2010

Stories from the front: health care access in the U.S. and Mexico in Mexican migrant farm workers

Jacqueline Marie Leung-Heras
University of Iowa

STORIES FROM THE FRONT:

HEALTH CARE ACCESS IN THE U.S. AND MEXICO

IN MEXICAN MIGRANT FARM WORKERS

by

Jacqueline Marie Leung-Heras

A thesis submitted in partial fulfillment of the requirements
for the Master of Science degree
in Community and Behavioral Health
in the Graduate College of
The University of Iowa

May 2010

Thesis Supervisor: Professor Joe D. Coulter

Graduate College
The University of Iowa
Iowa City, Iowa

CERTIFICATE OF APPROVAL

_____

MASTER'S THESIS

_____

This is to certify that the Master's thesis of

Jacqueline Marie Leung-Heras

has been approved by the Examining Committee
for the thesis requirement for the Master of Science
degree in Community and Behavioral Health at the May 2010
graduation.

Thesis Committee: _____
Joe D. Coulter, Thesis Supervisor

_____
Jingzhen "Ginger" Yang

_____
Laurence Fuortes

_____
Susan Murty

ACKNOWLEDGEMENTS

I would like to extend a thank you to Drs. Joe Coulter, Ginger Yang, Laurence Fuortes, and Susan Murty for their guidance and support regarding my thesis. Each of them was helpful in providing the guidance and assistance I needed to graduate on time.

To my beautiful daughter, Mei-Yu, and my spouse, Antonio. I would not have been able to do this without little Mei's soft laughter and the many playtimes we had together when I needed a break.

To my parents, George and Irene, and my brother Stephen, for their endless encouragement and for the nights I needed to vent.

To Mario Sixto, thank you for your assistance. Your help was invaluable for the project.

For my friends, Misty Olli, Kathy Tiedt-Burk, Inez Cruz, Paul Suedkamp, and Joe Troll: Thank you for your friendship and support during the process.

Last, but not least, I would like to thank the farmer and the migrant workers who agreed to participate in the study. Without your permission and participation, this study would not have been possible.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Thesis Introduction and Format

One of the most underserved and exploited groups often ignored is migrant farm workers. It is estimated there are over three million migrant farm workers within the U.S. (Perilla, et al 1998). Of these, 81% are foreign born, with 95% of Mexican origin, 2% Latin American, 1% Asian, and 1% from other countries (U.S. Department of Labor, 2005). In this study, migrant farm workers refer specifically to Mexican migrant farm workers. While the researcher acknowledges the existence of other migrant farm worker groups, the sole focus of this study is on Mexican migrant farm workers.

Despite the importance of their contributions to the U.S. economy, migrant farm workers are often invisible outside of the farm and the encampments in which they reside. Researchers from a variety of academic backgrounds have conducted studies with migrant farm workers to learn about various topics relating to health and health care access. The majority of studies are quantitative in nature, assessing such issues HIV knowledge, tuberculosis, depression rates, and cervical cancer screening (Coughlin and Wilson, 2002; Magana and Hovey, 2003; Organista, Carillo, and Ayala, 2004; and Poss, 1999). A few studies have been qualitative in nature, such as studies that examined the health needs and services of migrant workers and a needs assessment of their health practices that examined the hardships the workers experienced (Decker and Knight, 1990; Betchel, Shepherd, and Rogers, 1995; Perilla et al, 1998).

Migrant farm workers are defined as individuals who annually migrate from place to place to earn a living in agriculture, in contrast to seasonal farm workers, who live in

one location during the entire year. Migrant farm workers generally live in the southern half of the U.S. during the winter and migrate north before the planting and harvesting seasons (Hovey and Magana, 2002). Similarly, the U.S. Public Health Service Office of Migrant Health officially defines migrant farm workers as "individuals whose principal employment is agriculture on a seasonal basis, who have been employed within the past twenty-four months and who have established for the purposes of such employment, a temporary abode." This definition includes all aspects of agriculture, including, but not limited to, planting seeds and transplanting seedlings, weeding, applying pesticides, picking crops, transporting the crops, and working in factories that prepare the harvest for distribution (Farmworker Health Services, 2003).

Migrant farm workers often travel in one of three principal streams in the U.S. An eastern stream, originating in Florida, bring workers successively north along the eastern seaboard states as the harvest seasons progresses, and ends in New York for the apple harvest. A Midwestern Stream brings workers from south Texas to a wide range of Great Lakes and middle-western states, such as Ohio, Michigan, Wisconsin, and Minnesota. A Western Stream brings workers from south Texas, New Mexico, and Arizona to California's San Joaquin Valley, as well as to Oregon and Washington (Villarejo, 2003).

In addition, migrant farm workers may also be classified according to how individuals travel within each stream. Migrant farm workers can be broken down into follow-the-crop or shuttle migrant workers. If a worker travels from one location to another, following the crop season, they are considered follow-the-crop migrant farm workers (Villarejo, 2003). Approximately one-third of the individuals are follow the crop migrant farm workers who travel from job to job throughout the stream following

the harvest. The other two thirds are shuttle farm workers, who travel from home bases in Mexico, Florida, Texas and California to one or more job sites clustered less than seventy-five miles apart and then travel back to a home base

The health status of migrant farm workers is often impacted by the poor living standards in temporary housing, the risk of injuries from working in agriculture, or due to hazardous work conditions. Migrant farm workers have a life expectancy of forty nine years old, or about twenty six years lower than the national life expectancy of the U.S. population, which is seventy-five (Farmworker Health Services, Inc., 2003). The health of the workers is severely affected by their work. In addition, the risks and hazards associated with migrant farm work makes it difficult for the workers to receive continuing health care.

The purpose of the study is to explore and understand the experiences of migrant farm workers in relation to receiving health care in the U.S. and in Mexico. In particular, the study seeks to examine the types of services they have received and their satisfaction with the same services.

Although current literature exists on the health of migrant farm workers and their access to health services is reviewed in this chapter, there is a gap in what is known. This study reveals more about the feelings and perceptions of the migrant farm workers based on their experience with health care in the U.S. and Mexico, which is different from what is published.

The goal of the study was to generate knowledge and understanding regarding the health experiences of migrant farm workers related to the type of and satisfaction with the health service they received. The knowledge could then be disseminated to health care

providers who may care for the migrant farm workers. This research was conducted at the University of Iowa and received approval from the University of Iowa Institutional Review Board-01. Participants included Mexican migrant farm workers over eighteen years of age who were residing in a small community in Iowa.

This document is formatted in three chapters. This chapter begins with a discussion on the demographics and lifestyle of migrant farm workers. Second, the health status of migrant farm workers is discussed. Third, the barriers that prevent migrant farm workers from access to healthcare are presented as a major problem. Fourth, the health care utilization and satisfaction of services received by migrant farm workers are examined. The chapter concludes with an explanation for using qualitative methodology to explore the utilization and satisfaction of health services of migrant farm workers and the guiding research questions for the study. Chapter 2 follows the format of a publishable manuscript designed for the journal, *The Journal of Immigrant and Minority Health*. This chapter describes the methodology employed for the study and includes the results, discussion, study limitations, and future implications. Chapter 3 provides additional results not discussed in Chapter 2 and includes a further explanation of practical implications associated with the study and suggestions for future research.

Demographics and Lifestyle of Migrant Farm Workers

Information on migrant farm workers is limited. It is only within the past twenty years that research on this population increased. Most studies contain information that cannot be generalized to the entire group and neither can this study be generalized. Government agencies such as the U.S. Census Bureau, the Department of Labor, the Migrant Health Program, the Department of Agriculture, and the United States Public

Health Service, have all attempted to count the migrant farm work population. There are large discrepancies in the numbers because of different counting methods, different criteria for what constitutes a "migrant farm worker," and the difficulty in counting undocumented workers. The Census Bureau has done population counting in April when some migrant farm workers may have returned to their homes in Mexico. The Migrant Health Program, on the other hand, only counts those who use their programs. Some agencies count only individuals who do farm work, while others include those who travel with them, whether or not they perform farm worker duties. Various counts on the migrant farm worker population vary between three to five million (U.S. Department of Labor, 2005; National Center for Farmworker Health, 2009).

The largest study has been conducted by the U.S. Department of Labor, which collects general migrant farm worker data through the National Agricultural Worker Survey (NAWS). The following information is from the latest report of the NAWS (2005).

In general, migrant farm workers are a young population compared to farm operators. The average migrant farm worker is thirty-three years old with one out of twenty who are younger than 18 years old. The majority are male (79%), born in México (75%) and Spanish speaking (85%). Recent studies indicate more workers are coming from rural Mexico, who speak indigenous languages rather than Spanish.

Approximately fifty-eight percent of migrant farm workers are married, with approximately fifty-one percent of those married having an average of two or more children. In comparison to their male counterparts, females are more likely to be accompanied by their family (44% to 94%).

The average education level of foreign-born farm workers is 6th grade while U.S. born farm workers are more likely to have a high school education. Only fifteen percent of foreign-born farm workers completed high school. Most farm workers (73 percent) received their education in Mexico, only 21 percent were educated in the U.S. and the former group's median was low relative to the latter (6th grade versus 11th grade). The NAWS indicated high rates of illiteracy in the foreign born population – with those completely illiterate at twenty percent, functionally illiterate at thirty-eight percent, and marginally literate at twenty-seven percent. English proficiency was also linked by birthplace and ethnicity. Mexican-born and other foreign-born Latino farm workers had low rates of English proficiency, between two to four percent (U.S. Department of Labor, 2005).

The difference between U.S. born and Mexican-born migrant farm workers can also be seen in terms of the English language fluency. Three-fifths of U.S. born, Mexican descent migrant farm workers reported they speak English well. In comparison, about 5% of Mexican born migrant farm workers reported speaking English well.

Over 30% of migrant farm workers have family incomes below poverty levels, with an average income between $10,000-$12,499 a year. Important health benefits – such as health insurance, worker's compensation, and disability compensation are rarely available to farm workers. Approximately 77% of the population does not have health insurance. Of the 23% of workers who do have insurance, employers only provide it to about half of them; the rest are covered by insurance from the government (19%), self pay (15%), or spouse (12%). About one fourth (28%) of workers say they have worker's compensation insurance coverage at their job, whereas more than (56%) said they did not

have this benefit, with 17% indicating they did not know of this insurance (Villarejo, 2003). The above demographics are important because they contribute to the problems and barriers faced by the workers. Although several may be eligible for assistance programs such as Medicaid or WIC, few can receive the benefits. This is because the enrollment and eligibility standards are not designed to accommodate people who must move frequently to find work or whose income fluctuates dramatically.

One important, yet controversial aspect of migrant farm workers is their legal status. The NAWS estimates about 53% of migrant farm workers are undocumented workers, while the rest are a combination of U.S. citizens (25%), permanent residents (21%) and visa holders (1%). However, this information is often disputed, as other studies suggest a lower percentage of undocumented workers (Valerjo, 2003). It makes it impossible to gauge the total number of undocumented workers in the agriculture field, making it difficult to track workers and ensuring they receive proper work conditions.

Another controversial finding about migrant farm workers is that unlike other jobs, agriculture work is exempted from certain laws resulting in the oppression of farm workers in general. The laws include allowing minors as young as twelve years old to work; exempting employers from providing facilities such as housing unless more than eleven are employed, and exempting farm workers from mandatory overtime pay benefits (U.S. Farmworker Fact Sheet, 2007). The laws enable employers to potentially abuse their employees, by not providing basic amenities to live comfortably or providing basic employment protections normally given to U.S. Citizens.

Migrant farm workers are hired mostly by large agricultural businesses during labor-intensive periods of the farm season. They are often recruited by labor contractors

(crew leaders) called "patrones" who hire and supervise the workers in the field. The labor contractor is also the one "responsible" for providing housing, transportation, and other services if not furnished by the agricultural company. Farm workers often work in one location for up to three months until the work is complete and then move on to another work site (Villarejo, 2003).

Agricultural work is considered one of the most dangerous in the U.S, second only to mining industry. The major risks are related to work conditions, use of equipment, and exposure to chemicals. Chemical exposure can not only affect the workers themselves, but their families and children as chemical contamination may be brought home on clothing and exposed body parts. Most workers, on coming home, do not and cannot shower immediately (Betchel, Shephard, and Rogers, 1995).

Within the farm camps, migrant workers tend to have close and tight knit relationships. They also have little contact with the local area except perhaps with the local grocery store or gas station. Many are isolated due to language barriers, lack of transportation, and due to camp locations (Magana and Hovey, 2003).

The Health of Migrant Farm Workers

There are mixed reports on the health of migrant farm workers. First, a worker must be healthy enough to make the trip. Second, to do farm work, a worker must be able to work for long hours at a time, often performing repetitive motions for at least ten hours a day, six days a week. On the other hand, once in the fields, migrant farm workers are then exposed to hazards associated with the work environment (e.g. pesticide exposure) and occupational risks (e.g. injuries from farm equipment use). Certain behaviors also impact their health, such as the reported used of injections for vitamins or

illegal drugs. In addition, the life of migrant farm workers is hard in comparison to the general population. A transitory lifestyle, low income, living in overcrowded and unsanitary conditions, long and physical taxing work hours, language and cultural barriers, low education levels, and discrimination, all play a role in affecting the migrant farm worker health status. This section will describe what is known about some of the common health problems for the population.

Occupational Hazards

Migrant farm workers are considered "special populations" because they suffer from occupational and behavioral health related problems. Two types of injuries can result due to the type of work they do. The first, unintentional injuries, result from tasks related to their jobs. This includes repetitive motions, resulting in pain, sprain, or dislocations and single events, such as cuts and tears; or to a lesser extent, fractures or crushes injuries (Magana and Hovey, 2003; Villarejo, 2003; NCFH, 2009).

Other on-the-job issues include pesticide exposure, heat stroke, frost bite, dehydration, dermatitis, eye injuries, hearing loss, musculoskeletal problems, amputations, crushing injuries and other accidental trauma, as mentioned earlier (NCFH, 2009). Pesticide exposure could be either a one-time large dose exposure or chronic low-level exposures. Large dose exposures may occur during the application of the pesticides or entering the fields before the recommended reentry date. Low-level exposures result from contact with residual matter during the harvesting and the cultivation of crops. Low-level exposures can occur due to the location of workers homes in relation to the fields, but also as the result of worker behavior. In crowded housing conditions, workers may not be able to shower immediately after finishing work. In the process, as they

continue with their daily routines, such as changing clothes and eating meals, they potentially ingest the pesticide unknowingly. Pesticide exposure can lead to skin, eye, respiratory or even systemic conditions of unknown consequences not only to the migrant farm worker, but to their family as well (Frank et al, 2004; NCFH, 2009). Migrant farm workers suffer from the highest rates of toxic chemical injuries of any group of workers in the U.S. (NCFH, 2009). Despite improvements in the Worker Protection Standard, many workers have not received training in pesticide application and are not prepared to protect themselves from potentially hazardous chemicals.

Besides pesticide exposure, there are other causes of skin disorders in migrant farm workers. Dermatitis is often caused by pesticides, chemicals, plants, infections, as well as weather conditions, allergic reactions, infections from scratches and insect bites (NCFH, 2009; Arcury, Vallejos, Feldman, and Quandt, 2006). A 2000 report on farm worker injury indicated about half of occupational illness among farm workers was associated with skin disorders. These disorders are a result of plants scratching and irritating the skin, allergic reactions, and exposure to chemicals. Because workers often do not want to miss work because they will lose pay and could be fired, many with skin disorders do not seek medical care until the problem is severe (Feldman, et al 2009).

Eye injuries are often caused by traumatic events involving plants and tools or due to environmental conditions such as dust particles, crop residues, pesticide chemicals or weather conditions. Also problems with blurry or foggy vision due to lack of corrective lenses are common complaints in the population (Donham and Thelins, 2006; Villarejo, 2003).

Dehydration and/or heat stroke are other common health problems farm workers encounter. These conditions are more prevalent in areas where workers are hired paid for piecework, meaning the amount of pay they receive is directly related to the amount of work done. For example, a worker may get sixty cents for every bucket of tomato picked. Workers are often encouraged to work as fast as they can with as few breaks as possible (NCHF, 2007). When toilet and water facilities are not within walking distance of workers, dehydration and urinary tract infections become problematic as workers, especially women are frequently encouraged to "hold it" (NCFH, 2009).

Mental health issues are also prevalent among this population. This is often due to the complex and multiple factors migrant farm workers face. Farm work is difficult, and also characterized by low pay, and most importantly, social isolation. All these issues contribute to higher rates of drinking among the workers. Those who are married and who have family members present at the camp are less likely to be regular drinkers (Hovey and Magana, 2002).

When faced with isolation from family and other loved ones, a lack of social support and social isolation may result in a higher rate of substance abuse. Mexican culture traditionally places strong values on extended family support (*familismo)*. The NCFH (2009) reported that depression is common among the adults and related to isolation, economic hardship, and the unpredictable weather conditions. Hovey and Magana (2002) further report higher rates of anxiety disorders among migrant farm workers when they experienced isolation and lack of emotional support as they travel away from families. Anxiety is also attributed to low self-esteem for some migrant farm workers and from acculturative stresses.

While not the focus of this paper, a brief mention of the "Latino Paradox" warrants discussion. The paradox is defined as better health outcomes among low-income immigrants in the U.S. due to protective sociocultural factors that weaken as immigrants become acculturated (Abriado-Lanza, et al, 1999). Among the Latino population, protective sociocultural factors mentioned in literature include social support, strong family ties, and group identity (Alderete, et al, 2000). The study further indicates that due to the strengths of these ties, migrant farm workers who travel with family or other loved ones, have fewer mental health disorders than workers who travel solo.

There are four possible hypotheses to explain the Hispanic epidemiological paradox (Franzini et al, 2002). The data reliability hypothesis suggests the paradox stems from poor-quality data; that findings result from misclassification or errors in reported data. The "Salmon Bias" hypothesis maintains migrants return home when they become ill or reach old age. They would most likely die in their country of origin, not in the U.S., so the deaths are unrecorded in the U.S. statistics. There is also the Healthy Migrant hypothesis that suggests only health and vigorous people migrate to other countries. Previous studies indicate migrants from other countries have better health statuses in general than U.S.-born citizens. Last, the Risk Factor hypothesis states the Hispanic mortality rate is greater than the White rate for some causes of death, yet greater than the White rate for others, because of the distribution of health risks and protective factors among Hispanics: in some ways Hispanics have a better health risk profile in some areas, but not so well in others (LaVeist, 2005). Each of these factors may contribute to the differences of lower incidence rates of certain diseases.

Environmental Hazards

As mentioned earlier, three migrant streams exist in the U.S. – a West, Midwest, and Eastern stream. The environment across the streams varies accordingly. The states with a high Latino population (the Pacific and Eastern streams) provide migrant farm workers with more networking opportunities. This results in less language barriers and a higher number of Latino stores, resulting in less isolation from the community. On the other hand, migrant farm workers in the Midwest stream tend to be live in more isolated communities, where Spanish-speaking communities are at a greater distance. Regardless of the streams, it is difficult for farm workers to maintain year round work in agriculture. The streams enable workers to constantly move from one job to another (Villajero, 2003; U.S. Department of Labor, 2005).

Attaining safe and adequate housing remains problematic among the migrant farm worker community. Workers might live in any of the following: homes, apartments, mobile homes, their cars, and in some circumstances, in makeshift, outdoors camp sites (U.S. Department of Labor, 2005). Most workers, however, use housing provided by the employers or contractors. While some workers are provided free housing, others pay for housing through paycheck deductions. Lack of sanitation, inadequate plumbing and electricity, broken kitchen and laundry appliances, and no heating or air conditioning are common issues. Unfortunately, most workers live in overcrowded conditions; which lack adequate necessities such as potable water, toilet facilities, laundry services, and refrigeration (Magana and Hovey, 2003; NCFH, 2009; Villarejo, 2003). Some homes may also be dilapidated, lacking doors, window screens, and holes in the floor. Lack of hygiene is also apparent in camps, often covered with beer bottles, drug paraphernalia,

and trash (Perilla et al, 1998). As a result of these conditions, workers and their families may be exposed to pests (e.g. roaches, insects, rats), posing a health threat to many of them. Many workers live in locations within or adjacent to the same area they work. For this reason, workers are further exposed to the elements and pesticides used on crops (Frank et al., 2004).

Behavioral Hazards

The behavior of migrant farm workers also impacts their health status. Several studies have indicated workers reach for alcohol or other drugs (illegal and legal) as a way to cope with stress, boredom, depression, and anxiety (Hovey and Magana, 2003; NCFH, 2009; Alderete et al, 2000; Betchel et al, 1995). According to one study, this behavior differs across gender lines. Women are more likely than men to perceive drugs and alcohol as the most serious social problems threatening their community (Perilla et al, 1998). The same study determined the drug and alcohol problems brought by the men from their country of origin were exacerbated by the stressors and living conditions of migrant life. In addition, drinking and drug problems are increasingly more prevalent in the younger generations of migrant farm workers (Perilla et al., 1995). Workers may engage in drinking and smoking during their time off, at night, weekends or the end of a particular crop season.

The use of needles for drug use or vitamin injections has also been reported among farm workers. In Mexico, it is a common and legal practice for a person to purchase and use hypodermic needles to medicate himself and his family with vitamins and antibiotics (McVea, 1997). Because of the high price and inconvenience of visiting a physician in the U.S, migrant workers may end up reusing the same needle or sharing

their supplies with others. A study conducted by Lafferty (1991) indicated that 2.9% of 411 migrant workers reported illegal injection use, and 20% reported therapeutic self-injections of vitamins and antibiotics. Of these, 4% reported sharing needles for therapeutic injections. More recently, McVea (1997) found that 12% of the migrant workers surveyed admitted to injecting themselves with antibiotics or vitamins.

Studies indicate that incidence of communicable diseases in this community is higher than the national average. In particular, HIV/AIDS infection in the farm working community is estimated to be higher than the national average (Parrado, Flippen, & McQuiston, 2004). In 2000, the HIV exposure category of men who have sex with men (MSM) accounted for 47 percent of cases among Hispanic males, substantially less than for white males (73 percent). Injection drug use (IDU) was the exposure category in 36 percent of cases; heterosexual contact in 14 percent; and both MSM/IDU only 7 percent (CDC, 2000).

Furthermore, prostitution and unprotected sex are also common among workers. Hirsch et al (2002) found that up to a half of single men and 30% of married men living apart from their wives visited a commercial sex worker. Organista et al (2000) indicated typical migrant town nightlife is festive, filled with single men, bars, and female sex workers who visit migrant laborers on payday. Sex workers are predominantly located in cantinas where Mexican migrants may cash in their paychecks. With regard to the complex ways culture and migrant labor influence behavior, it was found that 13% of the men surveyed reported participating in a male bonding experience known as Hermanos de Leche (Milk Brothers), in which several migrant men have sex in succession with the same sex worker (Organista, 1998). Furthermore, Carrier and Magana (1991) found that

high rates of unprotected sexual activity remained prevalent, and women were hesitant to suggest the use of condoms due to fear that it would insinuate that their male counterpart or they themselves had HIV/AIDS or another transmittable disease.

Most alarmingly, in most Latino communities, the issue of homosexuality is complicated by the cultural factor that some Latino men who have sex with men do not consider themselves homosexual. Research by Organista (1998) reported that Mexican migrants' age, loneliness, and social isolation, and the fact that many are single or travel alone, make them likely to seek sexual activity either among each other or with other men in the area. The stigma associated with homosexuality creates a "sexual silence" in which Latino gay, bisexual, and transgender men carry on a secret sexual life cut-off from the support and familial network. The "sexual silence" prohibits them from negotiating safer sex methods due to cultural difficulties with sexual communication.

In addition to sexually transmitted diseases, migrant workers often undergo drastic dietary changes during the working season. Workers go from eating nutritionally balanced meals to junk food and periods of starvation (Villarejo, 2003). Gastrointestinal problems such as diarrhea, constipation, or long-term problems such as obesity often result.

Oral health problems are prevalent in migrant farm worker populations. Untreated caries, periodontal disease, missing or broken teeth may be found on both children and adults alike (NCFH, 2009; Villarejo, 2003).

There is also chronic health conditions within the population commonly found in the general Latino population. They include overweight/obesity, diabetes, hypertension and high cholesterol. Since many workers have not had a medical evaluation, they are

unaware of such problems and as a result of the physical and mental stress they endure, the problems become exacerbated to the point they become more severe (NCHF, 2007; Thomson and Poss, 2003).

Domestic violence is another concern among this population. According to a study by Gorton and Van Hightower (1999), approximately seventeen percent of 820 women in migrant farm worker families reported victimization – either physical or sexual – abuse by a husband, boyfriend, or companion in the previous year. The strongest predictors of domestic abuse were drug/alcohol use by the respondent's partner, pregnancy, and their documentation status. Undocumented women were more likely to be victims of domestic abuse than documented citizens. The factors that most influenced respondents' fear of their intimate partners were abuse and frequency of abuse (Van Hightower et al, 2000). Women whose partners used drugs or alcohol were approximately eight times more likely to be abused than women with partners who did not use alcohol or drugs. Age, marital status, and the number of children did not significantly affect the likelihood of women being abused.

Barriers to Access to Health Care Services

The most commonly cited barrier to access and possibly utilization of health care services is due to the language barrier. Until recently, Spanish has been the primary language of the migrant farm worker population. This has prevented direct communication between the workers and health care providers (Magana and Hovey, 2003; NCHF, 2005; Villarejo, 2003). While this problem can be overcome with the use of a medical interpreter, or a bilingual family member or friend, in smaller rural communities, an interpreter may not be readily available. With an increase in the number

of individuals who speak an indigenous language other than Spanish, finding someone who can interpret is more difficult. As a result, some workers wait until they return home to approach a service provider who can speak directly with them. By then, the worker may be in worse off health than before.

Cultural beliefs also play a role in inhibiting or delaying care. *Fatalismo* is the belief one's destiny and health is in the hand of God. This means that a person who believes in *fatalismo* believes that their condition is God's will and will not try to get medical attention (Berry, 2002).

Another important value in Mexican culture is respect. *Respecto* dictates appropriate behavior towards others based on age, gender, social position, economic status, and authority. Health service providers are considered deserving of great respect. However, for many Mexicans to follow the doctor's orders especially men, they must feel respected. This may include the doctor using simple formalities, such as addressing the individual by his/her last name. Many Mexican workers must feel *personalismo* and *confianza*. Personalization of actions is shown by expressing concern for the patient's family. Confidence and trust refers is when respect for the patient's culture and interest in their personal life is demonstrated (Berry, 2002). If health care providers do not treat the worker with respect, and convey *personalizmo* and *confianza*, the worker may not feel comfortable seeking their services.

Another way culture may affect a person's health is the belief in the humoral theory. In this theory, mixing hot and cold elements lead to illness. For example, a person who believes this theory will not take a shower immediately after work because it is believed to be unhealthy when the body is hot (Arcury et al, 2006, Feldman et al, 2004).

As a result, chemicals and other residues remain on the body for a longer period of time, resulting in a greater opportunity for the body to absorb the harmful chemicals.

Culture may also affect the type of health services a person seeks. A person may first want to try folk medicine such as herbs or the injection of vitamins to deal with a problem. Others may "borrow" medicine a friend is taking for a specific problem. Some individuals may bring their own "prescription" medication which they were able to buy over-the-counter from a pharmacy in their country of origin. Some workers may seek health care from folk medicine healers, such as *curanderos*, who treat physical and spiritual illnesses or *sobadoras*, who treat muscle and bone pain with massages, ointments and injections (Arcury et al, 2006; Villarejo, 2003; NCFH, 2009).

As mentioned earlier, on average, some percentage of farm workers only complete the seventh grade in school (U.S. Department of Labor, 2005). This indicates many workers may have low reading skills and health literacy levels. Therefore, it may be difficult for workers to understand scientific concepts or ideas regarding disease transmission and prevention. This becomes a barrier when health educators attempt to provide education.

Constant migration may also cause a problem for workers. This prevents many from qualifying for services requiring residency of a year or more or for programs requiring a local address. Constant migration also prevents follow-up with health providers since a stay in one location may be as short as a few weeks. Migration prevents workers from becoming familiar with the communities they live in temporarily and may result in lack of awareness of the services available to them.

Another unfortunate barrier is the lack of transportation. Often, farm workers will travel in groups and may not have access to their own vehicles. In these cases, the workers often rely on *"raiteros,"* the Spanglish word referring to those who give rides. The workers then pay daily or weekly fees to take them to and from work, the store or other places. The lack of transportation often affects all aspects of a worker's life including their nutrition, mental health, health seeking behaviors and recreational activities (Villarejo, 2003).

In addition to the above-mentioned issues, there are systematic barriers in the health care institution providing health services. Barriers to access of health services include fear of immigration penalties and lack of knowledge of eligibility criteria. In some states, a 45-day residency requirement is mandated; again, preventing workers from receiving aid they desperately need (Hansen and Donohoe, 2002). The California Agricultural Worker Health Survey (CAWHS) found that one fifth (or about 18%) of those who sought medical care went to Mexico to obtain these services. When asked why they sought health care in Mexico, most responded the absence of language and cultural barriers were the primary reasons (Villarejo, 2003). Few U.S. providers are fluent in the Latin American form of Spanish, let alone knowledgable about Mexican cultural viewers of health, and must rely upon interpreters in treating migrant worker patients.

In addition, health clinics may be limited in the amount of services they offer or are not equipped to deal with emergency problems, forcing workers to seek health services elsewhere. These programs may also be located in geographic locations far from the workers, making them impossible for workers to reach. Other types of health

programs, such as service organizations (e.g. mobile clinics) may attempt to overcome this barrier by providing mobile services. Additionally, health services are dependent on government funding. In a given year, certain services may be offered, but in the next year, cuts in funding may result in the same service not being offered (Betchel et al, 1995; Perilla et al, 1998; Villarejo, 2003).

Satisfaction and Utilization of Healthcare Services

The available evidence, though limited, indicates that only a small portion of migrant farm workers (between 5-11%) have health insurance provided through their employer. Equally disturbing, is that only another 7-11% have been able to obtain Medicaid or other government-provided health insurance coverage, despite the fact that their poverty status would otherwise qualify them (Villarejo, 2003).

The migrant health care system (MHC) of approximately 400 clinic sites funded by the federal government reaches only 12 to 15 percent of the migrant farm worker population. Although many are eligible for the services, only 15-20 percent actually obtains the benefits.

Multiple studies report most migrant workers wait until they are really sick before seeking medical services (Arcury et al, 2006, Perilla et al, 1998, Villarejo, 2003). The CAWHS found that nearly 31% (one third) of male workers interviewed never had a medical clinic or visited a doctor. About only half (48%) had been to a medical clinic or doctor within the previous two years.

Even utilization of dental and vision services were found to be low. Studies uniformly report poor dental care among migrant farm workers. Less than half of men and about 44% of women interviewed had never been to a dentist even though dental

screenings confirm that two thirds or more of persons had dental conditions such as untreated caries, missing or broken teeth, or periodontal disease (Villarejo, 2003).

The most common form of payment for healthcare services is out of pocket. Lack of health insurance protection results in less likelihood of workers utilizing the U.S. healthcare system. A doctor's bill could become a daunting burden to many. Since workers do not receive employment benefits such as sick leave, leaving work to seek health services is not an option. Workers who seek health services not only lose wages for the day, but they also risk losing their job since the employer or contractor may not approve.

While a data system exists with the Bureau of Primary Health Care that contains patient information for the health care provided by the clinic it funds, the data is generally not available for analysis. The data also is also limited; in that in can only provide information of those who receive care, and not those who are not in the system (Arcury and Quandt, 2007).

Arcury and Quandt (2007) further indicated that there is a substantial need for health services owning the hazards of their occupation and their migrant worker status. While numerous programs address several of the barriers to health services experienced by migrant workers, it appears the programs can improve the accessibility and utilization of health services among farm workers. There has been very limited evaluation of these programs. Only two papers appear in the literature, and these examined aspects of the Migrant Health Program's Camp Health Aide Program.

However, few data exists on the national health services utilization patterns of the farm worker population or on regional variations in these patterns – on the health services

farm workers want, or on their assessments of the health services they do receive. Although current programs are addressing the barriers to health services, there exists no known information that evaluates the efficiency of the programs. This basic data is needed for public health knowledge and policy and program planning.

While this study is not a national study and is not going to evaluate the efficiency of the health service programs mentioned by the Arcury and Quandt (2007), the study serves to address a partial question they posed. Specifically, this study examined some empirical data to document the health services patterns of farm workers, their perceptions of barriers to accessing health care, their perceived health needs, and an evaluation of the quality of the services they receive. Qualitative research methods were utilized to obtain a more, in-depth study about the utilization and satisfaction of health services by migrant farm workers.

Guiding Questions

The objective of the study is to learn from the migrant farm workers' their perspectives concerning their health services utilization in the U.S. and in Mexico as well as their satisfaction with the services received. The following questions were used as a broad guide for the study:

1. What are your health needs as a migrant farm worker?
2. What type of health care have you accessed and utilized in the U.S. and Mexico?
3. How satisfied are you with the services received in the U.S.? How do they compare with the services received in Mexico?
4. What services do you feel would be beneficial to migrant farm workers residing in the U.S.?

Qualitative Methodology

Qualitative research is a theoretical and methodological focus on complex relations between (1) personal and social meanings, (2) individual and cultural practices, and (3) the material environment or context (Ulin, Robin, and Tolley, 2005). It differs from quantitative research that attempts to gather information data by objective methods to provide information about relations, comparisons, and predictions and attempts to remove the investigator from the investigation (Krueger, 1994). Using qualitative approaches in this study allows the study variables in the natural setting. It obtains detailed data through open-ended questions so that word-for-word quotations can be gathered and making the interviewer an integral part of the investigation (Wolcott, 1990).

Employing qualitative research allows researchers to capture the lived-experiences of individuals in their social environments. In-depth interviews are characterized as conversations which ask questions and involve critical and active listening (Denzen & Lincoln, 1998). Interviews are preferred when the content area under investigation is not well defined and the questions required to find answers are long and complex (Windsor, et al, 2004). In asking questions and probing for more clarification in responses, interviews allow for description and explanations of social phenomena.

This study included two one-on-one in-depth interviews and a focus group session. A semi-structured, open-ended interview protocol was used to allow for sufficient probing of participants (Ulin, Robinson, and Tolley, 2005). The in-depth interviews were conducted in order to gain a more detailed understanding of the use and satisfaction with health services from the perspective of Mexican migrant farm workers who used services in the U.S. and Mexico. Little qualitative literature currently exists on

the satisfaction of health services by migrant workers (Perilla, et al, 1998). Therefore qualitative methods, conducting such interviews and a focus group were ideal methodologies for exploring the process.

Open-ended and demographic questions were administered to seven participants who met the inclusion criteria for the study. In-depth interviews enabled the researcher to obtain a greater understanding of the participant's experiences, as this type of interviewing enables a "conversational" partnership between the researcher and the participant (Ulin, Robinson, and Tolley, 2005). A focus group was another approach used by the researcher to obtain data from participants to obtain an in-depth understanding of their access and use of health care in Iowa and Mexico and their satisfaction with services. This mode of research also enabled participants to share their views, experiences, ideas, and opinions in a safe and comfortable environment (Krueger & Casey, 2000).

During in-depth interviews, participants were asked about their demographic background, in an open-ended format, their family background, the experience as a migrant worker, and their experience with access, utilization, and satisfaction with the health services in Iowa and in Mexico. During the focus group portion of the study, participants were asked questions that explore data their perceived health needs, the types of health services they received in either the U.S. or Mexico, and what health services they feel is lacking (Appendix C). The interview protocol and survey were developed after consulting relevant literature by other authors on examining the health of migrant farm workers (Perilla et al, 1998, Betchel et al, 1995).

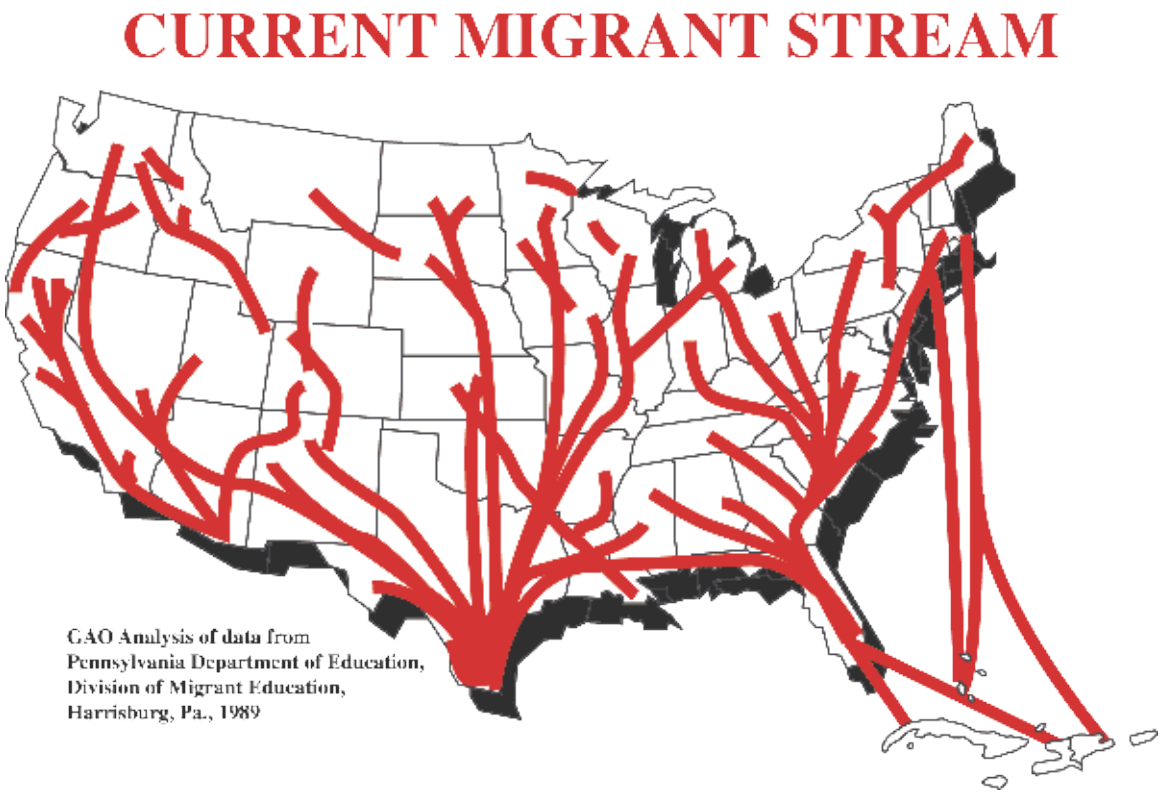

Figure 1.1: Migrant Farm Worker Streams

CHAPTER II

STORIES FROM THE FRONT:

HEALTH CARE ACCESS IN THE U.S. AND MEXICO

IN MEXICAN MIGRANT FARM WORKERS

Introduction

In the United States, there are approximately three million migrant and seasonal farm workers who provide labor and services to the agriculture industry (National Center for Farmworker Health Factsheet, 2009). Seasonal farm workers are workers whose primary income comes from farm work, but when the farming season ends, they complement their income doing other non-farm related work. Migrant farm workers, on the other hand, also rely on farm work as their primary source of income. However, the difference is that migrant farm workers must travel more than seventy miles from their home base to acquire such a job (Villarejo, 2003).

According to the National Center for Farmworker Health, Inc. (NCFH) Factsheet (2009), approximately 75 percent of migrant farm workers working in the U.S. were born in Mexico. Eighty-one percent of the migrant farm workers surveyed spoke Spanish, approximately 18 percent spoke English and the remainder speaking a rural language. The median level of completed education of the workers was sixth grade; the majority (thirty eight percent) had completed fourth to seventh grades. Over 30% of the workers have family incomes below poverty levels, with an average income of $10,000-$12,499 a year. The National Agricultural Workers Survey (NAWS) estimates 53% are undocumented workers, while the rest are U.S. citizens (25%), permanent residents (21%) or visa holders (1%).

Little is known about the health care services migrant farm workers utilize when they are in the U.S. or in Mexico. There is some evidence from the literature that the migrant farm workers are not receiving adequate services in the U.S. or in Mexico, but there are known barriers receiving health care services. The lack of services in the U.S. were due to language barriers (Arcury, 2007; Frank et al 2004; Villerejo, 2003), cultural misunderstandings (Berry, 2002; Perilla et al, 1998; Betchel et al, 1995), the incompatible clinic hours and distance of clinics (Farquhar, 2008), lack of knowledge of the services available (Anthony et al, 2009; Feldman et al, 2009; Farmer and Slesinger, 2008), and funding resources available for health clinics to provide services. However most of the studies were quantitative in nature, with few, if any, that examined the health needs and behaviors of the workers. Quantitative studies, while useful in providing statistical data, lack the information that could be obtained from qualitative studies. Studies on the examination of health services received in Mexico are even harder to find, with most looking at folk medicine usage of the workers, such as the use of a *curandero* (folk medicine healer) or *huesero* (a type of bone doctor).

Background on Iowa's Migrant Farm Workers

Beginning around May of each year, migrant farm workers move north from México into a rural southeast community in Iowa. The workers originally come from the Southern most area of México (e.g. Guerrero, Durango) and travel to Iowa. Most often, a crew chief, or contractor, serves as the middleman between the migrant worker and farmer, recruiting migrant farm workers from various states in México for different employers. Most workers pay upwards to $1,000 to secure employment and for the cost of the paperwork for a work visa. Unlike other groups, where the workers families often

travel to the U.S. with them, the many who come are single or married men, who came alone. As indicated by previous research, the status of these "solos" – single men traveling without families – status is more precarious because family social support is absent (Ward, 2008; Magana and Hovey, 2003).

Depending on the location, the workers may or may not be provided housing in the form of trailers or similar facility. Workers often live in homes, apartments, motels, mobile homes, and vehicles and in extreme circumstances the outdoors (U.S. Department of Labor, 2005). Oftentimes, their employers or contractors provide workers housing. While some workers are provided free housing, others pay for housing through paycheck deductions. In most cases, workers live in overcrowded conditions, lacking adequate necessities such as potable water, toilet facilities, laundry services, and refrigeration (NCFH, 2009; Magana and Hovey, 2003). The workers could live in converted living facilities, mobile housing units, apartments, and possibly others (Witt, 2007).

A brief note about the health program, Proteus, Inc. warrants mentioning. Proteus, Inc. provides basic health care services to Iowa's migrant farm worker population. The participants in the study are asked about their experiences using Proteus, Inc. Proteus Inc. is a government non-profit organization that provides Iowa's underserved populations with varying resources including: education, job training, health care provision, smoking cessation, homeless assistance, and food pantries. The Migrant Health Project (MHP), one of many programs under Proteus, is responsible for providing Iowa's farm worker population with health care services. It is the only program of its nature in Iowa and the only physician assistant-run program in the nation. In order to qualify for services, workers must have worked in field and crop production, with total

earned income below poverty level, and must consent to an initial basic physical exam at the start of a season. The workers do not need to have legal immigration documents to be eligible for services. Once Proteus accepts a worker, the worker has access to all services including a referral voucher program to local providers and pharmacies. The MHP has both federal (Department of Health and Human Services, Bureau of Primary Health Care) and state funding (I-4 Immunization program) resulting in an aggregate amount of over $400,000 dollars a year.

Health Care Services and Utilization Patterns

The current existing literature on migrant farm workers lacks information on the utilization and satisfaction of health services by migrant farm workers and their satisfaction with the health services they receive. Arcury and Quandt (2007) mention there are scant peer-reviewed empirical literature that documents the health services farm workers need, farm worker access to health services, farm worker utilization of health services, or farm worker satisfaction with their access to health services or health service used. While a data system exists within the Bureau of Primary Health Care department that contains patient information for the health care provided by the clinic it funds, these data are not available for analysis. Most importantly, it only includes data from workers who have received health care services. It only tells the story of those who receive care, but not those who are not in the system (Arcury and Quandt, 2007).

The delivery of health services to migrant workers is needed, and has been documented in the literature. The studies indicate most services provided to the workers are inaccessible because of language barriers in communities where staff are not bilingual, the scheduling of clinics that does not coincide with the work hours of migrant

farm work, the location of the clinic is not accessible for workers a limited amount of funding available to fund such clinics (Anthony et al, 2009; Farmer and Slesinger, 2009; Feldman et al, 2009; Arcury and Quandt, 2007).

As mentioned in studies by Arcury and Quandt (2007) and Leclere, Jensen, and Biddlecom (1994), very little data exists on the utilization patterns of the farm worker population. In particular, there is a limited amount of information on the health services farm workers desire and their assessment of the health services they do receive. This lack of information is alarming; as such data are needed for proper program planning in offering health services to such a vulnerable population.

The purpose of this study was to explore the utilization of health services by migrant farm workers and their satisfaction with the services they do receive. In this study, the questions about what types of services the workers have utilized, if they had health insurance coverage either in the U.S. or Mexico, and their satisfaction with health services were asked to gain a more in-depth understanding of these and whether they were satisfactory. This study helps to address part of the question posed by Arcury and Quandt. Rather than using quantitative research methods, qualitative research methods were utilized to obtain more insight about the utilization and satisfaction of health services by migrant farm workers.

Method

Participants

The participants' in the study were Mexican migrant farm workers who come to Iowa during the harvest months of May through September. The workers come to Iowa to harvest wheat, soy, and watermelon as early as May and stay as late as October. All

participants in the study had utilized the health care services available in Iowa and Mexico at least once. Participation in the study was strictly voluntary, and all potential participants were assured their decision to participate or not to participate would not affect their access to services at the Proteus health clinic.

Prior to interviewing the migrant farm workers, the researcher initiated contact with the farmer who owns the property. Unlike other employers, the farmer and his family are unique in that they also have a home in Mexico. The farmer and his family often make yearly visits to their home in Mexico, where they vacation for part of the year. Since the researcher entered private property, the researcher sought permission to access the migrant farm worker camp, where housing is provided in an old schoolhouse. This site was chosen given its location and the relationship the farmer and farm workers had with Proteus.

After receiving permission, the researcher visited the campsite prior to meeting with the migrant workers to take photographs of the schoolhouse. Two weeks later, she returned with two interpreters to speak with the workers and introduced the project. The researcher had trained the interpreters prior about the study procedures and protocols. The researcher and an interpreter trained in the study procedure and protocol provided copies of the consent form. In-depth interviews and a focus group were scheduled. Participants were reminded of the next meeting before the conclusion of each session and with a reminder telephone call.

A total of seven male participants were recruited in the study, of those, six completed the entire process. The inclusion criteria for inclusion in the study: men had to be at least 18 years of age. The participants were initially given a short screening

questionnaire. The questionnaire asked if they were of Mexican descent, were farm workers during their stay in Iowa, and if they had utilized health services both in the U.S. and Mexico.

Human Subjects

Institutional review board approval for the study of human subjects was obtained from the University of Iowa prior to conducting the study.

Data Collection

Semi-structured, in-person interviews on the topic of healthcare utilization and satisfaction were conducted with the migrant farm workers in the schoolhouse lunchroom. During the first visit, all of the migrant farm workers (n=16) present at the schoolhouse received information about the study through a short oral presentation, providing in Spanish with the use of an interpreter. Seven remained interested in the study and completed the informed consent process – workers were read the form in Spanish, and signed the Spanish translated consent form. Once consent was established, a short screening tool was administered (Appendix A). After being screened, participants participated in two semi-structured, open-ended one-on-one interviews and one focus group session. The first one-on-one interview occurred on a Monday or Tuesday evening, followed by the second session, which occurred Wednesday and Thursday. Two one-on-one interviews were held with each participant due to the time constraints (each interview took at least one and a half hour). The focus group was held the following weekend, on a Sunday afternoon with the same workers from the one-on-one interviews, except for one, who was drinking alcohol at the time. The purpose of holding the focus group was to enable the workers to share ideas that they may not have shared

individually. All interview sessions were conducted by the same interviewer and interpreters and audiotaped, translated, and transcribed.

The workers were compensated for their time and participation in the study. They were compensated with small gift bags at the completion of each session. The kits included toiletries (e.g. shaving kit, soap, shampoo), a gift card ($10 phone cards), and oral hygiene products (e.g. toothpaste, dental floss, toothpaste).

Measures

The interview protocol and screening tools were developed after consulting similar qualitative research studies on the health needs of migrant farm workers (Perilla, et al, 1998 and Betchel et al, 1995). The measures were developed in English, and most were asked in Spanish. The one-on-one interview protocol included eight main questions and additional questions in each as probes. The demographic questions in the one-on-one interview protocol included items that pertained to the participant's age, place of birth, marital status, highest education level completed, estimated annual income, health insurance status, and citizenship status in the U.S. During the one-on-one interview sessions, participants were asked about their length of time as a migrant farm worker and experiences, and whether they were satisfied with the health services they utilized in the U.S. and Mexico. During the focus group, after a brief introduction, participants were once again asked about their experience as a migrant worker, however the main focus of the questions focused on their perceived health needs and interest in receiving information on specific health issues.

Each interview took between 60 and 90 minutes and the focus group took 120 minutes to complete. The interviews were audio taped for translation and transcription

purposes. To supplement the audio recording, note taking by the researcher occurred during and following each interview, and from review of the transcription notes.

Instrumentation

Demographic data were collected using a survey format and include ten questions, including participants' age, martial status, health insurance status, educational background, county/state/city born, income status, health insurance status, and their citizenship status (Appendix C). Questions asked included their demographic background (in an open-ended format), participants' family background, the experience as a migrant worker, and their experience with access and utilization of health services in Iowa and Mexico. During the focus group portion of the study, participants were asked questions regarding their perceived health needs, the types of health services they received in either the U.S. or Mexico, and what health services they feel are lacking see (Appendix B). All the questions were translated and back translated by a professional translator (Appendix C).

The instrument was developed in English based on studies conducted by Perilla et al (1998) and Betchel (1995). The instrument was translated in Spanish and back translated into English. The Spanish instrument was pilot tested with a sample size of three individuals, who met the inclusion criteria, but were not a part of the group interviewed. Revisions were made accordingly based on the results of the pilot tests. The final version of the instrument included two one-on-one in-depth interviews, followed by a two-hour focus group guide that was written in both English and Spanish.

Data Analysis

The analysis of the interviews included transcription and translation of the data by a certified translator. The material was transcribed and translated to English and back translated by another translator to determine goodness-of-fit of the original translation. The first translator compared the two documents. There were some slight differences noticed in the back translation, and after a brief discussion with the second translator, there were some modifications made.

To analyze the interview data collected, methods from grounded theory and open coding were utilized (Ulin, Robinson, and Tolley, 2005). The demographic questions were used to categorize the men into respective age groups and by their length of time as a migrant farm worker. The data were then analyzed. To identify differences in the health care utilization and or satisfaction of health services received in both the U.S. and Mexico by the migrant farm workers, content within each subject matter was summarized and evaluated for differences and similarities. Coding, search for themes, and data simplification were done to draw conclusions. This included going through each interview, looking for similar phrases that were then labeled as a specific "theme." To assist in data analysis and summarization, Qualrus™ a qualitative analysis program, was utilized. As a verification step, a second coder reviewed a small sample in the transcribed interviews (Kruger, 1994). The second coder was a graduate student who had done several studies utilizing qualitative methods, and was familiar with the coding process. A brief training session by the researcher involved several short coding assignments before being given the small sample of the transcribed interviews. Several discrepancies were found in the coding, discussed, and agreed upon. Several items were

included into the coding system. Descriptive information of the sample was provided based on the demographic questions and frequencies were analyzed using SPSS, version 17.

Findings

Demographics

The seven participants were Mexican migrant farm workers. All migrant farm workers did field work. When not doing migrant work, all workers resided in Mexico. The workers had all worked at this particular migrant camp for at least four years, with one who had worked in Iowa for approximately five years. Table 2.1 presents the demographic information of the workers.

The age of the workers ranged from 22 to 53 years, with an average age of 39. The majority were at least thirty years of age. All participants were male, married, and with children. The informants had all left their spouses and children in Mexico when traveling to the U.S. for work. The number of children per participant ranged from one to five. All were born in Mexico, from the following respective states: Tamaulipas (1), Durango (2), Tlaxcala (3), and Nayarit (1).

All workers spoke only Spanish – two knew a limited amount of English, but not enough to have a conversation. The average education level of the participants was eighth grade, with one participant indicating he graduated from high school. Table 2.1 summarizes the demographic information of the informants. Pseudonyms are given to each informant for the remainder of the study, to protect their identity.

The Health Needs of Migrant Farm Workers

The first area of interest was on the health needs of the migrant farm workers. However, this topic was quickly discussed, as most workers reported not having a current health problem. There were two main themes identified – the use of vitamins and their self rated health. The discussion on health needs suddenly became narratives of their lives instead, and focused on family hardships, the financial struggle they experience, and a typical work day while in Iowa. It was not until the focus group did the workers discuss more about their interest in health needs.

The Use of Vitamins

The consumption of vitamins played a prominent role with at least three participants indicating they took them on a daily basis. The vitamins were Centrum® and Dr. Smith for grandparents®. When asked why they took vitamins, the participants indicated that vitamins gave them "strength." As Santos states,

> Yes, after taking them I feel better. . .I feel more energy. . .we get more older, we need medication so we can have more energy to work. And the young people take it too so they can have more energy.

Each felt more energized after taking vitamins. One participant indicated that the vitamins were like antacids,

> The vitamins are for the stomach so they can digest the food. I get stomach infections when I am here, and these pills help so my stomach does not hurt (Marcos).

Self-Rated Health

The participants were asked to rate their health from "poor to excellent." Four rated their health as good, with one excellent, and two "so-so." They agreed they had to be relatively healthy to travel to the U.S. for work. Ricardo stated the workers must have a brief physical as a requirement for their paperwork to be signed and approved. However, one participant was a bit more candid in his statement about his health. Julio said,

> I feel so-so – I feel mostly good, but when we work, the body feels tired.

Another question asked the workers if they discussed their health among each other outside of work hours. Marcos responded,

> I don't know…we haven't commented on anything. We don't complain to one another.

This appeared to indicate they did not talk, but Santos' statement appears to counter the earlier response when asked about if the workers are not well,

> Well being able to get checked if they are sick. If they are sick, they tell the boss who takes them to get treated.

Family

Distance and length of time apart from family caused emotional hardship for the workers. The participants also indicated the loneliness, frustration, and isolation they felt being away from their family. Access to one telephone helped lessen the loneliness for the participants, as they are able to purchase telephone cards (usually $10 U.S.), which provided up to two hours of calls to their loved ones. Most participants indicated they call home twice a week to once every seven to fifteen days.

> One has to leave family to and he comes over here. I talk to my family every three days (Julio).

All the participants echoed the sentiment that being away from family was hard, but that the hardships endured were worth the financial gain of working in the U.S. Santos, after being asked how working away from home affected his relationship with his family, mentioned,

> . . .It is different for us because it is a life we have been having. The money helps us out more, we don't find ourselves pressured we don't have to worry about the money being tight and buying small needs.

With these participants, as they have been working like this for the past four years or longer, have adjusted to the loneliness of being away from home.

Marcos states

> Working has not affected my family much…they are sacrifices 'worth' it.

Angel echoes the toll of the hardships associated with the distance of family:

> Sometimes sad and others happy like everyone else. Here, you are not with your family.

Most interesting, one participant mentioned it wasn't being away from his family that was the hardest. It was the traveling:

> It is to give a better life to my son and wife. I earn a bit more over here. It is not the work that is hard…it is the travel to get here (Ricardo).

<u>Financial Hardships</u>

In addition to feelings of isolation, financial concerns continued to be problematic for the participants. Each worker must pay at least $1,000 for the fee associated for the

work visa. For participants with young children, they often had to leave at least $1000 for their family to survive on until the participants receive their first paychecks. A participant mentioned how several men at the camp struggle with having several families to support. Marcos stated,

> To the south of México, there are many people like that – guys that have two to three girlfriends . . . the participants say 'yes, the small house and the big house' and have to send money to both wives.

While the majority of the workers stated the money exchange rate – the U.S. dollar is stronger than the peso, it helps with the money. However, he didn't struggle as hard as the other workers, as he said he had a side business in Mexico:

> Let's say I earn $100 U.S., over there…its 1.100 pesos. It helps us a lot that the money here is better. I am a worker because the Mexico what we earn isn't enough. Bill we have over there and to give my children an education isn't enough. That's why we have to find a way to come to the U.S. The money helps us out more, we don't find ourselves pressured, worry about the money being tight and buying small needs. I leave here and over there we have other things we do. We have maguey, to make *pulque* (a type of liquor). I invest my money (Santos).

Work conditions

Participants were also asked about their current place of employment. Specifically, they described a typical day in the life of the workers. Marcos responded:

> During oat season, we work…between 12 to 14 hours. No Saturday or Sunday resting. Work is work, regardless of the day. This job [referring to the current

> place of employment] is good because of its seasonal work. Everything is fine. They treat us right here.

Ricardo echoed his sentiments about the work conditions at their job,

> I feel good. The bosses pay me good and I like the work.

Several studies indicated that some places require workers to pay for board and or food. Angel describes how a slow day at work may be like:

> On days there are work, it makes you happy. The times go faster. But when there is no work, it passes by slowly – like right now. When there is no work, you walk back and forth, and the days are long. Sometimes we go to the store to distract oneself for awhile. We eat breakfast before 7, sometimes lunch at 2 and dinner…not until at least 8 when we get back here.

Focus Group Session: Health Needs

When asked what the health needs of the workers were, five agreed upon having more health education and health services:

> Someone that would be here for us……when we go out to work there are a lot of pesticides we don't know about so maybe someone that does know about that stuff. (Edgar)

Fernando also added specifically about having a doctor or nurse available:

> Like we are a lot of people that come here and so maybe a person like a doctor or nurse that would be here, like if someone gets sick of something, injured they would be here and they could tend to the person quicker. (Fernando)

Santos responded:

> Just more health services so we can be healthy and so when we are here there won't be a shortage of work.

Another area of interest to the participants was in receiving health education information. When asked about what was the best way to disseminate information to the workers, they disagreed on the type of material that would be "ideal" for the group. One worker, with an 11th grade education, wanted a pamphlet (Angel). Julio and Santos, whose education levels were 8th and 5th grade respectively, requested it be on video or television:

> Like video….gives us a better idea of what to do (Julio)

The participants also mentioned that time was an important factor. Three indicated that the time the workshop was offered was important. Fernando summed it by up stating:

> Depending on the time that they give us…like right now would be a good time, when we don't have time, we can't do it.

Health Education

One particular area that was discussed was the type of education material they were interested in receiving. Individually, the workers expressed interest in varying information such as English classes to basic protection from pesticides. The focus group produced similar findings from the workers, with three (Santos, Fernando and Edgar) indicating that they each wanted English classes, though Santos indicated he may not benefit so much:

> If I could classes, not for me, but the other workers. I might not learn but they maybe could learn English.

When asked what as a group the workers needed in general in the future to have a better life, many expressed interest in being able to receive social security:

> I would say for example when you can't work, someone will help you, with money, like social security (Marcos).

Santos further suggested life insurance to help reduce the burden on family:

> When our youth is gone and when we get older, that would be great help, a chance to get life insurance. Like is one dies the family is left alone and poor, it would help.

Type of Health Care Accessed and Utilized in the U.S. and Mexico

The participants were asked about their utilization of health services both in Mexico and the U.S. Specifically, they were asked about the types of services they utilized, including the type of health practitioner they saw. The responses could be separated into those who had health insurance compared to those who did not have insurance in Mexico. Every participant utilized health services in Mexico, including a few who have visited a *huesero* (bone doctor) or a *curandero* (folk medicine healer), but most only when sick or injured.

Mexico

The first question asked about when they see the doctor. When in Mexico, the majority indicated they only go see someone when they are ill.

Marcos stated,

> I only go when I am ill. I am interested in seeing a curandero or huesero, but haven't because I don't find time or the necessity to go.

Two others reported seeing someone when they were injured or ill.

> I was sick but the vitamins made me better (Marcos).

> I saw one two months ago because I had a cold. An injection was all I received.

Julio also reported seeing a *huesero* after being in a car accident before his last visit to the U.S. He said his chest hurt,

> He put lotion in a glass cup and "took out the injury." A glass was filled with Vapor-Rub, a candle glass, and lit up to "burn the injury." It was done six times. After two days, I was healed.

Satisfaction with Services Received

The participants were then asked about their satisfaction with the services they received in Mexico compared to the U.S. Their responses were overwhelmingly different – with mixed comments about the quality of medical care in Mexico and positive comments about the health services received in the U.S.

Mexico

Those who utilized the services in Mexico gave several positive responses but often associated with those who have or had health insurance or because the services were free and offered in the community. Of the three workers who had health insurance, it was not referred to as health insurance, but rather, social security.

One went to see the doctor because there was a large announcement that people in his community had to get immunized from tetanus.

Angel stated,

> It was free. I was happy with the treatment because one feels protected.

Julio also expressed a positive experience with seeing a doctor for his cold stating that after receiving the injection, he was cured. Marcos mirrored the sentiments of Angel and Julio about seeing a doctor because he said the services received "made him feel good."

When asked about their difference in utilization of health services in the U.S. and when in the U.S., the majority of the participants expressed concern about the lack of health insurance available for them while in the U.S. and for a vast majority, coverage in México. At least two participants mentioned having a form of social security, however only one elected to elaborate about the program he used.

> I use *Progresso*, which is ….a support group. It is where my daughter goes to school. My little girl goes to the school and every two months they go the hospital. The whole family will get checked (Edgar).

The other participant, Fernando, talked more about how a worker would qualify for social security benefits. He stated,

> Whenever we are here, the family doesn't have social security over there. Like all the work, you have to be working for over fifteen days, and if the place has it. But also when you quit, it covers only fifteen days after you quit.

Edgar felt the services he received through his daughter's school was through, however Fernando, who had social security intermittently, lamented,

> Doctors check you. . .but really quick, if you do not have insurance, they do not do a good job.

Once in Mexico, Fernando cut his finger. He described one incident where he went to the emergency room in Mexico and he did not have social security at that time. The doctors refused to look at his wound and told him he was fine. But when he bent his finger slightly, he began to bleed profusely.

> They don't look at you unless you are bleeding or a part of your body is missing. In Mexico, the majority of doctors do not check, even if you are falling to the ground from pain, they won't pay attention to you.

Santos echoes Fernando's sentiments of not having social security,

> Over there they have to pay for everything out of pocket. It is rare that someone has insurance and besides the insurance is not good service. Like the doctors are paid a certain wage so you don't have insurance they patch you up here and there but don't attend to you.

Two workers described how being without insurance affected his health. On not having insurance for medicine, Ricardo stated:

> Not right now, I don't use it……Over there, I don't have insurance. [referencing to his inability to afford foot cream for treating an athlete's foot problem].

Fernando was taking vitamins the previous year, but was unable to this year due to the expenses.

<u>Iowa</u>

All the workers had utilized the health services in Iowa at least once. Several had utilized the program, Proteus, for at least two years. In general, the participants had positive reviews about the services they received.

They had positive feedback about the services received:

I like everything they give. They give good treatment (Julio).

Santos talked about his experience the previous year with Proteus

> No everything is fine. Everything isn't to what we want were thankful that they worry about us. They help us they check us were are thankful and whatever they give we can get there its fine. Doctor comes to check on us. And they checked my pressure and said it's real good and very young. They checked everything and said it was good. My pressure is better than theirs [laughter]. (Santos)

Another area of interest was the positive report they had of their employer, who cared about their well-being. The workers talked about how if anyone was sick, the boss was informed immediately, and were taken to the doctor.

> We tell the boss…and he takes them to the clinic (Julio).

Santos explained it further about the health clinic:

> Proteus comes because of oats in chemicals. The boss and his wife ask the doctor to come and since we work with oats, they put a lot of chemicals in it. We need to be checked to make sure we are fine. Because sometimes we feel itchy and sometimes dizzy. It might be the heat or the chemicals, so we get checked.

Santos also talked about an incident with one worker his first year as an employee with the farm.

> The person that gets sick, they take him right away to get treated and won't get mad. This young man had asthma. He couldn't breathe. Another worker tried to help him but couldn't. The boss came here and the wife came here and they took him. He didn't come back the next year…sometimes they don't come back because they are sick.

All of the participants agreed the services they received through Proteus were substantial and that they were happy with the results. At the same time, they expressed concern about the type of coverage they would receive in another state. Not all states offer a contract. Marcos said it matter of fact,

> When the contract in Iowa ends, many go back to Mexico. Some stay and move onto other states, but that don't have a contract, and don't have health services.

Discussion

The study provides important information about the health needs, concerns, and their satisfaction and utilization of health services. Data collected from the one-on-one interviews and focus group suggest that the health needs of the migrant farm workers are similar to what is found in the literature. Previous studies mentioned the need to provide information on pesticide poisoning and first aid. The participants in the study were interested in receiving information on first aid (Farquhar et al, 2008; Arcury, 2006), pesticide poisoning and prevention (Frank et al, 2009; Farquhar et al, 2008), self-care (Anthony et al, 2009; Bethchel, 1995), and dental care (Villarejo, 2003). These areas were mentioned by several of the workers as important to receive more information on. Information on pesticide poisoning and prevention was noted to be high on the list of importance for the participants.

The Farquhar study (2008) indicated a general lack of basic health and safety. There was no mention of the use of protective equipment (e.g. gloves, masks) when the respondents' were in the fields, however they were aware of the life threatening dangers associated with the chemicals used on oats. The respondents indicated if they were ill, a healthcare practitioner would come see them, as long as their employer was notified.

This last part was surprising; as previous studies have shown workers in conditions where their place of employment is hostile towards taking time off for health services for medical purposes (Ward, 2008).

Consistent with previous research (with the exception of one respondent), the participants expressed dissatisfaction with the health care received in Mexico (Feldman et al, 2009; Villarejo, 2003). For example, the majority of men highlighted the problems associated with not having social security in Mexico - persons seeking treatment will receive poorer treatment over someone who had coverage. Not having social security reduced the likelihood of being seen in a timely matter, and being treated properly. This suggests that it may be necessary to develop programs or advocacy for health services or ensuring the workers are aware of the programs they are eligible for while in Mexico.

In comparison to the mixed reviews of health services in Mexico, all workers reported positive experiences with the health care they received in Iowa. The clinic provided general services to them, and enabled them to see a health care professional and to be treated. Many were able to afford the costs associated with any medicines prescribed, with help from payment vouchers given to them. The clinic is also unique in that it goes directly to the workers, and schedules clinic times in the evenings, to fit with the worker's schedules. Many studies report workers were unable to access health care services due to the clinic hours and location (Villarejo, 2003; Hansen and Donahue, 2002; Perilla et al, 1998). Ensuring clinic hours were outside of work hours and the availability of the clinic are important considerations when providing health services to such a group.

The availability of either bilingual staff and or volunteers is also important considerations in working with migrant farm worker groups. Proteus has both employees and volunteers who speak Spanish. Other studies with migrant farm workers expressed concern about the language barrier and the inability to speak with a healthcare provider. To decrease language barriers, providing services in Spanish through the use of bilingual staff or interpreters are essential (Arcury and Quandt, 2007; NCFH, 2009; Villarejo, 2003). While the participants only spoke Spanish, it is important to acknowledge in other communities, the workers may speak a regional dialect, making it more important for an interpreter speaking the same language be available (Farquhar, 2007).

The participants in the study self-reported health conditions from "so-so" to "very good" which seems similar to the study conducted by Slesinger and Ofstead (as cited by Farmer and Slesinger, 2008). Their study reported that about 37 percent of migrant workers surveyed in 1989 indicated they felt their health was "fair" to "poor" and about only 13 percent who stated their health was "excellent." Only one worker stated his health was "excellent" with the rest reporting health from "good" to "so-so." Those who reported "good" health stated the primary reason was due to their being able to travel and do the work associated with being a farm worker. This suggests that most workers would not travel to the U.S. for work if they were ill, which may be supportive of the healthy migrant effect as discussed in Abriado-Lanza, et al (1999).

As mentioned earlier, the stress associated with being isolated from family was found to be an issue with the migrant workers. The workers mentioned that they have traveled for at least four years to Iowa, and while they missed their family, they understood the necessity of leaving them for the time being. These results are similar to

those reported in the Grzywacz, et al (2006) study. The study determined that the majority of the participants were pushed to the U.S. to fulfill their family responsibility as a provider, but held to Mexico by concerns of leaving behind their spouses, parents, and or children behind. The participants in this study all mentioned the hardships associated with being way from their families; however, they seemed emotionally detached, as they recognized the necessities of doing so. As Grzywacz writes, "the bodies of the Latinos may be in the U.S., but their hearts and minds are in Mexico with their family." Given that it is an already difficult process for migrant workers who have traveled for work for several years, it would be interesting to examine those who are traveling for the first time to see the impact it has on them, and whether it affects the relationship they have with their family and in what capacity.

In addition to family dynamics, one worker had mentioned how others may support more than one household. The implications are important because several workers may deal with having to support more than one family. Currently, there does not seem to be any studies that have examined supporting multiple families in the migrant farm worker population.

Health insurance was another important consideration. In the study, two participants spoke of having "social security" (their terminology for health insurance) in Mexico, however none of the workers mentioned having it in the U.S. The workers are unique in that the health services they receive while in Iowa are due to the services of Proteus. All of the workers reported being able to receive health services within the previous year. No one reported unsatisfactory care from the clinic – in fact, most sounded grateful for the services they did receive. This was different from the workers

who traveled to other states. One worker had mentioned how after he leaves Iowa, he will not have health care available. This is similar in the Hoerester et al (2009) study and others that health care delivery and insurance coverage were both needed. However due to immigration and migratory status, it is not utilized effectively nor often available, making access and utilization of health care services in the U.S. low by most migrant workers. Rather than seek preventive treatment, most workers would rather wait to see a doctor or other health care professional when they are ill or severely injured. This revelation is similar to studies done on migrant farm worker health (Farmer and Slesinger, 2008; Villarejo, 2003) in that most migrant farm workers will not seek preventive services but would rather wait until treatment is needed to address health issues.

Another similarity in the study to others is the type of services the migrant workers reported as being beneficial to their brethren. As mentioned during several one-on-one interviews and in the focus group, one area of interest to the workers was having English classes. Hovey and Magana (2002) recommended that English classes be held on-site at the camps to offset difficulties associated with not knowing English. Other important programs, such as first aid prevention and treatment, treatment for athlete's foot issue, and nutritional reading were also determined to be important areas to cover (Anthony et al, 2009; Villarejo, 2003; Perilla et al, 1998). Not only will addressing these issues help with reducing the stress in the lives of the workers, but it would improve their health outlook, by providing venues and methods for the workers themselves to take the first steps towards self-care.

Limitations

The small sample size may not have resulted in a saturation of responses. Another limiting factor is that it was not a random sample. Rather, the men recruited were those who were readily available to participate. It excluded workers who do not arrive until later in the agricultural season and those who may have been already asleep. As indicated in previous studies, the results may reflect a "health worker effect." Since working migrant farm workers were recruited, it excluded those who may be unemployed due to injury, illness, or disability (Hoerster, et al, 2009).

Bias may also have been introduced during the study due to the methodology employed. Several questions may seem a bit personal to the respondents. Given the interviews occurred in the lunch room, the interview location provided no privacy. The others could have overheard the workers as they walked back and forth to their room and the restroom. Bias may also have been introduced given the reliance on the use of interpreters during the interview process and or analysis.

Finally, only seven out of the sixteen workers present at the campsite agreed to participate in the study. The individuals who participated may have different health care utilization patterns than those who did not participate in the study. It is also possible that those who did not participate may not have utilized any health care services, and could possibly have different health needs.

New Contributions to the Literature/Conclusion

Without a doubt, migrant farm workers continue to be an exploited group and are at risk for numerous health issues. The availability to healthcare to the workers in Mexico is sparse and limited, and without social security coverage, many receive

suboptimal care, if at all. While Proteus is one program in the U.S. that provides health care services to migrant workers, the type of services is also limited – based on the number of patients and the amount of time available to be seen. To improve healthcare access to the workers, additional clinics should be scheduled to ensure that all workers are seen, if they choose to be. Healthcare should continue to be brought to the farm workers.

Workers also expressed interest in receiving healthcare material. Given the varied education levels of the workers, written materials may not be the most suitable approach to effectively target the workers. Materials should include a live or video demonstration to ensure understanding of the material, and in the preferred language. Written material may be provided, but it does not ensure the information will be understood or heeded. Pre and post-surveys may not be most suitable either, as demonstrated in studies done on HIV/AIDS knowledge with workers.

Finally, but most importantly, workers, advocates, service organizations, and others should work together to develop affordable healthcare coverage for the workers. Most workers reported being seen at the clinic, and only going to the emergency room if their life was in immediate danger. However, workers who traveled to other states after Iowa reported not having any coverage, and therefore, did not see a healthcare professional, even when they needed to. Perhaps education and awareness of services they qualify for are needed to ensure the workers are aware of programs they may participate in during their time of employment as a migrant farm worker. Hoerster (2009) suggested an affordable health insurance not affected by immigration status,

seasonal income, employment fluctuations, or travel across states would be an important aspect for workers.

Responding to the needs of the migrant farm workers – not only the participants but all in general – requires the commitment, time, and energy to ensure that equality and access to proper health care is available to them, without restrictions or cost.

Table 2.1 Demographic information.

Informant	**Age**	**State Residing**	**Grew up Migrant Worker family**	**Marital Status**	**Children**	**Education**
Marcos	39	Tamaulipas	Y	M	2	6
Ricardo*	25	Durango	N	M	1	6
Julio	22	Tlaxcala	N	M	2	5
Santos	53	Tlaxcala	N	M	5	8
Angel	49	Nayarit	Y	M	3	11
Fernando	31	Durango	Y	M	2	H.S. Diploma
Edgar	34	Tlaxcala	N	M	4	9

*Did not participate in focus group session

Table 2.2: Summary of Themes Identified by the Participants

Health Needs of Migrant Farm Workers
The use of vitamins
Self-rated health
Family
Financial Issues
Utilization and Satisfaction of Health Services
México
Lack of health insurance coverage
The “haves” and “have nots”
Utilization of folk medicine and practitioners

CHAPTER III

CONCLUSION: ADDITIONAL FINDINGS, DISCUSSION, PUBLIC HEALTH IMPLICATIONS, AND FUTURE RESEARCH

Introduction

This chapter presents additional results from this research project, public health implications, suggestions for future research, and final thoughts about the findings. First, the chapter presents additional findings uncovered during the process of analysis. Specifically, the workers discussed their career choices - their career aspirations and their hopes for their family. Further discussion and an explanation of key findings are provided. Second, public health implications in how to increase health services and providing programming are discribed. Finally, ideas and directions for future research are proposed.

Additional Findings and Discussion

In addition to the findings concerning migrant farm workers' health needs and utilization of and satisfaction with health services, three other important themes beyond the scope of the data previously presented emerged during the process of analysis. The migrant farm workers talked about their decision to pursue migrant work – specifically, what their original career choice was and how they felt about it. Furthermore, the workers talked about their legal status. The additional findings are described, in relation to the curent literature.

Career Choices

With the exception of one worker, the workers expressed their desire for a different career. The desired career choices of the workers included chemist, architect,

computer expert, and engineer. Santos was the one worker who digressed from the others. He stated that farm work is what he had known and had come to love. He described farm work in this matter:

I would be doing the same thing, because that's all I know and I love.

The workers were also asked about the future for their children. All agreed they wanted their children to pursue a different career and to have a better life than the life they had. What is most interesting is that the men did not just want their male children to have a better career, but their female children as well.

> I would like my daughters to get nursing careers (Julio).
>
> Same thing, a career. Right now I have a daughter that loves sports. Like right now she goes to school, she's in a hockey team and she travels a lot to the tournaments and they are going to give her a scholarship, so whatever she wants (Edgar).

It is possible that these workers felt they failed to reach their goals because they were farm workers; however this was not explored in the study. In a study of depression, Hovey and Magana (2000) discussed how those who are more educated may set life and career goals other than migrant farm work, and then feel that they failed to reach their goals. Similarly, the workers may also be more aware of the disparity between their specific situations and those of others:

[in relation to a career] . . .with the economic state we are in right now, there is a shortage of work, and a career (Santos).

Santos was describing the shortage of employment opportunities. If the economy were better in Mexico, it is possible that the lives of these workers would have been different.

The Issue of Legality

Another issue that arose in the interviews and focus group was the issue of legality. As Villarejo (2003) reports, the NAWS estimated that at least half (approximately 52 percent) of farm workers are undocumented workers. The participants in this study reported that they were here legally, with work visas. However, one interesting note was the use of the term "migrant." As described earlier, migrant farm workers are defined as individuals who annually migrate from place to place to earn a living in agriculture, in contrast to seasonal farm workers, who live in one location during the entire year (Hovey and Magana, 2002).

During the study, the term "migrant farm worker" was utilized when inquiring about their specific work and living situation. The workers insisted that they were not "migrants," because they were here legally.

Julio said unhappily when asked about how he felt about being a migrant farm worker,

> Well not migrant . . .we are legal.

Santos further goes into detail about being legal in the U.S.:

> The way we came isn't difficult. Because we come with documents, we have our passports and not afraid the *la migra* will come and detain us. We come differently so it's not a hard experience at all.

This indicates the term "migrant" has negative connotations among the workers. Due to limitations of the study, the meaning and the use of the term were not explored further. However, it appears that the reaction to the term "migrant" has implications for work with migrant farm workers in the future – in particular. In particular, perhaps it

would be advisable to ask the workers themselves, what is the proper terminology to use when addressing the population.

Summary of Findings and Discussion of Data Analysis

The results of the study provide insight into the lives of the migrant farm worker and their use of and satisfaction with the health services in Iowa and in Mexico. As previously discussed, the findings indicate the workers are satisfied with the services they receive through Proteus while in Iowa, but also have concerns about traveling to other states where services may not be offered. In addition, the workers expressed concern with the services they receive in Mexico. In particular, they reported that the treatment they receive in Mexico when injured or ill are not as thorough and that they may not have any form of medical insurance in Mexico to cover the costs of medical services. To the researcher's knowledge, there are no English-language studies on the health system of Mexico nor on the satisfaction with the health services sought in the Mexico public health system. Any studies would most likely be in Spanish and hard to locate in the U.S. This study makes a contribution by identifying the above mentioned concerns by the migrant farm workers and that further research should be done on the topic.

Most interestingly, the workers were satisfied with the health services they received, but wished to have more health services readily available to them. The health services offered through Proteus, Inc are limited – offering a brief physical and limited number of vouchers for the pharmacy, with a focus on health care information.

The Proteus clinic is only scheduled twice each summer, for no more than three hours each session. The workers reported that clinic dates and times were fine, and that the wait time was reasonable, considering that during the season they have approximately

300 people at the farm. The workers were asked whether it is possible for everyone who wants services to be seen, and the response was if someone wants to be seen, they will be seen eventually. Their attitude was a bit unnerving – which could suggest the idea of fatalism among the workers – or the thought that their expectation about how long to wait is acceptable.

Public Health Implications

The findings of the study have several public health implications. These include incorporating more health education material and developing improved health services aimed at increasing workers' knowledge so they can improve their health and prevent illness. Specific topics of interest mentioned by the workers include pesticide exposure and poisoning, proper first aid techniques, preventing sunburns, proper dental hygiene, and care of athlete's foot problems.

Being able to bring in services to the workers has been shown to be conducive to the health needs. One suggestion by the workers is bringing in persons who can talk about their rights as a worker. This study uncovered that workers are interested in receiving information about services available to them, however, the time and availability of the workers make such programming difficult to organize. But as one worker stated, "It may be difficult, but not hard to do" (Ricardo).

Another implication in this study is the importance of health education for the workers. Poss and Pierce (2003) reported that how the health education needs of migrant farm workers are unknown. The workers indicated high interest in public health messages on television (all the workers reported watching television after a long day in the field), in person, and in pamphlets. This study highlights the importance of being

educational backgrounds of the workers. Two participants had at least a high school education, and the remainder had lower educational levels. The education background for most of the workers in this study was slightly higher than that found in the NAWS study (2009). Public health messages will need to be tailored to the literacy level of workers. A television public service announcement or an in-person presentation would be more suitable for a worker whose highest level of education is fifth grade, rather than a brochure. On the other hand, a worker who had graduated from high school may benefit from handouts, a brochure, and detailed explanations about a specific health condition in Spanish.

Several studies also mention the use of a *promotores de salud* ("health promoters") in working with migrant farm worker populations. *Promotores de salud* are defined as persons who comes from the community they work, active in the community and health care setting. Although they are not professionals, they are well trained and perform health promotion and education, and deliver services within a limited scope (Luque et al, 2007). In essence, a health promoter is the link to for the community to the outside resources. They help to establish trust among members of the community and facilitates outsiders gaining entry. Establishing a health promoter (or several) onsite, who can provide proper training and educational materials, is another method of providing health education to the workers. Ideally, the person selected to be health promoters will be individuals who return year after year to the work site, and who are comfortable speaking in either small or large groups. It is recommended the person be paid for their work as a promotore, as a method to offer incentives to participate.

Programmatic Implications

One major area of concern is the participation of migrant workers in research studies. Very little qualitative research exists that interviews workers. This study suggests one method to improve participation by farm workers in the research. The lack of trust by several of the workers revealed the importance of building rapport and trust. It is important to acknowledge that this issue may be linked to more culture-based value for *confianza*, or trust, among Latinos (Berry, 2002). In order to develop the trust necessary to conduct qualitative studies on migrant farm workers, it may be necessary develop a friendship with someone within the group, or work with personnel who have a background with farm workers. The interpreter and translator who worked with this study had come from farm worker backgrounds. Their parents and they themselves, work or once worked as a farm worker, and understood first hand the difficulties of such an occupation. Even though there were difficulties in obtaining trust with the workers, there may have been less participation if the interpreter and translator did not have a farm worker background.

Another major issue is the use of terminology among the workers. The term "migrant farm worker" was not accepted by the workers, because of the meaning they associated with this term. Avoiding this term might encourage participation and perhaps even lessen the hostility of the workers who may or may not come from undocumented backgrounds.

Finally, the translator and interpreter were heavily relied upon in the study and no doubt contributed to the number of workers who did participate. Being able to speak the language, or even knowing enough to engage in a short conversation is essential for

working with the community and developing trust of the workers. In addition, it would be interesting to determine whether the results would be different if the entire research team was the same gender as the participants.

Implications for Future Research

One major concern with the study is the lack of participation from the workers. There were approximately sixteen workers at the campsite, but only seven decided to participate. Time was taken near the end of the study to ask the workers the reasons for low participation. They reported reasons that were somewhat surprising – ranging from fear that the researchers might be undercover put their families in Mexico at first.

The major factor causing low participation that was reported was the suspicion that the research might put them or their families at risk. Fernando stated, "….we didn't really for sure know what you would do with the information. More people wanted to, they weren't sure so they didn't put themselves at risk." In addition to this revelation, Marcos stated all the workers at the campsite had legal documentation, and that the concern was for their families, a sentiment echoed by Angel.

> Like in Mexico, when you give your telephone a lot of things happen. (Marcos)
>
> Like with family. They ["they" refer to strangers, who sometimes call family members in Mexico or in the U.S.] call saying bad things. Like all the info they have they call and they say I have so and so at this facility and he needs money to get out. (Angel).

The researcher also asked about how she could have encouraged more participation by workers. Fernando responded, "I felt better when you showed me your

identification so if you guys carry a card saying you know I am a student from here. It would be better." Showing identification earlier in the study might have helped recruit more participants for the study. When asked if there was more that could have been done, Angel reaffirmed, "Yes, you guys' just need to show the identification for school."

A brief mention of identity theft was also mentioned. The researchers did not ask for their paperwork for proof of identification, but one worker mentioned an example of a fear not based on what was asked. Angel stated, "If someone gets those passports, someone could put another picture and work with them. A lot of people do that." This indicates there is knowledge that there is a trade in identity documents. The workers all seemed aware of this, and this also played a role in why there was such a low response of workers interested in the study.

Incentives

During the study, incentives were also provided to the workers to thank them for their interest and participation. The incentives included a total of three gifts for their participation. This included (1) Two $10 telephone gift cards to Mexico, (2) a dental hygiene kit (consisting of travel sized tooth paste, toothbrush, dental floss and breath freshener), and (3) a shaving hygiene kit (consisting of bath soap, small set of shavers, travel sized shaving cream and after shave). The workers were asked what their thoughts of the incentives were and if they were acceptable. Fernando and Marcos in particular were outspoken about the incentives:

> Well when someone comes and gives us a gift, we don't say no right. It would be good, but you can't say I want this give me more (Fernando).

> Beggars can't be choosy, you can't say take me here, take me there (Marcos).

These comments indicate the workers may have liked something else. However, there were no suggestions on what that would have been.

Previous studies on migrant farm workers offered incentives at times (Hovey and Magana, 2002; Perilla et al, 1998), but did not offer as many incentives as this study. The studies also did not report how the participants felt about the incentives. Telephone gift cards to their home country may be particularly helpful, since the workers did talk about calling home at least once a week.

Information from this study could be used to identify necessary future areas of research. One main focus would be on further exploration on the satisfaction and utilization of the health services the migrant farm workers received. In particular, several of the workers mentioned two workers who had to seek emergency medical treatment. It would be interesting to be able to establish contact with individuals who had used the emergency room and to learn about their experience with the health care system. The emergency room department and services would be vastly different from what is offered at a traditional clinic.

Another area of research would be to obtain a greater understanding of the life story of migrant farm workers. One particular method would include asking workers to present their lives when they return to their respective homes. This may include the use of digital photo story telling – providing participants with a camera to present their lifestyle in Mexico. Perilla et al (1998) study was the first of its kind in Georgia to examine the life stories of the migrant farm workers. This study attempted to obtain a

small portrait into the lives of the workers by focusing on the health and social needs in their environment. An in-depth ethnographic study by Holmes (2006) further demonstrates the need to learn about the migrant farm worker experience. Not only collecting life stories help establish rapport, but it might also encourage support and participation by more workers. In the process, the workers would be able to share their stories and life experiences, further empowering them.

Conclusion

The findings from the interviews and focus group were similar to results found in research on other migrant communities in the United States. The need for health care coverage, social services, and programs are echoed in previous research (Farmer and Slesinger, 2008; Arcury and Quandt, 2007; Donham and Thelins, 2006; Villarejo, 2003; etc). Health care coverage is severely lacking for many workers – with many who do not seek care until illness or injury is severe. The Proteus clinic services were adequate to meet the needs of the workers, however the clinics were not scheduled often and workers had a long wait time to receive services. The proper step would be to develop policies and programming that would provide workers with basic coverage during their stay in the U.S. Ensuring workers are aware of their rights, without fear of retribution by their employer, should also be considered. Migrant farm workers deserve better treatment – without their relentless, hard work, the fresh fruit we need would not be found on our tables.

APPENDIX A

SCREENING INSTRUMENT

1. Are you of Mexican descent?
2. Are you a farm worker?
3. Have you utilized healthcare services in both the U.S. and Mexico?

APPENDIX B

INTERVIEW PROTOCOLS (ENGLISH)

One-on-One Interview Questions

Session 1: Introduction & Experiences

1. Demographic questions
    a. What is your name?
    b. How old are you?
    c. Where were you born?
    d. What state are you from (in Mexico)?
    e. What is your birth date?
    f. Marital status (single, married, divorced, widow)? Children?
    g. What is the highest education level you attained? Spouse's highest education? Children's highest education?
    h. Income status (self reported)
    i. Insurance status (self reported)
    j. Citizenship status (ensure will not be deported or anything)

2. Family background questions
    a. How many brother/sisters do you have? What do they do?
    b. Tell me about your parents – where do they live. What do they do.
    c. Tell me about your spouse/significant other. What does (s)he do?
    d. Tell me about your children. How old are they? What are they doing?

3. Migrant worker experiences
    I. In the U.S.
        a. How long have you been a migrant worker?
        b. How long do you travel in a given year?
        c. Where have you traveled?
        e. What do you think about being a migrant worker? Why did you become a migrant worker?
        f. What type of work have you done?
        g. What do you think about the work you have done?
        h. Do you think it is hard to be a migrant worker? If so, tell me about your experiences. What have you found most challenging?
        i. How have you found your migrant worker companions?

    2. In Home Country
        a. What is your occupation (at home)?
        b. Other follow up questions about their family

Session 2: HEALTH CARE

Explanation: Last time we talked about you, your family background, and your experiences as a migrant worker.

Today, we are going to talk a little bit about your experience in health and health care services.

a. Have you ever seen someone about your health? If yes, the following questions will apply:

b. At _____ (home state/city), do you receive care?
   i. What type of care have you received?
   ii. What sort of personnel do you see? (i.e. Curandero – faith based healers, physicians).
   iii. What types of services do you normally go to one for?
   iv. Do you utilize any other types of services?
   v. What do you think of these services? Would you use them again?
   vi. Are you currently being treated for anything you want to share?
   vii. Do you take any medications? What do you take? (be specific here – herbal medicine, folk medicine, prescribed medicine, unknown medicine).
   viii. Do you take vitamins? What types of vitamins do you take? (needle-based, etc)
   ix. Overall, how would you rate your health?
   x. What types of services do you wish you could use?
   xi. How comfortable do you feel talking to your care provider about your health?

c. If you do not receive care or have never been to see someone for your health:
   i. What prevents you from seeing someone for your health?
   ii. Do you have any health concerns right now? If so, please tell me about them.
   iii. If given the opportunity, would you see someone about your health?

d. Now I would like to hear specifically about your experience as a migrant worker while traveling in the U.S. for work.
   i. Since this year, have you seen a health professional/attended health clinic that has been held in the migrant camps?

   If YES:
   ii. What did you get seen for? (I.e. screening, physical; nothing invasive!)

e. Thoughts of health services received
    i. What do you think of the health care services you have received?
    ii. What do you think of the health care professionals (i.e. physician, nurse, health educator, etc.)?
    iii. If you could change anything about the experience, what would you like to change?
    iv. What do you think of your health right now?

    IF NO:
    i. Why weren't you seen/why did you decide not the participate in the clinic?
    ii. What would convince you to attend a future clinic?
    iii. What would you like to happen at the clinic?

    v. In your opinion, what are the health concerns of your peers?
    vi. What are your concerns?
    vii. How often do you think about your health now?
    viii. When you return home, what if anything, will you do about your health? Please give an example.
    ix. How about your significant other? Your children? Other family?
    x. If I were to give you a questionnaire/survey with questions about your health before and after you attend a clinic, would you be willing to fill it out?
    xi. What types of questions would you like to be asked?
    xii. Do you have any questions for me?
    xiii. Summarize?/Thank/final goodbyes and gifts.

Focus Group questions

1. Introductions (small ice breaker activity to get acquainted/comfortable)
2. Experiences as a migrant worker
    a. What do you think about being a migrant worker?
    b. What are some experiences you have had as a migrant worker (positive, negative)?
        a. Not necessarily health wise, but anything in general about experiences.
    c. Tell me about your life as a migrant worker –
        a. How hard is it to travel? (Travel arrangements)
        b. How about your family? Is it hard for them?
    d. How long do you think you will be a migrant worker?

Health Needs

1. What do you perceive as your health needs?
2. What types of health care do you currently use?

3. Do you use any alternative medically related stuff?
    a. herbs
    b. vitamins
    c. injections…..
    d. whatever you find
3. What types of health services do you wish you could receive?
4. What do you think are the major health problems in your community?

Living conditions

1. Tell me about your living conditions (here, home, traveling)
2. What do you think about your living conditions?
3. What would you change if you had a choice?
4. What type of food do you normally eat? How is the diet different from when you are at home?

Social Issues

1. What concerns you most about being a migrant worker?
2. What do you think is needed to improve your overall standing in the community?
3. What services, besides health care, do you think/feel you need?
4. What services do you WANT?
5. How would you recommend going about looking for these services?
6. What types of services would you be willing to accept?

APPENDIX C

INTERVIEW PROTOCOLS (SPANISH)

Preguntas para la Entrevista Individual

1ra Sesión: INTRODUCCIÓN & EXPERIENCIAS

3. Preguntas Demográficas
    a. ¿Cuál es su nombre?
    b. ¿Cuántos años tiene?
    c. ¿Dónde nació?
    d. ¿De qué estado es originalmente (si de México)?
    e. ¿Cuál es su fecha de nacimiento?
    f. ¿Estado civil (soltero/a, casado/a, divorciado/a, viudo/a)? ¿Tiene hijos/as?
    g. ¿Cuál es el nivel más alto de educación que alcanzó usted? ¿Nivel alcanzado por su esposo/a? ¿Nivel alcanzado por sus hijos/as?
    h. Ingreso anual (reportados por sí mismo/a)
    i. Tipo de seguro (reportados por si mismo/a)
    j. Estado legal (asegurarle que no será deportado/a y que es confidencial)

4. Preguntas sobre el historial familiar
    a. ¿Cuántos hermanos/as tiene? ¿En qué trabajan?
    b. Cuénteme sobre sus padres --- ¿Dónde viven? ¿En qué trabajan?
    c. Cuénteme sobre su esposo/a/pareja. ¿En qué trabaja?
    d. Cuénteme sobre sus hijos/as. ¿Cuántos años tienen? ¿Qué es lo que hacen?

3. Experiencias como trabajador migrante
    I. En los Estados Unidos
        a. ¿Cuánto tiempo ha sido un trabajador migrante?
        b. ¿Cuánto viaja por año?
        c. ¿A qué lugares ha viajado?
        e. ¿Qué es lo que piensa sobre ser un trabajador migrante? ¿Por qué se convirtió un trabajador migrante?
        f. ¿Qué tipo de trabajos ha hecho?
        g. ¿Qué piensa sobre el trabajo que ha hecho?
        h. ¿Cree usted que es difícil ser un trabajador migrante? Si sí, cuénteme sobre sus experiencias. ¿Qué es lo que se le ha hecho más difícil?
        i. ¿Cómo ha encontrado a sus compañeros que también son trabajadores migrantes?

    2. País de Origen
        a. ¿En qué trabaja en su país de origen (en su pueblo)?
        b. Otras preguntas sobre su familia

2da Sesión: CUIDADO DE SALUD

Explicación: La última vez habíamos platicado sobre usted, sus antecedentes familiares, y sobre sus experiencias como un trabajador migrante.

Hoy, vamos a hablar un poco sobre su experiencia de salud y servicios de cuidado de salud.

a. ¿Ha visto a alguien para su salud? Si sí, conteste las siguientes preguntas:

b. ¿Recibe cuidado de salud en su país de origen _____ (estado/ciudad)?
   i. ¿Qué tipo de cuidado de salud ha recibido?
   ii. ¿Qué tipo de proveedores de salud ve? (p.ej. Curandero – sanadores basados en la fe, médicos).
   iii. ¿Qué tipos de servicios normalmente busca?
   iv. ¿Utiliza algún otro tipo de servicio?
   v. ¿Qué piensa de estos servicios? ¿Los usaría otra vez?
   vi. ¿Está presentemente recibiendo tratamiento para algo que le gustaría compartir con nosotros?
   vii. ¿Está tomando medicamentos? ¿Qué está tomando? (sea especifico aquí – medicinas herbales, tradicionales, recetadas o que desconoce).
   viii. ¿Toma vitaminas? ¿Qué tipos de vitaminas toma? (inyecciones, etc.)
   ix. ¿En general como diría que está su salud?
   x. ¿Qué tipos de servicio le gustaría poder usar?
   xi. ¿Qué tan cómodo se siente hablar con un proveedor de salud sobre su salud?

c. Si no recibe cuidado de salud o nunca ha visto a alguien sobre su salud:
   i. ¿Qué le previene el ver a alguien sobre su salud?
   ii. ¿Tiene cualquier preocupación sobre su salud en este momento? ¿Me podría decir cuáles son?
   iii. ¿Si le dieran la oportunidad de ver a alguien para su salud lo haría?

d. Ahora me gustaría oír sobre su experiencia como trabajador migrante mientras viaja en los Estados Unidos por motivos del trabajo.
   i. ¿Ha podido ver a un médico o atendido una clínica de salud que haya sido ubicada en el campamento migrante?

   Si SÍ:

ii. ¿Para qué lo vieron? (p.ej. visita de selección, físico; ¡nada invasivo!)

e. Sus pensamientos sobre los servicios de salud recibidos
   i. ¿Qué piensa sobre los servicios de salud que recibió?
   ii. ¿Qué piensa de los profesionales de cuidado de salud (p.ej. medico, enfermera, educador de salud, etc.)?
   iii. ¿Si pudiera cambiar algo sobre su experiencia, que le gustaría cambiar?
   iv. ¿Cómo piensa qué está su salud ahora?

Si NO:
i. ¿Por qué no fue visto o decidió no participar en la clínica?
ii. ¿Qué le convencería atender a una clínica en el futuro?
iii. ¿Qué le gustaría que pasara en la clínica?

v. ¿En su opinión, cuales son las preocupaciones de salud de sus compañeros?
vi. ¿Cuáles son sus preocupaciones de salud?
vii. ¿Cada cuando piensa sobre su salud?
viii. ¿Qué es lo que va hacer sobre su salud, si es que piensa hacer algo al respecto, cuando regrese a su país de origen? Favor de dar un ejemplo.
ix. ¿Qué tal su pareja? ¿Sus hijo/as? ¿Sus demás familiares?
x. ¿Si yo le entregara un cuestionario con preguntas sobre su salud antes y después de ir a una clínica, estaría dispuesto/a a llenarlo?
xi. ¿Qué tipo de preguntas le gustaría que se le hiciera?
xii. ¿Tiene alguna pregunta para mí?
xiii. ¿Resumen?/Gracias/Despedida y regalos.

Preguntas para el Grupo de Enfoque

3. Introducciones (actividad para conocer/hacer sentir cómodos)
4. Experiencias como trabajador migrante
   a. ¿Qué piensa usted sobre ser un trabajador migrante?
   b. ¿Cuáles son unas experiencias que ha tenido como trabajador migrante? (positivas, negativas)
      a. No necesariamente relacionadas a su salud, pero en general sobre otras experiencias.
   c. Cuénteme sobre su vida como trabajador migrante –
      a. ¿Qué tan difícil es viajar? (Arreglos de viaje)
      b. ¿Qué tal su familia? ¿Es difícil para ellos?
   d. ¿Por cuánto tiempo cree usted que trabajará como trabajador migrante?

Necesidades de Salud

1. ¿Cuál piensa usted que son sus necesidades de salud?

2. ¿Qué tipo de cuidado de salud usa en el presente?
3. ¿Usa algún tipo de medicina alterna?
    a. hierbas
    b. vitaminas
    c. inyecciones…
    d. lo que encuentre
3. ¿Qué tipos de cuidado de salud le gustaría poder recibir?
4. ¿Qué piensa usted que son los mayores problemas de salud en su comunidad?

Condiciones de vida

1. Dígame sobre sus condiciones de vida (presentes, país de origen, lugares donde viaja)
2. ¿Qué piensa sobre sus condiciones de vida?
3. ¿Qué cambiaria si tuviera la opción?
4. ¿Qué tipos de comida come normalmente? ¿Cómo es diferente su dieta en comparación a cuando está en su casa?

Temas Sociales

1. ¿Qué es lo que más le preocupa sobre ser un trabajador migrante?
2. ¿Qué piensa usted es necesario para mejorar su prestigio general en su comunidad?
2. ¿Qué servicios, aparte de cuidado de salud, le gustaría recibir/ siente que son necesarios?
4. ¿Qué servicios quiere USTED?
5. ¿Cómo es que usted recomendaría buscar estos servicios?
6. ¿Qué tipos de servicios estaría usted dispuesto en aceptar?

APPENDIX D

IRB approval (English)

INFORMED CONSENT DOCUMENT

Project Title: **Perspective on Health: What We Can Learn From Migrant Farm Workers**Research Team: **Jacqueline Leung, BA**

This consent form describes the research study to help you decide if you want to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not sign this form unless the study research team has answered your questions and you decide that you want to be part of this study.

WHAT IS THE PURPOSE OF THIS STUDY?

This is a research study. We are inviting you to participate in this research study because you are a migrant farm worker in the State of Iowa.

The purpose of this research study is to study the health needs and health care of migrant farm workers in Iowa. This information will be useful in providing insight into the disparities experienced by migrant farm workers.

HOW MANY PEOPLE WILL PARTICIPATE?

Approximately 10 people will participate in this study.

HOW LONG WILL I BE IN THIS STUDY?

If you agree to take part in this study, your involvement wil last for approximately three months (May 2006-August 2006). There will be four individual interview sessions with the PI and a Spanish interpreter and three group sessions with other persons in the study. The group sessions are expected to last from 1 to 2 hours. Individual sessions are expected to last no more than 1 hour per session.

WHAT WILL HAPPEN DURING THIS STUDY?

If you agree to participate, an appointment will be arranged to meet with you on a one-on-one basis. If a translator is needed, a translator will be provided throughout the session. The individual interview session will include introductions, with general questions about your family history and your life course perspective.

You will be asked to participate in a focus group session. After a brief ice breaker activity, you will be asked to describe your health according to your v iew and what you feel is needed to improve health. The topic of health, healthcare, and healthcare access will be discussed with the group for the remainder of the participation.

You do not need to reveal any information regarding your health status or any information you feel uncomfortable sharing. You may skip or refuse to answer any questions you do not feel comfortable answering.

Audio Recording

One aspect of this study involves making audio recordings of you. The recordings are made to collect information from the individual and group sessions. Only the PI and the Spanish interpreter will have access to the recordings. The recordings will be locked in a private cabinet only accessible to the above two individuals. The recordings will be destroyed within two years of the study.

WHAT ARE THE RISKS OF THIS STUDY?

There may be some risks from being in this study. The questions are able your opinions about your health in nature. If you feel uncomfortable answering any questions or discussing any topic, you do not have to answer or join in the discussion. Additionally, you may leave the group at any time.

It is possible that information disclosed in a group setting may not be kept confidential. We will talk about the confidentiality of information discussed during the group session and will encourage all participants to keep what is heard during the discussions confidential.

WHAT ARE THE BENEFITS OF THIS STUDY?

We don't know if you will benefit from being in this study. However, we hope that in the future, other people might benefit from this study because the information obtained may be useful in providing insight to other researchers about health care access to migrant workers.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You will not have any costs for being in this research study.

WILL I BE PAID FOR PARTICIPATING?

You will not be paid for being in this research study. Refreshments will be provided during the one-on-one and focus group sessions. There will be small gifts of non-monetary value as well for your participation such as dental hygiene packages containing toothpasate, tooth brushes, and dental floss.

WHO IS FUNDING THIS STUDY?

The University and research team are receiving no payments from other agencies, organizations, or companies to conduct this research study.

WHAT ABOUT CONFIDENTIALITY?

We will keep your participation in this research study confidential to the extent permitted by law. However, it is possible that other people may become aware of your participation in this study. For example, federal government regulatory agencies, auditing departments of the University of Iowa, and the University of Iowa Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research. Some of these records could contain information that personally identify you.

To help protect your confidentiality, we will use a numerical code to identify you in all documentation relating to the study and interview transcripts. These transcripts will be kept in a safe location accessible only to members of the research team. The list linking your name and study code will be stored in as ecure location that is accessible only to the investigators. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you cannot be directly identified.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose not to take part at all. If you decide to be in this study, you may stop participating at any time. If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Jacqueline M. Leung (xxx-xxx-xxxx) or via email at jacqueline-leung@uiowa.edu.

If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contactthe Human Subjects Office, 340 College of Medicine Administration Building, the University of Iowa, Iowa City, Iowa, 52242, (319) 335-6564, or email irb@uiowa.edu. General information about being a research subject can be found by clicking "Info for Public" on the Human Subjects Office web site, http://research.uiowa.edu/hso.

This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. You are not waiving any legal rights by signing this Informed Consent Document. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Subject's Name (printed): _____

_____ _____

(Signature of Subject) (Date)

APPENDIX E

IRB approval (Spanish)

CONSENIMIENTO INFORMADO

Titulo del proyecto: Perspectiva Sobre la Salud: Lo Que Podemos Aprender De Los Trabajadores Agrícolas Migratorios
Equipo de investigación: Jacqueline Leung, BA

El consentimiento informado describe el estudio de investigación para ayudarle a decidir si quiere participar. Este documento provee información importante sobre lo que se pedirá hacer durante el estudio, sobre los riesgos y beneficios del estudio, y sobre sus derechos como sujeto de un estudio.

- Si tiene alguna pregunta o no entiende algo en este documento, usted debe pedirle más información al equipo de investigación.
- Usted debe discutir su participación con cualquier persona que usted guste tal como su familia o amigos.
- No firme esta forma al menos que el equipo de investigación del estudio le haya contestado sus preguntas y usted haya decidido que quiere participar en este estudio.

¿CUAL ES EL PROPÓSITO DE ESTE ESTUDIO?

Este es un estudio de investigación. Lo estamos invitando a participar en este estudio de investigación porque usted es un trabajador agrícola migratorio en el Estado de Iowa.

El propósito de este estudio de investigación es estudiar las necesidades de salud y el cuidado de salud de trabajadores agrícolas migratorios en Iowa. Esta información será útil para conocer las disparidades vividas por los trabajadores migratorios.

¿CUANTAS PERSONAS PARTICIPARÁN?

Aproximadamente 10 personas tomaran parte en este estudio.

¿CUANTO TIEMPO ESTARÉ EN ESTE ESTUDIO?

Si usted acepta tomar parte en este estudio, su participación durará por aproximadamente 3 meses (Mayo 2006-Agosto 2006). Habrá cuatro entrevistas individuales con el Investigador Principal (IP) y un intérprete que habla español y tres sesiones en grupo con las otras personas en el estudio. Se espera que las sesiones en grupo duren una a dos horas. Se espera que las sesiones individuales duren no más de una hora cada una.

¿QUE SUCEDERA DURANTE ESTE ESTUDIO?

Si usted acepta participar, haremos una cita para hablar con usted uno a uno. Si necesita un interprete, le proveeremos uno durante toda la sesión.

Se le pedirá participar en un grupo de enfoque. En el grupo tendremos una actividad para romper el hielo. Después se le pedirá que describa como se siente sobre su salud y lo que usted siente es necesario para mejorarla. El resto del grupo discutiremos los temas la salud, el cuidado de salud, y el acceso al cuidado de salud.

Usted no necesita revelar ninguna información sobre su estado de salud o cualquier información que no esté cómodo en compartir. Usted podrá saltar o no contestar cualquier pregunta con la que no se sienta cómodo.

Grabaciones Audio

Para este estudio se requiere que se hagan grabaciones audio de usted. Las grabaciones son para conseguir información de las sesiones individuales y en grupo. Solamente el Investigador Principal y el intérprete tendrán acceso a las grabaciones. Las grabaciones estarán guardadas bajo llave en un gabinete privado que será solamente accesible a las dos personas mencionadas arriba. Las grabaciones serán destruidas dentro de dos años del estudio.

¿CUALES SON LOS RIESGOS DE ESTE ESTUDIO?

Puede que haya algunos riesgos por tomar parte en este estudio. Las preguntas son relacionadas a su opinión sobre su salud. Si su siente incomodo en contestar algunas preguntas o discutir algún tema, usted no tiene que contestar o unirse a la discusión. Además, usted puede dejar el grupo en cualquier momento.

Es posible que la información revelada durante los grupos no sea mantenida confidencial. Halaremos sobre la confidencialidad de la información discutida durante las sesiones en grupo y animaremos a todos los participantes a mantener confidencial todo lo que se escuche durante las discusiones.

¿CUALES SON LOS BENEFICIOS DE ESTE ESTUDIO?

No sabemos si usted recibirá algún beneficio por tomar parte en este esudio.
Sin embargo, esperamos que en el futuro, otras personas se puedan beneficiar de este estudio porque la información obtenida puede ser útil para que otros investigadores conozcan mas sobre el acceso al cuidado de salud de los trabajadores migratorios.

¿ME COSTARÁ ALGO TOMAR PARTE EN ESTE ESTUDIO?

Usted no tendrá que pagar nada por tomar parte en este estudio de investigación.

¿SE ME PAGARÁ POR PARTICIPAR?

No se le pagará por tomar parte en este estudio de investigación. Habrá bebidas durante las entrevistas individuales y las sesiones en grupo. Por su participación, recibirá pequeños obsequios de ningún valor monetario tal como paquetes higiénicos dentales, que contienen pasta de dientes, cepillos de dientes, e hilo dental.

¿QUIÉN ESTÁ FINANCIANDO ESTE ESTUDIO?

Mantendremos su participación en este estudio de investigación confidencial hasta lo permitido por la ley. Sin embargo, es posible que haya personas que se entren de su participación en este estudio. Por ejemplo, agencias reguladoras del gobierno federal, departamentos de revisión de la Universidad de Iowa, y el Comité Examinador Institucional de la Universidad de Iowa (un comité que repasa y aprueba los estudios de investigación) pueden inspeccionar y copiar expedientes que pertenecen a este estudio de investigación. Algunos de estos expedientes podrían contener información que lo identifique personalmente.

Para ayudar proteger su confidencialidad utilizaremos un código numérico para identificarlo en toda documentación relacionada al estudio y las transcripciones de las entrevistas. Estas transcripciones serán mantenidas en un lugar seguro y accesible solamente a los miembros del equipo de investigación. La lista que liga su nombre y su código del estudio serán mantenidos en un lugar seguro que será accesible solamente a miembros del equipo de investigación. Si escribimos un informe o un artículo sobre este estudio o si compartimos los datos del estudio con otros, lo haremos de tal manera que usted no pueda ser identificado directamente.

¿ES VOLUNTARIO TOMAR PARTE EN ESTE ESTUDIO?

Tomar parte en este estudio de investigación es completamente voluntario. Usted puede escoger no participar en lo absoluto. Si usted decide tomar parte en este estudio, puede dejar de tomar parte en cualquier momento. Si usted decide no tomar parte en este estudio, o si decide dejar de tomar parte en cualquier momento, no será penalizado o perderá ningún beneficio al cual usted de todos modos calificaría.

¿QUÉ TAL SI TENGO PREGUNTAS?

Le animamos a que haga preguntas. Si tiene alguna pregunta sobre el estudio de investigación, favor de ponerse en contacto con: Jacqueline M. Leung (xxx) xxx-xxxx o a través de correo electrónico a: jacqueline-leung@uiowa.edu.
Si tiene preguntas, preocupaciones, o quejas sobre sus derechos como sujeto de investigaciones, o sobre una lesión relacionada con un estudio de investigación, favor de

ponerse en contacto con la Oficina de Sujetos Humanos (Human Subjects Office), 340 College of Medicine Administration Building. The University of Iowa, Iowa City, Iowa, 52242, (319) 335-6564, o mande un correo electrónico a irb@uiowa.edu. Usted puede encontrar información general si es sujeto de investigación en la página de Internet de la Oficina de Sujetos Humanos http://research.uiowa.edu/hso, presionando en el tema "Info for Public."

Este Consentimiento Informado no es un contrato. Es una explicación escrita sobre lo que ocurrirá durante el estudio si usted decide participar. Usted no está negando algún derecho legal al firmar este Consentimiento Informado. Su firma indica que este estudio de investigación de investigación se le ha sido explicado, que sus preguntas han sido contestadas, y que usted está de acuerdo en tomar parte en este estudio. Usted recibirá una copia de esta forma.

Nombre del Sujeto (Escrito en letra de molde):

_____

_____ _____
(Firma del Sujeto) (Fecha)

Declaración de Persona que Obtuvo el Consentimiento

He discutido los temas mencionados arriba con el sujeto, o donde apropiado, con el representativo autorizado legalmente del sujeto. Es mi opinión que el sujeto entiende los riesgos, beneficios, y procedimientos implicados con la participación en este estudio de investigación.

_____ _____
(Firma de persona que obtuvo el consentimiento) (Fecha)

REFERENCES

Abraido-Lanza, AF, Dohrenwend, BP, Ng-Mak, DS, and Turner, JB. (1999). The Latino Mortality Paradox: A Test of the "Salmon Bias" and Healthy Migrant Hypotheses. *American Journal of Public Health*. 89(10): 1543-1548.

Anthony, MJ, Martin, EG, Avery, AM, and Williams, JM. (2009). Self care and health-seeking behavior of migrant farmworkers. *Journal of Immigrant Minority Health*. Published online April 24, 2009. Available at http://www.springerlink.com/content/x88707k6052u8281/.

Arcury, TA and Quandt, SA. (2007). Delivery of health services to migrant and seasonal farmworkers. *Annual Review of Public Health*. 28:345-363.

Arcury, TA., Vallejos, QM., Feldman, SR., and Quandt, SA. (2006). Treating skin disease: self-management behaviors of latino farmworkers. *Journal of Agromedicine.* 11(2):27-35.

Alderete, E, Vega WA, Kolody, B and Aguilar-Gaxiola, S. (2000). Lifetime Prevalence of and Risk Factors for Psychiatric Disorders Among Mexican Migrant Farmworkers in California. *American Journal of Public Health*. 90(4):608-614.

Berry, A. (2002). Culture Care of the Mexican American Family. In M. Leininger and M. McFarland (Eds). *Transcultural Nursing: Concepts, Theories, Research, and Practice*. 3rd edition. New York: McGraw-Hill.

Betchel, G, Shepherd, MA, and Rogers, PW. (1995). Family, Culture, and Health Practices Among Migrant Farm workers. *Journal of Community Health Nursing, 12*(1):15-22.

Carrier, J, Magaña, R. (1991). Use of ethnosexual data on men of Mexican origin for HIV/AIDS prevention programs. *J. Sex Res.* 28(2):189–202

Center for Disease Control (CDC). (2000). HIV/AIDS Among Hispanics/Latinos. *Accessed from www.**cdc**.gov/**hiv**/resources/factsheets/PDF/hispanic.pdf.*

Coughlin, SS and Wilson, KM. (2002). Breast and cervical cancer screening among migrant and seasonal farm workers: a review. *Cancer Detection and Prevention*, *26*(3):203-9.

Decker, SD and Knight, L. (1990). Functional Health Pattern Assessment: A Seasonal Migrant Farm Worker Community. *Journal of Community Health Nursing, 7*(3):141-51.

Denzin, N. K., & Lincoln, Y. S (Eds.). (1998). Collecting and Interpreting Qualitative Materials. Thousand Oaks, CA: Sage.

Donham KJ, Thelins, A. (2006). Special risk populations in agricultural communities. In: Donham KJ, Thelins, A, authors. Agricultural medicine: occupational and environmental health for the health professions. 1st ed. Iowa: Blackwell Publishing; Ch2. p.45-51.

Early, J, Davis, SW, Quandt, SA, Rao, P, Snively, BM, and Arcury, TA. (2006). Housing characteristics of farmworker families in North Carolina. *Journal of Immigrant and Minority Health*. 8(2): 173-184.

Farmer, FL and Slesinger, D. (2008). Health Status and Needs of Migrant Farm Workers in the United States: A Literature Review. *Journal of Rural Health*. 8(3): 227-334.

Farmworker Health Services, Inc. (2003). *About migrant and seasonal farmworkers*. Retrieved August 20, 2009, http://www.farmworkerhealth.org/migrant.shtml

Farquhar, S, Samples J, Ventura, S, Davis, S, Abernathy, M, McCauley, L, Cuilwik, N, and Shadbeh, N. (2008). Promoting the occupational health of indigenous farmworkers. *J Immigrant Minority Health*. 10:269-280.

Frank, AL., McKnight, R., Kirkhorn, SR., and Gunderson, P. (2004). Issues of agricultural safety and health. *Annual Review of Public Health*. 25:225-245.

Feldman, SR, Vallerjos, QM, Quandt, SA, Fleischer, AB, Schulz, MR, Verma, A, and Arcury, TA. (2009). Health Care Utilization among Migrant Latino Farm Workers: The Case of Skin Disease. *Journal of Rural Health.* 25(1): 98-103.

Franzini, L, Ribble, JC, and Keddie, AM. (2002). *Understanding the Hispanic Paradox.* In LaVeist, TA (Ed), *Race, Ethnicity, and Health: A Public Health Reader* (pp. 280-310). San Fransciso: Jossey-Bass

Gorton, J and Van Hightower, N. (1999). Intimate Victimization of Latina Farm Workers: A Research Summary. *Hispanic Journal of Behavioral Sciences*, 21(4): 502-507.

Grzywacz, JG, Quandt, SA, Early, J, Tapia, J, Graham, CN, and Arcury, TA. (2006). Leaving Family for Work: Ambivalence and Mental Health Among Mexican Migrant Farmworker Men. *Journal of Immigrant and Minority Health*, 8(1):85-97.

Hansen, E and Donohoe, M. (2002). Health Issues of Migrant and Seasonal Farmworkers. *Journal of Healthcare for the Poor and Underserved*. 14(2): 153-164.

Hirsch, J., Higgins, J., Bentley, M., and Nathanson, C.. (2002). The social constructions of sexuality: Marital infidelity and sexually transmitted diseases: HIV risk in a Mexican migrant community. *American Journal of Public Health*, 92(8), 1227-33.

Hoerester, KD, Beddawi, S, Peddecord, KM, and Ayala, GX. Healthcare Use Among California Farmworkers: Predisposing and Enabling Factors. (2009). *Journal of Immigrant and Minority Health*. E Pub ahead of Print.

Holmes, SM. (2006). An ethographic study of the social context of migrant health in the United States. *PloS Med*. 3(10): e448.

Hovey, JD and Magana, CG. (2002). Exploring the Mental Health of Mexican Migrant Farm Workers in the Midwest: Psychosocial Predictors of Psychological Distress and Suggestions for Prevention and Treatment. *The Journal of Psychology*, 136(5): 493-513.

Hovey, JD and Magana, CG. (2000). Acculturative stress, anxiety, and depression among Mexican immigrant farmworkers in the Midwest United States. *Journal of Immigrant Health*. 2(3):119-131.

Krueger, RA and Casey, MA. (2000). Focus Groups. A Practical Guide for Applied Research (3rd Edition). Thousand Oaks, CA: Sage Publications. 206 pp.

Krueger, R.A. (1994). *Focus Groups: A Practical Guide for Applied Research.* 2nd edition. Thousand Oaks, CA: Sage.

Lafferty, J. (1991). Self-injection and needle sharing among migrant farm workers. *American Journal of Public Health*, 81, 221.

LaVeist, TA. (2005). *Minority Populations and Health: Introduction to Health Disparities in the United States.* 1st ed. San Francisco, CA: Josseybass.

Leclere, FB, Jensen, L, Biddlecom, AE. (1994). Health care utilization, family context, and adaptation among immigrants to the U.S. *Journal of Health and Social Behavior*. 35(4): 370-384.

Luque, JS, Monaghan, P, Contreras, RB, August, E, Baldwin, JA, Bryant, CA, and McDermott, RJ. (2007). Implementation evaluation of a culturally competent eye injury prevention program for citrus workers in a Florida migrant community. *Progress in Community Health Partnerships: Research, Education, and Action* 1.4. 359-369.

Magana, CG and Hovey, JD. (2003). Psychosocial Stressors Associated with Mexican Migrant Farmworkers in the Midwest United States. *Journal of Immigrant Health, 5*(2):75-86.

McQuiston, C., Doerfer, L., Parra, K., and Gordon, A. (1998). After-the-fact strategies Mexican Americans use to prevent HIV and STDs. *Clinical Nursing Research*, 7(4), 406-22.

McVea, K.L.S.P. (1997). Lay injection practices among migrant farm workers in the age of AIDS: Evolution of a biomedical folk practices. *Social Science Medicine*, 45(1), 91-8.

National Center for Farmworker Health, Inc. (NCFH). (2009). Fact sheets about farm workers: Facts about farm workers. Retrieved online http://www.ncfh.org/factsheets.php on February 3, 2010.

Organista, KC, Carrillo, H, and Ayala, G. (2004). HIV Prevention with Mexican Migrants. *Journal of Acquired Immune Deficiency Syndrome, 37*(Supplement 4), S227-39.

Organista, K.C., Balls-Organista, P., Bola, J.R., Garcia de Alba G, J.E., and Moran, M.A.C. (2000). Predictors of condom use in Mexican migrant laborers. *American Journal of Community Psychology,* 28(2), 245-265.

Organista, KC. (1998). Culturally Competent HIV Prevention with Mexican/Chicano Farmworkers. Occasional Paper, No. 47. Accessed from http://www.jsri.msu.edu/RandS/research/ops/oc47.html on February 14, 2010

Parrado, E., Flippen, C., and McQuiston, C. (2004). Use of commercial sex workers among Hispanic migrants in North Carolina: Implications for the spread of HIV. *Perspectives on Sexual and Reproductive Health*, 36(4), 150-6.

Perilla, J, Wilson AH, Wold, JL, and Spencer, L. (1998). Listening to Migrant Voices: Focus Groups on Health Issues in South Georgia. *Journal of Community Health Nursing, 15*(4):251-63.

Poss, JE and Pierce, R. (2003). Characteristics of selected migrant farmworkers in West Texas and Southern New Mexico. *Californian Journal of Health Promotion.* 1(2):138-147.

Poss, JE. (1999). Developing an Instrument to Study the Tuberculosis Screening Behaviors of Mexican Migrant Farmworkers. *Journal of Transcultural Nursing, 10*(4): 306-19.

Rubin, A. and Babbie, E.R. (2008). Research Methods for Social Work (6th ed.). Belmont, CA: Thomson, Brooks/Cole.

Thomson, S. & Poss. J. (2003). Health education for the migrant farm worker community in El Paso, Texas through the integration of faculty research and student learning. *Californian Journal of Health Promotion*, 1(2), 223-228.

Ulin, PR, Robinson, ET, and Tolley, EE. (2005). 1st edition. Qualitative Methods in Public Health. Jossey-Bass. San Francisco: CA. pp. 318.

U.S. Department of Labor. Findings from the National Agricultural Workers Survey (NAWS), 2001-2002. A Demographic and Employment Profile of United States Farm Workers. U.S. Department of Labor, Office of the Assistant Secretary for Policy, Office of Programmatic Policy Research Report No. 9, March 2005.

United States Farmworker Factsheet. Accessed on June 29, 2008 from: http://cds.aas.duke.edu/saf/pdfs/SAF%20Fact%20Sheet%20US07.pdf

Van Hightower, NR, Gorton, J, and DeMoss, CL. (2000). Predictive Models of Domestic Violence and Fear of Intimate Partners Among Migrant and Seasonal Farm Worker Women. *Journal of Family Violence*. 15(2): 137-154.

Villarejo, D. (2003). The Health of U.S. Hired Farm Workers. *Annual Review of Public Health,* 24: 175-193.

Ward, LS. (2008). Farmworkers at Risk: The costs of family separation. *J Immigrant Minority Health*. Published online 2008.

Windsor, Clark, Boyd, and Goodman. (2004). Evaluation of Health Promotion, Health Education, and Disease Prevention Programs, 3rd edition. Published by McGraw-Hill, New York, NY.

Witt, B. (2007). Personal Communication.

Wolcott, H.R. (1990). Qualitative inquiry in education: The continuing debate.