

- In contrast to other parts of the US and contrary to widespread belief, California agriculture has become more, not less, dependent on migrant labor in the past few decades
- In 1989, about 1 million seasonal and migrant workers labored on California farms



# Cross-cultural Medicine

## A Decade Later

### A Season in the Life of a Migrant Farm Worker in California

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There is an erroneous but widespread belief that in the past few decades California agriculture has become increasingly mechanized and reduced its need for migrant labor. Steeply increasing demand, however, for specialty fruit and vegetable crops, which are labor-intensive, has actually increased the need for migrant workers, who come mainly from Mexico. A case study of a young migrant describes the dismal work, economic, and living conditions such workers typically endure and the possible health consequences of those conditions.

(Palerm JV: A season in the life of a migrant farm worker in California, *In Cross-cultural Medicine—A Decade Later* [Special Issue]. *West J Med* 1992 Sep; 157:362-366)

Contrary to the widespread belief that agricultural mechanization and modernization have effectively eliminated the need to employ large numbers of low-wage seasonal farm workers, California continues to rely on the presence of a large and growing number of farm workers who work for extremely low wages and live uncertain lives. The implications for health care services and policies are substantial.

#### An Illustrative Farm Worker's Season

I met Pedro\* in mid-September 1989, while observing a Valencia orange harvest crew at work in the vicinity of Fillmore, California, during the course of field research for the Employment Development Department.<sup>1</sup> A crew of 32 pickers was working an old terraced and gravity-irrigated orange grove situated on a hillside. Pedro was high on his 4-m (14-ft) ladder busily clipping oranges when the tree suddenly leaned over, uprooted itself, and toppled over the terrace with a big crash into an orange bin, nearly crushing a manned forklift machine. Pedro clung to his ladder but was left upside down entangled in the branches with the bulging 20-kg (50-lb) canvas bag tugging at his underarm. A few workers rushed from their trees to help him and, once they saw Pedro was unhurt, had a good laugh. This was the fifth time in three days the young worker had fallen from a tree. Seeing that he was shaken, the foreman suggested that he take a half-hour rest before returning to his job.

Pedro is a single, 19-year-old worker from Valle de Santiago, Guanajuato, Mexico. He had started to work at age 14 for a local construction contractor as an errand boy and by age 17 had become an accomplished *albañil* (bricklayer). His meager earnings (7,000 pesos a day [\$3.50]) as an occasional construction worker, however, hardly enabled him to provide for himself. Every week he handed over half his earnings to his mother to help with household expenses. He relied on the

small *ejido* farm, managed by his father and two married brothers, for basic sustenance. Pedro shared a small room with three nephews and two younger brothers.

Pedro was envious of village friends who regularly migrated to California and brought back fine clothes, electronic goods, and cash—even occasionally a car or truck. Despite the fact that no one else in his family practiced seasonal migration—at least not since his father's experience as a *bracero* in the early 1960s—Pedro decided to try his luck as a seasonal farm worker in the United States. A friend supplied him with a photocopy of his papers (immigration documentation and Social Security card) for a \$50 fee, assuring him that was all he needed to obtain employment. In late February 1989, after helping his father establish the winter crop, Pedro went to Tijuana with nearly 500,000 pesos (\$250) in his pocket. His first experience as an undocumented farm worker was about to begin.

Following instructions given him at home, Pedro strolled unchallenged across the border and jumped a freight train just outside San Ysidro, California. After 2½ days without food, he arrived at Oxnard where he camped along with other Mexican migrants in a cardboard-and-plastic shantytown located in a dry drainage ditch that ran between the railroad tracks and a strawberry field. The day he arrived, the fields were sprayed with a pungent fungicide, and most of the shantytown dwellers stood across the tracks waiting for the smell to recede. Because he had neglected to exchange his Mexican currency for dollars in Tijuana, he was forced to strike a deal with a local convenience store merchant to buy food. Pedro changed half of his savings (250,000 pesos) for \$80, well below the official exchange rate. He later learned that this store would allow him to fill his plastic bottle with tap water whenever he made a purchase. He had been syphoning foul-tasting, lukewarm water from a plastic drip irrigation line in the strawberry field.

It took Pedro two weeks to find a job as a strawberry

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\*Names, locations, and other identifying features have been altered to protect farm workers.

picker. Until then, no grower or farm labor contractor had wanted to employ him because of his dubious papers. Nonetheless, as the fresh strawberry season got busier, he was finally hired, just when he was running out of money. The first days in the strawberry fields were "pure hell," according to Pedro. Not only did he have to crawl on the humid ground from 6 in the morning to 4 in the afternoon, but he was unable to produce the amount and quality of fruit the foreman demanded. Moreover, he was suffering from nagging diarrhea, which he attributed to eating too many strawberries, and a hand rash other workers explained was caused by the fuzz on the undersides of the plant leaves. Fortunately, an old man taught him how to do the work, and soon Pedro was earning more than \$4.50 per hour.

After two weeks, while still camping in the shantytown and eating purchases from the convenience store—the owner now cashed his checks for a \$10 fee—he was able to accumulate nearly \$400. These earnings were spent in a single afternoon, however: he mailed \$250 home and bought three polyester shirts, a pair of expensive running shoes, a small "boom-box" radio, a blanket, and a baseball cap—all of well-known American brand names. Following the advice of the field foreman, Pedro purchased "legitimate" papers for an \$80 fee from a local counterfeiter. The acquired papers included immigration documentation, Social Security identification, and a US entry visa.

During his third week as a strawberry picker, an acquaintance in the shantytown suggested to him that because he now had "good" papers he could aspire to a better-paid job. He was sure Pedro, with his skills, could easily find employment with a local construction contractor. The acquaintance gave Pedro an Oxnard address and told him to go there the following Monday morning when the *patrón* would be waiting for him. That morning he was put to work in the backyard of a roofing company removing nails and sorting two-by-four studs and plywood sheets piled high on two large trucks. He was told that if he did a good job, he would be considered for a full-time position.

Pedro worked hard and diligently all week (10- to 11-hour days) hoping to secure a nonfarm job, which, after the strawberry experience, was more attractive to him. On Saturday morning the *patrón* drove into the backyard where Pedro was finishing the assigned task, complimented him on his work, tossed him an impressive wad of bills tightly rolled and secured with a rubber band, and drove away saying he would be calling him soon. On undoing the bundle, Pedro discovered that a single \$20 bill covered 62 one-dollar bills—his total earnings for a 60-hour week amounted to \$82 (\$1.36 per hour). Needless to say, the abusive *patrón* never called back.

On the following Monday, Pedro returned to the strawberry fields only to discover he was not wanted or needed; the foreman severely admonished and perfunctorily dismissed him for abandoning his job. That week Pedro sought work at an Oxnard street corner but found employment for only two half-days laboring part-time for a landscaping contractor, digging trenches for a sprinkler system in a privately owned home; his total income for that week was \$34. In the course of the week he met a fellow *paisano* from Valle de Santiago who told Pedro he and others were going to Bakersfield to harvest asparagus. Pedro joined a group of five other young men, caught a ride to Bakersfield for a \$20 fee, and labored near Lamont for ten days cutting asparagus. The improvised

work crew camped in a truck parked next to a cotton field. During these ten days Pedro earned \$425, mailed \$100 home, and kept the rest in reserve.

In Lamont, Pedro was hired by a farm labor contractor to harvest navel oranges near Delano. The contractor drove him to Delano, set him up in a 3-m by 10-m (300-sq ft) windowless storage shed made of corrugated metal that he shared with eight other workers and several stacks of sacks filled with what Pedro assumed to be granulated fertilizer. Because the shed lacked indoor plumbing, the employer provided the crew with a portable toilet placed next to the shed. Tap water was available from a faucet located at the side of the structure. Every morning they were transported to the orchards on the floor of a gutted van filled with tools and returned as soon as work concluded. Work was erratic: some days the crew would harvest oranges for only 3 or 4 hours (after a 1.5-hour drive to the orchards), and other days they would work 10 to 12 hours. Although the crew was paid at a piece rate, none of the workers ever completed their quota and, hence, were earning minimum wage. Moreover, the crew constantly changed workers because most workers were beginning to head north to Oregon to participate in the berry harvest. During his first orange harvest experience, lasting 12 days, Pedro earned \$357 but only retained \$261 because he was charged \$96 for housing and transportation. He mailed \$100 home and used another \$100 to pay for a ride to Oregon with a group of Oaxacan migrants in the bed of an open pickup truck.

Oregon was unquestionably Pedro's worst work experience. During eight weeks he labored for ten different employers harvesting berries and cucumbers, weeding fields, and unloading trucks. He rarely worked more than six hours a day when employed, and work was often interrupted by rain or muddy fields. Although he earned \$850, well over two thirds (\$570) was spent on lodging, food, and transportation. He was able to mail home only \$150. The Northwest, according to Pedro, was gloomy, wet, and cold, which made him morose and homesick. As a result, he explained, he went on a five-day drinking spree, engaged the services of several prostitutes, and lost practically all his earnings. With a small monetary reserve, Pedro returned to California in early August.

After an unsuccessful search for work in Salinas, Watsonville, and Gonzalez, Pedro was finally hired in Santa Maria (near Santa Barbara) as a trainee to labor in a celery harvest crew, which he later admitted was the hardest work he encountered during his trek. At first he only stapled celery boxes shut and loaded them onto a truck. Soon he was also cutting, tying, and boxing celery bundles. The foreman drove the crew hard and hardly gave the workers time to rest, claiming that sufficient rest was possible by rotating positions every hour or so (from cutter to bundler or boxer to stapler or loader). When the workers began to show fatigue and become irritable, the foreman dispensed small triangular pills that he called "pinkos" and that he claimed would reenergize the worker. (I suspect he was administering amphetamines.) One afternoon Pedro accidentally cut his hand just above the thumb as he was chopping a bundle of celery with the awkward two-edged knife. When it became obvious that the bleeding could not be stopped with a bandage, he was rushed to a local clinic. The cut was stitched closed, and Pedro was given a tetanus shot and a pain killer. The next day when Pedro showed up for work, the foreman handed him his

paycheck and fired him, warning Pedro not to make any trouble.

By late August, Pedro was back on an Oxnard street corner seeking day employment with little success; his hand was still injured and his funds were depleted. In September Pedro was finally hired to harvest oranges near Fillmore (where I met him) and had again built up his reserve to \$350. At that time he was planning to remain in Fillmore until the end of the orange harvest season and then travel east to Kern County or Fresno to participate in the raisin grape harvest, although he had been warned that the raisin season was probably already under way.

In late October, Pedro arrived home at Valle de Santiago with \$850 in cash, having lost his gifts and radio to Mexican border officials. Overall, Pedro was pleased with his experience and by December was planning a second "adventure." Next time, he would get his schedule right so he could go to the San Joaquin Valley in the middle of summer to pick table grapes. Pedro was calculating that if he did things right, next year he could return home with at least \$2,000, maybe even a used car.

Throughout his seven-month migratory experience in 1989, Pedro earned a total of \$3,248. He provided \$1,350 to his Guanajuato-based household, and \$1,898 was consumed by his spartan subsistence arrangements and travel. Under the best possible circumstances, his income, had he stayed home, would not have exceeded 1,120,000 pesos—under \$500. The cash Pedro provided to the household enabled an older brother to advance construction of his one-room dwelling and helped Pedro's father pay some pressing debts incurred by medical expenses for Pedro's baby sister.

**California Agribusiness and Farm Laborers**

Pedro was just one of about 1 million workers employed on California farms in 1989.<sup>2,3</sup> Considering the increasingly diverse makeup of California's agricultural labor force, which includes immigrants and migrants, men and women, young and old, documented and undocumented, Pedro, a single young man, is not a typical farm worker except that he is Mexican and poor. The conditions under which he worked, lived, and traveled, and the revenue he garnered, however, were unremarkable and were typical of the experiences most farm workers regularly encounter.

Pedro represents the new entry-level worker who is continually needed to restore a labor pool that suffers an exceptionally high attrition rate.<sup>4</sup> Aside from the well-known fact that farm workers tend to abandon farm employment whenever other jobs are available, the average productive life span of a farm worker is short—it is estimated to be only 15 to 20 years. Pedro, therefore, exemplifies the healthy, strong, young new worker whose physical fortitude will probably succumb to the drudgery of farm work before he turns 40, unless illness or serious injury shortens his career even more.

*The 'Mexicanization' of California Farm Labor, 1940 to 1990*

Three important events summarize the evolution of farm labor in California since the early 1940s:

- With the outbreak of World War II, the dust bowl refugees portrayed by Steinbeck in *The Grapes of Wrath*<sup>4</sup> were soon replaced with Mexican guest workers. The *Bracero* Program (1941 to 1964) encouraged and enabled many Mex-

ican citizens to seek seasonal employment on California farms. As a result, they soon became the principal, if not exclusive, source of labor used to cultivate and harvest the state's cornucopia of crops.<sup>1</sup>

- Despite the euphoria and hullabaloo created by the introduction of the mechanized tomato harvester in the early 1960s—admittedly a landmark accomplishment of modern technology—most other fruit and vegetable crops have remained stubbornly resistant to mechanization.<sup>5-7</sup> As a result, machines never fully replaced Mexican migrant workers, who continued to supply California's steady demand, even after cancellation of the *Bracero* Program in 1964, which only had the effect of converting guest workers into undocumented aliens.<sup>8</sup>

- California's thriving agricultural industry, driven since the mid-1970s by a massive development of high-value fruit and vegetable specialty crops, has substantially increased its farm labor demand.<sup>1</sup> In other words, the growing demand for fresh fruits and vegetables brought about largely by the increased number of health-conscious consumers has greatly stimulated the agricultural industry to devote more land and capital to high-value, machine-resistant, labor-intensive, and wholesome specialty crops that, in turn, require that more low-paid farm laborers be sought to tend them. These workers come primarily from Mexico.

The process described is ongoing. For example, in the course of only five years, 1985 to 1990, Santa Barbara County farms increased average monthly employment by 62% and peak season employment by 86% (J. V. Palerm, "Farmworker Enumeration, Santa Barbara County: A Preliminary Report," Center for Chicano Studies, University of California, Santa Barbara, 1992) by substantially augmenting acreage devoted to, among other crops, broccoli, celery, lettuce, and strawberries.<sup>9</sup> There are, as a result, more farm workers in California than ever. What we have witnessed over the past years is not the mechanization but rather the "Mexicanization" of California agriculture.

*Enclave Formation*

Not all farm workers are migrant. Many have settled down permanently with their families in small rural towns and communities located in those regions subjected to agricultural intensification where farm employment is more abundant and regular. For example, in the course of the past three decades—1960 to 1990—the population of Guadalupe, a small rural California town, grew from 3,225 to 5,479 and its Mexican-origin population swelled from 18% to 83%.<sup>1</sup> Field research has uncovered the existence of at least 150 other rural locations where enclave formation is well under way. In some, pre-enclaves, the process is only in an embryonic stage, but in many others, majority enclaves, the process is complete. Table 1 provides some striking details about these burgeoning Mexican enclave communities of California that, in sharp contrast with the rest of rural America, are peopled by young families with extremely high fertility rates.<sup>10</sup>

Unfortunately, the vast majority of these settled farm-working families earn so little that their annual income only rarely reaches or exceeds the government's definition of poverty. They often crowd into substandard houses located in bankrupt communities that are unable to provide basic public services, and they are subjected to widespread neglect on the

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part of most public and private social service organizations. The communities, in effect, are pockets of severe and enduring poverty that require urgent public attention.<sup>11</sup> Despite the bleak circumstances under which they live, few families are currently prepared to trade rural jobs and homes for urban employment given the prevailing conditions of city blight compounded with high rates of unemployment, crime, drugs, and violence.

Migrants often compete with settled workers for farm jobs. They unintentionally help to keep wages depressed and further affect overcrowded resource-poor communities during their sojourn.

**Immigration Policies**

The Immigration Reform and Control Act of 1986 was intended to stem the flow of illegal migrants. It has not affected California agriculture because, among other reasons, farm employers were successful in introducing special provisions that protected their growing multibillion-dollar

TABLE 1.—Rural Californian Chicano and Mexican Enclave Communities—General Demographic Characteristics\*

Type of Community	No.	Latino, %	Median Age, yr	Fertility Rate/yr	Average No. of Persons Per Household
Pre-enclave.....	26	17.3	31.7	340	2.70
Enclave.....	61	30.0	26.0	376	3.04
Majority enclave... 61	65.6	24.3	456	3.60	
California.....		19.2	29.9	272	2.68

\*From the US Census Bureau.<sup>10</sup>

industry—that is, the Special Agricultural Worker and Replenishment Agricultural Worker programs.<sup>12</sup> The main contributions of the immigration reform act, on the contrary, have been to provide an opportunity for many former and new undocumented workers to become legal and to create the perception that new legalization opportunities will be forthcoming for those who either did not qualify the first time around or who joined the labor pool later. Although the Immigration and Naturalization Service estimated that only 250,000 farm workers would apply for amnesty through the Special Agricultural Worker program, 1.3 million actually did; more than two thirds were in California alone. Subsequently, an equally impressive number of workers have pre-registered for the impending activation of the Replenishment Agricultural Worker program.

Armed with bona fide papers, many former migrants have decided to settle permanently in the already overcrowded enclave communities with their undocumented dependents, whereas others continue to trek back and forth without having to cross the border clandestinely anymore. Meanwhile a new cohort of prospective farm laborers without proper documentation are being inducted into the labor market.

There is no indication that the issues briefly described here will abate any time soon. Neither agricultural modernization nor immigration legislation has been capable of either diminishing California's hunger for low-wage seasonal farm jobs or deterring the massive flow of migrants and immigrants from Mexico who meet the demand. It is paramount that we acknowledge, once and for all, that these issues are endemic to California agriculture so that we can get on with

the job of addressing the myriad social problems they entail, problems that can no longer be perfunctorily dismissed as trivial, transitional, and self-corrective.

**Health Care Implications**

Once the permanence of the situation has been acknowledged, problems of housing, occupational risk, and access to health care can be addressed.

- Among the many problems farm workers face when they settle into their enclave communities in California and during their sojourns from Mexico is poor access to basic health care services. The problem is of singular gravity for the following reasons: it involves a large and growing population; the population, mostly from impoverished rural Mexico, suffers a long history of health deprivation and neglect; people live in overcrowded, substandard, unsanitary conditions; and a large segment of this population receives exposure on numerous occasions during work to large quantities of diverse potentially toxic substances, which can—and do—result in acute and chronic health problems.

- Few farm workers have any form of health insurance. Most seasonal farm workers are inadequately protected against accidents in an industry where accidents and injury abound. Most farm workers are unaware that some degree of public aid is possible, through, for example, Medicare or Medicaid (in California, Medi-Cal). When access to services is sought, often timorously, people encounter insurmountable language or cultural barriers, unintelligible paperwork, and disinterest, if not outright discrimination, on the part of public servants. Documented special agricultural workers think they are ineligible for assistance, and undocumented workers fear they will be reported to the Immigration and Naturalization Service. Thus, few actually attempt to obtain public health services even in cases of dire need.

- When illness or injury occurs, farm workers stoically and stubbornly rely on traditional or home remedies. When that fails, they make quick emergency trips across the border to affordable Mexican health practitioners and available over-the-counter drugs. Sojourners who become too sick to continue working rush back to Mexico. As a result, it is common for farm workers not to seek professional medical assistance for themselves or their ailing dependents until illness is well beyond the scope of simple treatment and physical injuries are irreparable. Because preventive medicine is practically unheard of, expectant mothers only rarely and sporadically receive prenatal care, and children's health is commonly left unattended. All this is occurring in the midst of the most modern, successful, and profitable agricultural business in the world.

In view of this large and growing but extremely vulnerable population—constantly exposed to high-risk jobs, high-risk environments, high-risk housing, and high-risk behavior—the urgent need to find solutions cannot be overstated. A two-pronged approach is vital. It is absolutely essential that the health care system be improved to deal with the specific needs of these communities and populations. It is equally essential to educate and instruct the population on health matters.

Pedro returned home safe and sound without suffering any major mishap. He was lucky, considering his life-style and the number of close calls he had. Others have not been as fortunate. It is only a matter of time, however, before Pedro,

whether as a migrant farm worker or as a resettled community member, has a medical emergency through illness or injury. Unless there is a safety net to protect him and others like him, the probability of sustaining permanent, irreparable damage is great. It is the responsibility of those who benefit from his hard work—the agricultural business, the state, and consumers of inexpensive, wholesome farm commodities—to ensure that Pedro's productive life is not prematurely shortened or wasted and that his health and the health of his family, friends, and compatriots are not unduly compromised.

## REFERENCES

1. Palerm JV: Farm Labor Needs and Farm Workers in California, 1970 to 1989—California Agricultural Studies. Sacramento, Calif, Employment Development Dept, 1991
2. Martin PL, Vaupel S, Egan DL: Unfulfilled Promise: Collective Bargaining in California Agriculture. Boulder, Colo, Westview Press, 1988
3. Campos PV, Kotkin-Jaszi S: California Farmworker Enumeration Report. San Francisco, Calif, US Dept of Health and Human Services, Region IX, Migrant Health Program, June 1987
4. Steinbeck J: The Grapes of Wrath. New York, NY, Viking, 1939
5. Friedland WH, Barton A: Destalking the Wily Tomato—Research Monograph No. 15. Davis, Calif, Dept of Applied Behavioral Science, University of California, 1975
6. Runsten D: Mechanization and Mexican Labor in California Agriculture. San Diego, Calif, Center for US-Mexican Studies, University of California, 1981
7. Thompson OE, Scheuring AF: From Lug Boxes to Electronics: A Study of California Tomato Growers and Sorting Crews. Davis, Calif, University of California, 1978
8. Palerm JV, Urquiola JI: A binational system of agricultural production: The case of the Mexican Bajío and California. In Aldrich DG, Meyer L (Eds): Mexico and the United States: Neighbors in Crisis. San Bernardino, Calif, Borgo Press, 1992
9. Agricultural Employment: Report Nos. 882 and 882A. Sacramento, Calif, Employment Development Dept, 1987 and 1990
10. 1980 US Census of Population: Number of Inhabitants in California—publication No. PC 80-1-A6. US Dept of Commerce, Bureau of Census, 1980
11. Palerm JV: Latino Settlements in California—The Challenge: Latinos in a Changing California—Report of the Task Force in response to Senate Concurrent Resolution 43 introduced by Robert Presley, University of California Consortium on Mexico and the United States (UCMEXUS). Riverside, Calif, University of California, 1989
12. Rosenberg H: Emerging Outcomes in California Agriculture From the Immigration Reform and Control Act of 1986—Paper No. 88-3. Davis, Calif, University of California, Agricultural Issues Center, 1988

The total population of migrant and seasonal farm workers in the US is estimated to be as large as 5 million. In 1987, the all-cause work-related death rate (49 per 100,000 workers) for farm workers was the highest for all occupations (compared to 11 deaths per 100,000 workers for all jobs).

Migrant and seasonal farm workers in California. Far from being a socioeconomically disadvantaged group, potential farm workers face a high risk of tissue disorders and other health problems. Few have assessed dependents. A standardized working condition survey (Mobed K, Gold E) was conducted later [Special Issue].

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Agriculture in the United States and the need for labor, especially for labor-intensive crops, such as fruits and vegetables, and seasonal farm workers. Although they are often considered hazardous occupations, the highest all-cause death rates were 35 for farm workers and 11 for agricultural workers.

The US agricultural workforce is estimated to be about 1.5 million, and seasonal farm workers are estimated to be about 500,000. Statistics generated by the Bureau of Labor Statistics generally show a high turnover rate on hired farm workers.

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From the Division of Occupational and Safety Center. Supported by a grant from the National Institute for Occupational Safety and Health. Reprint requests: Dr. Davis, CA 95616.