with a meal plan that fits their dietary habits and budget. But this was difficult due to the high carbohydrate nature of the Mexican diet and the couple's poor socioeconomic profile. The dietician recommended dividing Palemon's *comida* into a series of smaller portions that can be eaten throughout the day, as well as eating more protein and fewer carbohydrates. She suggested buying large bags of frozen vegetables, cottage cheese and peanut butter at Wal-Mart.

Our next stop was the exercise specialist's office. He asked Palemon if he was on any kind of medication and whether he ever had chest pains. Palemon explained that he did have intermittent chest pain and thought that he used to be on medication for it. However, when his last prescription ran out he discovered that the free clinic he used to go to had moved. He couldn't find the new location and the family does not have the resources to take him to another doctor let alone buy more medicine. The exercise specialist was very concerned about this situation and asked Palemon if he did any

kind of exercise. Since Palemon is unemployed he walks for at least an hour everyday. This encouraged the exercise specialist who told him to continue walking at least every other day. The exercise specialist recommended that Palemon wear tennis shoes on his walks (instead of the boots he was currently wearing) and to walk one hour after eating to prevent dizziness.

The last person we saw was a nurse who was supposed to measure Palemon's blood sugar and show him how to do it at home. Palemon's blood pressure was very low (90/76), which alarmed the nurse. She asked if he had eaten breakfast and Palemon explained that he didn't because he thought he was supposed to fast before having his blood tested. The nurse gave him graham crackers and milk and asked why he wasn't working. Leonilla explained that he used to work in a *pollera*, but had to quit because when he stands a lot his feet and legs swell and ache. The nurse examined Palemon's feet, which seem to be in good shape. She decided not to check his blood sugar because she was afraid it would be too high and she would be obligated to admit him to the emergency room. We figured out the new location of the clinic Palemon used to go to, but the nurse insisted that we go to another free clinic that was open that day.

The Emergency Room

One evening Yari and I accompanied Santos and Susana (30, urban Michoacán, *pollera* worker) to the emergency room at the public hospital. When we arrived Santos was received in triage first. Both of the triage nurses spoke some Spanish but appreciated my help. Santos explained that she had *aire* in her ear, which didn't cause her pain but sometimes made her feel dizzy. She also described an intermittent pain in her side. Though she was not in pain at the moment it was sometimes so bad it

shot down her leg. One of the nurses asked how long she had the condition and Santos told her about five months. The other nurse collected contact and personal history information. When asked for her date of birth Santos pulled her birth certificate (from 1934) out of her plastic bag. The nurse remarked that you don't see one of those everyday and made a copy of it for Santos so she wouldn't have to handle the worn, folded original. Because Santos is old and described symptoms of dizziness she was put at the top of the waiting list and directed to the priority waiting room.

Susana was next in triage. She had been having stomach pain and diarrhea for three or four days. She took Tylenol for the pain and was not currently hurting but the Pepto Bismal she took for the diarrhea was not working. Apparently Susana had been to the Health Department clinic but was not seen. Susana was sent to the priority waiting room as well, because she was with Santos. Santos was assigned an examining room almost immediately. I went with her and Yari stayed with Susana.

A nurse took Santos' blood pressure (190/72) and recorded name of the blood pressure medication that Santos is currently taking. Then we waited for the doctor. I knew it would be a while so I asked Santos more about her condition. She told me that the problem started about five months previously and she initially attributed it to her high blood pressure. However, because she is taking blood pressure medication she realized that it must be something else, perhaps *aire* or water stuck in her ear. It doesn't hurt but she has ringing in her ear. The doctor eventually arrived and I interpreted as he asked Santos a series of questions. He diagnosed the ear problem as vertigo and prescribed some medication for it. The doctor was more concerned about the pain in Santos' side and ordered some x-rays and blood tests. We waited for about two hours for the results and chatted about Santos' grandchildren. During this time Santos also

confided that she is afraid of doctors and hospitals and fears that they will tell her she has all kinds of problems. However, her family convinced her to go to the emergency room. After receiving the test results the doctor told Santos she would need to return to the hospital for further examination and sent her home. By this time Susana had also finished her consultation with the doctor and was likewise sent home with a prescription.

La Pediatra

There is an American pediatrician in Athens who is affiliated with la clínica de parteras, accepts Medicaid and speaks fluent Spanish. I visited this doctor's office several times with different research participants but never actually got to meet her. Because she is one of the few Spanish-speaking doctors in the area she is often called to the hospital and a colleague who shares her office covers many of her appointments. When I accompanied Teri to her daughter Evelyn's four-month vaccination appointment I got to meet "Dr. John." The day of this appointment was the second time I had seen Teri dressed and made-up (the first time was when we went to Wal-Mart together). Of course Evelyn was wearing a new dress too. We didn't have to spend much time in the waiting room at the pediatrician's office. The nurse took us back, measured and weighed Evelyn and took her temperature. I then interpreted as the nurse asked Teri about her daughter's feeding, diaper changing and sleeping habits.

About five minutes after the nurse left us the doctor arrived. Dr. John speaks some Spanish but has a thick accent that was difficult for Teri to understand. However, his effort made a positive impression and was greatly appreciated. The doctor determined that Evelyn was in good health and gave her two shots. Teri wanted to

make sure Evelyn's *omblígo* (naval) was normal and Dr. John was happy to look at it for her. The nurse returned to the examining room with information on vaccinations (in Spanish) and a free sample of Tylenol for infants. She advised Teri that Evelyn might develop a slight fever because of the vaccines that was nothing to worry about and could be treated with the Tylenol.

As these vignettes suggest, the encounters Mexican women have with the mainstream American medical system are generally positive. However, linguistic, cultural, economic and transportational barriers to professional health care do exist in Athens. Though both hospitals, most clinics and even some private doctors have Spanish speakers on staff (and Catholic Social Services has numerous volunteer interpreters) several of my research participants identified language as a problem.

> Gabi. "*Hay muchos servicios médicos, lo que pasa es que, que hace falta es que uno no se entiende, entenderlos la idioma.*"
>
> There are many medical services, what happens it that, what's missing is that one doesn't understand, understanding the language.
>
> Anna. "*Y Entonces hay muchos servicios pero a veces...*"
>
> And then there are many services but sometimes...
>
> Gabi. "*Uno no sabe, ni tampoco las leyes. Por ejemplo, a veces llegan papeles y uno no sabe leerlos y ya no sabe que paso y llega otro, y llega otro y si uno no sabe ni que beneficio fue ni porque se lo cortaron. Hace falta estudiar la idioma.*"
>
> One doesn't know, nor the laws. For example, sometimes papers arrive and one doesn't know how to read them and one doesn't know what happened and another arrives, and another arrives and one doesn't know neither what benefit it was nor why they cut you off. What's missing is studying the language.
>
> Anna. "*Y piensa que hay algo que falta aquí de los servicios médicos?*"
>
> And do you think that something is missing here, from the medical services?
>
> Juana. *Pues si más que nada que sepan hablar Español.*
>
> Well more than anything that they know how to speak Spanish.

For the most part, professional healthcare providers in Athens at least make an attempt to be culturally sensitive to their Spanish-speaking patients. Due to differences

in explanatory models, Mexicans are often concerned about issues that Americans may not normally associate with a particular sickness. The health care providers that I met as an interpreter were consistently open-minded, patient and willing to both listen to and answer questions about such concerns. However, I did witness some examples of miscommunication due to American cultural assumptions. For example, when I visited the Diabetes Education Clinic with Leonilla and Palemon the dietician attempted to show them how read a nutrition label to find out how many grams of carbohydrates are in a given product. Although she sent them home with a booklet that had been translated into Spanish (and even included information that was specific to the typical Mexican diet) this information was of little use to Leonilla and Palemon who are both illiterate. Viewing the dietician as an authority figure the couple politely took the written materials without mentioning that they could not use them. Also, while Wal-Mart is an inexpensive store for the masses in most parts of the United States, it is an upscale place to shop in Mexico. It may be one of the most inexpensive places to buy food in Athens, but because Mexicans do not necessarily perceive it as such recommendations to shop there may be ignored, leaving low-income diabetics unaware of where to find healthy but inexpensive foods.

Of greater significance is the fact that none of the healthcare providers that I interpreted for asked their Mexican patients about the use of herbal remedies. As described in the previous chapter, many women in Los Duplex use herbal remedies and pharmaceuticals at the same time. Even when they are prescribed medication they may still continue to take the home remedies they tried as a first resort. This is a concern because many herbal remedies can have significant effects on different disease states and drug therapies (Rivera, et al. 2002). Failing to recognize the culture of self-

treatment with home remedies that Mexican women share could lead to adverse reactions and slow the healing process.[21]

Like many Hispanics in the United States, the women who participated in my study have little to no health insurance. None of the women who I interviewed reported having health insurance through their employers and only one of my research participants is insured through her husband's employer. As Luci explained to me, even though some local employers of Mexicans offer their workers health insurance this coverage cannot be extended to spouses or children if workers are using someone else's name and social security number (employment and marriage records don't jibe). Again, while 14 of the women whom I interviewed have children who qualify for Medicaid, Raqi was the only adult that I met during 13 months of fieldwork who had it.[22] The high cost of professional medical care in Athens is prohibitive for many Mexican families. Enida, Catalina (38, Mexico City, *pollera* worker) Mari and Yari mentioned that offering payment plans would make it easier for low-income Mexicans to receive professional medical care. This would also remove some of the burden off the hospital's Low Income Assistance program and free clinics.

> Enida. "*Quiero yo para que las personas pagan sus cuentas y pueden tener un mejor servicio de salud y que no tengas miedo de las cuentas de un hospital. Una forma de pago que sea más cómodo para las personas que quieren pagar sus cuentas lo pueden utilizar en cualquier momentos habiendo que pueden hacer pagos cómodos y con un buen tiempo para poder terminar pagaron el bill que te cargo.*"
>
> I want people to be able to pay their bills and have a better health service and that they don't have fear hospital bills. A form of payment that would be more comfortable for the people that want to pay their bills, they can do so at whatever time, they can do comfortable payments and within good time for be able to end the payment of the bill they are charged with.

[21] The 1998 PDR for Herbal Remedies does not report any drug interactions for chamomile, mint, rue or basil.

[22] Raqi had temporary emergency Medicaid during one of her pregnancies.

Transportation is also an issue in Los Duplex. Only eight of the women whom I interviewed know how to drive and have access to a car. The others generally rely on their husbands (and/or other household members) for transportation. Quite frequently, these people can't get time off from work when someone is sick (let alone when someone is not sick but wants a medical check-up). The city bus does run through Los Duplex and I did teach a few of my research participants how to use it. But most women are hesitant to ride the bus because it is too time consuming or they are afraid of getting lost. Taxis are an expensive but reliable option and I met a few unemployed men who give rides to their neighbors for cheaper fares than the licensed cabs. It is also risky for Mexicans to drive because many do not have valid driver's licenses, so even the women who know how to drive avoid doing so whenever possible.

In addition to the barriers described above, some women in Los Duplex are not able to access the services they seek because those services are absent in Athens. For example, women who participated in structured and semi-structured interviews have noticed that there are no dentists in Athens who can accommodate low-income clients.

> Mari. *"Pues una clínica dental que sea, que no te cobran porque no hay clínicas dentales. Porque aquí el dentista es muy caro si no tienes su seguranza medica, te cobran mucho."*
>
> Well a dental clinic that is, that doesn't charge you because there are no dental clinics. Because here the dentist is very expensive if you don't have medical insurance, they cost you a lot.

> Yari. *"Todo está bien. Lo que falta si es mucha ayuda para los hispanos que no tienen papeles pues que llegan grandes si a de fuera. Falta mucho para los dentista."*
>
> All is good. What's missing is a lot of help for the Hispanics that don't have papers, well that arrive very old and from outside. Dentists are really lacking.

Finally, during one of the group interviews Elena and Josefina lamented the fact that there is no Catholic priest in Athens who visits sick parishioners.

Social Networks and Social Support in Los Duplex

As described in chapter three, Mexican migrant social networks facilitate migration because they are sources of information about border crossing strategies and job opportunities in the United States. Social networks also provide information about local services that can contribute to the maintenance of good health. To access the few forms of public assistance for which they are eligible, undocumented migrants must know what agency to contact, which paperwork to fill out and where to find an interpreter. Women learn about these services and means of accessing them through their interactions with schools and by networking with other migrant women (Chavira-Prado 1992). Likewise, in a study of immigrant women from Guatemala Menjivar (2002) found that most of their activities that related to healthcare were mediated by informal social ties. This was especially true for recent arrivals and economically and socially marginalized women. For non-emergency sicknesses finding treatments involved contacting different women, including friends, family, acquaintances and even strangers.

Additionally, social networks are a source of social support/capital that helps minimize the harmful effects of stress. Stress refers to environmental, social or personal demands that require people to readjust their usual behavior patterns. As stressors accumulate the ability to cope or readjust can be overtaxed, which in turn increases the probability that illness, injury or disease will follow (Thotis 1995). Social support includes emotional support, advice, guidance and material aid that people get from their social relationships. Social support is influential in maintaining health and

preventing sickness by helping people cope with medical problems. It has a stress-buffering effect that can improve health and social functioning and is related to longevity in the epidemiological literature (Hurdle 2001).

Informal social networks, social activities and participation in organizations are also associated with better health chances (Cattell 2001). One of the first studies to link social and community ties with mortality used the 1965 Human Population Survey of a random sample of 6928 adults in Alameda County, California and follow-up mortality data from 1974. People who lacked social ties were found to be more likely to die during the nine-year follow-up period than those with more extensive contacts. The association between social ties and mortality was independent of self-reported health status, year of death, socioeconomic status and health practices (Berkman and Syme 1979). It is not clear exactly which kinds of social relationships (strong or weak ties) are most effective in the creation of social capital and the protection of health. Some researchers have suggested that relationships involving similar people foster understanding and support, while dissimilar people in loose networks of weak ties provide wider access to diverse resources (Cattell 2001; Wilson 1998). Having a confidant such as a spouse significantly reduces the effects of stress. However, research suggests that migrants do better if they have social ties outside their immediate families. Social integration (the number of contacts one has within a social network) is associated with lower mortality (Thotis 1995).

In her study of social networks and health in two low-income London neighborhoods, Cattell (2001) found that individuals with restricted networks were more likely to express feelings of fatalism, pessimism, etc. that are associated with negative health outcomes. Individuals involved in local activities felt in control of their lives and

had higher self-esteem and better health. People who had socially excluded or narrow homogenous networks[23] found it difficult to cope because such networks lack resources and social capital. Broader homogenous networks include effective levels of mutual aid and other social capital, but sometimes not enough to meet needs. Heterogeneous networks[24] promote access to a range of resources but members may miss out on the kind of support associated with dense ties. The networks most advantageous for health appear to be those made up of both strong ties among family members and friends, which provide emotional and/or financial support in times of sickness and weak relationships with acquaintances that provide information about health and social services.

The social capital/network theory of migration implies that most Mexicans who migrate to the United States are fortunate enough to be part of well-developed social networks that include extended family members, close friends and acquaintances. There is support for this assumption in the anthropological literature. A survey of 679 Mexican immigrant women in San Diego, California found that most respondents were not isolated from their families as a result of migration and that about two-thirds developed friendships after migrating to California. When women migrate they are easily able to join or make new networks in the United States. These reconstituted social networks are made up of family members and old friends. Women make new friends during the early years of immigration but over time social interaction with family increases as new members join the migration stream. Early access to family support among immigrant women is key to successful adaptation to life in the United States.

[23] Cattell (2001) defines homogenous networks as dense networks made up of extended family and a small number of local friends.

[24] Heterogenous networks are defined by Cattell (2001) as loosely knit networks made up of different types of people.

Family also appears to be a more important source of emotional support than friends (Vega, et al. 1991).

Cattell (2001) also found that features associated with neighborhood context play a role in network and social capital formation. For example, in one of the London neighborhoods she studied, housing design encouraged neighborliness and facilitated co-operative childcare practices. Alienating housing design in the other neighborhood, along with high population turnover has made it difficult to develop and sustain local social networks. Local clubs and shops that serve as casual meeting places, which foster the weak ties necessary for a vibrant community are disappearing in both neighborhoods that Cattell (2001) studied.

Figure 7.2. When the weather is nice women in Los Duplex spend free time outside, where they can better socialize with neighbors who pass by.

The way Los Duplex is designed seems to promote neighborliness among many residents. All of the units have a front patio area that many people spend time on

when the weather is nice (figure 7.2). This leads to casual conversations with passers by. The playground is a central location that mothers of small children frequent. Though the property owner views them as a problem, *tienda* operators and food vendors further encourage social interaction in Los Duplex by attracting neighbors to them.

Through participant observation and unstructured interviews I collected data on the female social networks of 35 Mexican immigrant women. That is, I determined how many female relatives and friends each woman has in Athens and in Los Duplex itself. There is research that suggests male and female social networks influence different aspects of Mexican women's lives. Women depend on men and male networks to get them across the border but choose destinations where they have access to strong female networks (Davis and Winters 2001). Menjivar (2002) suggests that women's networks are the key to the Hispanic health paradox. This may be because women have a greater propensity to seek social support (as a coping strategy) than men (Thotis 1995). In girls and women the need for connection and relationships with others is a primary motivation that determines cognition, affect and behavior. Thus, social relationships may assume a primary role for women and influence the decisions they make about health (Hurdle 2001). Although most of the women in my study have strong and weak ties with men in Los Duplex, they have more relationships with women (figure 7.3) and those relationships have greater significance for health maintenance.

My research participants have between three and 18 social ties to other Mexican immigrant women in Athens, with an average of nine. The majority of these ties are with other women who live in Los Duplex. Only four of my research participants have more connections with women who live outside of Los Duplex than they have with their neighbors. Six women have no family (consanguinal or affinal) in Los Duplex, but

the other 29 have between one and ten family members in the neighborhood (with an average of 3.8). Thirty-two women have at least one friend in Los Duplex. The number of friends ranges from one to nine (with an average of 4.2). Thus, it seems that while many women do have female family members in Los Duplex, friendships are more common than family ties.

Figure 7.3. Women in Los Duplex have social networks that include female family and friends from Mexico.

In addition to the number of female contacts women have I also determined whether each friend or family member in a woman's social network is a strong or a weak tie. Strong ties are family members or friends who visit on a regular basis and are invited to social events. Weak ties are family members whom a woman does not have regular contact with, or neighbors who are known but would not be invited to a social event. All 35 research participants have strong ties with one to 14 other women in Los Duplex (with an average of 4.6). Thirty-one women have a number of weak ties that

ranges from one to six (with an average of 2.6). Twenty-seven women who I interviewed have expanded their social networks by adding from one to five of their neighbors to them (the average number of post-migratory contacts is 2.5).

I expected self-assessed health status to increase with the number of social ties a Mexican woman has in Athens. To test this hypothesis I calculated composite health assessments for 35 women, based on overall health status and frequency of sickness ratings. Women were divided into three categories: 1. very healthy (self-assessed health rating above three and frequency of sickness rating less than three), 2. healthy (self-assessed health rating above three or frequency of sickness rating less than three) and 3. not healthy (self-assessed health status under four and frequency of sickness rating above four). I then compared the mean numbers of social ties in Athens and in Los Duplex, as well as mean numbers of strong and weak ties in Los Duplex for each category (Table 7.1).

Table 7.1. Mean numbers of social ties in Athens and Los Duplex in Very Healthy, Healthy and Not Healthy women

Composite Health Assessment	Mean Number of Social Ties in Athens	Mean Number of Social Ties in Los Duplex	Mean Number of Strong Ties in Los Duplex	Mean Number of Weak Ties in Los Duplex
Very Healthy	7.5	4.9	2.1	2.6
Healthy	10.2	8.7	2.6	6.2
Not Healthy	10.3	8.0	3.6	4.3

The healthiest women had the fewest social ties in Athens and in Los Duplex, independent of the strength of ties. This finding is surprising, given the literature on social support and health and may be due to the small size of my sample. Immigrant women have been found to be central to the creation and maintenance of social networks, even if their activities are subtle and unrecognized (Menjivar 2002). In Los

Duplex both men and women spend much of their free time socializing. While men tend to gather in large groups in someone's yard or apartment after work or on the weekends, women engage in more personalized visits. By spending entire days at the homes of several research participants I learned that women frequently stop by a friend's house on the way to or from work (or some sort of errand) but usually stay for no more than 30 or 40 minutes.

Sharing food also helps maintain ties between members of a network. For example, Teri and Josefina periodically make large batches of *atole* that they bring to the homes of their *cuñadas* and neighbors. I observed other women making soup for sick friends and family. Mexican women also support each other by taking care of each other's children. Through frequent visits, food sharing and mutual childcare women in Los Duplex strengthen ties with female family members and friends. Such relationships are a source of emotional and sometimes financial support during stressful events. The women whom I interviewed, themselves identified caring for other people and spending time with friends and family as a way to maintain good health (see chapter five).

I also compared mean numbers of social ties in frequent, occasional and infrequent patrons of the mainstream American health care system in Athens. Women who received pre-natal care and/or visited a clinic or hospital more than 10 times were grouped in the frequent use category. Occasional use was defined by five to ten visits and women in the infrequent category have visited professional healthcare providers in Athens less than five times. Again, I was surprised to find that the women who have the most experience with local professional healthcare had the lowest average number of contacts in Athens and Los Duplex (figure 7.2).

Table 7.2. Mean numbers of social ties in Athens and Los Duplex of Frequent, Occasional and Infrequent patrons of professional medical services.

Use of Mainstream Health Care Services	Mean Number of Social Ties in Athens	Mean Number of Social Ties in Los Duplex	Mean Number of Strong Ties in Los Duplex	Mean Number of Weak Ties in Los Duplex
Frequent	8.7	6.5	2.1	4.4
Occasional	10.0	6.8	3.5	3.3
Infrequent	9.3	7.8	2.6	5.1

In Los Duplex women usually take responsibility for activities that require interaction with a number of local institutions. For example, newly arrived women must go to the school department to enroll their children in school. This puts them in contact with the mainstream American healthcare system because all students must be vaccinated. Women are also the ones who find their way to the county Department of Children and Family Services offices to apply for Medicaid or Peachcare for their children or food stamps for their families. Accessing such institutions generally involves learning where they are located, arranging a ride to pick up and drop off applications and finding someone who speaks English to help fill out applications and interpret during appointments. While husbands sometimes help their wives by asking co-workers about various services, driving women to appointments, or arranging other means of transportation, women rely more on their own networks of female family and friends.

The women whom I interviewed identified friendships as a source of assistance when women determine that they, or members of their families need professional medical care. Eight of the women whom I interviewed about health and sickness explained that friends and family who are established in Athens help newcomers find doctors and other mainstream health care providers when needed.

Anna. *"Y cuando una persona a penas llega de México y no conoce este ciudad"?*

And when a person has just arrived from Mexico and doesn't know this city?

Gabi. *"Ay es muy difícil. Preguntarla los demás que ya están aquí y decirles como puede ir al doctor o que tengo que hacer."*

Ay it's very difficult. Ask others that are already here and ask them how can you go to the doctor or what I have to do.

Anna. *"Y cuando ustedes llegaron aquí y se enferman por la primera vez aquí, y donde encontraron información de los doctores, de las clínicas?*

And when you arrived here and got sick for the first time here, and where did you find information about doctors and clinics?

Yari. *"Yo por parte de una amiga, pero casi nunca así nos enfermamos. La niña puro calentura si pero tuvo Tylenol. Pero así enfermedades así graves no los tenemos gracias a Dios. Y casi nunca hemos ocupados los hospitales."*

I, on the part of a friend, but we almost never get sick like that. The baby only gets fevers yes, but she had Tylenol. But illnesses like that, serious like that we don't have thank God. And we have almost never been in the hospital.

Anna. *"Aquí en este ciudad, cuando ustedes llegaron aquí la primera vez, como encuentra información de los doctores, de los hospitales aquí?"*

Here in this city, when you arrive here the first time, how do you find information about the doctors, the hospitals here?

Mari. *"Pues casi siempre te lo dicen los amigos, familiares son los que te informan donde."*

Well almost always friends tell you, family members are those who inform you where to go.

Anna. *"y si una persona no tiene amigos o familiares aquí?"*

And if a person has no friends or family here?

Mari. *Es más difícil, pues no sé por la televisión.*

It's more difficult, well I don't know from the television.

More importantly, friends help each other find inexpensive and bilingual health care providers.

Enida. *"Ah bueno. Yo creo que ya en los Estados Unidos la población hispana es muy bastante. Entonces yo creo que el conseguir un amigo o alguien que te lleve al hospital creo que es más fácil si tu no sabes, no conoces del lugares, no conoces el centro de salud más ah pequeño o más económicos pues tienes que ir al hospital."*

Ah well, I believe that in the United States the Hispanic population is very sufficient. So I believe that to find a friend or someone that can take you to the hospital, I believe that its easier if you don't

know, if you're not familiar with the places, you're not familiar with the smaller or more economical health centers, well you have to go to the hospital.

Luci. "*Pues uno encuentra a un doctor por medio de otra persona que conoce esta doctor o fijate que dicen que hay un doctor bueno que habla español, claro si que habla español porque uno no habla ingles tiene que uno para entenderse pues busca uno un doctor que habla español por medio de otra gente uno se va.*"

Well one finds a doctor by means of another person that knows this doctor or realize that they say that there is a good doctor that speaks Spanish. Clearly that speaks Spanish because one doesn't speak English you have that for understanding, well one looks for a doctor that speaks Spanish, by way of other people one goes.

Summary

This chapter has described how Mexican women in Los Duplex seek care outside the household for sick members of their families. While my research participants themselves, identified barriers to mainstream medical services (including linguistic, financial and logistical issues) most of the women in my study have some experience with the professional healthcare system of Athens. In general, healthcare workers in Athens are sympathetic to their Mexican patients and many at least make an attempt to speak some Spanish to them. Still, I observed some cultural misunderstandings between American health care workers and Mexican women. Also, while healthcare workers do ask their Mexican patients about pharmaceuticals they use at home, I never heard a doctor or nurse ask about the use of herbal remedies.

When asked, women who live in Los Duplex told me they learn about local health care (and other professional) services through friends and family. However, when I analyzed data from the structured interviews, I found that women with the fewest social contacts had the most experience with the mainstream health care system. Likewise, I expected the healthiest women in my sample to have the most

social ties, but found the opposite in structured interview data. This was unexpected based on the growing literature on social networks and health. I suspect these surprising findings are due to the small size of my sample, but it could be that preventative medicine and/or home remedies are more important than social ties in the maintenance of health in Los Duplex.

Chapter 8: Conclusion

Summary of Findings

The findings of this ethnographic case study of an urban, undocumented, first-generation Mexican migrant community in north Georgia, are consistent with the Hispanic health paradox. Los Duplex is a poor neighborhood, yet most of the people who live there with their families are in good physical and emotional condition. Although older women perceive themselves to be in slightly worse health than do younger women, self-assessments and assessments of other household members were generally positive. Few of the women in this study suffer from chronic and/or life-threatening health problems. Spouses and children are also described as healthy.

Women encourage healthy behaviors such as eating nourishing foods that agree with the body, exercising and staying active, maintaining a positive attitude and spending time with friends and family. All of these things contribute to good health because they reduce stress and prevent depression. When members of their families do get sick, the Mexican women of Los Duplex recommend and administer home remedies and oversee the use of prescription drugs. The efficacy of the most popular herbal medicines is well supported by the botanical, chemical and pharmacological literature for the kinds of conditions they treat in Los Duplex. Women have varying degrees of experience with pharmaceuticals (over the counter and prescription) but generally use them appropriately.

In the family-based households of Los Duplex, women determine when sick people need professional medical care and draw on their social networks to access it.

There are well-established female migrant social networks in Los Duplex (and elsewhere in Athens). Women in half the households in my sample followed sisters, daughters and female cousins and friends to Athens. Ninety-three per cent of the households in my sample are connected to each another through female kin and/or friendship ties. Most of the women I interviewed have family whom they see almost daily and all have several friends and acquaintances. Information about hospitals, clinics, doctors, interpreters, social workers, foodbanks, church organizations and government officials travels through these social networks. In Los Duplex, women take the initiative in scheduling doctor appointments, securing transportation and finding interpreters when their children and husbands get sick. It was also always women who asked me to help them find *ayudas* for their families. Thus, the female migration networks that draw Mexican women to Los Duplex also help immigrant families access the mainstream American health care system and the little public assistance for which they are eligible.

The social networks that Mexican women maintain and expand are also a source of social support. Women are of great importance in keeping members of Mexican families close. They thereby ensure that relatives may still be relied upon for emotional and financial assistance during serious illness, despite acculturative pressures. Moreover, humans are social beings. We need the company of trusted friends and family to lift our spirits and inspire us to engage in life. A whole host of human sicknesses, as well as early mortality are associated with isolation and depression (Farinpour, et al. 2003; Jiang, et al. 2002; Ramasubba and Patten 2003). The fact that most Mexicans migrate as part of established networks helps prevent loneliness, which along with information about jobs, healthcare resources and financial support helps ease the

transition to life in the United States. Nevertheless, the healthiest women in my study were those with the fewest social contacts.

Significance

Much of medical anthropology is focused on identifying the causes of disease and illness in various communities. Critical medical anthropologists and medical ecologists alike have argued that ecological, historical, political, social and economic forces have made people sick, all over the world. Los Duplex is a case in which these forces have contributed to a generally healthy population of immigrants. Historical, political, economic, social and cultural forces created network mediated migration between Mexico and the United States. Social networks (along with other facets of Mexican culture like familism, dietary practices and beliefs about the nature of different medicines) keep people healthy. While identifying the causes of sickness in different parts of the world is a noble and important task, medical anthropologists must not forget that ethnomedical beliefs and practices help people adapt to poor conditions.

Mexican women's medical knowledge is part of a set of cultural factors that explain the Hispanic health paradox, at least among recent, undocumented immigrants to Georgia. By comparing and contrasting Mexican folk models of the actions of medicinal plants with the chemical and pharmacological literature I have shown that immigrant women use effective home remedies. This system of self-medication is rational and appears to be an inexpensive and reasonable response to many of the health problems in Los Duplex.

Although Mexico has a long and rich tradition of herbal medicine, immigrant women are knowledgeable about the activities of pharmaceutical medications as well as medicinal plants. There is a growing body of literature that addresses how

conceptions of health, illness and medicine lead to reinterpretations of drugs according to traditional medical beliefs. An early example of this phenomenon comes from Guatemala. In 1973, Logan demonstrated that Guatemalan peasants classify pharmaceuticals as hot or cold according to the indigenous humoral classification system. Etkin, et al. (1990) show that among the Hausa pharmaceuticals are evaluated using the same criteria as are medicinal plants and are expected to follow indigenous models of drug action. For example, the Hausa consider iron tablets to be effective fortifiers not because iron contributes to hemoglobin synthesis, but because the tablets are red in color like some of their already-tested fortifying plants. A more recent study of self-treatment among school children in Kenya found that numerous pharmaceuticals are freely available and widely used. These remedies are integrated into a pre-existing self-treatment system based on herbal remedies (Geissler et. al. 2000).

In Los Duplex, pharmaceuticals are ascribed characteristics of traditional medicines, at least by some women. However, Mexican immigrant women make a sharp distinction between drugs and herbal remedies. The former are considered harmful to the body and potentially addictive while the latter are perceived as natural and safe. Similar beliefs about the nature of medicines are found in other parts of North and South America. The use of home remedies rather than mainstream American medicine is not necessarily related to the high cost of professional medical care. All of the women who participated in my study have accessed the mainstream medical system at one time or another and there is some assistance available in Athens for both children and adults. It is quite possible that many Mexican women avoid consultations with doctors because they are not interested in the types of medicines they offer, especially if appropriate herbal remedies are available.

Social scientists have given little attention to a growing trend of reduced dependence on professional medical services by the acquisition of health knowledge and self-care skills for health maintenance (Giachello 1994a). I have found that Mexican immigrant women know enough about health, sickness and medicine to manage the health of their families without professional assistance (at least most of the time). Yet, while most women in Los Duplex are not dependent on the mainstream medical system, they still choose to use it from time to time.

Rivera, et al. (2002) make a valid point about the potential hazards of uncritically combining home remedies and prescription drugs. While much of what Mexican women know about medicines is accurate, the perception that medicinal plants are harmless remedies that don't affect the body could lead to drug interactions. Self-medication needs to be discussed more in the mainstream healthcare system so physicians know *all* the medications their patients are taking and patients are aware of potential side effects or adverse reactions.

Directions for Future Research

My research shows that Mexican women's medical knowledge helps explain positive self-assessments of health in a low-income Mexican immigrant neighborhood. However, generalizations about all Hispanics, or even all Mexicans living in the United States cannot be made based on a single case study. Future research that includes quantitative methods would test the applicability of my results to other immigrant populations. The qualitative data that I collected in Los Duplex can be used to develop a larger survey of Hispanic immigrants. Following Kempton, et al. (1995) transcripts of my semi-structured interviews will be useful in identifying a set of themes and debatable ideas that are important for understanding the maintenance of health,

the causes of sickness and the actions of medicines. From these themes a series of statements that reflect the diversity of opinions expressed in the interviews may be developed into a "fixed-form" survey that can be administered orally. In such a survey, respondents are asked to state whether they agree or disagree with each statement as it is read to them.

Data generated by such a survey can be analyzed by drawing on the cultural consensus model proposed by Romney, et al. (1986). Instead of using this model to assess the competence of individual informants, the responses of all informants who take the survey are analyzed together to see if a single belief system concerning health maintenance, illness causation and medicinal actions exists. Kempton et. al. (1995) used a residual factor analysis of the number of agreements between all pairs of their informants to determine whether the conditions for the application of the consensus model (i.e. that 1. respondents share a common culture, 2. their answers are given independently and 3. their competence is consistent over all questions) were met. Kempton and colleagues state that if the consensus model fits the data, one can conclude that a single belief system is present. Confirming the existence of a shared belief system about health and medicine among other groups of Hispanic immigrants would further support the proposition that women possess medical knowledge that contributes to the good health of their families.

A comparative study that includes other low-income neighborhoods in Athens is also needed to confirm whether my observations about health status in Los Duplex truly represent the Hispanic health paradox. I don't know how the medical knowledge of Mexican women compares to the knowledge of mothers in other ethnic groups in Athens. Moreover, it should be even easier for poor American citizens to find financial

assistance for healthcare than it is for undocumented immigrants. It would be interesting to document self-medication practices and social networking in poor African and Anglo American neighborhoods and compare health status and number of doctor visits in these three populations.

Men's knowledge of health and medicine in communities like Los Duplex is also an important area of future research for a number of reasons. Although I did not interview any men for this study I did get to know several husbands of my research participants during my fieldwork. When I told these men about my project most assured me I would need to talk to they're wives about that. However, a few proceeded to tell me everything they know about medicinal plants and other folk medical practices from Mexico. They mentioned very different plants than the ones cited by women during freelist interviews. I don't know what the implications of gender differences in medicinal plant knowledge are. Moreover, because many men are living in Athens without women, one must wonder how well are they able to take care of themselves. There is some preliminary research that suggests men who travel to the United States by themselves suffer from malnutrition because they don't have wives with them who ensure they eat well (Orozco 2003). If women really do play a crucial role in family health maintenance, single men may be at risk for ill-health. Research is needed to identify gaps in their knowledge of health and medicine.

Finally, comparative case studies on the migration of ethnomedical knowledge can further understanding of how immigrants adapt to host cultures/environments. There is reference in the literature to positive birth outcomes among North African immigrants in France and Belgium compared to more advantaged, native-born women (Iannota 2003). Perhaps ethnopharmacological knowledge and social support

outweigh the negative health effects of legal and socio-economic status in other biological, physical and cultural environments.

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APPENDIX: Glossary of Spanish Terms

A
Abuelo/a: Grandfather/grandmother.
Aire: Literally air. Refers to both a type of air that causes dizziness, nausea and headache and intestinal gas.
Albahaca: Basil (*Ocimum basilicum*).
Alegre: Glad, joyful.
Antibiótico: Literally antibiotic drug. Many women in Los Duplex use this term to refer to any prescription drug.
Aspirina: Aspirin (salicylic acid).
Atole: A thick, lightly sweet pudding made of corn or rice.
Ayuda: Literally help. "*Un ayuda*" refers specifically to financial assistance from the county welfare office or a charitable organization.

B
Buen: Good.

C
Cabeza: The head.
Campesino: Peasant.
Carbonato: Baking soda (sodium bicarbonate).
Carretera: Refers to a highway or major road.
Comadre: Literally co-mother. Godmother.
Comal: A metal griddle.
Comedor: A small restaurant operated out of a Mexican family's house.
Comida: Refers to food in general, or to the Mexican midday meal.
Compadrazgo: Traditional Mexican system of co-parenting. Godparents are chosen at major life-events (such as baptism) and these relationships usually last a life-time.
Contenta: Content, happy.
Coyote: A guide hired to facilitate undocumented border crossings.
Cuadra: Refers to a set of wall decorations purchased through direct sales.
Cuerpo: The body.
Cuñado/a: Brother in-law/sister in-law.

D
Dolor: Pain.
Droga: Literally drug. In Los Duplex this term is used to refer specifically to illegal drugs.

E
Empacho: A blockage of the intestine caused by improper eating.
Estómago: The stomach.

F
Feliz: Happy.
Fiesta: A festival or party.

Fresca: Fresh or cool.

G
Gordo Lobo: Mexican common name for several medicinal species of the genera Verbascum, Gnaphalium and Senecio.
Gripa: An upper-respiratory tract infection.
a Gusto: At ease.

H
Hijo/a: Son/daughter.

M
Mal ojo: Literally evil eye. An illness caused by looking at someone inappropriately. Symptoms may include unexplained crying, diarrhea, fever and/or vomiting.
Manzanilla: Chamomile (*Matricaria chamomila*).
Migra: Migration police.
Mojado: Literally wet. Refers to someone who illegally crossed the United States-Mexico border by swimming across the Rio Grande.

N
Nieto/a: Grandson/granddaughter.
Niñera: Babysitter.
Nuera: Daughter in-law.

O
Omblígo: Belly button.
Optimista: Optimistic.

P
Pastilla: Pill.
Pollera: Poultry processing plant.
Pomada: Salve.
Primo/a: Cousin.
la Pulga: Literally flea. Refers to a local flea market.

Q
Químico: Chemical.

R
Rancho: A small, agrarian community in Mexico.
Ruda: Rue (*Ruta spp.*).

S
Secundaria: Secondary school (grades seven and eight).
Sobadora: A Mexican folk massage therapist.
Sobrino/a: Nephew/niece.
Suegro/a: Father in-law/mother in-law.

T
Tienda: A little store that sells miscellaneous groceries.
Tío/a: Uncle/aunt.
Telenovela: Literally television novel. Soap opera.
Tranquilo: Tranquil, calm.

V
Vaporub: Vicks Vapo Rub.
Vecinos: Neighbors who occupy the same building.

Y
Yerbabuena: Mint (*Mentha spp.*).
Yerno: Son in-law.