

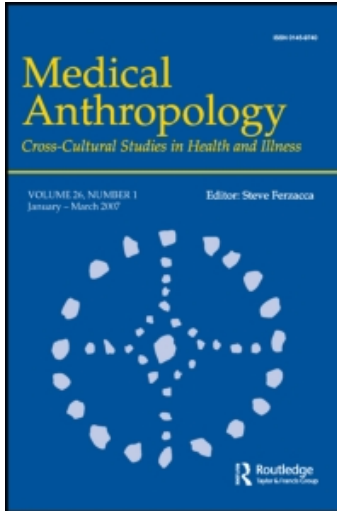
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### Popular Medicine and Self-Care in a Mexican Migrant Community: Toward an Explanation of an Epidemiological Paradox

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# Popular Medicine and Self-Care in a Mexican Migrant Community: Toward an Explanation of an Epidemiological Paradox

Anna Waldstein

While Hispanics are among the most economically disadvantaged groups in the United States, immigrants from Latin America have health profiles equal to or better than Americans of European descent. Research on this epidemiological paradox suggests that aspects of Hispanic culture prevent negative health outcomes associated with poverty, poor education, and barriers to professional care. However, little attention has been given to the ethnomedical beliefs and practices of any Hispanic subgroup. Here I present an ethnographic study of women's popular medicine in a Mexican migrant community in Athens, Georgia. Migrant women promote healthy behaviors, diagnose sick family members, and prescribe home remedies. These practices stem from long traditions of self-medication and family care, which have experienced less disruption by the biomedical profession than have other North American popular medical systems. Examining Mexican popular medicine within the context of scientific literature suggests that these self-care practices protect health and should be considered by investigators of the "Hispanic health paradox." The study also suggests that directing more attention to self-care will be fruitful for medical anthropology.

*Key Words:* Hispanic health paradox; Mexican migrants; popular medicine; self-care

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## INTRODUCTION

Standard of living and quality of life are critical determinants of health (Molina, Zambrana, and Aguirre-Molina 1994). Low socioeconomic status is associated with reduced life expectancy and higher overall and infant mortality rates (Blane 1995; Syme and Berkman 1976). Unfortunately, most Hispanics<sup>1</sup> living in the United States reside in communities with high unemployment and poor housing, social welfare, and health care facilities (Molina et al. 1994). They are disadvantaged educationally and are likely to work in low skilled, low paying positions (Iannota 2003), which put them at increased risk of occupational health problems (Friedman-Jimenez and Ortiz 1994; Morales et al. 2002).

Given the low socioeconomic status of Hispanics in the United States, it is not surprising that they have higher rates of diabetes (Bernal and Perez-Stable 1994; Carter-Pokras 1994; Vega and Amaro 1994); gall bladder disease (Carter-Pokras 1994; Gutierrez-Ramirez, Burciaga Valdez, and Carter-Pokras 1994); stomach, esophageal, and liver cancers (Gutierrez-Ramirez et al. 1994); chronic liver disease (Perez-Stable, Marin, and Marin 1994), HIV/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. However, despite disparities in employment, education, and socioeconomic status, Hispanics have greater life expectancy at birth (Morales et al. 2002), lower all-cause mortality rates (Abraido-Lanza et al. 1999; Hummer et al. 2000), and lower infant mortality rates (Iannota 2003; Scribner and Dwyer 1989) than middle class Americans of African or European descent. Hispanics of Cuban and Mexican descent also have lower rates of overall morbidity (Gutierrez-Ramirez et al. 1994; Iannota 2003; Pappas, Gergen, and Carroll 1990; Vega and Amaro 1994; Zsembik and Fennell 2005). This phenomenon, commonly known as the “Hispanic health paradox,” “Latino mortality paradox,” or simply the “epidemiological paradox,” has been documented extensively in the public health literature (see Franzini, Ribble, and Keddie 2001; Markides and Eschbach 2005; and Morales et al. 2002 for recent reviews).

Possible explanations of the Hispanic health paradox include the “healthy migrant hypothesis” and the “return migration/salmon-bias hypothesis.” The healthy migrant hypothesis proposes that only healthy people migrate from Latin America to the United States. The return migration hypothesis suggests that Hispanic migrants retire to their home countries after working in the United States for a period of time and are not included in American mortality statistics, which creates an artificially low Hispanic mortality rate.

While there is some support for both these hypotheses, it is generally weak. Using data from the National Longitudinal Mortality Study, Abraido-Lanza

et al. (1999) found that Hispanics born in the United States have lower mortality rates than Americans of European descent, which suggests that the effect cannot be explained simply by healthy immigrant stock. They also determined that family networks established in the United States reduce return migration. Combining data from the fourth National Health and Nutrition Examination Survey and the Mexican Health and Aging Survey allowed Crimmins et al. (2005) to compare the height (a possible indicator of childhood nutrition and health) of non-migrant Mexicans, Mexican Americans born in the United States, Mexican immigrants, and return migrants. They found that Mexican immigrants and Mexican Americans are taller than both return migrants and non-migrants, indicating support for both the healthy migrant and return migration hypotheses. However, controlling for early life conditions, education, health behaviors, and health insurance, Mexican immigrants were not found to have higher levels of any adult condition than Mexican Americans. Finally, Rubalcava et al. (2008) tested the healthy migrant hypothesis using data from the Mexican Family Life Survey, which consists of a baseline survey from 2002 and a follow-up study from 2005. The follow-up study sought to locate and re-interview all respondents, including those who migrated to the United States. They found weak support for the healthy migrant hypothesis, as the effect of relevant health indicators on the probability of moving to the United States was small.

An alternative explanation of the positive health status of the Hispanic population of the United States, relative to its socioeconomic profile, stems from a rapidly growing body of research that has established that the favorable health profile of Hispanics diminishes in the second and subsequent generations (Abraido-Lanza et al. 2006; Morales et al. 2002; Rumbaut 1997; Sundquist and Winkleby 1999; Tseng et al. 2000; Vega and Amaro 1994; Viruell-Fuentes 2007), even as English language skills, income, and use of primary health care services increase (Molina et al. 1994). Thus, various cultural and structural factors such as stress-coping strategies (Farley et al. 2005), exposure to discrimination (Viruell-Fuentes 2007), neighborhood context (Cagney, Browning, and Wallace 2007), family support (Iannota 2003), and risk factors such as smoking, alcohol consumption, exercise, and diet (Abraido-Lanza, Chao, and Florez 2005; Perez-Stable et al. 1994) have been investigated as explanations for the paradox.

In contrast, surprisingly little attention has been paid to the ethnomedical beliefs and practices of Hispanics. The ethnographic literature on the medical systems of Hispanics in the United States (e.g., Chavez 1984; Clark 1959; Higgins and Learn 1999; Kay 1977a; Lopez 2005; Mendelson 2003a; Rubel 1960; Saunders 1954; Trotter and Chavira 1997) is extensive and

describes many cultural beliefs and practices that are beneficial to health, at least from an emic point of view. However, most of the research on the Hispanic health paradox has been conducted by public health specialists and medical researchers who do not seem to find emic descriptions of ethnomedical phenomena convincing enough to consider that lay people can effectively manage their own health. Instead, these researchers rely on quantitative surveys that measure narrowly defined health-promoting behaviors, derived from their biomedical perspective, in their attempts to explain the paradox.

Researchers of the paradox have also overlooked ethnographic accounts that document women's roles as guardians of family health in Mexican (Logan 1983), Mexican American (Bruhn 1997; Clark 1991; Mendelson 2003b), Mexican migrant (Chavira-Prado 1992), and Guatemalan immigrant (Menjivar 2002) communities and have not focused enough attention on women. To fill these gaps in the literature, I present an ethnographic study of women's popular medical knowledge, beliefs, and practices in a recently established Mexican migrant community in Georgia.

In 1980, Kleinman proposed that the majority of health care takes place within families through the application of home remedies. Following a brief review of literature on popular medicine and self-care in medical anthropology, I describe how Mexican migrant women conceptualize health and sickness, promote healthy behavior, and use home remedies to treat minor ailments. My intent is not to empirically test the association between these beliefs and practices and health in this community or to compare them directly with popular health beliefs and practices in other communities. Rather, my objective is to describe the health protective ethnomedical behaviors that should be considered by researchers who wish to better understand the Hispanic health paradox. To make these ethnographic data more useful and attractive to researchers in other disciplines, I discuss them within the context of social science, biomedical, chemical, and pharmacological literature. This sheds light on some "blind spots" (cf. Ecks 2008) in the biomedical assessment of the Hispanic health paradox and thus suggests new directions for quantitative research to follow. Finally, considering various North American self-care practices within their cultural/historical contexts suggests further support for the argument that Mexican popular medicine protects migrant health. In the last century, family/popular medicine in North American communities of European descent has been disrupted by professional biomedicine in ways that Mexican self/family care traditions have not. Thus, migrants from Mexico may be able to put popular medical knowledge into practice more effectively than can many American citizens.

## POPULAR MEDICINE AND SELF-CARE IN ANTHROPOLOGICAL PERSPECTIVE

In medical anthropology, “popular medicine” refers to self-treatment and/or treatment by close relations. The concept is derived from Kleinman’s (1980) model of a cross-cultural internal structure of health care systems, which includes the popular, folk, and professional sectors. Accordingly, popular medicine encompasses self-care, which represents a range of behaviors (Dean 1989; Kickbusch 1989) and “technologies of the self” (Foucault 1988) that individuals perform to promote or restore health within the context of everyday life. Great ape (Huffman 2001) and evolutionary (Fabrega 1997) studies establish the deep historical roots and adaptive nature of self-medication and self/family care. Currently, self-care practices are among the most preferred treatment strategies reported in the international literature and include the use of home remedies and medications that are purchased without professional medical advice (Edgeworth and Collins 2006). Thus, the popular sector is both the oldest and the most central part of any health care system.

Popular medicine has received some consideration in relation to its contribution to primary health care in poor, developing nations. However, mundane, everyday health behaviors are easily overlooked or taken for granted by researchers (Stevenson et al. 2003), which limits our understanding of human health and healing. Indeed, as Ecks (2004) pointed out, while Foucault’s early works on power have deeply influenced anthropological understandings of health care practices, his later work on self-care has received little attention in medical anthropology. Some researchers may shy away from the study of self-care, which is particularly controversial (Kickbusch 1989) and could be used to justify blaming individuals for their own health problems or decreasing the level of professional health services provided by the state (Segall and Goldstein 1989; Ziguras 2004). Much research is also limited by a biomedical bias, which considers self-care as supplementary to professional care (Segall and Goldstein 1989) and people who self-medicate as diseased, noncompliant individuals who use drugs inappropriately (Das and Das 2005).

Nevertheless, the study of how popular medicine and self-care reflect larger social, political, and historical issues contributes substantially to theories of medical pluralism, hybridization, autonomy, and sustainability. It has been argued that medical pluralism (i.e., the existence of multiple theories of illness/disease and corresponding therapeutic strategies in a single society) is a myth in most societies because so-called alternative medical systems are based on the same capitalist principles that shape biomedicine (Han 2002; Hsu 2008). Biomedical models may serve as frames

of reference for the use of alternative medicines, and the incorporation of such treatments into biomedicine is unlikely to challenge the epistemological and authoritative boundaries established by the profession (Shuval 2006). Popular theories and therapies appear to be no less vulnerable to assimilation by and/or hybridization with professional biomedical systems. Due to the high costs of biomedical technologies, a variety of self-help treatments may be promoted to reduce the health care burden on the state (Han 2002). For example, in the United States, self-care and clinical practice have formed a hybrid medical approach to diabetes management (Ferzacca 2000). However, while lay evaluations and self-treatment take place in conjunction with professional care (Dean 1989), self-care is promoted only in ways that fit with the dominant biomedical paradigm (Fox, Ward, and O'Rourke 2005; Stevenson et al. 2003).

In many parts of the world popular medicine and self-care have been eroded by Western modes of thought, which have given rise to both biomedicine and consumer capitalism. Foucault (1988) traced a fundamental change in technologies of the self back to early (fourth and fifth century) Christian ascetic traditions that viewed caring for the self as immoral. Such discouragement of self-care was echoed centuries later as active participation in health care decreased with scientific advances of the early 1900s. During this time patients developed an unprecedented reliance on the expert advice of physicians (Wilson 2001). While in India, anxieties about being "enslaved" by modern life and modern medicine have been expressed since the introduction of colonial medicine (Ecks 2004), dependence is generally a crucial feature of lay people's relationship with biomedicine (Bissell, Ward, and Noyce 2001), especially when it is accessed with relative ease. The overprescribing of industrially produced medications has undermined confidence in self-treatment (Stevenson et al. 2003) to the point that some patients under the care of biomedical professionals simply do not wish to take responsibility for their health (Fox et al. 2005).

Dependence on professional expertise and/or commodified medicines reduces diversity, resilience, and sustainability in healing strategies. Thus, understanding the factors that shape how people value and/or dismiss popular medicine and self-care in different cultural contexts is of great importance to medical anthropology. While medical beliefs and practices have always evolved (just as any other cultural domain does), intense commodification of both medical expertise and treatments is peculiar to consumer capitalism. The case study of Mexican migrant medicine to which I now turn suggests that popular medicine and self-care need not be sacrificed or commodified when confronted with biomedicine. Rather, they can exist as part of a plural medical worldview in which homemade medicine and social support buffer the negative health outcomes associated with low socioeconomic status and migration.

## DATA COLLECTION AND ANALYSIS

Since the Immigration Reform and Control Act was passed in 1986, Georgia has become one of the most important destinations for people making their initial move from Mexico (Hernández-León and Zúñiga 2000). My research was conducted in Athens, Georgia, which is located 70 miles northeast of Atlanta. According to the 2000 United States Census, the population of Athens was just over 100,000 with at least 6,400 Hispanics.<sup>2</sup> As in the rest of Georgia, most of the Hispanic people living in 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 the city. My research on Mexican migrant women's popular medical knowledge, beliefs, and practices took place in one of these neighborhoods, which is known by its Spanish-speaking residents as "Los Duplex." Nearly three quarters of the 131 residences in Los Duplex were occupied by Mexican tenants at the time of my study, and 51 of these households included women and children.

All of the data for this study were collected in Los Duplex between April 2002 and June 2003, under the approval of the Institutional Review Board of the University of Georgia. After I thoroughly explained the aims, objectives, methods, and expected outcomes of the project, each participant signed a consent form, written in Spanish. Likewise, all of my work in Los Duplex was conducted in Spanish.

### Research Participants

Through volunteer work at the neighborhood's community center, referrals, and cold calling, I was able to recruit 37 women to participate in the study. I found that it was more fruitful to use a snowball sampling technique than a random one, due to a pervasive wariness toward Americans who have not been introduced by a trusted relative, friend, or institution. Participants ranged in age from 20 to 76 years and spoke only Spanish. Most were married with children and came from central Mexico. Roughly half the participants came from urban communities and none identified themselves as indigenous. Additional details of the women who participated in the research are presented in Table 1.

### Participant Observation and Unstructured Interviews

While I took my evening meal and slept in an apartment in the center of Athens for the majority of my fieldwork, I spent most of my days



TABLE 1  
 Sociodemographic Characteristics of Research Participants  
 (N = 37)

<i>Research participant characteristic</i>	<i>n</i>
Age	
20–30 years	16
31–40 years	11
41–50 years	7
51–60 years	0
61–70 years	2
71–80 years	1
Marital status	
Single	3
Living with partner	2
Married	28
Divorced	1
Widowed	3
Has children	
Yes	35
No	2
Has grandchildren	
Yes	8
No	29
Language(s) spoken	
Spanish	37
English	0
Other	0
Mexican state of origin	
Estado de México	2
Guanajuato	2
Guerrero	5
Hidalgo	3
México, D. F.	4
Michoacán	15
Morelos	1
Nyarit	2
Puebla	2
Tamaulipas	1
Community of origin type	
Rural	18
Urban	19
Number of current trips to United States	
First	29
Second	8
Duration of current trip	
Less than 1 year	5

(Continued)

TABLE 1  
Continued

<i>Research participant characteristic</i>	<i>n</i>
1–3 years	14
4–6 years	13
7–9 years	3
10–12 years	1
13+ years	1
Formal education	
Primary school only	10
Secondary school	12
Post-secondary	5
Current employment	
Childcare	6
Disco	1
Food vending	3
Housewife	4
Hotel	2
Music store	1
Poultry factory	18
Restaurant	2
Member of a household with health insurance for adults	
Yes	
Low income assistance from public hospital	22
Medicaid	1
Private	0
Through employer	1
No	13
Member of a household with health insurance for children	
Yes	
Medicaid	14
Peachcare (offered by the state of Georgia)	2
No	21

in Los Duplex engaging in various forms of participant observation (e.g., attending parties and other social events, accompanying research participants to shops, medical appointments, and social service institutions). I also spent six weeks living in Los Duplex with one of my key informants, which gave me a “behind the scenes” look at life in the community. Participant observation was complemented by informal discussions of health hazards, how to avoid colds and the flu, home remedies for back pain, infections, fevers and “cold” maladies, pregnancy, life in Mexico, border-crossing experiences, and encounters with doctors and hospitals in Athens.

## Structured Interviews

I gathered demographic and health status data using a structured interview protocol. I wrote the questions in Spanish and worked with two key informants and members of their families to make sure they were understood appropriately 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.

During structured interviews, I asked research participants to evaluate their own health status and that of other members of their families. Women assessed their overall health on a scale of one (horrible) to seven (excellent) and rated how often they get sick on a scale of zero (never) to four (almost always). They were then asked to rate how often their children and husbands/partners get sick using the same five-point scale. This was followed by questions concerning chronic and acute health conditions and the collection of family health histories.

## Semi-Structured Interviews

Thirteen of the 37 women in the study participated in semistructured interviews on health and sickness and were asked to describe healthy and sick people, discuss why people get sick, and reflect on what people can do to maintain health. These key informants were selected based on their interest and expertise in issues related to health, sickness, and medicine, as well as the high level of rapport I was able to establish with them. Nine of the women who were involved in the health interviews also participated in a second interview on medicine (the other four declined to do a second interview because of work and family obligations). These interviews included questions about the preparation and use of herbal remedies, but were focused on eliciting what Mexican women believe home remedies do to restore the body to a state of health.

Upon consent of research participants, I audiorecorded interviews and transcribed them verbatim. In this article, I present quotations in English, which I translated from Spanish. The original Spanish interview transcripts are available upon request. Interview notes and transcripts were coded and categorized inductively according to themes that were informed by the research objectives. Recurring patterns emerged from the coding process and were analyzed across informants. To improve the validity of the analysis, transcripts were read several times to evaluate systematically whether the code categories fit the data. Likewise, the code categories and conclusions derived from the analysis were developed in consultation with a senior colleague.

## RESULTS AND DISCUSSION

## The Los Duplex Environment

Los Duplex is a residential subdivision situated about six miles from the center of Athens. The neighborhood takes up an area of land roughly one tenth of a square mile and is bounded by a thin, wooded buffer zone on the north and east sides and two-lane highways on the west and south sides. Los Duplex is an older neighborhood and includes a fair number of mature trees. There are two wooded areas in the interior of the subdivision that children are afraid to walk through, unaccompanied, after dark.

The 97 residences in Los Duplex that Mexicans lived in at the time of my study come in three floor plans. Eighty are two-bedroom, single story duplex apartments (78 with vinyl siding and roofing and 2 made of brick). There are four brick, town house-style duplexes in the neighborhood, containing six apartments occupied by Mexicans. The rest are single-occupancy, vinyl-sided houses.

All the residences in Los Duplex have small front and back yards that are, with rare exception, covered with grass. Some lots also have ornamental hedges and trees. 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 pastime for many women in Los Duplex and more than 10% of the subdivision's Mexican households kept small vegetable, flower, and herb gardens throughout the study period. Chilies were the most common vegetable grown, followed by tomatoes. A few families also planted corn and banana trees. *Yerbabuena* (*Mentha spp.*) was the most common medicinal plant grown in Los Duplex; one research participant had a basil garden in front of her apartment, and three others had collections of potted medicinal plants, which they keep inside during winter.

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 parked cars. Chickens (the most common domesticated animal kept by Mexican households) are allowed to run freely through the neighborhood.

When the weather is tolerable (spring, early summer, and fall), the people of Los Duplex spend a lot of time outside. Many dwellings have seating (plastic chairs, back seats from cars, picnic tables) on the front patio. Patios and yards of households with children are also littered with toys. However, there is not much garbage in the streets, yards, or wooded areas, with the

exception of beer bottles and periodic debris from community center activities on the playground. I never saw the property manager or city picking up litter and suspect most residents were conscientious about keeping the neighborhood clean.

### Social Organization and Networks in Los Duplex

The Mexican population of Athens is predominantly male. About half of the Mexican households in Los Duplex are made-up of eight to ten young men who are either single or have come to the area without their families to work in labor-intensive jobs. However, there were also a growing number of families with three or four generations of relatives moving into the neighborhood. In Los Duplex, women and children live in nuclear, extended, and multi-family households. Most of the women who participated in my study were part of extended family households, living with adult siblings, adult children, and/or elderly parents.

Decisions to migrate to Athens were strongly related to kinship ties. Thirty-three research participants 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. The three women that I interviewed who were older than 60 years followed their adult daughters to Georgia and three participants came to Athens as single women because they had sisters living there. Two of the married women in my study came to the United States before their husbands, two research participants were single mothers who migrated with their children, and one left her husband and adult children in Mexico. These women came to Athens because they had friends already living there. The importance of social networks in influencing Mexican migration patterns is documented elsewhere in the literature (Davis and Winters 2001; Hondagneu-Sotelo 1994; Marcelli and Cornelius 2001; Reyes 2001; Wilson 1998).

Most of the social lives of the migrant women who participated in my study 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 physically active games. Throwing a large party strengthens ties with neighbors.

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. However, in Los Duplex I observed relationships develop

between neighbors who came 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 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. 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. Neighbors may even go so far as to provide financial support by hiring each other to cater parties. I also encountered a case of *compadrazgo* (co-parenting) ties that developed between neighbors who did not know each other before moving to Los Duplex.

### Making a Living in Los Duplex

Los Duplex is two miles from the nearest commercial and industrial areas; however, unlike most American suburbs, it has a community center and a few informal small businesses. It is a low-income, working class community that is known for having a significant number of undocumented residents. Most adults in Los Duplex work in poultry processing plants. Some men find jobs in construction or stonecasting and a few women work in Mexican restaurants and businesses or as housekeepers for hotels. 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 or homemade "fast" foods such as tacos.

Household income in Los Duplex depends on the number of working adults in a given home. Due to the level of risk involved, the poultry factories paid a reasonable hourly wage (US\$7 to \$9 per hour) compared with the cost of living in Athens. The work is also full-time (eight hours a day, five days a week) although plants were known to close early on occasion. Other factories pay a bit less, but construction work and stonecasting were competitive with them. Housekeeping and restaurant jobs paid about US\$6.50 an hour. Of the occupations in the informal economy, food vending was by far the most lucrative and some women were able to support their entire households by preparing and selling food on the weekends.

At the time of my study, rent (US\$425 per month) and utilities (US\$100 to \$200 per month) were the greatest expenses for residents of Los Duplex. The cost of food obviously varied with household size but was the next greatest expense for most families. Most women, even those who work outside the home, try to cook for their families on a regular basis. The three women with whom I had the chance to go grocery shopping bought mostly

unpackaged foods like fruits, vegetables, dried beans, cheese, and meat and spent about US\$50 to 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* (a local weekend flea market) 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 fulltime employment were 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 the United States 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.

Despite the relatively low cost of living in Georgia, many families in Los Duplex periodically have trouble making ends meet, especially if they have children. 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 public assistance or charity donations.

### Encounters with the Host Community

All of the 37 women who took part in my study migrated to the United States either to work themselves or to support working husbands. Over half of these migrant women desired to return to Mexico. The most commonly mentioned disadvantages of living in the United States 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* (immigration police) 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 also 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.

Nevertheless, research participants had mostly positive thing to say about Athens and found it relatively easy to restrict their encounters with Americans to sympathetic individuals and organizations.

Church organizations that assist 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 were fairly easy to come by. The food banks make generous donations to eligible families, but they include a lot of American packaged or processed goods that many Mexicans are unfamiliar with or simply will not eat. Moreover, churches and food banks rarely have someone on staff who speaks Spanish so Mexican families must find bilingual Americans (friends, anthropologists and/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. University students have 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. By the end of my fieldwork, several years had passed since they were painted and the vandals had respected them.

In 1999, a playground was built behind the community center, which gave both children and their families a place to play and gather. 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 the community center. 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 on the playground. The community event that most resembled the *fiestas* (festivals) that I have 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 bouncy castle, 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.

After churches and other charitable organizations, the American institutions with which migrants in Los Duplex have the most interaction are part of the mainstream health care system. As there are few, if any, Hispanic folk healers in the area, health care resources for Mexican migrants living in Athens consist of self-treatment and a variety of professional services. The latter include two women's clinics, two free clinics, two doctor's offices, and two hospitals that have Spanish-speaking interpreters on staff. The public hospital also had a well-funded, low-income assistance program at the time of my study, which made it reasonably accessible for much of Athens's migrant population.

Although the focus of my research was on popular medical knowledge and the use of home remedies, migrant families in Los Duplex use a combination of professional and popular medicines. During the course of participant observation, I accompanied several research participants to medical appointments at all of the health care providers mentioned above. However, the ways migrant women navigate and interact with the mainstream health care system of Athens will be described in a separate, forthcoming article. While 2 of 37 research participants admitted to forsaking all home remedies in favor of doctors' care, the rest continue to use Mexican home remedies in the United States even if they also seek professional treatment. The majority (roughly 70%) of visits with professional health care providers that Mexican women in Los Duplex reported related to prenatal care, childbirth, and childhood immunizations. Thus, professional medical care plays a minimal role in the everyday management of health, which is the focus of this article.

### Defining Health in Los Duplex

Like many people all over the world, Mexican women in Los Duplex have a holistic definition of health. The 13 women who participated in semistructured interviews described healthy people in terms of appearance, energy level, and both physical and emotional states. Nine talked about what healthy people look like. A healthy person has color in her face and her eyes look clean. Most important, the face of a healthy person is happy and smiling. Nine women characterized healthy people as active and energetic. They have the energy and desire to go out and 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. Eight women described healthy people as free from pain and three stated that they do not have any type of sickness. Finally, all 13 women talked about the emotional state of healthy people. 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).

### Threats to Health in Los Duplex

The threats to health that are recognized by women in Los Duplex reflect both Mexican cultural beliefs and health risks identified by etic investigations of migrant health. Two of the most commonly cited causes of sickness were weather and bodily constitution, which 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. However, a few women also explained that the heat reduces one's desire to go out and can thus make a person sick.

These beliefs about weather and sickness are derived from the humoral theory of disease causation, which is common throughout Latin America and many other parts of the world. While humoral concepts are seen in the roots of biomedicine, the examination of disease at the molecular level and subsequent adoption of the "germ theory" have led to their discontinuation as part of biomedical explanatory models. Nevertheless, 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 associated with such physiological maladies (Anderson 1987). Observations of these phenomena reinforce the idea that exposure to different types of weather can lead to illness.

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, coughs, and colds. "Here we get sick when the temperature changes, and it pains our throat and gives us cough," one woman explained. Kay (1977a) also found that rapid changes in temperature, such as bathing when one is overheated, are considered especially dangerous and attributes this belief to the concept of balance that is found in many medical systems. She points out that the concept of balance is even important in biomedicine (for example, blood chemistry must remain balanced between acid and alkaline).

Eight women who participated in the health interviews recognized that the weather does not affect everyone in the same way. 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. "There are some of us who have more defenses for some things and others do not," one woman noted. "For this reason we frequently get sick from one thing, constantly and others well, we can be in the same environment and we don't get sick the same." Nevertheless, only one woman specifically cited genes as the reason why some people are healthier than others.

Mexican women in Los Duplex also described many other threats to health that people do have some ability to control. Several women described poor environmental conditions as threatening to health. Theoretically, such environments can be avoided, although in reality many migrants may not have the means to do so. Environments full of smoke and smog were mentioned by a few women; however, the poor working conditions in which many Mexicans find themselves were of greater concern. This is especially true of the poultry plants that must be kept cool. "Many have to work, we say in a very cold place and well there they get sick in the bones, from colds, from bronchitis. One has to work and there are not many possibilities of having another job that won't make you sick," explained one woman. Eighteen of 37 women who participated in the structured interviews have worked in a poultry processing plant and suffer from back and joint pain, colds, and respiratory distress, which they attribute to the cold temperatures of the factory floors. Working too much and not getting enough sleep were also cited as causes of sickness. Insufficient sleep patterns are a big concern in Los Duplex because many people alternate between night and day shifts, which prevents regular sleep cycles.

Nine women explained that a poor diet causes people to get sick because people who don't eat enough healthy foods have lower defenses and those who eat too many unhealthy foods develop health problems associated with obesity. According to research participants, a poor diet is one that is high in fats, sodas, sweets, chips, and meat, as well as foods that are not fresh (i.e., are canned, dehydrated, or frozen). Eating "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. Although Mexican women generally know what they should and should not eat in order to avoid getting sick, many find themselves eating poorly in the United States. Fresh fruits and vegetables are among the least expensive foods in Mexico, but in the United States produce is often more expensive than industrially processed junk foods (Drewnowski and Darmon 2005).

Several other risky behaviors were also mentioned during interviews. Six women cited cigarette smoking as a cause of respiratory problems. During 13 months of fieldwork in Los Duplex, I observed only one woman smoking,

though a second research participant admitted to smoking cigarettes on occasion. While the physiological effects of alcohol consumption were not specifically cited as potentially damaging to health, women in Los Duplex reserve the consumption of alcohol to Christmas Day and New Year's Eve (if they drink any alcohol at all) but drink soda (usually Coca Cola) at parties. Married men drink beer at social gatherings, but liquor is not generally consumed. However, all of my research participants complained that the single men who live in the neighborhood drink too much alcohol and even consume illicit drugs. This behavior was seen as threatening to the health of families in Los Duplex because it has led to accidents, violence, and murder.<sup>3</sup>

Finally, Mexican migrant women believe that physical sickness can result from an unhealthy emotional state or outlook on life. Research participants cautioned that letting other people upset you, worrying about getting sick, and being lazy can all lead to ill health. "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," said one woman. In Los Duplex, as in many other Mexican and Mexican American communities, intense fear and jealousy can lead respectively to *susto* (a folk illness attributed to soul loss resulting from a sudden shock or fright) and *mal de ojo* (a folk illness that affects infants and small children, which is characterized by diarrhea and fever and is caused by someone who casts an envious glance at a child). Four women also cited loneliness and depression as causes of poor health, which are associated with increased morbidity and early mortality (Farinpour et al. 2003; Jiang, Krishnan, and O'Conner 2002; Ramasubbu and Patten 2003).

### The Maintenance of Health in Los Duplex

The strategies migrant women use to maintain and promote health in Los Duplex reflect their perceptions of threats to their health. Paying attention to the body is thought to help 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. Such bodily awareness is seen as helpful in mitigating the effects of poor defenses, weather, and environmental conditions that cannot be controlled directly. Mexican women in Los Duplex don't just pay attention to their own bodies, but monitor somatic indicators of health in other members of their households as well. Like most women of Mexican descent living in the United States (Higgins and Learn 1999; Mendelson 2003b), my research participants make initial diagnoses of sickness, which lead them to recommend home remedies, a visit to the doctor (or other medical specialist), or both. Thus, their ability to recognize sickness in

themselves and in others is critical to family health maintenance. Signs of ill health that migrant women look out for include pallor, red and/or oozing eyes, bags under the eyes, rashes, inflammation, listlessness, difficulty walking, sadness, and depression. However, six women cautioned that sometimes a person can be sick without realizing it or showing it.

Eight women who participated in the semi-structured interviews talked about the importance of good dietary practices, which for my research participants include consuming lots of vegetables and fruits as well as plenty of water. Five women recommended taking vitamin supplements and avoiding large amounts of meat. According to the migrant women I worked with, 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. "For one to be well one needs to eat good things that sit well with you," one woman explained.

Nutritional research suggests that traditional Mexican diets can be characterized as healthy. For example, Guendelman and Abrams (1995) found that women who were born in Mexico and consumed a traditional Mexican diet have higher intakes of protein, vitamins A and C, folic acid, and calcium than Mexican women born in the United States and Americans of European descent. Mexican Americans also consume more dietary fiber than other Hispanics and Americans of European descent (Tippett 2000). Beans and corn tortillas, the two main staples of a traditional Mexican diet, have a low glycemic index that is associated with low cholesterol and triglyceride levels, as well as stable glucose levels in the blood (Jiménez-Cruz et al. 2004).

There is some evidence that people of Mexican descent who live in the United States deviate from a traditional Mexican diet and may suffer diseases of malnutrition (Romero-Gwynn and Gwynn 1997). Adult migrants in Los Duplex do not appear to have adopted too many poor American dietary habits. All of the women who participated in my research cook traditional Mexican foods for their families. During my fieldwork, I ate at least one meal in 18 different households and shared meals regularly with members of five of these homes. The food that is prepared by women in Los Duplex is typical Mexican fare (corn tortillas, beans, salads, and soups and stews made with fresh chilies, tomatoes, onions, and meat). While many women consume more meat than they say is good for them, the consumption of fruits and vegetables is generally high as well. Many of the herbs and spices used in Mexican cooking (e.g., oregano, cinnamon, *epazote*) are also used as medicines. Children eat a lot of candy and potato chips outside the home, but most adults eat a limited amount of sweets and fast foods.

Five women mentioned exercise specifically as a way to maintain health, and another explained that if you are active in your job and daily routine,

there is no need to do additional exercises. “In the day until four in the afternoon there one finishes work now having done nothing but work all day, all of it working. And this well, this is a lot of exercise because there the jobs are heavy, so one doesn’t have to do exercise in the afternoon,” one woman told me. 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 (Abraído-Lanza et al. 2005; 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 the argument that people can get enough exercise throughout the day if they are active in their jobs. Using data from the third National Health and Nutrition Examination survey, 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. Finally, my research participants explained that spending time with family and friends also helps people stay healthy. As described above, women in Los Duplex are part of elaborate social networks and maintain strong relationships with extended family and friends from Mexico by visiting and supporting them both emotionally and materially. Informal social networks, social activities, and participation in organizations are all associated with better health chances (Berkman and Syme 1979; Cattell 2001). All three of these things are sources of social support, which has a stress-buffering effect that can improve health and is related to longevity in the epidemiological literature (Hurdle 2001).

### Home Remedies in Los Duplex

When health maintenance strategies fail, the consumption of medicines is the most common healing strategy in Los Duplex. On the rare occasions when women engaged in symbolic healing (for example using an egg to remove bad energy from the body that results from *mal de ojo*), it was also accompanied by the ingestion of medicine. While the medicines used by my research participants include over-the-counter and prescription medications, the majority are derived from medicinal plants. In their study of health maintenance and health care seeking among (predominantly Mexican) Latina immigrants, Garcés, Scarinci, and Harrison (2006) classify the use of herbal remedies as an “exotic” practice that neither leads to nor hinders health or the quest for care. However, medicinal plants have profound effects on human physiology and the efficacy of the most popular herbal medicines used by Mexican migrant women is well documented in the chemical and pharmacological literature (see Waldstein 2006).

A full discussion of all of the herbal remedies used in Los Duplex is beyond the scope of this article, and the preparation methods, administration, and pharmacological effects of herbal remedies in Los Duplex have already been described elsewhere (Waldstein 2006). Thus, Table 2 summarizes the four most popular medicinal plants used to treat common maladies in Los Duplex and their known pharmacological effects.

### Are Mexican Migrants in Los Duplex Healthy?

Thus far I have discussed Mexican migrant women's ethnomedical knowledge, including the health threats they perceive, the behaviors they relate to staying healthy, and the medicines they consume when ill. I will now turn to the question of whether Mexican migrants in Los Duplex are actually able to maintain and/or restore their health. The scope of this small, ethnographic research project accommodated two indicators of health status in Los Duplex: self-assessments of health (described in the methods section) and reports of chronic conditions suffered. The 25 women in my study who were younger than 40 years consider themselves to be in good overall health (i.e., they rated their health as good, very good, or excellent). Only two reported suffering from any chronic condition and all stated that their health has stayed the same or improved since moving to the United States. Most of the women in this age bracket reported they do not get sick very often and the most common health problems that these women suffer are colds and indigestion. The 12 research participants who were 40 years and older rated their health lower than the younger women did (i.e., good, fair, or poor). Only three older women felt their health was better in the United States 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. Eight reported that they suffer from a chronic illness. The illnesses reported were diabetes, heart disease, hypertension, asthma, and migraine, which all require professional medical attention, according to most migrant women.

The health of spouses/partners was generally perceived to be good and the most commonly reported health problems were colds 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 participants who lived in Athens with children younger than 18 years perceived them to be healthy overall. Mexican children were reported to suffer common childhood ailments like colds, 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 2  
Pharmacological Effects of the Most Popular Herbal Remedies in Los Duplex

<i>Remedy</i>	<i>Use/condition treated</i>	<i>Preparation/administration</i>	<i>Pharmacological evidence</i>
Manzanilla <i>Matricaria recutita</i> L. (Asteraceae)	Gastrointestinal distress	Infusion of flowers, taken orally	Flavonoid and bisabolol constituents exert antispasmodic activity on isolated guinea-pig ileum (Barnes, Anderson, and Phillipson 2002). Ethanol (40%) extract of flowers effective against ethanol induced ulcers in male rats (Ross 2001). Oil increases bile secretion in cats and dogs (Barnes et al. 2002). Aqueous extracts of dried flower and preparation of apple pectin and chamomile significantly reduce diarrhea in children (Ross 2001).
	Menstrual cramps	Infusion of flowers, taken orally	Aqueous extract enhances uterine tone in guinea-pig and rabbit (Barnes et al. 2002).
	Eye infection	Infusion of flowers, used to bathe eyes	Essential oil has antifungal activity and antibacterial activity against Gram-positive bacteria (Barnes et al. 2002).
	Anxiety/ insomnia	Infusion of flowers, taken orally	Apigenin has anxiolytic effects in mice (Paladini et al. 1999). Oral dosage of extract induced deep sleep in 10 of 12 cardiac patients (Barnes et al. 2002).
Yerbabuena <i>Mentha</i> <i>spp.</i> L. (Lamiaceae)	Gastrointestinal pain	Infusion of leaves, taken orally	<i>M. piperita</i> oil relaxes gastrointestinal smooth muscle by acting as a calcium antagonist (Hills and Aaronson 1991). Piperitenone oxide has spasmolytic effects on guinea pig ileum (Souza et al. 1997). Ethanol extract of <i>M. piperita</i> anti-inflammatory and analgesic in mice (Atta and Alkofahi 1998). <i>M. piperita</i> oil exerts

(Continued)



TABLE 2  
Continued

Remedy	Use/condition treated	Preparation/administration	Pharmacological evidence
	Stimulate digestion	Infusion of leaves, taken orally	spasmodic effect on gastrointestinal smooth muscle in healthy adults (Grigoletti and Grigoletti 2005). Six out of eight randomized controlled trials of <i>M. piperita</i> oil in patients with irritable bowel syndrome had significant, positive results (Pittler and Ernst 1998). <i>M. spicata</i> oil stimulates lipase and intestinal amylase activity in rats (Sharathchandra, Patel, and Srinivassan 1995).
	Tonic for infants	Infusion of leaves, taken orally	<i>M. spicata</i> leaves contain iron, magnesium, phosphorus, zinc, and selenium (Choudhury, Kumar, and Garg 2006).
Ruda <i>Ruta spp.</i> L. (Rutaceae)	Rheumatic pain	Leaves soaked in rubbing alcohol for several days, applied topically	Extract of <i>R. graveolens</i> inhibits nitric oxide and prostaglandin E2 in murine macrophage cells (Raghav et al. 2006). Ethanol extract of <i>R. chalepensis</i> has anti-inflammatory and antipyretic in mice and rats (Al-Said et al. 1990). Ethanol extract of <i>Ruta graveolens</i> has anti-inflammatory and analgesic in mice and rats (Atta and Alkofahi 1998).
Albahaca <i>Ocimum basilicum</i> L. (Lamiaceae)	Rheumatic pain	Leaves soaked in rubbing alcohol for several days, applied topically	Fixed oil has anti-inflammatory activity against carrageenan, histamine and serotonin-induced paw edema in rats (Singh 1999).

Although they may not always match the results of detailed clinical evaluations, self-reported assessments of health are powerful predictors of mortality, specific disease status, and disability (Angel, Buckley, and Finch 2001). There is also a positive relationship between parental perception of children's health status and children's actual health status (Bruhn 1997). Nevertheless, self-assessed health data need to be interpreted with caution, as people of different cultural and ethnic backgrounds evaluate their health in different ways. Hispanics often report poorer health than non-Hispanic whites. However, this does not seem to be associated with objective indicators of poor health (Shetterly et al. 1996). Moreover, this phenomenon is more pronounced among Hispanic immigrants than among more acculturated Hispanics (Finch et al. 2002). Thus, if the recent Mexican migrant population of Los Duplex follows the typical Hispanic self-rated health pattern, then objective measures of health status could be more favorable than their self-assessments.

#### How Might Mexican Migrant Popular Medicine Compare with Self-Care Practices of Middle-Class American Citizens?

It is estimated that over one third of Americans of all ages, ethnicities, and income levels use herbal medicines. However, most are educated females of European descent (Ambrose and Samuels 2004). Why should Mexican migrant self-care practices be any more effective than other North American ones? One possible reason relates to the disruption of popular medicine in the United States due to the professionalization of biomedicine. In 18th and early 19th century America, many people were wary of physicians and relied on the care of family members and lay specialists when ill (Roberts 1999). Ingredients for home remedies were derived from familiar, natural surroundings, and women played a dominant role in handing down and using home remedies, which was intimately related to their domestic work (Saillant 1998). Thus, laypeople were empowered to care for themselves rather than put their health in the hands of physicians. However, scientific discoveries in the latter half of the 19th century strengthened the professional status of certain practitioners. Patients came to rely on expert or professional advice for problems that used to be handled by lay people (Roberts 1999). This was accompanied by the rise of biomedicine as the dominant system by the early 20th century (Baer 1989). Biomedicine established itself by excluding other forms of rationality, including women's folk knowledge of the body and oral traditions of self-care. North American home remedies came to be regarded as makeshift, foreign, and amusing and the range of popular medicines narrowed (Saillant 1998) and became commodified, as suggested by the boom in the

United States patent medicine industry during the 1920s and 1930s (Kaptchuk and Eisenberg 2001).

This did not begin to change until the 1960s and 1970s, when patients' rights, informed consent, and living wills became key concerns in the health care field. The self-care movement of this time period stressed the need for self-reliance both as protection from the professionalization and medicalization of health and as a supplement to conventional medical care (DeFriese et al. 1989). Self-help clubs and media have become increasingly popular in the past four decades and provide access to medical information to lay people (Roberts 1999). Although many North American health care practitioners initially saw the concept of self-care as threatening, self-care educational programs have tended to be developed by health professionals (DeFriese et al. 1989). Currently, there seems to be a natural synergy between consumers' desires for more involvement in health management and providers' desires for lower costs (Baker 2001). However, it is not clear that professional biomedical hegemony will ever give way to the re-introduction of uncommodified technologies of the self.

After nearly two centuries of dependence on biomedical professionals in the United States, popular medicine has begun to be reinvented, though the commodification of health and healing continues. A survey of over 2,000 self-care education programs indicates that lifestyle modification and health promotion are principal areas of instruction in American self-care instructional programs led by health care professionals (DeFriese et al. 1989). However, the consumption of dietary supplements (Nichter and Thompson 2006) and herbal medicines (Ambrose and Samuels 2004) has come to play a more central role in popular American health culture since the mid-1990s.

The efficacy of post "doctor knows best" popular medicine in the United States appears to be minimized by inadequate information about and poor quality control of herbal and dietary supplements. Friends and relatives are an important source of information about supplements (Ambrose and Samuels 2004; Nichter and Thompson 2006), but may not have accurate knowledge of safety, efficacy, and appropriate use (Ambrose and Samuels 2004). Thus, most Americans who self-medicate still rely on professional advice and/or information from mass media. The Internet is used to find information about supplements that is not provided through social networks (Baker 2001; Nichter and Thompson 2006). Satia-Abouta et al. (2003) found that supplement use for specific conditions was informed by both scientific and lay media. However, there was also evidence that their American research participants self-treat with supplements based on erroneous or incomplete information related to efficacy. Moreover, in the United States, the general public can buy hundreds of herbal supplements that make unproven or false claims. Content and potency also vary among

manufacturers or even between batches, and herbals may not be effective at recommended doses (Ambrose and Samuels 2004; Thomas 2004), which may further reduce the efficacy of self-care practices in the United States.

Biomedicine was also adopted by the modern Mexican health care system when it was created in 1943 (Nigenda et al. 2001). However, folk and popular medical traditions remained widespread throughout Mexico's history and are still the most important sources of medical care in most Mexican communities (Berlin and Berlin 1996; Browner 1985; Frei et al. 1998; Leyva-Flores, Kageyama, and Erviti-Erice 2001). Mexico's heritage of indigenous cultures has made it a nation with a complex cultural wealth of traditional medical systems (Lozoya 1994). Cultural and biological diversity form the basis of popular medicine that helps support the health of the nation, largely through the use of more than 5,000 medicinal plant species (Frei et al. 1998).

During the colonial era in Mexico, missionaries, rather than doctors, were primarily responsible for the care of the sick (Kay 1977b). While many indigenous cosmological beliefs about health and sickness were lost or transformed by Spanish missionary activity, the empirical use of medicinal plants by folk specialists and the general populace remained vibrant. The Spanish were greatly interested in the medicinal plants of the New World and incorporated many Aztec plants into colonial medicine because they fit European conceptions of illness and the Hippocratic-Galenic doctrine of balancing humors (Ortiz de Montellano 1990). To the indigenous pharmacopoeia, European *materia medica* were added. The use of the same medicinal plants (both introduced and native species) for related disease conditions is common among Mexican *mestizos* and Mexican Americans as well as numerous indigenous Mexican groups (Kay 1977b).

Since independence, Mexico has been home to a wide variety of professional and folk healers, including biomedical physicians, nurses, social workers (Harrison 2001), pharmacists (Logan 1983), homeopaths, osteopaths, chiropractors, acupuncturists, aromatherapists, massage therapists (Nigenda et al. 2001), *curanderos*/shamans, spiritualists, herbalists, bonesetters, and midwives (Heinrich et al. 1998; Huber and Sandstrom 2001). Yet popular knowledge of healing with medicinal plants is still widely distributed throughout indigenous and *Mestizo* communities (Berlin and Berlin 1996; Browner and Purdue 1988; Heinrich et al. 1998; Logan 1983).

Self-care with medicinal plant remedies has maintained continuous popularity in Mexico for a variety of reasons. Biomedical clinics were slow to spread through rural Mexico, many people cannot afford professional biomedical care (Leyva-Flores et al. 2001), and, as my research participants suggest, medicinal plant remedies are considered safer and/or more effective than pharmaceutical medicines. Although medicinal plant use and other

self-care practices have evolved since the colonial era, they never fell into disuse. Thus, most Mexicans have a variety of family and friends in their social networks from whom they can learn directly about how to use medicinal plants to manage the health of themselves and their families.

## CONCLUSION

Consistent with the Hispanic health paradox, migrant women's self-assessments of health and assessments of the health of other family members were generally positive, even though Los Duplex is a poor neighborhood and its Mexican population is exposed to a variety of health threats. During interviews migrant women described many Mexican beliefs and practices that could account for good health despite low household incomes, unfamiliarity with English language and American culture, difficult jobs, sleep deprivation, racism, and other stressors associated with undocumented migration. My daily observations in Los Duplex confirm that women encourage healthy behaviors such as eating nourishing foods that agree with the body, exercising and/or 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 administer home remedies. The efficacy of the most popular herbal medicines is well supported by the botanical, chemical, and pharmacological literature for the kinds of conditions they are used to treat in Los Duplex. Because migrant women are part of large social networks from which they can draw popular medical knowledge and have experience of creating home remedies from plants, they are not dependent on the purchase of medicines and medical advice alone. This may explain why Mexican migrant popular medicine may be more effective than the self-care practices of American citizens.

As with any well-designed case study (Yin 1994), the findings of my research are generalizable to the theoretical proposition that cultural beliefs and practices account for the Hispanic health paradox. However, they do not show how representative the Mexican migrant culture of Los Duplex is of Hispanics in general. I also don't know how popular medical knowledge of Mexican women compares with the knowledge of mothers in other ethnic groups in Athens, how objective measures would portray the health status of families in Los Duplex, or whether other factors (e.g., biomedical care) have important roles in their health maintenance. This study does suggest three hypotheses that merit attention by investigators of the Hispanic health paradox and would lend themselves well to quantitative methods: (1) The

health benefiting practices of Mexican migrants are found in other Hispanic cultures in the United States. (2) Self-care practices in the cultures of the American middle class are less effective than Hispanic self-care practices. (3) There will be a greater association between positive health status and reliance on Hispanic self-care practices and home remedies than between positive health status and a reliance on professional biomedical care and commodified medicines. Further study will not only better explain the paradox, but will contribute to a deeper appreciation of the importance of popular medical knowledge, self-care practices, and homemade medicines in medical anthropology.

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### NOTES

1. Although my research participants describe themselves as *Mexicanas*, they use the term *Hispanos* to refer to immigrants from other Latin American countries. Thus, while some social scientists prefer to use the term *Latino/a* to refer to people of Spanish-speaking origin from Latin America, I use *Hispanic* in this paper.
2. United States Census Bureau [http://factfinder.census.gov/servlet/SAFFacts?\\_event=&ActiveGeoDiv=geoSelect&pctxt=fph&\\_lang=en&\\_sse=on&geo\\_id=16000US1303440&\\_state=04000US13](http://factfinder.census.gov/servlet/SAFFacts?_event=&ActiveGeoDiv=geoSelect&pctxt=fph&_lang=en&_sse=on&geo_id=16000US1303440&_state=04000US13), accessed May 20, 2007.
3. 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 many children play outside. One month after my study ended, there was a fatal shooting that killed two men in front of the community center on a Saturday afternoon.

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