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Alive and Well: Generating Alternatives to Biomedical Health Care by Mixtec Migrant Families in California

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Soledad lay on the soiled and torn couch, moaning softly and rubbing her abdomen gently. Her husband was outside talking to Don Sabio, the curandero *who had come to the house to heal Soledad. Soledad and her family have lived in Madera, California, for ten years. Her husband works in the agricultural fields, bringing home $11,539 a year. Of the entire family of eight, only the two youngest daughters have legal status, having been born in Madera Community Hospital. As an "illegal alien," Soledad quali-*

Some of the material for this chapter, such as the section on working and living conditions, has been published previously in slightly different form in my writings that appear in the reference list to this chapter.

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I dedicate this work to the Mixtec families in Mexico and California who have generously opened their lives and hearts to me. Without their kindness and patience, and collaborative support, none of the work presented here would have been possible.

fies for a Medi-Cal card that covers her for "emergency and pregnancy-related" services only. Today Soledad was coughing up blood for the third time this month. She has already been to the emergency room at the hospital twice, sent away both times after receiving a five-minute examination and a prescription for Maalox. The doctor, who speaks neither Spanish nor Mixtec, does not attempt to tell her what is wrong. The pain continues, so she asked her husband to send for Don Sabio, a healer from her native village of Ñuu Chucún in the mountains of Oaxaca.

Don Sabio's hands are stained dark green from two months in the tomato fields of the San Joaquin Valley. He presses gently on Soledad's abdomen, reciting an oration in Mixtec to the spirits of the wind, rain, sun, and earth. He lights several candles and through prayer invokes the intervention of the saints and other nonmaterial powers on behalf of Soledad while Soledad drinks a tea of rue and chamomile. After a while Don Sabio puts rubbing alcohol in a glass and lights it on fire. After applying the juice of a cut piece of aloe vera to Soledad's belly, he places the rim of the glass onto her abdomen, just below her breastbone, extinguishing the fire and causing the skin to pull up into the glass in a mound. Soledad whimpers but says nothing. Don Sabio intends to remove the "mal" that is inside of her, an affliction sent to her by a jealous neighbor who is also from Ñuu Chucún.

In the tradition of Mixtec medical treatment, unlike clinical biomedicine, discovering the cause of an ailment is even more important than alleviating its symptoms. In this regard, the patient gains a sense of empowerment once the source of her suffering is known. It becomes merely a question of repelling the source with the appropriate means. For this reason, the clinical treatments that Soledad has received to this point, although beneficial toward relieving her pain, do nothing toward treating the cause of her illness. Only someone with the appropriate knowledge of how to deal with external cause – in this case Don Sabio's navigation and manipulation of the nonclinical forces involved in her ailment – can truly address Soledad's need. At the end of the two-hour healing ceremony, Soledad feels exhausted, but the pain inside is gone.

For Mixtec families living in California, economic and social barriers act to limit access to and use of clinical health care. Expensive biomedical treatments, lack of health insurance, language barriers, transportation problems, and cultural differences concerning illness causation and treatment combine to marginalize Mixtec families from the mainstream biomedical health care culture. This study examines the ways that Mixtec

families generate alternatives to clinical health care to meet their health care needs and the conditions under which such a practice is necessary.

Drawing upon fifteen years of qualitative and quantitative research, the findings presented here indicate that Mixtec medical culture, with its ancient roots of medical and plant knowledge, provides Mixtec families with the means to supplement insufficient access to clinical care in California. The generation of health care alternatives by Mixtec families represents an ethnically based self-defense strategy of unrecognized economic and political value. It is this practice of transmedical health care that maximizes health care treatment options because it involves crossing the boundaries and drawing upon the resources of distinct medical, linguistic, and cultural systems. Due to limited access to biomedical clinical treatments, Mixtec families therefore complement them with medicinal plants, sweat baths, massage, and ritual healing ceremonies to meet their health care needs. Mixtec cultural forms and practices thus combine with the social and economic marginalization of Mixtec communities, in both Mexico and the United States, to reaffirm community membership and identity and to enforce a cultural distinctness that defies "melting pot" assimilationist theories and provides increased alternatives for coping with health problems.

THE MIXTECA

Don Primo points to another plant with the end of his cane. "With the root from that one you can make a tea to treat people with diabetes," he says. "The milk from a broken stem of it can eliminate dark blotches on your hands," he adds. We wind our way down a trail in the mountains overlooking his small pueblo. The three botany students from the University of California scramble to take a digital image of the plant and then press it between pieces of cardboard to be dried and added to the collection. Don Primo has been directing the medicinal plant collection since we arrived in Ñuu Yucu two weeks ago. For Don Primo and myself, the presence of the students offers a refreshing twist to our own mentor-student relationship that began twelve years earlier. As the only person expressing interest in learning the medicinal concepts and practices employed by Don Primo, I had been assigned the duty of recording his knowledge to the best of my outsider, non-Mixtec ability. Forty years earlier Don Primo had been trained as a healer and herbalist by three men from neighboring villages. He had worked with them for years, learning the orations, diagnostic methods, and plant remedies while accompanying them during healing ceremo-

nies. The last time I had been in Ñuu Yucu with him, it became apparent that we had to systematically tackle the immense plant knowledge he had acquired. With some help from San Diego State University and the San Diego Museum of Man, the means to do an ethnobotanical study and plant collection materialized. "Now this one is good for women who are in labor," he said, indicating a small plant with yellow flowers. "It makes the baby come out faster." Again the students rush to capture the plant physically and digitally. Don Primo smiles.

The civilization from which Don Primo draws his knowledge has been practicing medicine for thousands of years. Their books tell of a great warrior, Lord Eight Deer, born in 1063 A.D., who unified the coasts, mountains, and valleys of the Mixteca. Pre-Columbian Mixtec society based its economy on agriculture and long-distance trade. It distinguished itself by generating sophisticated forms of art, literature, architecture, religion, cosmology, and a complicated calendar based on mathematics and meticulous long-term observation of the celestial bodies.

Today, in mountains covered by pine and oak forest, small villages occupy valleys and hillsides where Mixtec farmers cultivate corn, beans, and squash on steep slopes and along arroyos. Agricultural production in the Mixteca still depends on the Spanish-introduced plow and oxen team, which replaced the pre-Columbian digging stick. Rugged mountains render mechanized agricultural production inappropriate. Steep slopes, the plow, goat herding, a thin layer of topsoil, and torrential rains have combined to accelerate the ecological devastation of the Mixteca. Since there are no natural gas systems available to the rural indigenous regions of Mexico like the Mixteca, the ecological loss of the area is furthered by the dependence on wood for household fuel.

Economically underdeveloped communities of the Mixteca frequently lack basic services such as potable water, roads, telecommunications, sanitation, natural gas, secondary schools, and often clinical health care. In light of the economic reality of farming in the Mixteca, Mixtec families practice infra-subsistence agriculture, producing on average enough corn to last four months out of the year (Bade 1994).

Employment opportunities in the Mixteca are limited; a significant feature of local Mixtec economies is that there is virtually no wage labor available. Small businesses that theoretically could provide employment are run by families and tend to be front-porch general stores with basic goods like sugar, coffee, toilet paper, and candles. Some families generate household income through petty capitalistic activities such as basket and

hat weaving, furniture making, and selling surplus fruits and vegetables. These labor-intensive economic means pay poorly. For example, it takes an expert weaver eight hours to make two hats, which she can sell for $0.20 each. If she has a soda while she works she just breaks even.[1] Handmade wooden chairs sold in Juxtlahuaca take days to make and sell for $20.[2]

As a consequence of poverty, diminishing local resources, and Mexico's worsening economic crisis, many Mixtec families migrate to external labor markets to support themselves. Since the early 1980s, Mixtec families have increasingly become transnational migrants seeking work as farm laborers, construction day workers, gardeners, and factory workers in the north. Runsten and Kearney report that in 1994 more than 50,000 people from the Mixteca were residing in California. Madera, California, with a population of approximately 30,000 in 1993 and 45,000 in 2003, is experiencing a "Mixtecization" of its agricultural labor force as more than 5,000 Mixtec families from more than 38 communities of the Mixteca work and reside there (Bade 1994; Runsten and Kearney 1994).

WORKING CONDITIONS IN CALIFORNIA

Although some Mixtec workers find labor in other sectors of the economy, the majority of migrant Mixtec families support themselves in California as hired farmworkers. Large concentrations of Mixtec families can thus be found in the agricultural regions of the state, including the Central Valley, San Diego County, the Salinas Valley, the Imperial Valley, the Sacramento Valley, and agricultural towns along the coast, such as Oxnard.

Agricultural workers in California are paid by one of two systems: hourly pay and piece rate. The most common wage system in California agriculture is hourly pay. California farmworkers earn an average of $5.69 an hour, up only 29 cents since the average in 1990–91.[3] Zabin et al. (1993) report widespread violation of minimum wage laws by those employing Mixtec workers.

Qualitative data from Madera and San Diego counties indicate that hourly pay is less desirable than the piece rate system because there is no way to earn more money by doing more work. However, while the piece rate system maximizes production, it also puts greater mental and physical

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[1] Carole Nagengast and Michael Kearney, field notes, July 1987.

[2] Bade field notes Ñuu Yucu, November 1992.

[3] According to the 1995–1997 NAWS, 73 percent of California farmworkers are paid hourly (Rosenberg et al. 1998: 6).

stress on the workers. Due to their often desperate financial situation and the sporadic nature of employment as agricultural laborers, farmworkers are already under great pressure to maximize their earnings in a given work period. In addition, labor contractors are also often paid by the piece rate system (by tonnage, for example), greatly increasing pressure on the workers to work as fast and efficiently as possible. The piece rate system creates a situation in which laborers work at full capacity as long as possible, and considerations such as health and accident risk are often secondary to production.

Workers can be fired for not being able to maintain a fast and productive pace. The practice of eliminating slower workers especially affects older workers, who frequently suffer from health problems such as arthritis and rheumatism. One sixty-two-year-old worker said that he had not been able to hold a job in the tomato fields for more than a few days before he was asked not to come back: "I get so hot out there, and after a few hours my knee hurts real bad. The foreman says that if I sit down, then I can just go home and not bother to come back."

According to data from the 1995–1997 National Agricultural Workers Survey (NAWS), 61 percent of California farmworker families live in poverty.[4] California farmworkers are employed, on average, twenty-three weeks during the year and, when employed, average forty-two hours of work per week. The median annual personal income of California farmworkers is between $5,000 and $7,500, while the median total farmworker family income is between $7,500 and $10,000 (Villarejo et al. 2000; Rosenberg et al. 1998: 11–17).

Job security does not characterize the farmworker occupation. Thirty percent of farmworkers interviewed in the 1995–1997 NAWS survey held five or more jobs a year, 53 percent held between two and four jobs a year, and only 18 percent held one job all year.

If one looks only at the annual earnings of a farmworker, one gets an incomplete portrait of net farmworker income. An aspect of agricultural employment that is not commonly known to non-farmworkers is that the worker must pay for a number of services, such as transportation to and from the workplace, regardless of whether these services are needed.

Transportation to and from the fields, known as the *raitero* (or ride) system, is prevalent throughout California and in some areas is obligatory.

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[4] Poverty is defined by the Federal Register (1997) as an annual income below $10,610 for two, below $13,330 for three, below $16,050 for four, below $18,770 for five, below $21,490 for six, below $24,210 for seven, and below $26,930 for eight.

The NAWS data reveal that half (52 percent) of California farmworkers pay for rides to work that are arranged by their employers (Rosenberg et al. 1998: 16). Recent research done by the California Agricultural Worker Health Survey (CAWHS) reveals a significant correlation[5] between the use of *raiteros* by an individual and both housing density in which the individual lives and the number of unrelated residents with whom the farmworker lives (Bade and Villarejo 2004). Cost for a *raitero* is $4 to $5 a day (Bade 1989: 46, 2000). The *raitero* system constitutes one of the primary sources of worker injury. Many of the vehicles have no windows, no seat belts, and are overcrowded. As one worker put it, "They pack us in there like we're sardines or something, and usually it's so hot and a lot of people get dizzy or sick." On August 9, 1999, thirteen people working the tomato harvest were killed on their way to work; the van in which they traveled had wooden benches bolted to the floor and no seatbelts. Several comparable incidents have occurred throughout the state since then.

Another on-the-job expense for workers is food. On a typical day a worker might get one or two breaks in which to rest and eat. Food in the fields is usually provided by a catering truck, or *lonchera*. Due to overcrowded or nonconventional housing accommodations in which many farmworkers must live, where there is no kitchen in which to prepare food, many workers cannot bring their lunches with them to work and therefore have no choice but to buy lunch from the catering truck. The available food—chips, sodas, and pastries—is generally overpriced and low in nutrition, although more solid items, such as burritos and tacos, are also available. A bag of chips and a soda can cost $5 (Bade 1989). Company store dominance contributes to elevated food prices. Workers in Madera report that the *lonchera* is usually owned by the labor contractor or one of his friends or relatives, and that competing food services are driven off the fields so that workers can only buy from one *lonchera*.

Often the agricultural work done in the fields requires special tools, such as clippers, knives, cartons, and gloves. The 1995–1997 NAWS data indicate that 89 percent of California farmworkers pay for all or some of the tools they use on the job (Rosenberg et al. 1998: 15), even though requiring workers who earn less than $11.50 per hour to buy work-related materials that are essential to performing the job is an illegal practice. In the garlic harvest, for example, the workers must buy clippers to cut the roots off the garlic bunches before placing them in the bins. A pair of clip-

[5] $p = .178$ and $p = .235$. Pearson's correlation coefficients significance of 0.01.

pers ranges from $18 to $30. Knives used in the grape harvest cost between $8 and $13, and buckets used in the olive harvest run between $10 and $15.

Many agricultural laborers in Madera, Merced, and Fresno counties report that they do not receive paychecks. Instead, they are charged a check-cashing fee and then paid in cash. According to the workers, this service, provided by the labor contractors, costs between $2 and 10 percent of the check's total value. The workers are then given a check stub on which deductions for Social Security, federal and state taxes, and unemployment are recorded. All agricultural employees pay for these private and public services, regardless of their legal status in the United States. As one migrant farm laborer put it:

> Since 1976 I've been picking tomatoes and grapes here and paying Social Security and unemployment and all that. The sad part of it is that even though I pay this money to be here, and even though they make me buy a permit, I still have to hide from the authorities because they still consider me illegal (Bade 1989: 36).

One of the greatest costs to California's seasonal farmworkers manifests itself in the form of harassment. For example, undocumented workers frequently suffer denial of pay for their work.[6] A group of workers in Arvin reported that more than a hundred workers had not been paid for a week's worth of labor in the grape harvest. According to Herminio, one of those who had been denied this pay, the labor contractor simply told them that he had never seen them before and that they had not worked for him. Not surprisingly, all of the workers who were refused their earned pay were undocumented and were using false permits. The labor contractor, who knew which of his employees were undocumented and therefore likely to avoid legal confrontation, decided not to pay them for their work. According to Herminio, the workers were eventually paid—but only after weeks of persistent complaining and camping out on the labor contractor's front lawn. Such occurrences represent an additional source of stress and financial hardship for undocumented workers.

A farm laborer's workday is long and tiring. During the tomato harvest, for example, the day begins at 3:30 or 4:00 a.m., when the *raitero* comes to

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[6] According to data from the 2000 NAWS, 91 percent of workers are Mexico-born, and 42 percent are undocumented. Further, the majority of workers and their families arriving to the United States since 1987 are undocumented.

pick up the workers from houses, shacks, and fields, loading four to five workers at each stop. After about forty-five minutes of driving, the vehicles are filled and then head for the fields, sometimes traveling more than an hour before reaching the work site. Once in the fields, the workers begin filling five-gallon buckets, for each of which they earn between 33 and 45 cents.[7] By 9:00 a.m., the cool morning hours are over, and the average worker has filled between sixty and eighty buckets, hauling the full containers, now weighing twenty-five pounds each, to the tomato truck and lifting them head high to the person who will dump them into the truck trailer. Young and ambitious workers run all the while, racing to the *ponchera* to get their cards punched for each bucket filled, the tally that represents their earnings. By the time of the first twenty-minute break, about 10 a.m., the older workers are sweating and tired, and many complain of headaches and nausea. They complain quietly, however, out of fear of being overheard and dismissed.

Maintaining personal hygiene in the field is difficult. Hands become encrusted with a mixture of oil from the tomato plants, dirt, and chemicals. A dark green muck cakes under fingernails, on hands and forearms, and over shoes, ankles, and legs.

Posted information about the chemicals in use in the fields is rarely seen. Even the labor contractors do not know what pesticides are sprayed in the fields and when. They say it is the grower's responsibility to make sure the fields are safe to pick. As the heat builds to over 100 degrees at midday, the thick smell of chemicals becomes almost unbearable. One worker commented that he holds his breath while picking, breathing when he stands up and his face is farther from the ground. He admits, however, that this slows him down: "I'd probably make more money if I didn't worry so much about dying" (Bade 1989: 52).

By the end of the day, if it has been a good one, most workers will have picked between 175 and 200 buckets of tomatoes. They are exhausted and dirty, having had only one or two twenty-minute breaks all day. One older worker, who worries that his shoulder might not last another day, falls asleep during the ride back to Madera. Another keeps rubbing a red and swollen eye with the back of his green and grimy hand. He says his eye has been bothering him during the last few days, and his eyelids are puffy and infected.

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[7] Although these data were originally gathered by the author in 1990, piece-rate pay for tomatoes had changed little by 2003.

UNHEALTHFUL LIVING CONDITIONS

A dominant feature of the living conditions of California farmworker families is crowding due to the scarcity and high cost of housing. Several families often share a single unit, with entire families inhabiting single rooms in a house or apartment. In such situations, a household may have seven or eight women cooking and caring for fifteen or twenty children in the same living space. In one house in Madera, an older couple rented out rooms to migrant families and single men from their home village. One woman, Magdalena, reported that she and her husband and their three children lived in a 12-by-10-foot room off the kitchen. A tattered king-sized mattress, which served as the bed for the family, took up nearly all of the floor space. Food was stored in cardboard boxes in a corner. Another corner contained clothing and cardboard boxes and bags with personal items. Magdalena complained of a high, persistent fever that she had had intermittently for over a month. Two of the other women making tamales in the kitchen also had fevers. When asked what she had done to get well, Magdalena replied:

> I've taken a whole bunch of pills that I bought at the pharmacy, but nothing seems to help. I feel so tired all of the time, and when I cook hot things I get dizzy and need to sit down. That's why I'm not working. My husband can't find a job in the tomatoes because they told him they already have people. I need to work but I feel so sick. I want to just sleep but then who would watch the children and cook the food? Besides, my husband would get mad (Bade 1989: 47).

The shortage of affordable housing means that farm laborers find themselves in unhealthful living situations. Extreme crowding and a lack of basic needs such as beds and indoor plumbing characterize the home lives of California's seasonal farmworkers. In a house in the Central Valley, an elderly couple have more than twenty men staying in their living room. Other rooms in the house have at least one family in each, and more than thirty men and women live in the backyard and shed. All living space in the house is overcrowded, especially the kitchen and bathroom. The women with children generally stay home during the day, preparing food for their families and some of the other workers. The couple charges weekly rents of $10.00 for individuals and $15.00 for families.

For many of the more than 700,000 farmworkers employed in California, home is a shack or shed in someone's backyard (Villarejo 1999: 9).

When a farmworker family can rent a house, there are often twenty or thirty workers sleeping in the house's rooms, hallways, bathrooms, closets, and backyard. As one man who rents out space to workers put it:

> There isn't any place for my *paisanos* to live. They won't let the single men rent houses here because they always end up with fifty or so, all living under the same roof. I let these guys and couples stay here in my backyard because they don't have any other place to go. If they stay in the park, the cops chase them out. The ones with cars just park here in front of my house, they sleep in their cars. My wife won't let everyone in to use the bathroom because it would just be too much, so they all go to the San Joaquin River to bathe and clean up after work (Bade 1989: 42).

Sherman et al. (1997: 31) found that in Parlier a significant portion of the farmworker population lives in substandard and unofficial housing, such as shacks, trailers, sheds, and tents. Many seasonal farm laborers, usually lone males, live in garages, abandoned shacks, orchards, warehouses, caves, or beside a river. Some individuals find housing through their labor contractors. One group of four men converted an old refrigerator truck-trailer in a junkyard into living quarters with bunk beds. They made an outdoor shower of four corrugated tin walls with an elevated hose. When they got so enterprising as to run an extension cord from a power source in the yard, the owner of the property, who was their labor contractor, began to charge each of them an additional $20 a week to stay. In another case, there were thirty-seven men living in a garage behind a private home. There were no bathroom facilities, and the kitchen consisted of a board on two sawhorses and a water bucket. A portable electric grill served as a stove. The only water source for these men was a faucet around back, which was used for bathing, cooking, and clothes washing. The area beneath the faucet was perpetually muddy. Most lone male workers have no more than two or three changes of clothes, so after a couple of days in the same pants and shirt, a worker would wash his clothes under the faucet and hang them to dry on the barbed wire fence.

The farmworkers' inability to rid themselves of pesticide residue is compounded by their lack of space, water, and other basic facilities. Flea-ridden carpets, broken windows, makeshift bedding, and dirty clothing caked with sweat and chemicals all combine to make the living conditions of farm laborers a perpetual health hazard. These conditions exist not by

choice but because of lack of choice. The shortage of low-income housing for farmworkers is one reason for workers' unhealthful living conditions. Other reasons lie in a rental system that fails to recognize the limiting factors that dictate the nature of the seasonal farmworker lifestyle. Since many workers follow the crops throughout California and into Washington and Oregon, they are not able to rent or lease living space for extended periods. Many landlords reported that short rental time was the main cause for their unwillingness to rent to farm laborers (Bade 1994). Second, since many farmworkers come to the United States as economic refugees, they do not have the necessary capital for the deposits required by owners of rental housing. As a result, the majority of the California agricultural labor force lives in substandard, crowded, and unhealthful living conditions.

In Mecca, California, during the grape harvest of May and June, workers live in their cars and rent parking spaces in parking lots owned by local merchants. The shortage of housing has produced a proliferation of unlicensed trailer parks, shacks, and sheds for farmworkers in backyards, as well as a swell of people living in the open in city parks and on city streets. Riverside County's efforts to control the situation by shutting down unlicensed trailer parks merely displaced hundreds of families to the streets.

The neighborhoods where farmworkers and their families live are poor and dangerous. Communities of migrants are usually located in low-income districts and ghettos, where housing is more affordable and available. These areas tend to have high crime rates and are often home to drug dealers and users. This environment is hostile and threatening, especially for women and young people. Qualitative data gathered between 1989 and 1999 in central and southern California reveal that women who are abused or raped in these areas are often afraid to seek help from authorities because they do not speak English or even Spanish, because they fear deportation, and because they do not trust legal authorities such as the police.

HEALTH OF FARMWORKERS

Research that I and others conducted in 2000 in the first statewide study of farmworker health—the California Agricultural Worker Health Survey—indicates poor health for California's hired farmworkers. In the CAWHS we interviewed 971 farmworkers and performed 652 physical exams. The findings show that farmworkers suffer from high blood pressure, high serum cholesterol, obesity, anemia, and dental problems (Villarejo et al. 2000). The main findings of physical examination and blood chemistry data are as follows:

- Nearly one in five male subjects (18 percent) had at least two of three risk factors for chronic disease: high serum cholesterol, high blood pressure, or obesity.
- Both male and female subjects in the CAWHS sample show substantially greater incidence of high blood pressure as compared with the incidence of hypertension among U.S. adults.
- A significantly larger fraction of male subjects had high serum cholesterol as compared with the U.S. adult population.
- Eighty-one percent of male subjects and 76 percent of female subjects had unhealthful weight, as measured by Body Mass Index, with 28 percent of men and 37 percent of women obese.
- Both male and female subjects show evidence that they are more likely to suffer from iron deficiency anemia than is the case for U.S adults.
- More that one-third of subjects had at least one decayed tooth, and nearly four out of ten female subjects had at least one broken or missing tooth.

BARRIERS TO CLINICAL HEALTH CARE

Health care is the outcome of the interaction between two fundamental processes—*access* and *utilization*—of health care services. An individual's ability to gain access to clinical diagnosis and treatment, coupled with that person's experience in the utilization of these gained services, determines the quality of health care. Access involves both the *ability to pay* for needed health services and the *availability* of those services. Cash, worker's compensation, Medi-Cal, Healthy Families, and other health programs provide access to health care services because they cover the costs, or part of the costs, of those services. The number of service providers in a given region (that is, the availability of health care) also promotes or hinders access to health care. Utilization can be defined as the individual's ability to employ health care services. The following discussions of maternal, child, occupational, and elderly health among Mixtec families in California inherently raise the primary issues of problems surrounding health care access and health service utilization.

The various factors that combine to present difficulties in accessing care for Mixtec farmworkers and their families include both the ability to pay for care and the availability of care. Fundamental to the ability to pay for health care in California is health insurance. Farmworker health studies in

McFarland found that 46 percent of all families and 64 percent of Spanish-speaking families did not have health insurance coverage (California Department of Health Services 1992). Similarly, Sherman et al. (1997) report that 61 percent of adults in Parlier lack any form of health insurance. Findings from the 2000 CAWHS reveal lack of insurance and underutilization of clinical services. Of the 971 farmworkers interviewed:

- 70 percent of all persons lacked any form of health insurance;
- 16.5 percent said their employer offered health insurance, but one-third of these same workers did not participate in the insurance plan that was offered because they could not afford the premiums or co-payments;
- 32 percent of male subjects said they had never been to a doctor or clinic;
- half of all male subjects and two-fifths of female subjects said they had never been to a dentist; and
- two-thirds of all subjects reported never having had an eye-care visit (Villarejo et al. 2000).

There are numerous health care programs that do offer access to health care for California's farmworkers and their families. General coverage, however, does not exist. Health care coverage for Mixtec farmworker families is limited to emergency/pregnancy-related care programs such as Medi-Cal, federal public health programs such as for tuberculosis treatment, disease-specific grant-funded sporadic programs such as diabetes or chlamydia treatment, or immigration status-specific programs such as Healthy Families. While these programs are invaluable sources of acute health care coverage for Mixtec farmworker families, many health conditions, such as chronic illness and primary care needs, do not receive clinical attention. Many individuals with health needs—such as an elder with arthritis, a worker with psoriasis, or a woman with an ulcer—do not meet the criteria for such limited programs and thus cannot access clinical care unless they can pay for it out of pocket.

Access to health care is also determined by its availability. The unavailability of health care services in areas where farmworkers in California live poses another barrier to accessing health care. According to numbers from the 1990 census and the Medical Service Study Areas database, maintained by the Department of Health Services, there are twice as many primary care physicians relative to population in urban areas of California than in

rural areas, where Mixtec families are concentrated.[8] Furthermore, 16 percent of the rural Medical Service Study Areas in California have *no* primary physicians. The low-income rural agricultural towns in California where Mixtec families largely reside, such as Mecca, Cutler, and Gonzalez, have fewer resources available to attract potential providers, who need an insured or economically comfortable clientele—illustrated by the fact that the ten most affluent communities in California have an average of 498 residents per primary care physician, while the ten poorest communities have an average of 3,548 residents per primary care physician (Villarejo 1999: 6).

Utilization of services refers to the ability of the person with the health need to employ the existing services. The following case, which I recorded in 1997, illustrates the ways in which access barriers combine to negatively influence health service utilization.

Angela is a nineteen-year-old undocumented Mixtec farmworker living in the Central Valley. Along with her mother and four siblings, Angela arrived in California in 1990 to join her father, who has been a farmworker in Fresno County since 1979. At twelve years of age Angela quit school to work the tomatoes and grapes with her father. She had been attending the local elementary school, but had decided that her family needed her help in order to make ends meet.

At fifteen Angela met a young man from her hometown in Mexico. Antonio and Angela married and Angela had her first child within a year. She continued to work the tomato and grape harvests, leaving her daughter with her mother, who had two toddlers of her own, during the day. One night while Angela and her husband drove through the barrio to the local park to relax and watch their daughter play on the grass, a bullet pierced the back windshield and killed Antonio immediately. Angela became a widow at seventeen.

After a year of living with her parents and siblings, Angela met another man from her hometown and the two became engaged. Angela didn't realize that her boyfriend was already promised to another young woman, only fifteen years old, from the hometown. The fifteen-year-old's parents became enraged with the boyfriend, called the cops, and had him arrested

[8] Medical Service Study Area (MSSA) is a concept developed by the Office of Statewide Health Planning and Development. It refers to a small geographic area in which residents seek health services. There are 487 Medical Service Study Areas in California.

for molesting a minor. Angela's boyfriend is currently serving a two-year sentence in the county jail.

Within days of his arrest, Angela discovered that she was pregnant. By the time of her second child's birth, Proposition 187 had passed in California. Angela, along with the rest of the undocumented portion of her family, avoided the local clinic since she had heard that she might be taken away by the migra, or immigration service, if she went there. By the fifth month of her pregnancy, Angela had still not sought prenatal care. In the sixth month she began to have pains and became extremely worried. She went to the local clinic, but they refused to see her; because she was past her first trimester and had had no prenatal care, she was considered to be "high-risk." The only health service provider around that sees high-risk pregnant women is the Medical Center in Fresno, a thirty-minute freeway ride from the small agricultural town in which Angela lives.

The clinic gave Angela a telephone number and told her to call the Medical Center and make an appointment. Since Angela did not have a phone, she had to use the public phone at the local convenience store to make the toll call to Fresno. After three unsuccessful communications with the Medical Center, Angela finally got an appointment for the following week. She had to take the day off from work. There is no regular public transportation available in this small agricultural town in California, so Angela had to round up a ride from neighbors and acquaintances. A young man across the street said he would take her for $20.

After wandering the halls for half an hour, Angela finally found the obstetrics division of the Medical Center. Another Spanish-speaking patient observed Angela's arrival and told her that she needed to sign in at the desk. The receptionist handed Angela a "medical history" form and told her to fill it out while she waited. Since Angela had completed only six years of school, she found the medical history form to be mostly incomprehensible. In addition, the medical conditions listed on the form, such as cervical cancer, lie outside of the illness categories of Angela's medical culture, which includes illnesses such as susto and evil eye. She spent the hour guessing which items to check or not check on the form and finally decided to leave it blank.

An hour later a bilingual medical assistant called Angela's name. Angela was weighed, her blood pressure taken, and a blood sample drawn before the medical assistant led her to an examination room and instructed her to remove her skirt and underpants. Angela sat on the vinyl and steel chair with the apron draped over her lap for over forty-five minutes before a non-Spanish-speaking nurse practitioner entered the room and proceeded

to do a pelvic exam. Since the nurse practitioner did not speak Spanish, Angela was unable to tell her of the pains she had been experiencing. Later Angela had a sonogram, and the doctor assigned to her expressed concern over the size of the fetus. The bilingual medical assistant was not present, and thus the information was not communicated to Angela.

After determining that Angela was anemic, the medical staff gave her a prescription for iron pills and told her to go to another counter to make her next monthly appointment. When she walked out to the parking lot, her ride had long since left. Angela called her mother's house and waited for her mother to find a neighbor willing to go and get her. Angela sat in the parking lot of the Medical Center until after dark, when a van pulled up two hours later and gave her a $30 ride back to her house. Angela never made another prenatal appointment, became a "noncompliant" patient, and returned to the hospital four months later to give birth to a healthy baby boy.

In Angela's case we see that health service utilization involves much more than availability and access. At play are the usual barriers that have been reported to negatively affect health service utilization since the early 1980s, such as lack of transportation, lack of child care, inconvenient service provider hours, and language difficulties (cf. Mines and Kearney 1982; Bade 1994; Diringer 1996). Several other obstacles arise in Angela's case. Bureaucratic labels, such as "high risk" and "noncompliance," determine Angela's health care options without consideration for her situation, placing added hardship on an already dire situation. If no attempts are made to explain biomedical illness categories such as cervical cancer, they become little more than esoteric jargon to the patient. Finally, what could be called a lack of bedside manner—Angela's waiting undressed in an examination room and not being given the opportunity to express her concerns—can negatively affect a Mixtec woman's decision to continue to pursue a particular course of clinical treatment.

Maternal and child health constitute a primary health need among Mixtec families. Data from a 1993 survey of 109 Mixtec women in Madera, California,[9] reveal that 39 percent of last visits to a clinic were to seek perinatal care, such as family planning, prenatal, delivery, and postnatal health

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[9] Survey conducted by the author and financed by the University of California Agricultural Cooperative Extension with the support of James Grieshop of the University of California, Davis and Martha López of UC Cooperative Extension in Madera.

Table 8.1. Monthly WIC Food Coupon Benefits for a Representative Migrant Farmworker Family

Week/Year	Product							Monthly Total
	Milk	Cereal	Beans	Eggs	Cheese	Juice	Formula	
July 20, 1992	$3.74	$9.57	$0.79	$2.46	$5.26	$11.66		$33.48
Sept. 3, 1992	$6.48	$7.42	$0.79	$2.92	$5.56	$11.36		$34.53
Sept. 9, 1992	$7.86	$10.07	$0.79	$2.92		$12.78		$34.42
Oct. 14, 1992	$9.89	$7.42	$0.79	$2.86	$4.07	$11.34	$37.80	$74.17
Total	$27.97	$34.48	$3.16	$11.16	$14.89	$47.14	$37.80	

care. Perinatal care needs function as a result of the youthfulness of the Mixtec migrant population. In the 1993 Madera study, the average age of first pregnancy among the 109 Mixtec women interviewed was 17.8 years, with 70 percent of pregnancies occurring between 15 and 19 years of age. However, utilization of perinatal services by Mixtec families also reflects the availability of federal, state, and local perinatal support programs, such as Medi-Cal and the Special Supplemental Food Program for Women, Infants, and Children (WIC). Data from the 1995–1997 NAWS indicate that although only 18 percent of farmworker households received any type of needs-based assistance from social service programs, the program that most frequently assists them is WIC, which is used by one in seven California farmworker households (Rosenberg et al. 1998: 8). The Madera survey I conducted in 1993 confirms that WIC is widely used by Mixtec farmworker families; in that survey 86 percent reported that they had participated in WIC with their children born in the United States. WIC's primary benefit to farmworker families takes the form of food coupons. Table 8.1 shows price totals of WIC food coupons from various months in 1992 for the family of Juan and Soledad (introduced earlier in this essay). Excluding baby formula, the average monthly value of the food coupons is $34.70. The items that a family can buy with WIC coupons are limited to specific quantities and brands of milk, cereal, beans, eggs, cheese, juice, and formula. The WIC coupons subsidize the insufficient wages of farmworker families, which for three-quarters of the farmworker population is below $10,000 per year.

As of the writing of this essay in 2003, Medi-Cal continued, despite recent legislation, to provide emergency and pregnancy-related health care benefits. For young farmworker families, these two benefits are indispensable. My 1993 Madera data show that 73 percent of the 109 women who responded sought prenatal care during their last pregnancy. The study also reveals, however, that prenatal care was sought *after* the first trimester of pregnancy, with a mean of 3.8 months for the first prenatal visit. This number is consistent with data gathered nearly *twenty years ago* in Tulare County by Mines and Kearney, who found that 18 percent of women interviewed had no prenatal care and over half did not have a prenatal exam during the first trimester (Mines and Kearney 1982: 74). Studies have shown that prenatal care after the first trimester creates a situation of high risk for both mother and child.

An obvious aspect that affects health service utilization by Mixtec families is patient/provider interface. During the 2000 CAWHS study, I conducted qualitative ethnographic research regarding patient/provider inter-

face while acting as site coordinator in Vista, California. The following case illustrates the problems surrounding utilization of health care services by Mixtec farmworkers in the context of the medical clinic.

Lázaro waits daily on the corner of Vista Way and South Santa Fe Avenue for prospective employers to drive by and offer him a day's work. He had been working the cucumber harvest in Vista, but his job ended when there were no more cucumbers to pick. One of the CIRS [California Institute for Rural Studies] interviewers from the Vista community, assigned to randomly select farmworker participants at different outlying day laborer pickup sites, arranged for Lázaro's physical exam. Lázaro arrived at the clinic along with three other workers from a nearby nursery, who were also participating in the study. When greeted by the CIRS staff, he took the opportunity to tell the site coordinator about an acute pain he had been experiencing in his foot. The CIRS site coordinator communicated the complaint to the bilingual medical assistant, who said she would mention it to the doctor during the physical exam. When Lázaro returned to the waiting room after having had his physical, he told the CIRS staff that the doctor, who did not speak Spanish, had not mentioned his sore foot. Lázaro had not said anything to her about it for fear that she would not understand him. When Lázaro returned two weeks later for his follow-up appointment, lab results showed that his glucose level was alarmingly high. The medical assistant sat with Lázaro in one of the examination rooms to explain that he needed more tests because the doctor suspects he is diabetic. Lázaro refused to make another appointment because he could not afford it. He said he didn't trust the people at the clinic because they had not acknowledged his problem with his foot, which had worsened dramatically in the two weeks since his last visit. He told the CIRS staff that he had to leave his last job due to the pain in his foot and was headed to Mexico to "get injections" and some treatment for his foot.

We learn several lessons from Lázaro's experience at the clinic. The lack of health delivery personnel who speak the patient's language creates a situation in which the patient cannot communicate his needs to the provider and the provider cannot communicate concerns to the patient. The lack of communication generates mistrust and fear, which affects both utilization and delivery of health care. Furthermore, the lack of communication allows treatable, preventive health conditions to escalate to full-blown health crises.

Farmwork obviously ranks as a highly stressful and dangerous occupation. Recently published data show that the 1994 accident rate among California hired farmworkers was 10,546 per 100,000 full-time employees (Villarejo 1999: 39). Accidents on the job and in vehicles transporting workers to and from work, pesticide and dust exposure, and heat, cold, and other environmental exposures that come with outdoor work are only some of the risks that farmworkers face daily in the agricultural fields of California.

Eugenia's eyes wrinkled in delight as I ate the bowl of mole she placed before me. We sat alone in the kitchen in the late afternoon, the other men and families who occupy the house all out in the backyard cooling off after a long day in the tomato fields. "As I was telling you, guerita, my arm is so messed up I can't work anymore," she said as she cleaned the herbs her husband had found in the tomato field. She held out her hand and exclaimed, "look, guerita, look how this arm is so much shorter than the other. They used to be the same, you know."

Ever since Eugenia fell off a ladder while picking olives in Selma two years ago, things have not been the same. She still works, picking tomatoes with her husband. They work together under his name since the farm labor contractor won't hire Eugenia because she works too slowly. So all her tomatoes go in Francisco's bucket, earning them 34 cents for each five-gallon tub they fill. This helps Francisco keep his job as well, since he's old and moves slowly due to chronic knee pain. He goes to Mexico every six months to buy arthritis medicine that he himself injects while seated on the floor of the single bedroom the couple share in a two-bedroom house full of farmworkers and their families. The house rents for $650 a month, so many people live there to share the rent, including a family of five in the other bedroom and seventeen single men farmworkers who sleep in the living room. Another family lives in a makeshift shack behind the house, and migrating farmworkers frequently camp out in the backyard.

Eugenia has her legal documents, which she proudly waves under the noses of the local bureaucrats with whom she must deal in order to get compensation for her injury. She has been involved in a legal battle since her accident. A friend had told her about a lawyer in Fresno who would help her "get money" for her injury. Eugenia had been working the olives less than thirty days when she fell from the top of the ladder, smashing her arm against both the tree and the ladder and breaking the ulna in four places. She has a huge scar on her elbow where the bone broke through the skin. Her labor contractor drove her to the emergency room, and Medi-Cal covered the expenses of her initial treatment. Eugenia had heard of

worker's compensation from a friend and had asked her employer about it. He claimed that since she had worked for him less than thirty days, she did not qualify for it. The injuries Eugenia suffered needed treatment beyond the emergency room. Physical therapy, as well as further surgery, would be necessary if Eugenia was to regain the full use of her arm.

"I can't get that employer to talk to me. He acts like he has never seen me," Eugenia says as she pulls a stack of papers and envelopes bound in a rubber band out of a plastic shopping bag she keeps stored under the mattress. "Here, can you read these to me, because I think they want me to go to court or something." Mixed in with notices from Medi-Cal and the Employment Development Department are a few letters from a public defender stating that Eugenia's case had been closed. As she pulls an x-ray of her arm out of the bag to show me, she exclaims, "Can you believe all those screws and nails they put in my arm? No wonder it hurts all the time." As I read through the legal documents, all written in English and full of incomprehensible jargon, I realized that the courts had determined that Eugenia suffered from no lasting effects of the fall and that she required no further treatment. "But how can they say that?" she said, showing me an arm at least two inches shorter than the other and covered with scars. "At night it really hurts, guerita. What can I do? That's how life is."

Elderly workers, who tend to experience more health problems than younger workers as a consequence of the strenuous and stressful farmworker lifestyle, are in a particularly vulnerable position without health insurance. A case in point is Eliseo, a sixty-two-year-old Mixtec farmworker from Tepejillo, Oaxaca. Eliseo suffers from rheumatism in his left knee. He also broke his arm several years ago in the citrus harvest, and it frequently causes him severe pain when he does strenuous work. Work in the tomato fields has recently become quite difficult for him. The five-gallon buckets, which weigh up to twenty-five pounds when full, are too heavy for him to lift over his head for eight or ten consecutive hours. He also complains that he has trouble standing from the kneeling position required for picking and filling the buckets.

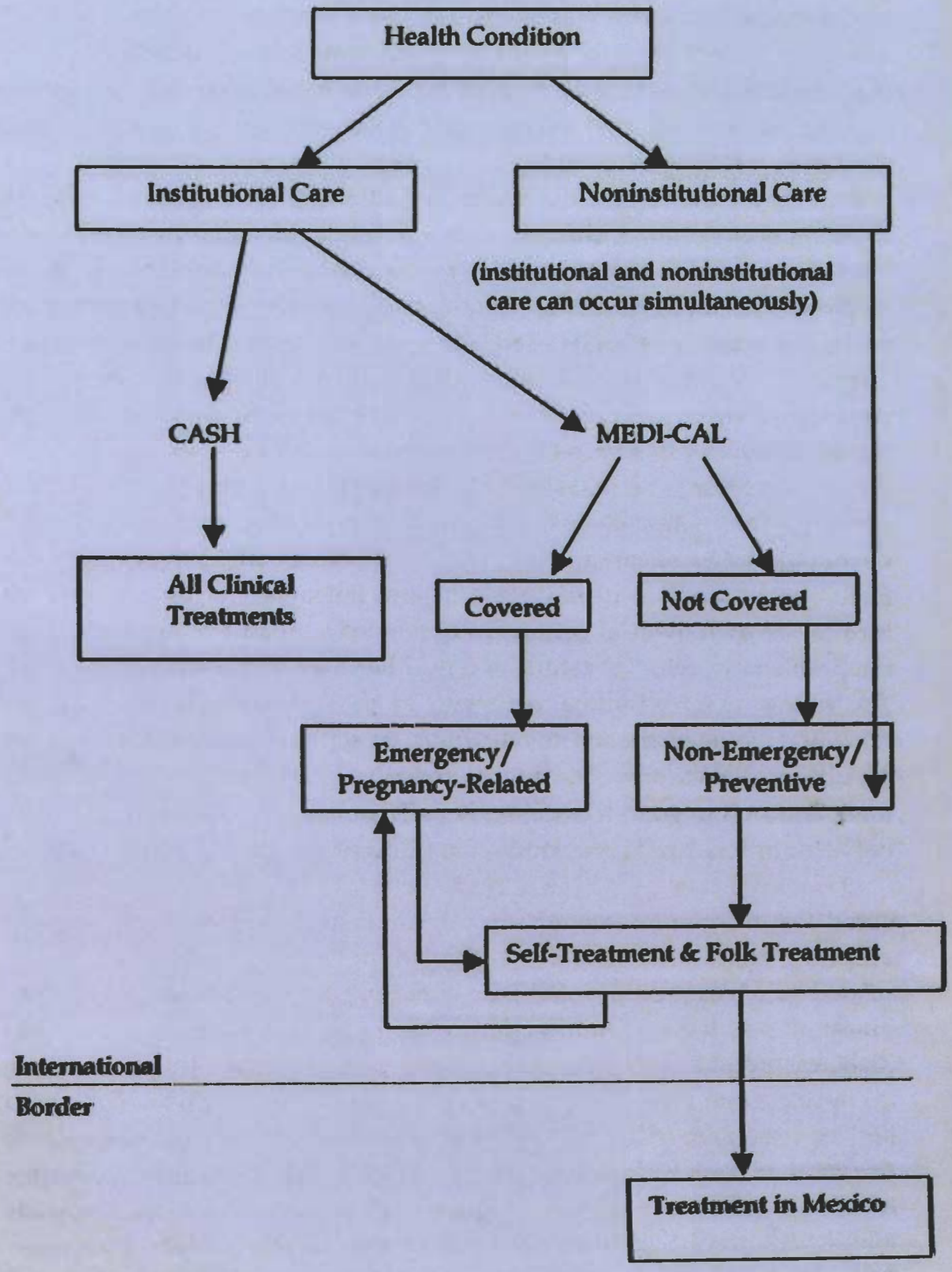
As noted previously, access to and utilization of health care are intimately related. The nature of access programs such as Medi-Cal can determine an individual's pattern of health service utilization. The very structure of Medi-Cal, the default health insurance for Mixtec farmworker families in California, directs individuals with health conditions to specific treatment "choices," including treatments that are covered by Medi-Cal

and treatments that are not. Furthermore, Medi-Cal promotes use of emergency rooms by farmworker families seeking primary care. Figure 8.1 outlines the pathway to health care for farmworker families without medical insurance, whose access to clinical treatment is Medi-Cal dependent. The arrows represent the movement of individuals toward health care. The diagram does not include all available options, but focuses instead on those most commonly used by economically disadvantaged farmworkers and their families living in agricultural towns of California.

The pathway begins at "health condition" with a particular health situation occurring in California—for example, a Mixtec woman with prolonged uterine bleeding. She can seek clinical care at a local clinic, hospital, or private doctor (institutional care), or she can rely on self-treatment or perhaps a traditional healer, depending on her cultural background (noninstitutional care). If she chooses institutional care, she has two options for payment of services: cash or Medi-Cal. Her economic status limits cash-rendered services to affordable treatments, which in this case may be none. As her condition worsens, she seeks emergency care at a hospital, where she is given a series of tests and possibly prescribed something and/or operated on and released. If the condition persists after emergency treatment, which tends to treat symptoms and not causes of illness, she may turn to her own medical culture and knowledge in an attempt to alleviate the problem, which, if it recurs, will lead her back to the emergency room. The woman is forced into a treatment "loop," alternating between institutional emergency care and noninstitutional self- or traditional care as her condition persists or diminishes in severity. Her other health care treatment option is to go to Mexico, perhaps Tijuana, where she is familiar with both institutional and noninstitutional forms of treatment.

Two important points stand out in the pathway to health care for uninsured low-income individuals in California such as Mixtec farmworkers and their families. First, ailments that are not emergencies or pregnancy-related—such as general aches and pains, respiratory aliments, and gastrointestinal problems (vomiting, diarrhea)—as well as chronic illnesses like diabetes, arthritis, asthma, and high blood pressure either: (1) go untreated, (2) develop into emergency or urgent care situations, or (3) are diagnosed and treated using ethnospecific (folk) methods. Second, the bureaucratic structure of Medi-Cal imposes emergency care, one of the most expensive types of health care, upon individuals with nonemergency health needs who wish to receive clinical medical attention. In other words, if an uninsured Mixtec farmworker needs clinical care and cannot afford it, then that individual must seek emergency care.

Figure 8.1. Pathway to Clinical Health Care Treatment for the Uninsured



Quantitative data recorded in the 1993 study I conducted in Madera indicate that Mixtec families rely heavily on self- and ethnospecific treatment to meet health care needs. Tables 8.2 and 8.3 represent treatment choices reported for ethnospecific and clinical ailments. The ethnospecific illnesses (discussed in more detail below) refer to illnesses or ailments that are not formally recognized or diagnosed as illnesses by biomedical or clinical health care practitioners. The ethnospecific illnesses reported were *susto* (fright), *empacho* (constipation, stomach pains), *aire* (coldness), *caída de mollera* (fallen fontanel), *espinilla* (childhood illness of clammy skin), *mal de ojo* (evil eye), *mal puesto* (hex), and *látido* (stomach cramps), in order of descending frequency. The respondents were asked if they had sought clinical treatment (at a medical facility such as a clinic, hospital, or private doctor), ethnospecific treatment (seen a Mixtec healer), or self-administered pharmaceuticals or medicinal plants.

Table 8.2. Treatment Choices for Reported Ethnospecific Illnesses

Illness	Reported Cases	Clinical Treatment	Ethnospecific Treatment	Self-Treatment[a]
Susto/espanto	38	6	17	15
Empacho	20	4	3	13
Aire	12	2	7	3
Caída de mollera	9	5	2	2
Espinilla	4	1	3	0
Mal de ojo	6	2	1	3
Mal puesto	2	2	0	0
Other[b]	3	0	3	0
All ethnospecific ailments	94[c]	22 (24%)	36 (38%)	36 (38%)

[a] Self-treatment includes three options: no care sought, herbal treatment, pharmaceutical treatment.

[b] Stomachache, headache, and *látido* were included as ethnospecific illnesses reported.

[c] Total number of respondents = 109.

This same procedure was followed for the section on treatment choices for clinical ailments. These data are recorded in table 8.3. Respondents were asked if they suffered from a particular health condition, such as toothache, stomachache, diarrhea, weakness, and so on, and if so, what

Table 8.3. Treatment Choices for Reported Clinically Recognized Health Conditions

Health Condition	Total	Average[a]	Clinical Treatment	Ethnospecific Treatment	Self-Treatment
Aches and pains (4)[b]	211	53	38 (18%)	13 (6%)	160 (76%)
Mental/stress (6)	150	25	15 (10%)	10 (7%)	125 (83%)
Dental (3)	137	46	70 (51%)	1 (1%)	66 (48%)
Respiratory/allergy (4)	88	22	28 (32%)	4 (4%)	56 (64%)
Gastrointestinal (3)	39	13	9 (23%)	2 (5%)	28 (72%)
Menstrual/urinary (2)	28	14	16 (57%)	2 (7%)	10 (36%)
Obesity (1)	7	7	1 (14%)	0	6 (86%)
All clinical ailments	660		177 (27%)	32 (5%)	451 (68%)

[a] Average: reported cases of category divided by number of ailments per category.

[b] This indicates the number of ailments combined to form each category. In the cases of aches and pains, there is some ambiguity as to whether it referred to syndromes or symptoms.

type of treatment—clinical, ethnospecific, self-treatment—they had utilized. The categories "aches and pains," "mental/stress," "dental," "respiratory/allergy," "gastrointestinal," and "menstrual/urinary" are the result of grouping several related health conditions together. The aches and pains category, for example, consists of headaches, backaches, stomachaches, and chest pains; the mental/stress category includes lack of energy, sleeplessness, nervousness, depression, lack of appetite, and *coraje* (anger); the dental category comprises toothache, dental caries, and tooth loss; the respiratory/allergy category covers breathlessness, coughing, allergies, rashes; the gastrointestinal category encompasses diarrhea, vomiting, bowel problems; the menstrual covers urinary; and the obesity category corresponds to the one condition identified.

Tables 8.2 and 8.3 show the relationship between ailment type and treatment choice. Non-ethnospecific ailments (table 8.3) are more commonly reported then ethnospecific ailments (table 8.2). However, the patterns of treatment choices differ between clinical ailments and folk ailments and with respect to ethnospecific and self-treatment. Both tables confirm a considerable reliance on self- and ethnospecific treatment as compared to clinical treatment for all types of ailments—ethnospecific and clinical. For clinical ailments, however, table 8.3 shows that ethnospecific treatment is sought in only 5 percent of reported cases. The data also indicate that self-treatment, such as the use of herbs, sweat baths, and pharmaceuticals, plays an important role in the treatment of clinical illnesses, while folk treatment plays a more important role in the treatment of ethnospecific illnesses.

Figures 8.2 and 8.3 show the types of treatments chosen for both ethnospecific and clinical ailments. Clinical care was sought with more or less the same frequency for both ethnospecific (24 percent) and clinical ailments (27 percent). That is to say, regardless of the type of illness or health condition suffered—clinical or ethnospecific—only one-quarter of these cases are clinically treated. In contrast, close to three-quarters of all ailments, both ethnospecific (76 percent) and clinical (73 percent), are being treated with self- and ethnospecific care, meaning that the Mixtec rely heavily on their own resources, such as herbs, purchased pharmaceuticals, sweat baths, and healers, to confront their health problems.

Figure 8.2 represents reported treatment choices for ethnospecific ailments. A total of ninety-four ethnospecific ailments were reported by 109 respondents. Twenty-four percent (twenty-two) of the reported ethnospecific aliments were clinically treated; 38 percent (thirty-six) were treated ethnospecifically; and 38 percent (thirty-six) were self-treated. Figure 8.3

represents reported treatment choices for clinically recognized health conditions. A total of 660 health conditions were reported by the 109 respondents. Twenty-seven percent (177) of the reported clinical ailments were clinically treated; 5 percent (32) were treated ethnospecifically; and 68 percent (451) were self-treated.

Figure 8.2. Treatment Choices for Ethnospecific Ailments

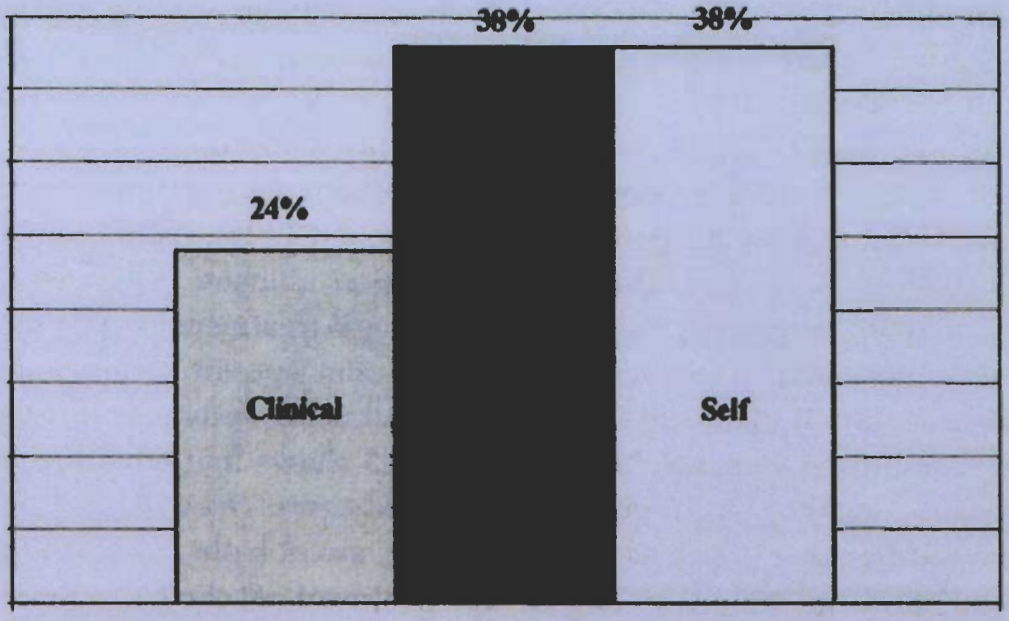
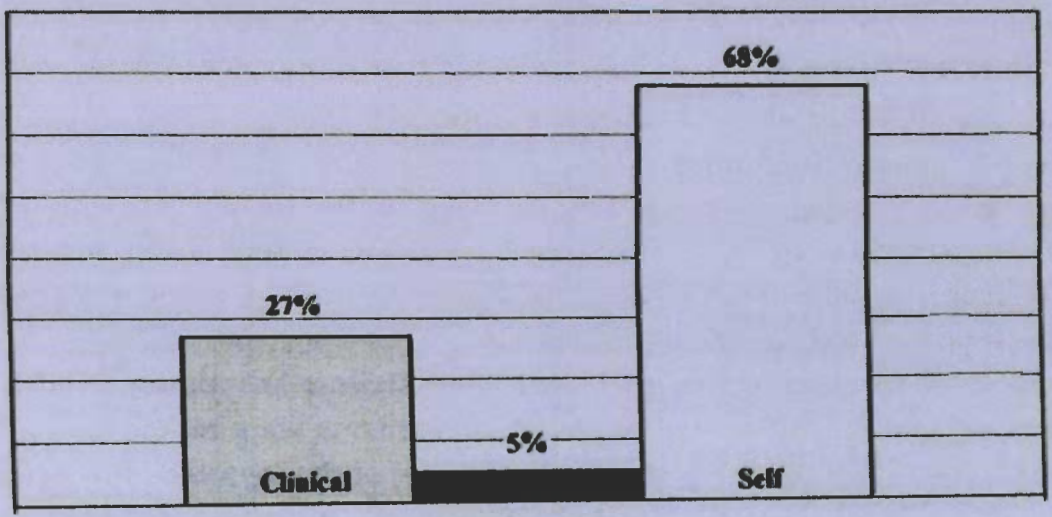


Figure 8.3. Treatment Choices for Clinical Ailments



Differing patterns are revealed in comparing self- and ethnospecific treatment choices for confronting ethnospecific and clinical ailments. Figure 8.2 shows that ethnospecific and self-treatments equally provide health care options for ethnospecific, or folk, ailments, such as *susto* or *empacho*. In contrast, figure 8.3, or treatment choices for clinical ailments, shows that there is a higher dependency on self-treatment (68 percent) than on any other type of care to meet perceived health care needs. When comparing clinical, self-, and ethnospecific treatment choices for specific health conditions, such as dental or menstrual problems (tables 8.2 and 8.3), we see that clinical care is preferred over ethnospecific care. In summary, the data in the tables and figures reveal a pattern of high reliance on ethnospecific and self-treatment to meet health care needs for Mixtec women in Madera.

Regarding health care, Mixtec families, like anyone else, want "full coverage," which means having as many available treatment options as possible. For the political, economic, and social reasons discussed above (undocumented status, chronic poverty, ethnic status), clinical care for Mixtec families in California is limited. The quantitative Madera data indicate that clinical care actually meets only about 25 percent of Mixtec women's health care needs. To fill this gap and better meet their medical needs, Mixtec families supplement clinical care with indigenous care. The qualitative data reveal that Mixtec women adeptly exploit as many types of health care as deemed necessary or possible, ultimately alternating between self- and folk treatments such as herbs and sweat baths (discussed below) and clinical treatments, especially emergency room care. In addition, it is significant that some travel to Mexico to seek treatment that is unavailable or unaffordable in California. Mixtec women and their families move between distinct health care systems (with differing values, methods, languages, behaviors, and schedules) and along diverse pathways (with differing social relationships and behavioral expectations) to attend to their medical needs in California. This is the practice of "transmedical" health care. When Mixtec families practice health care in California, they move not only across, beyond, and between medical systems, but also across, beyond, and between social and linguistic barriers, cultural landscapes, and political borders. The movement implied by the term "trans" refers not only to the migrant nature of the Mixtec lifestyle but also to the complex systems—social, political, and economic—that Mixtec families navigate to achieve health care.

CONTEMPORARY MIXTEC MEDICINE

In California, increasing numbers of indigenous people from southern Mexico and Guatemala bring with them nosologies (classifications of disease), etiologies (causation theories), diagnoses, therapies, and concepts of prevention that are markedly distinct from those of clinical biomedicine. Pre-Columbian indigenous medicine, fifteenth-century Spanish medicine, and some contemporary biomedical concepts and practices all inform contemporary Mixtec medicine.

For the Mixtec people, as with many other indigenous cultures, illness, health maintenance, religion, and social relations are all intimately interwoven. When an illness occurs, one's spiritual, social, and cosmic positions are considered to affect both cause and cure. In addition, the principle of equilibrium lies at the foundation of Mixtec medical beliefs and practices. Thus illness can occur when a healthy individual in balance has been exposed to a potentially disruptive force—be it physical, such a heat or cold, social, such as a relationship with a relative or neighbor, or spiritual, such as entities that occupy caves, roads, and rivers.

Mixtec worldview dictates the presence of outside forces—physical, social, and cosmic—that can threaten the equilibrium of an individual and create illness. In fact, some scholars have reported that malevolent actions of outside agents—supernatural, human, or nonhuman—form the cornerstone of Mixtec illness etiology (Aguirre Beltrán 1947: 115; Butterworth 1975: 109; Chiñas 1973: 87; Mak 1959: 127; Romney and Romney 1966: 72). Illness results, for example, when one has somehow let down his/her psychological or physical defenses and become exposed to attack. The causes of many illnesses are therefore attributed to offended spirits, the evil eye, sorcery, the dead, and violations of prescribed codes of social behavior. Several scholars have attributed this perception of the pervasiveness of threatening forces to the chronic poverty that characterizes Mexican indigenous communities. Theoretical models such as Foster's "image of limited good" (1967) and Kearney's "image of diminishing good" (1969) explain this fatalism in terms of competition between neighbors over "goods," such as land or food, that exist in limited quantities. Concepts of illness causation in the form of threatening malevolent forces thus stem from historic, economic, and social realities mandating defensive social forms and practices.

In accordance with the principle of equilibrium upon which Mixtec illness causation theories are founded, it is believed that strong emotions—such as fear, anger, or jealousy— can put one off balance and cause one to

absorb or transmit illness, depending on the conditions behind the experience (Foster and Anderson 1978; Kearney 1972; Rubel 1960). Young children in particular are believed to be extremely susceptible to potentially disruptive forces like strong emotions, and they must be protected from jealousy, anger, and fear if they are to avoid illness. For example, a nursing Mixtec mother must maintain control over her emotions, particularly anger, lest she cause "anger sickness" (*cuehe canduu*) in her child (Mak 1959: 131).

Recent studies indicate that Mixtec families in California maintain and cultivate ethnospecific medical beliefs. In table 8.4, data from the 1993 Madera study show that out of 107 women interviewed, 49 report having suffered from *coraje*, which is characterized by feelings of frustration, powerlessness, and general restlessness (Bade 2000: 30). Furthermore, 36 percent of these women reported suffering from *susto* (Spanish) or *kueniiyu'u* (Mixtec). Literally "fright," this is an illness in which the soul separates from or is taken from the body. It can result from a shocking experience such as a fall. *Susto* can be caused by offending the spirits of the ground, the cornfield, a river, a cave, the sweat bath, and so on (personal communication with Don Primo, 1998; Dyk 1959: 87). Symptoms of *susto* include loss of appetite, listlessness, and often diarrhea and vomiting. These effects can be delayed, frequently appearing later in life. Often adults suffering from prolonged symptoms of general fatigue, lack of appetite, and listlessness that have not responded to self-treatment will attribute the illness to a traumatic episode in their childhood in which they experienced fear. Proper cure of soul loss due to *susto* involves appropriate ritual and prayer, usually performed by a healer and often accompanied by the administration of pharmaceuticals and/or herbs.

Table 8.4. Ethnospecific Illnesses Experienced in Madera

Illness	Number of Cases	Percent of Sample
Coraje	49	46.0%
Susto	38	36.0
Empacho	19	18.0
Aire	11	10.0
Caída de mollera	9	8.5
Mal de ojo	6	5.6
Mal puesto	2	2.0

Source: Bade 1994.
Number of respondents = 107.

Nonclinical health care treatment in the Mixteca generally involves healing ceremonies of strong religious value in which divine intervention is sought. Offerings, in the form of sacrifice, food, or other valued items, serve to appease an offended spirit responsible for the illness, as well as to petition the assistance of benevolent spirits to aid in the cure (cf. González Villanueva 1989). Hens and roosters are common sacrificial offerings, highly valued in both symbolic and material senses.

Since for the Mixtec people many illnesses are attributed to indirect or supernatural causes, the role and function of the healer and the skills required to cure differ markedly from those of clinical health practitioners. Indeed, for illnesses of supernatural origin, the Mixtec healer must possess divinatory or prophetic skills to determine the cause and appropriate treatment. The sick person in such cases is a victim of malevolent forces—bad spirits or witchcraft—that must be neutralized or redirected with the aid of the healer. Diagnosis of the illness, therefore, holds great psychological value because it reveals not the immediate cause but rather who or what was the originating cause and why.

In contrast to the diagnostic methods of biomedical clinicians, the Mixtec healer rarely asks questions about symptoms, focusing instead on recent events in the individual's life that may have disturbed his or her physical, spiritual, or social balance. The skill of the healer is evaluated largely on the basis of his ability to use divination, pulsing, and other methods to diagnose an illness and determine where it seized the individual, which deities or supernatural entities are involved, which prayers are required for the cure, whether the patient's soul has been captured, whether the illness is spiritual or physical in nature, and whether strong emotions such as envy are at work. In addition, the healer must have intimate knowledge of the physical, symbolic, and religious attributes of medicinal plants and their proper preparation. Many healers combine modern pharmaceuticals, such as analgesics, antihistamines, and antibiotics, with nonbiomedical treatment. The following case describes Don Primo's use of the ancient diagnostic method called "*sacar tiempo*" (reckoning time).

Don Primo led us over the log bridge to the other side of the river. The woman who had asked him to come and heal her child lived down in the cornfield by the path that ran to the caves. A plant with small yellow flowers grew by the side of the path. "That one is called pericón, *it's used for stomachaches," he indicated as he turned onto the trail to Guadalupe's house. She waited for him at the door of her wood slat kitchen, the sick child in her arms. An older son brought us Pepsis, and it began to rain steadily.*

In the kitchen Don Primo sat on the small chair on the dirt floor and examined the child, who began crying the minute his mother handed him to the healer. Snot ran from the child's nose, and his eyes showed the dull puffiness of fever. Don Primo rubbed his hands together and blew into his cupped palms. He then began an ancient Mixtec oration.[10]*... While speaking, Don Primo took the pinky finger of his right hand and positioned it on the tip of his left elbow. With the pinky finger in place, the thumb of his right hand extended along the outer edge of his forearm toward his left hand. As he spoke, and keeping his thumb in place, he swung the pinky finger from his elbow up to the side of his left palm, noting where on the outer edge of the palm the finger landed. He did this several times, his eyes staring in a faraway, unfocused manner and his head at times rolling forward as if he were asleep. After a bit he stopped praying and looked at the woman. "Something has happened to frighten the boy," declared Don Primo. "Last week during the Todos Santos celebrations the fireworks in town woke him from sleeping, and he has been crying ever since," the woman replied while she resumed grinding chilies on her metate. "Do you have the items for the cure?" he asked, pulling his bible from the medicine bag slung over his shoulder. "We'll have to do the ceremony here in the kitchen, since it's raining so hard out there." The woman reached behind a large clay pot by the fire and pulled out a plastic tub containing flowers, candles, beer, cigarettes, eggs, and loose tobacco.*

Although certain elements of the above history are unquestionably contemporary, the medical knowledge possessed by Don Primo comes from an ancient and sophisticated civilization known for its complexity and grandeur. Employing pre-Hispanic cosmological concepts, such as the complex twenty-day sacred calendar and the thirteen levels of the upper world, Don Primo's oration and hand gestures, documented in 1998, are described in uncannily similar detail by Ruiz de Alarcón, who lived among the Aztecs and wrote about their culture in the seventeenth century. The ritual called "*sacar tiempo*" constitutes a complex diagnostic procedure that indicates to the healer what illness has seized the individual and how to proceed with treatment.

Extensive knowledge of the plant and animal worlds characterizes the information possessed by Mixtec healers and herbalists. Don Primo's knowledge about plant medicinal uses was vast. As referred to briefly

[10] See chapter appendix 1 for a transcription of this healing ritual.

above, in 1998 I and three research assistants conducted an ethnobotanical collection of 140 medicinal plants as indicated by Don Primo.[11] The study recorded the Mixtec name, Spanish name, scientific name, uses, preparations, harvesting procedures, and location of each one. This knowledge of medicinal plants has been transmitted orally for generations among Mixtec communities. In 2003, a Mixtec herbalist in Vista, California, supported by the Oaxacan Indigenous Binational Front (FIOB), grows medicinal herbs in a field donated by a local mental institution. He trades and sells these herbs to local Mixtec families who wish to use them medicinally.

In addition to the extensive knowledge of medicinal plants, Mixtec medical culture possesses several very effective and healthful treatment practices. Mixtec women throughout California use the sweat bath as a postpartum treatment. The sweat bath incorporates the use of medicinal plants as well as the use of a small structure in which the individuals receive treatment.

It is nearly sunset and the 105-degree day in Madera finally begins to cool. Magdalena's husband, Ignacio, pokes at the fire pit, which is full of burning embers two feet deep. He built the wooden frame for the sweat bath, or ñi'i, *several days ago, gathering willow branches down by the Fresno River. He then dug the pit and this afternoon began to burn wood so that by sunset there would be enough embers to provide the necessary heat for the sweat ritual. Having determined that the embers are ready, Ignacio covers them with a metal trashcan lid punctured with holes and then places rocks in a pile on the lid. He lays cardboard sheets on the ground inside the structure and then on the wooden frame itself. Ignacio covers the cardboard with several blankets, mostly the fuzzy acrylic ones with "Lion King" prints that you can get in Tijuana for $10. The sweat bath looks something like a makeshift two-person tent, with one end sloping down to the ground just beyond the enclosed fire pit and the other open end draped with blankets which must be pulled aside for entry. My* comadre *Magdalena and I had gone out earlier in the afternoon to gather the* yucu ni, *a special herb used for the sweat bath. Since true* yucu ni *grows only in Oaxaca, we settled for walnut branches, which we bunched up into small hand-held brooms. Magdalena says that when you get in the* ñi'i, *you gently slap the skin with the leaves of the brooms and this causes the blood to flow to the*

[11] Collaborative study with the San Diego Museum of Man and funded by San Diego State University's Minority International Research Training Program, supported by a Fogarty grant.

surface of the skin, which is one of the beneficial aspects of the sweat bath. Magdalena had asked me earlier if I would assist her in the sweat bath. She said that the woman who normally sweats with her had gone to Oregon with her husband to pick cherries. Magdalena had given birth to a daughter two weeks before and now needed to cleanse her body with the sweat. We would do four sweats over the next two weeks before the ritual was complete. With her other children running about the yard chasing the chicks that had hatched two days before, Magdalena and I crawled into the structure and removed our clothes, covering ourselves with a bed sheet. Ignacio went into the house to get a chair so that he could sit outside the sweat structure and monitor if we had any problems. As we lay side by side in the small wood and cardboard tent, Ignacio handed me the plastic five-gallon bucket of water, which he instructed me to place near the embers. Leaves of fresh rue (Ruta graveolens)*, another beneficial herb used in Oaxaca and grown in Magdalena's garden in Madera, floated on the water in the bucket. Ignacio dropped the blankets over the entrance, and Magdalena and I lay in darkness. When our eyes adjusted, Magdalena reached for the plastic bowl floating in the water and splashed a bowl full of water over the rocks in the trash can lid. Steam immediately enveloped us, searing my eyes so that I had to close them. I scrambled to remove a gold hoop earring I had forgotten as it burned a ring onto the skin below my ear. The heat entered our lungs and made breathing difficult. Magdalena instructed me to grab one of the brooms and slap it against her legs, making sure to cover every inch. The leaves became extremely hot. The small space we had to work in seemed even smaller with the oppressive heat and steam. Magdalena then used one of the brooms to slap my legs. The wet leaves burned against my skin, leaving red blotches. We lay there too exhausted to move and then she called to Ignacio to lift the blankets. Twenty minutes had passed, but it felt like an hour. I gasped at the fresh air, but Magdalena and Ignacio told me not to get out. After we refreshed ourselves for ten minutes or so, Ignacio again lowered the blankets and Magdalena and I repeated our actions, concentrating on the other parts of the body. I had become accustomed to the heat, and my body began to relax in a way I had never before experienced. After four sessions, we were finally done. I felt extremely relaxed, my skin was smooth, and my consciousness had entered an acutely aware state. We put our clothes back on, and Magdalena covered my head with a blanket and told me to keep covered for a few hours so that the* aire*, or cold air, wouldn't get into me and make me sick.*

Obviously, illness or any other health condition involves a certain degree of emotional insecurity. Fear, uncertainty, denial, anxiety, and despair are among the most notable emotional states that may be associated with illness. Recognition of and attention to such feelings are notably absent from most clinical health caré procedures. The impersonal, often cold approach to illness in medical clinics or county hospitals offers little reassurance to the individual that the illness will be cured through persistent and comprehensive efforts. Such clinical visits typically comprise a five-minute examination by a physician and a prescription for an expensive medicine with an unpronounceable name. Faith must be placed in the assumed skills of a stranger and the workings of science. In contrast, religious diagnostic and therapeutic methods that Mixtec healers employ (such as oration and elaborate ritual) combine with physical treatments such as the use of herbs, massage, sweat baths, and pharmaceuticals to give the patient the perceived emotional and "spiritual" support necessary to overcome illness. In such a context, the ill person may take comfort in the knowledge that several possible forces, rather than merely the physical forces, have been rallied in her defense.

SOCIAL AND POLITICAL SIGNIFICANCE OF TRANSMEDICAL HEALTH CARE

A comprehensive study of health care for low-income foreign-born migrant workers in California must include such complex and volatile social and political issues as national immigration and border policies, U.S.-Mexico relations, national health policies, social services, civil rights, public education, and the economy. Many relevant support programs sponsored at local, state, and federal levels provide support to the poor and to women and children. Special programs to service the legal, educational, and health needs of ethnic migrants include California Rural Legal Assistance, Migrant Education, the Child Health Dental Program, and numerous local church and community organizations such as the Lion's Club and the Catholic Church.[12] Medi-Cal offers invaluable support in emergency and pregnancy-related situations. The WIC program provides material and social support by teaching dietary awareness, offering family planning consultation, and supplying infant formula and food coupons for staples

[12] Fortunately, it would be difficult to list here all of the many local, county, state, or federal programs that support the poor or migrant farmworker population.

such as milk, eggs, cheese, cereal, beans, and juice. Most of these and similar programs have recently lost invaluable funding.

Local private, county, state, and federally funded medical clinics constitute the primary source of clinical health care for migrant farmworker families in California. Most of these facilities offer flexible payment programs and fixed low-cost visitation fees, and employ Spanish-speaking personnel. Mixtec families living and working in California depend upon these facilities for treatment of serious conditions, such as fevers, infections, diarrhea, and skin irritations, as well as for reproductive health concerns.

Largely as a result of California's economic troubles, the current political environment for undocumented men, women, and children in the state continues to be hostile and threatening. High unemployment rates, crime, overpopulated schools, and overrun prisons and hospitals fuel fear and mistrust of noticeable migrant workers like the Mixtec. Recent legislation aims to further cut medical aid to the undocumented, denying emergency, prenatal, delivery, and postnatal services to thousands of taxpaying workers.

The structural relationship of mutual dependency between the economies of the Mixteca and California, as well as Oaxaca's economic and political situation, indicate that Mixtec families will continue to commute to work, traveling thousands of miles to the agricultural sectors of the United States (Kearney 1986; Runsten and Zabin 1989; Wright 1990). The social, political, and economic marginalization of the Mixtec, manifest in labor market segregation and the formation of Mixtec enclaves throughout California, has combined with their own cultural forms of distinct identity—inscribed in language, custom, and religious celebration—to defy "melting pot" assimilationist models of immigration. Long-term circular migration between the Mixteca and California will doubtlessly deepen the integration of Mixtec and California communities. However, for many social and cultural reasons, the Mixtec residing in California will continue to be ethnically distinct from mainstream culture. Problems in the delivery and consumption of health care services will be magnified not only by poverty, inaccessibility, and immigration status, but also by differences in the cultural construction of illness etiologies, health care treatments, and the functioning of the human body. Mixtecs, in contrast to other indigenous peasant immigrants to the United States such as the Khmer and Hmong, will continue to reinforce and refresh their ethnic identity and cultural forms through circular migration and continuous new migration to California from the Mixteca. For these reasons, policy makers cannot assume that the

problems surrounding health care delivery to migrant ethnic groups like the Mixtec will be solved by assimilation, a paradigm that expects the Mixtecs' eventual adoption of the biomedical model of the human body and health simply by exposure. Mixtec families' reliance on their own medical system to treat illness possibly indicates some culturally related psychological benefits. However, this use of ethnomedical resources is best understood as supplementing insufficient clinical care.

The problems surrounding health care service utilization for Mixtec families in California are due in large part to the chronic poverty and political repression in Oaxaca, and they will continue until there is a considerable improvement in economic opportunities in Oaxaca. Any attempts to resolve health care service utilization and access problems in California, such as the promotion of indigenous health care practitioners and the employment of trilingual clinicians, must therefore include and link with both institutional and indigenous health care systems of the Mixteca.

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APPENDIX 1: SACAR TIEMPO

The following is a transcription of "Sacar Tiempo,"[1] a Mixtec diagnostic healing ritual performed by Don Primo Domínguez Tapia, followed by translations in Spanish and English.

MIXTEC

Biti ntaui stoyo, biti nda tiin siin ya cata, ya casiin, kaandanto kaankuiti ndo kaandanti kankuitiindo, indukaba indubatia Ndo. kaantando kaankuitindo siin yu tia yuba, tia sii. Tia kaui yubi tia kaui kivi. Tia kaui tiaii ishi naa, tia naa, kissi ña naan ñaan utbi kiui ushi iin, ushi ii ushi uñi.

Ita cua, ita ya antivi ushi uvi antivi ushi uñi, kaandanto kaankuitindo. Ñuun tun ñun yeeh yosokui, yoso ya, ña indaka mi yuku ann ntian indau Yaa tunñi nda, kaantaa kaankuitiuin taan kava taa kasiaun tan shitaun taa kaan shitun ña yuvi. Biti ndavi sto.

Kaandanto kaankuitindo siin yuu, kaanta tiakundo indukaba intubatia, kaandanto kaankuitindo siin yu tia yuba tia sii tia kavi yubi tia kavi tiaii, tia kavi yubi tia kavi tiai. Biti kaandanto, kaankuitindo, kaandanto kaankuitindo ntatiaku.

Tiin kiti canrââ, tiin kiin nticara

SPANISH

¡O! Mi señor ahora ruego al todopoderoso, señor de los señores, ustedes que andan de día y de noche, ruego a ustedes que me den esa sabiduría para entender lo que yo quiero saber. Desde el camino de la tierra, de la sombra; ¡oye! Vino cosas extrañas, cosas del monte o del otro mundo. Porque esta situación parece ser difícil, este día once, este día doce, este día trece, ruego a las flores rojas y blancas, al cielo doce, trece.

Yo clamo que vengas a ayudarme para saber lo que yo pregunto. Ahora, fuego rojo, fuego brillante [the sun], valles verdes y blancos ¡o! yo clamo, adonde estás en la tierra del monte o adonde estás colgado.

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[1] Recorded by Bonnie Bade and Deborah Small on July 13, 1998, in San Miguel Cuevas, Juxtlahuaca, Oaxaca.

Sabiduría de las palmas, de las manos, ahora ayúdame, tú que sueñas, tú que das vuelta, tú que sabes y proteges, ayúdame. Camino de sabiduría, esto es lo que pido humildemente ahora, a mi señor.

[Here he blows twice on his hands, then places his left hand along his right lower arm.]

Hablen con la verdad y más que la verdad ¿Me hablarán la verdad? No me rechazen, no se burlen de mí persona humilde. Háblenme con la verdad y más que la verdad conmigo, yo que soy más que honorable, yo que he sido más que ustedes. Por eso ahora hablen con la verdad y más que la verdad. Se oye, que todo hablo y que todo hablo.

ENGLISH

Oh my lord, I now pray to the all-powerful, lord of lords, you who walk in the day and in the night, I pray to you who give me the knowledge to understand that which I want to know. From the road of the earth, of the shadow; listen! Strange things have come, things of the mountain or of the other world. Because this situation seems to be difficult, this day eleven, this day twelve, this day thirteen, I pray to the red flowers, to the white flowers, to the twelfth heaven, to the thirteenth heaven.

I implore that you come to help me to know that which I ask. Now, red fire, brilliant fire [the sun], green valleys and white valleys, oh! I implore to where you are in the earth of the mountain, to where you are located.

Knowledge of the palms, of the hands, now help me, you who dream, you who turn about, you who know and who protect, help me. Road of knowledge, this is what I humbly ask you now, my lord.

[Here he blows twice on his hands, then places his left hand along his right lower arm.]

Speak the truth and more than the truth. Will you tell me the truth? Do not refuse me, do not make fun of this humble person. Speak to me with the truth and more than the truth, I who am honorable, I who have been more than you. For this, now speak the truth and more than the truth. Listen to all I say, to all I say.

APPENDIX 2: METHODOLOGY

The binational fieldwork on which this study is based began in 1987 and is ongoing. The primary ethnographic field method has been participant observation. In Oaxaca I have lived in two villages on and off for fifteen years, participating in civil and religious ceremonies, assisting in daily life chores, attending healing rituals with a local healer, and documenting Mixtec medical practices. Qualitative data recorded in California come primarily from participating in the daily lives of more than twenty women and their families. I have accompanied them to clinics, doctors' offices, grocery stores, schools, and other private, state, and local institutions and agencies for fifteen years. Assisting the women (and health service providers), by translating, filling out forms written in English and Spanish, providing rides, explaining clinical procedures and concepts, negotiating with officials, and offering general support in adapting to the complex and bureaucratic details of California social structure formed the basis for a bond of trust between myself and these women.

The data from the Madera study were gathered in summer 1993. Support from Dr. James Grieshop, of the Applied Behavioral Sciences Department at the University of California, Davis, and Dr. Martha López, of the University of California Cooperative Extension in Madera County, enabled the development and administration of a 159-question Spanish-language questionnaire[1] to 109 Mixtec women living in Madera, California. A sample of the Mixtec community was taken using various methods: "snowball" sampling (Cornelius 1982), lists of addresses of Migrant Education students at a local elementary school, contacts made through Mixtec self-help organizations, and *comadre* networks. Interviews were conducted by three Spanish-speaking women from the Madera community. Interviews averaged about two hours; families were compensated for their time with a ten-dollar gift certificate redeemable at a local supermarket. Relevant issues addressed in the questionnaire include barriers to health care, maternal health histories, illness history, including clinical and ethnospecific illnesses and their corresponding treatment choices, and some demographics.

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[1] Spanish was chosen for the interview due to difficulties with written Mixtec, marked linguistic differences between Mixtec villages, and scarcity of Mixtec-speaking women with sufficient reading and writing skills to conduct interviews. I developed the questionnaire after more than three years' experience in the field. Parts of Mines and Kearney's study of the health of Tulare County Farm Workers (1982) provided a model for the section on health conditions.