

Farmworkers in Florida: Silence is their rational choice

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**A Report for the Farmworker Association of Florida
on Working Conditions for Farmworkers in
Central Florida Ornamental Plant Nurseries
based on interviews with workers**

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ABSTRACT

This research documents cases of farmworker abuse and cases of pesticide exposure in Central Florida; it explores why farmworkers do not denounce their working conditions. The researcher conducted informal interviews with 16 participants, who were currently employed or had been employed in a nursery or fernery. The data compiled through these interviews was analyzed using qualitative research methods.

The findings suggest that there are various types of worker abuse including: issues with proper or adequate sanitation, the constant rushing pace of farmworkers making the work environment more dangerous, lack of safety equipment, work injuries not being covered by employers through workers compensation, no overtime pay rate, and hazardous practices of pesticide application. There are also several cases where farmworkers had adverse health effects due to exposure to pesticides. The findings also suggest that farmworkers make the rational choice not to speak out against their employers because of multiple factors: there are few alternative jobs; farmworkers face financial pressure to support their dependents in their home country; the health issues of farmworkers and their children create a financial burden on their spouses, who are often also farmworkers. Understanding the complex array of factors that inhibit them from reporting workplace hazards is an important first step to understanding the plight of Central Florida's farmworker population.

INTRODUCTION

The working conditions of farmworkers have been documented in the past, highlighting deplorable conditions such as inadequate sanitary facilities, substandard housing, pesticide exposure, sun exposure and heat stress. (1) Worker abuse and violations of regulations have also been explored (2, 3). The Environmental Protection Agency revised the Worker Protection Standards in 1992 (4) and regulatory bodies in various states have acted accordingly and have set local regulations to protect farmworkers. For example, the 2004 Farmworker Safety Act, a section of which was later renamed the Alfredo Bahena Act, "incorporated the federal Worker Protection Standards into Florida state law. It also increased the fines for pesticide safety violations, increased the number of field inspectors, and authorized the use of worker representatives to file complaints."(5) This law also prohibited crew leaders from price gouging farmworkers for food, water and housing, enhanced the regulation of pesticides and stipulated that workers have a right to obtain information on these pesticides at their jobsite (6). However,

as the findings of this research will reveal, the abuse of workers and violations of workplace protections continue in many parts of Central Florida. These cases of maltreatment and unsafe working conditions are seldom reflected in official statistics.

Farmworkers suffer chronic exposure to pesticides, which negatively impacts their health. Some farmworkers are subjected to acute pesticide exposure, which can result in immediate and severe health problems. Flocks et al. explained that “exposure to pesticides can be dermal, oral, and respiratory and can occur through direct contact with pesticides during application, contact with pesticide residue on plants, upon entering a recently treated area, or through drift from nearby applications.” Studies have reported that exposure to pesticides prior to conception was associated with reduced fecundability (7, 8, 9). There are also studies documenting the elevated risk of stillbirths for women exposed to pesticides working in agriculture and horticulture (10, 11, 12). Other studies have documented the effects of pesticide exposure in-utero; their findings include fetal growth delay (13, 14, 15), birth defects like orofacial defects (16), musculoskeletal defects (17, 18, 19), neural tube defects (20, 21, 22), and childhood leukemia (21, 22).

While some states have responded with measures to regulate the use of pesticides, farmworker exposure to pesticides continues to take place in Central Florida. As with cases of worker abuse, the official statistics do not reflect the caseload seen by community organizations like the Farmworker Association of Florida. Cases of pesticide exposure include adverse health effects on workers: severe skin rashes, long-term skin lesions, and respiratory problems. Adverse health outcomes for their children may also be linked: low birth weight, asthma, allergies, and malformations. Increasingly, there are also links to learning disabilities, autism and ADHD in children of mothers exposed to pesticides (23).

The present study documents cases of current and former farmworkers in Apopka and Pierson in Central Florida. The following is a small description of the fernery and nursery industry in Central Florida. In general terms, nurseries produce a variety of ornamental plants, including: cut flowers, potted plants, and garden plants; ferneries produce cut foliage (25). Nursery work mostly takes place inside plastic greenhouses; fernery work happens under a large black mesh structure or under large shade trees. Tasks at nurseries include: planting at conveyor belts; loading pots of plants into trays; and loading and carrying trays, boxes, and bags of soil. These tasks involve close contact with plants and soil, which have been chemically treated (25). Fernery workers also come into frequent dermal contact with chemically treated soil and plants. They must “bend over, thrust their arms into the bushes of ferns, cut fronds at their base, and bundle them into bunches” (25); then load these bunches onto trailers. The ferns can grow thigh high and when the ferns are wet with morning dew, workers’ unprotected clothes and skin get soaked with a mixture of water and traces of pesticide. Some workers tie plastic aprons or plastic garbage bags around their waists in an effort to protect themselves from the chemicals (25).

For the purposes of this study, the terms “nursery” and “fernery” are sometimes used loosely and interchangeably, because that was the use given to them in some of the informal interviews. The research focuses on the working conditions that ferneries and nurseries have in common. The common conditions include: the physical labor involved; the enclosed work environment, which does not allow for pesticides to dissipate as easily as they would in an open field (24); and the interaction with pesticides.

PURPOSE

The present research was conducted at the request of the Farmworker Association of Florida. This research has two aims. The first is to document cases of worker abuse and pesticide exposure and the second aim is to understand the incongruence between official statistics of worker abuse and pesticide exposure in Florida, and the number of people voicing cases of worker abuse and pesticide exposure at local community organizations. Why aren't real cases of abuse and pesticide exposure being reflected in the official statistics? Why do farmworkers remain silent about what they experience in their jobs?

SAMPLE

The findings in this research are based on a "convenience sample" of 16 individuals. Some participants were picked randomly in the waiting room of a local clinic. Other participants were clients from a local community-based organization who were picked based on their availability to participate in the study on specific days of the week. Interviewees were all currently employed or had been employed in ferneries or nurseries in the surrounding area.

All of the participants are female, with the exception of two male participants. There are two reasons for this gender imbalance. First, the clinic is well known for its maternity health services, so the majority of the people in the waiting room are women. Second, many of the community organization's clients were available to participate because they were mothers staying home with their children. It is important to point out that many of the female participants discussed their husbands' experiences working at nurseries or ferneries.

All of the participants are of Hispanic descent. Central Florida's nursery/fernery industry workers are mostly Hispanic, but there is a small minority of Haitian and African-American workers. Although the sample does not reflect this ethnic distribution, many of the themes explored in the findings, such as poverty and fear of losing their jobs, can apply to the farmworker population in general. The informal interviews were conducted in Spanish.

The participants' migratory status varied. Some participants were undocumented, others had U.S. permanent residency, others were citizens, and others chose not to reveal their migratory status during their interview. The status distinctions will be made whenever pertinent to the findings. All names mentioned here are pseudonyms and any references to specific companies were omitted for the privacy and protection of participants.

METHODS

The primary methodology in this research is qualitative. The value of qualitative research lies in its power to *discover unexpected links* between people's feelings, behaviors, ideas, and facts; and its power to *explain the rationale* for particular behaviors¹. The researcher conducted informal interviews with participants either within the clinic grounds or in participants' homes. The interviews touched on a variety of themes in order to gain a holistic understanding of workers' lives. These informal discussions included the following: participants' arrival in the United States, work, family, health, household structure, finances, and ties to home country. The

¹ Qualitative research entails ethnographic fieldwork (observing and participating in the context under study), informal interviewing, triangulation of sources to verify data, and qualitative data analysis (organizing all of the text that was culled during fieldwork to discover emerging themes and finding the links amongst said themes).

interviews were not recorded in an effort to ease participant's anxiety about discussing sensitive topics.

FINDINGS

This section explores the two aims of the research separately. First, it deals with excerpts from different case studies where farmworkers discussed instances of worker abuse and pesticide exposure. These excerpts have been edited for brevity but the full version of every case study can be found in the appendix section. The second portion of the section will explain the rationale behind farmworkers' choice to remain silent about their working conditions and why some continue working at nurseries/ferneries. The last section of the findings is dedicated to one particular case that vividly illustrates the context of farmworkers' lives.

Worker abuse and pesticide exposure

- *Issues with sanitation*

A few participants brought up issues with sanitation at nurseries. In many cases, toilets were located far from the greenhouse, where the majority of the work takes place; many bosses were reluctant to allow workers to take a bathroom break.

Camila explained that at one of the nurseries where she worked, the working conditions were very bad. There were no toilets in the nursery, so workers were obliged to ask for permission to use the toilet inside the owner's home. The boss often asked Camila to wait or to "go" outside of the nursery instead of walking all the way to the house. Camila refused to do this on several occasions; she quit after three months.

Another participant bitterly remembered the unsanitary conditions at another nursery:

Melisa explained that the nursery has been kept in worsening conditions for many years under the pretext that they are going bankrupt. "Hubo un tiempo en que ni agua nos daban. Ni papel higienico!" [*"There was a time when they didn't even give us water or even toilet paper!"*] ... In addition, the nursery used to pay someone to clean the workers' toilets. Today the workers have to take turns cleaning the toilets every week.

Other participants also mentioned that bosses didn't allow people to take bathroom breaks, so workers had to "hold it" until either the official 15-minute breaks or the 30-minute lunch break.

- *Being rushed in a dangerous environment*

Participants explained that being constantly rushed, while working with heavy pots or trays or with hazardous chemicals, was often dangerous and could lead to injuries. They described an environment where safety regulations were casually violated for the sake of productivity and efficiency. One participant described an injury caused by rushing inside the nursery:

Flor stayed 2.5 years at her first nursery job, until the owners closed it down. "De allí salí acabada." [*"I left that place physically deteriorated"*] Flor slipped while rushing to turn off a water hose. She scraped her hands and one arm; her elbow and shoulder were also injured. "Me llevaron al medico y luego me llevaron a trabajar." [*"They took me to the doctor and then they took me back to work"*] Flor did not want to lose her hours of work from earlier that day so she

continued to work that day. The nursery covered the visit to the doctor. “Alguien me dijo que iba a recibir terapias (para rehabilitar el codo y hombro) pero nunca dijeron nada mas. Y yo no dije nada para que no me corrieran, mi necesidad era grande.” [*“Someone told me that I would get physical therapy for (my elbow and shoulder), but they never said anything else. And I didn’t ask so that they wouldn’t fire me, I was in great need”*] Flor still feels pain in her arm and shoulder; her elbow still hurts on cold days.

Another participant, Marianna, explained that workers were constantly rushed, as if they were paid “por contrato” (“by contract”, that is, per number of units such as plants or trays) instead of by the hour. She knows about that form of work, because her husband picks cucumbers and apples, and is paid by the bucket. He makes \$100 per day, while nursery workers make an average of \$300 *per week* and, according to Marianna, work at a similar rhythm. Marianna pointed out that workers were so rushed that there wasn’t any chatter among them.

The mother-in-law of one of the participants was present for a portion of an interview and quickly jumped in to tell the story of her own falls:

The mother in law fell several times, but the nursery bosses couldn’t send her to the doctor because “el patron estaba en quiebra... todavía estan en quiebra”. [*“The boss was going bankrupt...they’re still going bankrupt.”*] Instead, she chose to clean the nursery floors voluntarily on the weekends so that no one else would slip and fall anymore.

One participant, Flor, mentioned that workers often have to rush to load the specific number and types of plants when a client sends in an order, and that it is very important that orders go out on time. She explained that if an order required a particular plant that happened to be in a greenhouse that had recently been sprayed, she would quickly run in and bring out the plants, just so that she didn’t have a late or incomplete order. She said she did this was because she was afraid to lose her job.

- *Lack of safety equipment*

Participants often complained about not having appropriate equipment to protect themselves from the harmful chemicals being sprayed on the plants or the residue of these chemicals on the leaves, soil, and surfaces in the greenhouses. For example, one participant, Ingrid, explained that one of her duties at the nursery was to spray a 5-gallon mixture of water and pesticide. “Ese spray mareaba y te adormecía. No daban nada para protegerse, ni guantes, ni gafas, ni máscara.” [*That spray made you dizzy and sleepy. They didn’t give you anything to protect yourself, no gloves, no goggles, no facemask.”*]

Another participant, Melisa, described the situation at her workplace:

The bosses at this nursery never provided workers with gloves, so we had to buy our own. Melisa calculated that a box of gloves lasts less than a couple of weeks. “Incluso el que spraya (el pesticida) no tiene ni el traje (traje de protección) porque el traje ya esta muy viejo.” [*“The guy who sprays (the pesticides) doesn’t even have the suit (protective suit) because the suit is so old now.”*]

Two of the participants pointed out that some nurseries provided very little equipment to workers dealing with the soil, plants and trays. Instead, they provided an array of protective gear to workers dealing with plants that require protection from human contamination.

- *Covering the costs of work-related injuries*

Participants complained that they often pay for their own medical care after being injured at work, because even though the nursery bosses take workers to see the company doctor after an injury, these doctors send workers back to work without proper care. Participants reported several cases where they had to visit an independent doctor to find out what was wrong and to get treatment.

Marianna saw one of her co-workers develop a rash on her face and arms from one of the plants. Marianna learned that the “patron” [“boss”] took her co-worker to the company doctor, who assured the co-worker that the rash was not due to the plants there. “(ella) siguio trabajando y ya. Si quiere curarse, tiene que ir al doctor por su propia cuenta.” [*“(she) continued working and that was that. If you want to be cured, you have to go to the doctor on your own dime.”*]

The case below illustrates this pattern of work-related injuries going untreated by company doctors. The participant, Ingrid, worked at a nursery for 10 years.

“Tambien era pesado, mucho sol, humedad con la lluvia, mucho frio en el invierno... bultos y plantas pesadas, y sobre todo: movimientos rutinarios... Al principio yo lo confundia (el dolor) con cansancio, pero cuando ya no podia con el dolor de las manos fue que empecé a buscar ayuda y ya fue cuando descubrieron que tenía eso (Carpal Tunnel Syndrome)”. [*“it was also heavy work, lots of sun, humidity with the rain, and very cold in the winter...loads and heavy plants, and most of all: repetitive movements...At first I confused it (the pain) with fatigue, but when I couldn’t bare the pain in my hands, I started seeking help and that was when they discovered that I had that (Carpal Tunnel Syndrome)”*] In addition, her back injury evolved into two dislocated disks in her spine and a hernia.

She initially mistook the pain and partial stiffness of her arm to be a sign of heart failure, so she rushed to the hospital on several occasions. Ingrid’s doctor suggested that she rest for a few months. But Ingrid and her husband simply couldn’t afford it because her medical bills had gotten them \$7000 into debt. She tried to manage the pain with over-the-counter medications for approximately four years. Ingrid and her husband covered all the costs.

When asked why she didn’t ask her employer to give her time off or to cover some of the medical expenses Ingrid replied: “Es que quejarse que algo le duele es como firmar su renuncia en este tipo de trabajo. Entonces, le aseguro que todos los que sienten dolor pues se lo aguantan.” [*“The thing is that saying that something is hurting is like signing your resignation letter in this type of work. So I assure you that those who feel pain try to put up with it.”*]

Nevertheless, Ingrid reached a point of desperation and decided to take the doctor’s report of her lumbar disk and carpal tunnel condition to her boss; she asked to be assigned to a different task in the nursery. The boss, then, sent Ingrid to the company doctor, who said she had nothing wrong and instead prescribed four strong pain medications. Ingrid had to stop taking them because they were making her extremely drowsy and nauseous. She went back to the company doctor who again said she had nothing wrong. So, she turned to an independent rehabilitation clinic for another exam, where they confirmed that she did have Carpal Tunnel and back problems. The

company doctor replied by saying she had to return to work. This is when Ingrid sought legal advice at a local community organization. Once, she threatened to sue the nursery's insurance company, the company paid for surgery for one of her hands.

Today, her hands hurt when the weather is cold. At night her hands and forearms tingle with numbness. She has lost all feeling in her right thumb.

Things weren't the same at work after the surgery. "Si uno se lastima, y el patron lo sabe, poco a poco le dan menos horas...No me gusto el trato que me dieron el ultimo año que estuve alli. Querian que yo renunciara." [*"If you get hurt and the boss knows it, little by little they give you less work hours...I didn't like the way they treated me the last year I was there. They wanted me to quit."*] Ingrid quit in 2011 after what she described as several incidents of unfair cutting of her hours and general mistreatment. Ingrid explained that they couldn't just fire her like any other undocumented person because she was a US resident since 1998. She claims her employers discriminated against her because of her damaged hands until she finally quit. Ingrid's husband still works for this nursery, and therefore Ingrid decided not to pursue the matter any further. She fears for her husband's job.

- *No overtime*

Farmworkers are often paid minimum wage and do not get an overtime pay rate. However, they often work many more hours beyond the traditional 40-hour work week that is the norm in the United States.

Glorita works with roses seven days a week all year round. (Other types of nurseries require seven days a week of work, but only during certain periods of the year; harvest, for example). She comes into work at 8 am and "no hay hora de salida" [*"There's no set time to go home."*]. The longest day she has ever worked was from 8am until the following morning. On such days, she would start work again at 5am and leave at 1pm. The hours of departure depend on the season.

Another participant, Marcela, talked about her work hours:

Lately, there isn't much work available. She exemplified this by saying: "entran a las 7 y salen a las 3! Osea que no hay trabajo." [*"They go in at 7 and leave at 3! So there's not much work"*] The hours she quoted make for an 8 hour day. Marcela explained that she is used to working more hours than that per day. She got paid a flat hourly rate without adjustment for overtime.

Elias, another participant, who was born and raised in the United States, described the lack of benefits at his job, in comparison with other jobs, with much surprise:

He has been working at the nursery for the past year and a half. The nursery has 6 employees who receive annual pesticide trainings. They spray pesticides on Saturdays, so that no one is exposed for 48 hours after application... They also provide safety equipment. However, Elias highlighted "they don't offer medical coverage, overtime, paid sick leave, no paid vacation!"

- *Pesticide application practices*

Other participants often mentioned that they were not protected from pesticides at all times. Sometimes they were exposed by momentarily walking into a greenhouse that was recently sprayed in order to complete an order (as mentioned in one excerpt above). Other times they

came into contact with pesticides because the “sprayadores”, or people in charge of spraying the chemicals, would spray in close proximity to the workers inside a greenhouse.

Marcela recounted that when spraying fertilizers, the “sprayadores” wore mouth and nose covers as well as gloves. They sprayed pesticides while the rest of the workers were in the same room. Non-sprayadores did not receive protective gear during or after spraying. Marcela also explained that there were no signs to explain to workers that they should leave the room and come back at a later time. Marcela and her co-workers at this nursery never received any pesticide training or information about the dangers of pesticides during the 10 years that she worked there.

Similarly, another participant, Rosa Maria, described the pesticide safety practices at the nursery where she worked:

Pesticide safety was not strictly practiced but Rosa Maria managed to protect herself, “yo siempre he sido resongona, no me dejaba esprayar encima. Cuando el (sprayador) echaba (pesticidas) yo me salía...el esprayador si se protegía pero a nosotros nos echaba encima”. [*“I have always been rebellious, I wouldn’t let myself get sprayed on. When the sprayador sprayed, I would get out...the sprayador did protect him/herself, but would spray right on top of us.”*] Rosa Maria decided to help make signs in Spanish, telling workers not to enter the nursery after spraying.

Another participant, Melisa, explained that in 13 years of working at that nursery, she never saw any videos on pesticides, and her employers or supervisors never explained anything about the dangers of using them.

“A veces sprayaban a dos líneas de uno y con el movimiento del aire igual nos caía todo el spray...antes (personas externas) iban a chequear las nurseries, entonces ponían los avisos de no entrar despues de sprayar. [*“sometimes they would spray two rows from you and with the movement of the air, all the spray would still land on us...before, (people from outside) would come to check on the nurseries, so they would put up the signs saying not to enter because they had just sprayed”*] But now, since no one has come to check whether nurseries follow the regulations set for pesticide use, the safety practices at this nursery have been widely ignored.

Luis, another participant, described a similar scenario:

“La gente se quita cuando el sprayador pasa, pero igual quedan a tan solo 5 metros del area sprayada”. [*“People move over when the sprayador passes by, but they’re still at only 5 meters from the area that was sprayed.”*] Luis added that in any case, they don’t spray very strong chemicals. Luis continued: “vienen a chequear que los químicos se usen bien, chequean la tierra, chequean la limpieza.” [*“they come to check that the chemicals are properly used; they check the soil, the cleanliness.”*] However, he couldn’t recall when was the last time he saw people coming to check.

Another participant, Glorita, described what happened where she worked:

The nursery showed their staff videos about pesticide safety and began posting signs in English and Spanish. Still, she remembers that sometimes they did not put up the signs that keep people away from closed off areas after a chemical has been sprayed. In addition, people sometimes ignored the instructions and precautions on the labels. She feels that people have a lax attitude toward chemicals.

But many other participants reported that nursery bosses scheduled pesticide spraying to happen during the weekends, so that greenhouses could be closed off for more than 24 hours until the following weekday. For example, Camila explained:

“Cuando se sprayaba allí, no nos dejaban entrar. Siempre nos decían que no entramos allí...Tambien, trataban de sprayar el fin de semana, a menos que hubieran animalitos, entonces sprayaban durante la semana.” [*“When they sprayed there, they wouldn’t let us inside. They always told us not to enter...they also tried to spray on the weekends, unless there were little critters, then they would spray during the week.”*]

Similarly, another participant, Juanita, explained how her employers protected workers:

The nursery is a large operation that includes approximately another 10 nurseries. The management rotates the workers throughout the different nurseries in order to close down operations in each nursery after it has been sprayed with pesticides. In this way, workers can avoid being exposed to the pesticides before they settle on the ground and other surfaces. Juanita added that the nursery provides its workers with protective gloves and scissors.

However, as mentioned in the introduction, pesticide exposure can potentially occur after the chemicals have settled on plant surfaces. Thus, even if nurseries try to protect their employees by spraying pesticides on the weekends, it is important to issue protective gear to employees or, alternatively, to eradicate the use of certain hazardous chemicals.

- *Cases of pesticide exposure*

Many participants discussed cases where they themselves, or someone close to them, experienced adverse health effects due to workplace pesticide exposure. In some cases, company doctors and nursery bosses dismissed workers’ health complaints by saying that the chemicals or the plants were not the cause of their health problem. The case of Camila’s brother-in-law illustrates this pattern:

He works at a small nursery. Eight months ago, he developed a severe skin rash, first on one arm, and then it extended to his whole body. He talked to the nursery owner, “pero el le dijo que no le parecía que los químicos fueran la causa” [*“but (the owner) told him that he didn’t think that the chemicals had caused it”*]. The brother-in-law then reached out to Camila’s husband, who told him to ask his doctor for documentation of the rash that proved that it was caused by chemicals at work. Both the doctor in Florida and his doctor in Mexico have independently come to the conclusion that his skin rash was caused by the harsh chemicals with which he works. The brother-in-law continues to work at the same nursery in the same position. Camila explained that the reason he stayed is that he is making approximately \$16 per hour and that other types of jobs would not pay as much to someone with his skills. The researcher tried to contact the brother-in-law to document his case in further detail, but he declined to participate in the research out of fear for his job.

It is important to point out that, as it will be explored in the second section of the findings, that having a family to support, as well as other financial pressures, contributes to farmworkers’ willingness to protect their employers and their jobs.

Another participant, Flor, explained that she was too afraid to say something about her skin reaction to the pesticides:

Independent of her fall (referenced above), the skin on Flor's hands was also constantly irritated and peeled. One of her duties was to wash plant trays, which have soil residue. She thinks that the chemicals in the soil caused the skin on her hands to peel off. She never saw the doctor about this, because it was too expensive. Flor explained that pesticides are very strong chemicals and, although nursery bosses sometimes gave out gloves, they didn't give them out often enough. It is because of that, that when the gloves would wear out, people would simply work with their bare hands. Today, she cannot touch household cleaning products (like: Windex or Clorox) because her fingers start to peel. Flor specified: "en Mexico (los productos de limpieza) no me pelaban los dedos" [*"Back in Mexico my fingers didn't used to peel"*]. When I asked why she and her family had remained in these nursery jobs for so long, Flor replied: "La necesidad y el miedo de no encontrar otro trabajo. Nos daba miedo hasta pedir un permiso (para ir al medico)" [*"The need and the fear of not finding another job. We were even afraid of asking for permission to go see the doctor."*]

Rosa Maria, another participant, explained that whenever someone developed a rash, bosses at her nursery would provide "una pomadita" [*generic word for cream or ointment, "a little cream"*] and that was as far as they helped.

Abigail's husband had a strong reaction to the pesticides:

He used to get allergies when they asked him to spray pesticides. "...le daba mucha tos y le salían ronchitas con manchas blancas. Llegaba (del trabajo) con la piel llena de ronchas en todo el cuerpo. Los ojos estaban rojos cuando esprayaba. Le duraban las ronchas y los ojos rojos como dos o tres días...Cuando esprayaba le daban mascararas, guantes y trajes que protegen. Pero es tan fuerte el químico, porque le pasaban (los químicos). Ahora, que no trabaja en eso, ya no le dan esas alergias. Por eso, me di cuenta yo que era por el químico de la nursería." [*"...I would cough a lot and get little bumps with white blotches on my skin. I would come (from work) with my skin covered in bumps throughout my body. My eyes were red when I had to spray. The bumps and red eyes would last for two or three days...when I sprayed they gave me face masks, gloves and suits to protect me. The chemical is so strong, it would pass through. Now that I don't work in that, I no longer gets those allergies. That's how I realized it was due to the chemical at the nursery."*]

- *Long-term and intergenerational effects of pesticide exposure*

Although the cases above illustrate mostly skin rashes and allergies, there are also long-term and intergenerational effects of pesticide exposure. As outlined in the introduction, pesticide exposure can have effects prior to conception and in-utero. However, these long-term and intergenerational health effects are difficult to document because, throughout their lifetimes, farmworkers can work in different nurseries, engage in different types of farm work, or they may do farm work in other states or in their home country. Therefore, they are exposed to a myriad of different chemicals. This makes it very difficult for any doctor or researcher to accurately pinpoint the source of an illness or the cause of a deformity or illness in a farmworker's child.

The choice to remain silent and to continue working at nurseries

In the "Purpose" section of this paper, we asked: Why aren't real cases of abuse and pesticide exposure being reflected in the official statistics? Fear of getting fired and/or fear of deportation

is the simplistic explanation. This research aims to illustrate the array of factors that lead farmworkers to make the decision to not speak out against instances of abuse or pesticide exposure.

- *Few work alternatives*

Participants often talked about the difficulty of finding work alternatives. This is because the other industries that require unskilled labor are at a significant distance from Apopka. A few of the participants have managed to find work alternatives through employment agencies, which provide transportation to the different work-sites. However, according to two participants, undocumented workers are having a harder time enrolling with these employment agencies. In addition, work availability with these agencies fluctuates, affecting workers' ability to earn money on a daily basis.

Glorita feels there are only a few other options for work. For example, she worked at a hotel through a cleaning service agency. The pay rate was very low through the agency, and she is not sure how good the pay rate would be if she were to work directly with the hotel as part of their cleaning staff. In addition, she considers that the distance from Apopka and difficulties with transportation are important barriers to this type of job. “Tendría que conseguir el ride.” [*“You would have to find a ride.”*]

Glorita's mother works at a hotel and her father works in a recycling plant. She explained that both of those jobs are only available for people who can drive or have arranged rides with other workers in the area. These driving arrangements are often short lived because of unstable employment conditions.

Another participant, Flor, also tried working through employment agencies:

Flor started to find jobs through an employment agency that matches workers with labor needs in different industries in the area. She worked at a laundromat, a soda packing factory, and a juice factory. The organization provided transportation to some of these, often distant, factories. Flor explained that it wasn't a good source of work, because there were many days when there was simply no work available. In addition, Flor explained that the employment agency mentioned above, now requires more documentation from its laborers.

Continuing with Flor's case, her family illustrates the importance of driving or having a “steady ride” in order to keep a job that was far away from Apopka:

Flor's husband and four daughters have all worked at nurseries in the past. All have chosen to take jobs in different industries. Her daughters were able to find jobs in cleaning, in administrative positions, and in retail because they speak English and can drive/own cars. Flor's husband worked at a door factory 45 minutes from Apopka. After that, at a recycling facility, 20 minutes from Apopka. He was able to take these jobs because he can drive and owns a car; he drives without a license, which involves the risk of deportation. Nevertheless, Flor views nursery work as physically demanding and potentially hazardous. She supports her husband's choice of work, even if it means significantly more driving.

Construction work was often mentioned as the key alternative for many male farmworkers. Several of the participants' husbands worked in construction. However, some participants

reported cases of wage theft, where bosses would simply disappear without paying the construction crew for weeks' worth of work. The deed often went unpunished because the workers were often undocumented and were too scared to report the theft to the authorities.

- *Dependents back home*

Participants often mentioned the added financial pressure of having dependents that still lived in their home countries. Participants sent up to one third of their weekly earnings once or twice per month to their children, siblings and/or their parents. The regularity with which farmworkers send money may reflect the degree to which their family members depend on it. This is an added pressure to stay employed.

Rosa Maria explained that a long time ago, she and her children waited for a weekly check from her husband, who worked in the United States:

Her husband arrived alone to the United States to work in 1983. He was homeless when he first came and ended up sharing an abandoned bus with 6 other men. He would send money back to Mexico. Rosa Maria explained that, even with his American income, “un cheque nos duraba una semana” [*“One check would last us one week.”*]. He returned to Mexico to be with his family only one month out of the year.

Another participant also talked about dependents back home:

Miriam and her husband have had to send money back to their relatives in Mexico for a number of years. Her grandparents are very ill, and although her brother returned to Mexico to help them out, his job as a construction worker and as a seasonal farmworker in Mexico, does not pay enough money to support him and the grandparents. Miriam sends them \$150 each month. In addition, the couple sends \$100 per month to a blind uncle. Miriam explained that life in the United States is full of additional stresses, “el trabajo es estresante, lo que tu ganas no es para tí, es para la renta, las cosas basicas y para enviar (a Mexico)...” [*“The work is stressful, what you earn is not for you, it is for rent, the basic amenities and to send (to Mexico).”*]

Abigail's case exemplifies several of the points above. At the time of our interview, she was in the precarious situation that many farmworkers fear:

Abigail has had difficulty finding jobs that last longer than a few months. The exception was a job at a nursery; it lasted four years. Abigail was forced to quit after the owner sold the nursery, and it has been difficult to find other jobs since then. She only gets hired for short periods of time; “no es nada estable” [*“It's not stable at all.”*]. Abigail explained that not having a ride to work is another important barrier and further reduced the choices of jobs available to her. Being pregnant has further complicated matters, because it makes Abigail very nauseous. (NOTE: the researcher suspects that it will be harder to get work when her belly starts to show). She had not found any work for the past month at the time of the interview. She worries about not being able to send money to her mother and sons in Mexico. She sends money every two weeks or once per month. “Mi marido si gana y me da dinero. Pero como no es el padre de mis hijos (en Mexico), pues me toca seguir buscando (trabajo) para mandar (dinero a Mexico)” [*“My husband does earn money and gives me some. But since he is not the father of my children (in Mexico), well, I have to keep looking (for work) to send (money to Mexico).”*]

- *Their children's health issues*

Participants often discussed the health issues of their children. It is important to point out that this study does not delve into the causal factors behind the various ailments of farmworkers' children. Whether the children's illnesses were or were not caused by pesticide exposure in-utero, these illnesses add to the set of pressures that push farmworkers to maintain their jobs at any cost.

Marianna's three children have had a variety of health issues. Her oldest (7 years) has gastrointestinal issues and cannot ingest tomatoes, spicy foods, orange juice or other acidic foods. He is on medication. He has always had constant allergies and sinus issues. He also had respiratory difficulties when he was two months old and had to be rushed to the emergency room. Her second child (5 years) also had respiratory complications when she was six months old. Doctors had to operate on her nose at age four as part of her treatment for her respiratory condition. She has also developed asthma. Marianna's third child (1.5 years) had a condition in which her cranium closed prematurely. She had surgery at four months old in order to open the cranium. She wore a special helmet for 8 months and must be closely monitored by an ophthalmologist every six months.

Melisa, another participant, has four children:

They are 11, 8, and 5 years old and 1 month old. Her 11 year old son has constant sinus infections. Her 8 year old son had asthma since birth and was recently diagnosed with ADHD (Attention Deficit Hyperactivity Disorder). He takes medication for both conditions and goes to therapy for his ADHD. Her 5 year old daughter was born with a skin rash. Her 1 month old baby also has skin rashes.

Elias has two sons:

Their oldest son is 8 years old. He had asthma since birth, but in recent months he has improved significantly. Their second son, 5 years old, has had epileptic seizures since he was 9 months old. He has developed a speech impediment associated with the seizures. Elias also had seizures as a little boy, and he also has some difficulties with speech.

As mentioned in earlier excerpts, Rosa Maria said that her work was dangerous because of pesticides, that bosses sometimes randomly reduced people's work hours, and that people weren't allowed to go to the bathroom outside of break times. However,

Rosa Maria stayed at this nursery because they gave her more flexible hours in order to spend more time with her eldest son (now 26), who is legally blind. She explained that it is not easy to switch to a new job because the places that hire undocumented immigrants prefer young workers.

- *Their own health issues*

Participants' own health issues are also a burden. None of the participants interviewed have health insurance. Their health issues are not only a physical burden, but also a financial one; they cover their own health costs. In addition, these health issues sometimes impede them from working, thereby putting more pressure on their spouses (who often also work at nurseries) to maintain their jobs.

Luis is a US resident. He was diagnosed with diabetes 8 years ago. He also has hypertension and is overweight. Luis had to stop working 9 months ago because of the most debilitating of his

health issues, his vision. He has trouble seeing stairs, sometimes he sees double and, in general, he cannot estimate distance or depth. In the past, he had eye surgery due to internal bleeding in the eye. The most recent operation was to correct what Luis explained as a “fallen retina” in one of his eyes. He describes the pain as high pressure inside his eyes. Luis has not received disability coverage, social security, sick leave, or any form of financial support for his health crisis. This is one of the reasons why his wife continues to work at the nursery. However, Luis is enrolled in a program for blind people and will start therapy that may partially restore his sight. At the time of this interview, he had just received a formal letter from his doctor with which he hopes to start receiving disability money.

Elias and his wife are both US citizens. Both have a US high school education. Elias hurt his knee while playing basketball 5 months prior to the interview:

Since the family has no health coverage, they opted to see a “sobador” (bone-setter) who re-positioned his knee manually. Elias did not get an MRI to know what exactly happened to his knee, because his family cannot afford it. He continued working with a “busted knee” for several months. His boss tried giving him different jobs within the nursery “but none of them worked out”. Three weeks before this interview, his boss told him to go home and rest. Elias realized that his being home meant a huge financial cut, so he immediately went to a local community organization for help. Elias explained that the family is very short on money this month because they are living on his wife’s earnings. She also works at a nursery.

The lack of alternative jobs, the responsibility to dependents living in their home countries, the health issues of their children, as well as their own health issues, are among the myriad of factors influencing farmworkers to decide to remain silent and continue in this line of work.

- *Exemplifying rational decisions: working in nurseries while pregnant*

It is clear that many farmworkers live in precarious financial conditions. The following passages illustrate cases in which female farmworkers have made the rational choice to continue to work in nurseries while pregnant, despite knowing pesticides could be dangerous for their babies.

Glorita worked until she was 6 months pregnant with her first child:

She feels that she should protect herself and her fetus from the pesticides: “Uno debe protegerse. Esos químicos son todos dañinos, especialmente lo que ponen en los rosales, parece que es muy fuerte...uno no va a ser joven toda la vida y los efectos (de los químicos) pueden verse mas tarde...pero igual uno sigue regresando a trabajar allí por el dinero.” [“*You have to protect yourself. Those chemicals are harmful, especially the ones they put on roses, it seems that it is very harsh...you are not going to be young all your life and the effects (of the chemicals) may be seen later on...but you still continue going back to work there because of the money.*”]

Another participant, Juanita, worked throughout her pregnancy:

Her husband was deported three months prior to her interview. Juanita was approximately seven months pregnant when this happened. Juanita continued to work in the nursery until the day she gave birth. Juanita explains that she and her baby are both healthy, so they probably were not exposed to pesticides. She added that she had to continue working for the money, particularly after her husband’s deportation.

Miriam, another participant, was pregnant and working at a nursery at the time of her interview. As mentioned earlier, the nursery where she works schedules pesticide spraying on the evenings and weekends. However,

“Nos mandan prestadas.” [*“They lend us out.”*] Miriam and her five co-workers are often sent to other nurseries when work is slow at their usual nursery. She said it’s hard to know whether these other nurseries are careful with their use of pesticides. Last year, Miriam participated in focus groups to discuss pregnancy and pesticide exposure. She is four months pregnant and continues to work in the nursery. despite the knowledge she gained at these sessions.

Miriam’s choice to work in conditions that may affect the health of her fetus may exemplify the extent to which Miriam’s family needs her earnings.

Another participant, Melisa, has also worked in nurseries throughout her pregnancies. She was staying at home with her newborn baby at the time of her interview:

Melisa worked at the nursery throughout her four pregnancies except for six months during the first pregnancy. She recently took her newborn to the nursery for her co-workers to see the baby, “pero solo al break room, no la iba a meterla la nurseria!” [*“but only to the break room, I wasn’t going to put him inside the nursery!”*] she exclaimed, acknowledging the dangers of the pesticides. Melisa’s husband has asked her to stop working so that she can dedicate more time to the children. Melisa feels that the household finances would simply not be enough without two incomes. She exemplified “hay veces tengo que ir a las Iglesias para que me ayuden con la renta” [*“Sometimes I have to go to the churches, so that they can help me with the rent”*].

- *Exemplifying rational decisions: living on the nursery property*

Nursery employees are sometimes given the option to live with their families in trailers situated on the nursery property, in very close proximity to the greenhouses. In exchange, they are expected to “keep an eye” on the premises and be sure everything is in order throughout the weekends. When discussing pesticides, participants expressed some anxiety about living so close to the greenhouses.

Camila’s family lived on a nursery property for a few years:

When they were still living at the nursery, she sometimes became concerned because of their proximity to all the chemicals. All four of her daughters were diagnosed with asthma; there is no history of asthma on either side of the family. All four girls outgrew their asthma by age three, but two of the girls still have allergies. Camila explained: “esa cosa vuela, quien sabe si uno esta inhalando eso.” [*“That stuff flies, who knows if you are inhaling it.”*]. She thought back and added, “vivíamos al lado cuando las niñas tenían asthma.” [*“we lived next to the nursery when the girls had asthma.”*]

Virginia and her family currently live on a nursery property:

One of the main reasons why Virginia is not employed at the nursery is that her 10-year old son has muscular dystrophy and requires additional care for everyday tasks, like bathing himself or brushing his teeth. Their second son, age six, is in good health and thriving. Virginia believes that the chemicals sprayed in the nursery are dangerous. Sometimes she can perceive a smell of chemicals in the air around her home; she is not sure if living in such close proximity to the

nursery is a bad thing. Her son's muscular dystrophy requires her full attention and does not allow her to work full-time to contribute to the household finances. Whether living so close to the nursery is dangerous or not, her family chooses to seize the opportunity to live rent-free.

One very illustrative case study

The following case has not been cited in any of the sections above. It is presented separately because it illustrates several of the points made above.

Sandra came from Guatemala 9 years ago. She came because after her father was killed, her mother was alone supporting several young children. As the eldest of her siblings, Sandra had to leave her own son behind so that she could find work in the United States and send money back for everyone else in the family. Her husband came first and worked for a year before she arrived. They chose to come to Florida, because the husband's cousin lived here. Sandra's first son, now age 9, still lives in Guatemala with Sandra's mother. Her other children, ages 6 and 1.5 years, live with Sandra and her husband in Apopka. The thought of her son in Guatemala still brings tears to her eyes.

Sandra always worked for the same Asian family that owns a set of nurseries. Her duties included planting, moving soil, cutting plants, and filling trays with young plants. Sandra described the work environment: "Ellos quieren que uno siempre se apure...y contal que no nos corran, pues dale más, a trabajar más rapido." [*"They want you to always rush...and just so that they don't fire you, well you just give more, go and work faster."*] No minute of the day went to waste. For example, there were no bathroom breaks outside of lunch break and one official 15-minute break, except in emergencies. She explained that other nurseries sometimes allow for two breaks in the day and laughed saying that would have made a big difference for her bathroom activities. Sometimes they didn't provide drinking water at the nursery where she worked. On other occasions, the bathroom stopped working, and when they asked the boss to fix it, "el respondió que tomen menos agua para no tener que ir tanto!" [*"He answered that you should drink less water, so that you don't have to go so much!"*] Sandra continued to work at the same nursery until one year ago.

Sandra developed a severe rash on her arm while she was still working. They had sprayed pesticides on the plants the day before and the mist on the surface of the plant rubbed off on her arm. Sandra had a burning sensation that very instant. She tried to tell her boss "pero no me hizo caso el patron" [*"But the boss just ignored me."*] She continued to work. By evening time, the arm was covered in white bumpy blotches. Again, she went to her boss and he simply dismissed it, saying that the rash couldn't have been from the chemicals in the nursery; those didn't affect the skin. Sandra kept working for the following six months despite the continuing rash and the burning sensation on her arm. She eventually went to the clinic on her own and doctors prescribed medications for her arm. However, her rash was never documented as a work-related injury. Sandra explained that if she had asked for financial help or documentation of her injury, her boss would have fired her. She lied at the clinic, and said the rash "simply appeared". When the clinic staff asked her if she worked at a nursery, she denied it. "Hay muchas cosas que uno se reserva porque uno tiene que seguir trabajando...ni modo. Tenía que seguir, llega el cheque y cada dollar tiene su destino y a uno no le queda nada. Tengo a mi mama allá enferma, tengo a mi nino, los bills...por eso protegemos estos trabajos." [*"There are many things that you keep to yourself because you have to keep working...there is no other way. I had to go on, that check arrives and every dollar has its purpose and you are left with nothing. My mom is sick over there, I have my little boy, the bills...that's why we protect these jobs."*]

She waited until her brother arrived from Guatemala, and, when he found a job at a mushroom farm, she decided it was time to quit. Now that her brother was making money, he could help Sandra support their

family in Guatemala. Three months ago, the rash finally started to fade. At the time of the interview, she still had discolored patches on her hands and forearms.

Sandra explained that nursery work is very hard. She has cousins and aunts who also work at nurseries. She feels bad for them and tells them to get out of these jobs, “pero no hay otra opción, no hay mas trabajo.” [*“But there is no other option, there isn’t any other work.”*] The cousins’ and aunts’ work environments echo the reasons why Sandra left her own job at the nursery: the chemicals are dangerous, the work is very physically demanding, and the bosses want fast-paced labor.

When discussing alternative work options, Sandra explained that there are jobs in the hotel cleaning industry where one can make between \$250 and \$300 per week, depending on the hours. “Pero los hoteles piden papeles, piden que tu leas, escribas, hables un poquito de ingles.” [*“But the hotels ask for papers, they require you to read, write and speak some English.”*] Those are requirements that many farmworkers cannot meet.

She explained that men have one other option for work, construction. Her husband worked in construction for some time, but chose to stop because of wage theft and instability. Sometimes there wasn’t any work, other times the construction boss would disappear at the end of the week without paying his workers, “y no podíamos hacer nada. Como quejarnos? (Si los encontramos) los patrones amenazan con llamar la inmigración. Entonces, a uno le toca buscar otro trabajo.” [*“and we couldn’t do anything. How could we complain? (if we found them) the bosses threatened to call immigration. So you just have to find another job.”*]

Sandra and her husband live with their two children (1.5 and 6 years), with Sandra’s brother, who arrived from Guatemala one year ago, with Sandra’s cousin, and the cousin’s newborn baby. Today, the home also serves as an informal daycare for a few moms in the community. Sandra charges \$12 per day per child. She sees this as a way to help other moms, who work in nurseries. She started this informal daycare six months ago, when a cousin asked Sandra for help with her kids. Sandra explained that people really need the money and mothers try to arrange affordable care for their kids, so that they can work at a nursery. Sandra sometimes gives the kids baths and dinner, so that their mothers can rest after they pick them up. Money from the informal daycare now contributes to the \$100 that Sandra sends for her family every two weeks.

Sandra feels that farm work has affected her and her husband’s health. Her husband’s eyes are constantly burning and tearing up. It started approximately two years ago, but they haven’t seen the doctor - too expensive. Sandra notices that he now blinks very often. She attributes his eye problems to the constant brightness inside the greenhouses.

When I asked Sandra “this sounds like a life of hardship, why come to live this way?” She responded “Aquí nos alcanza un poquito más. Hemos pasado tanta necesidad (en nuestros países) que aquí ya aguantamos todo para seguir adelante...lo aguantamos todo por conservar nuestro trabajo. No nos importa que no nos den tantos breaks, lo que queremos es ese cheque cada viernes.” [*“Here money lasts a bit more. We have been through so much need (in our countries) that here we put up with everything just to get ahead...we put up with everything to keep our jobs. We don’t care that they don’t give so many breaks, what we want is that check every Friday.”*]

CONCLUSION

The first part of this paper explored various cases of farm worker abuse and pesticide exposure. These cases included: issues with sanitation at the work sites; the constant rushing of employees

who are working with heavy objects and dangerous chemicals; the lack of safety equipment; the lack of coverage for workers injured on the job; the lack of an overtime pay rate; the dangerous practices associated with pesticide application; and multiple cases of pesticide exposure.

The second part of this paper explored the reasoning behind people's choices to remain silent about abuses and to remain in these jobs. Some of the reasons include: the lack of other job opportunities; the financial responsibility to multiple dependents back home; the costs and pressures associated with their children's health issues; and the costs associated with their own health issues.

Understanding the context in which farmworkers make these decisions for the wellbeing of their families is the beginning to understanding their plight. They are people trying to escape poverty through hard work.

APPENDICES

Glorita

Glorita came to Florida because she had an aunt and an uncle living here. She started to work at a nursery because she knew people working there. Glorita worked with the same nursery for 10 years. She is currently 8 months pregnant with her third baby. She has a 5 year old boy and one 10 year old girl. She worked until she was 6 months pregnant with her first child.

Glorita's English is not proficient. She tried to learn English by taking her baby to a motherhood center (centro para mamás) where women could come to learn English and teach English to their babies. She maintained this until she had to return to work.

WORK

Most of her work has been in roses. She works seven days a week all year round. Unlike other nurseries, the rose nurseries require seven days a week of work, but only for specific seasons. She comes into work at 8am and "No hay hora de salida." [*"There's no set time to go home."*] The longest day she has ever worked was from 8am until the following morning. On such days, she would start work up again at 5am and leave at 1pm. The hours of departure depended on the season.

Glorita quit her job 1 year ago. One of the reasons for quitting her job was to spend more time with her two children. She also felt constantly exhausted due to her anemia and the work pace, which has long hours of intense physical labor and no resting days (7 days per week). She also explained that she was tired of the repetitive nature of the work. Finally, she feels that she should protect herself and her fetus from the pesticides: "Uno debe protegerse. Esos químicos son todos dañinos, especialmente lo que ponen en los rosales, parece que es muy fuerte...uno no va a ser joven toda la vida y los efectos (de los químicos) pueden verse mas tarde...pero igual uno sigue regresando a trabajar allí por el dinero." [*"You have to protect yourself. Those chemicals are harmful, especially the ones they put on roses, it seems that it is very harsh...you are not going to be young all your life and the effects (of the chemicals) may be seen later on...but you still continue going back to work there because of the money."*] Glorita often considers going back for a season or two, because she believes the money is good if one is willing to put in the hours.

In addition, she feels there are only a few other options for work. For example, she worked at a hotel through a cleaning service agency. The pay rate was very low with the agency, and she is not sure how good the pay rate would be if she were to work directly with the hotel as cleaning staff. In addition, she considers that the distance from Apopka and difficulties with transportation are important barriers to this

type of job. “Tendría que conseguir el ride.” [*“You would have to find a ride.”*] Glorita has spent the last year enjoying her children and working sporadically at the hotel (through a temporary employment agency).

PESTICIDES

Glorita thinks all chemicals (pesticides) used at the nurseries are bad for people’s health. She thinks the worst chemicals come from nurseries that grow roses. The nursery where Glorita worked showed their staff videos about pesticide safety and began posting signs in English and Spanish. Still, she remembers that sometimes they wouldn’t put up the signs that keep people away from closed off areas, after a chemical has been sprayed. In addition, people sometimes ignore the instructions and precautions on the labels. She feels that people have a lax attitude toward chemicals.

Glorita explained that people from Central America (Guatemala) don’t seem to care about health; they may be more used to “el campo mas agresivo... no se preocupan por los pesticidas.” [*“rougher, more aggressive field work... they don’t worry about the pesticides.”*] (NOTE: This behavior may reflect the lack of awareness and education, as well as the immediate necessities of people who work in these conditions.)

She has seen cases of other nursery workers, who have had negative skin and eye reactions to the exposure to certain chemicals in the nursery. “Simplemente te mueven de una casa para otra con diferentes tipos de planta.” [*“They simply move you from one greenhouse to another one with different types of plants.”*]

Glorita also cited high temperatures inside the nursery as another important hazard of working in the nurseries.

HEALTH

Glorita developed anemia 5 years ago. She often feels dizzy, weak and tired. Her two children are in good health. Her children have access to clinics and government services. Glorita also has access to some of these services for the time being because she is pregnant.

FINANCES

Glorita started making minimum wage in 2001. Her bosses gave salary increases to those who continued to work season after season as an incentive. Her last year’s pay rate was \$8 per hour. (NOTE: minimum wage that year was at \$7.31 per hour. After 10 years of working for this nursery, Glorita managed to increase her pay rate by only 69 cents per hour). Glorita used to buy food from a lady who comes to the nursery to sell lunches. These lunches were much like a simple home-cooked meal consisting of rice, meat and soup, costing Glorita \$6 every day. In addition, on the days that she was needed at the nursery until late, she had to pay her sister-in-law to cook for her two children when they came home from school. Despite this “grim” financial picture, Glorita explained that she feels no financial pressure to return to work. She explains that when they are making less money, then they just try to cut down on expenses.

HOUSEHOLD MEMBERS

Glorita’s husband works in construction. He leaves home at 5am and returns at 6pm. Glorita’s parents live in the house as well. Her mother works at a hotel, and her father works in a recycling plant. She explained that both of those jobs are only available for people who can drive or have arranged rides with other workers in the area. These driving arrangements are often short lived because of unstable employment conditions.

Marcela

Marcela arrived in the United States at age 20 and has been living in the United States for 25 years. She had three daughters and one son, all adults. They have given her 9 grandchildren. Marcela is married and her husband works in construction.

WORK

Marcela worked with a nursery for 10 years. At the time, this was a small nursery with only 10 other employees. Marcela quit working at the nursery three years ago because she went to Mexico for 3 months, and when she returned, they said they no longer had jobs available. She also agrees that lately there isn't much work available. She exemplified by saying: "entran a las 7 y salen a las 3! Osea que no hay trabajo." ["*They come in at 7 and leave by 3! There is not much work.*"] The hours she quoted make for an 8-hour day². Marcela explained that she is used to working more hours than that per day. She got paid a flat hourly rate without adjustment for overtime.

Marcela planted and weeded plants using her own protective gear: purple latex gloves "como los del doctor" ["*Like doctors' gloves.*"] Marcela had to buy the gloves for herself and replaced them often, because they tore easily. She recounted that when spraying fertilizers, the sprayers wore mouth and nose covers as well as gloves. The "esprayadores" as they call them, sprayed pesticides while the rest of the workers were in the same room. Non-esprayadores do not receive protective gear during or after spraying. Marcela also explained that there were no signs to explain to workers that they should leave the room and come back at a later time. Marcela and her co-workers at this nursery never received any pesticide training or information about the dangers of pesticides during the 10 years that she worked there.

Nevertheless, Marcela explained that she is aware that sometimes the health effects of pesticides come later. However, she says that Apopka offers little choice of work; the majority of employment is either in construction or in nurseries. One of her daughters worked in a nursery on two occasions for brief periods. It is possible that she used these "bouts of hard work" to save money for a specific purpose.

FAMILY

One of Marcela's daughters has worked at nurseries on and off and is currently staying at home with her four year old son and 14 month old baby girl. Marcela stays with her to help out with the kids. The boy is barely able to speak a few Spanish words. Marcela says he speaks very little in comparison to the other grandchildren of his same age. Marcela hopes he'll start speaking when he starts school, which may be next year. Still, they have not taken him to a speech specialist nor have raised questions as to why he does not speak a fraction of what other children his age can speak.

Her younger daughter lives 20 minutes from Apopka and recently stopped working; she is approximately 7 months pregnant. Her son works in construction.

Juanita

Juanita came to the United States two years ago. She left her three children in Guatemala with her mother. They are eleven, nine, and seven years old. Her husband also came to the United States a few years ago and was deported three months prior to this interview. Juanita was approximately seven months pregnant when this happened. One of her nephews came from the Miami area to Apopka to stay with her and help her during this difficult time. Leaving the US to be with her husband was out of the question. First, she was too pregnant to safely withstand the journey. Second, coming into the US was a significant investment and involved significant danger; she did not want to give up so easily. In addition, "aquí rinde mas el dinero (que en Guatemala.)" ["*The money we earn here lasts a bit longer than the money we earn in Guatemala lasts there.*"]

² Nine hours minus two 15 minute breaks and one 30 minute lunch break.

HOUSEHOLD

Juanita is currently living with her newborn baby, nephew and three other men. They split the cost of rent and utilities. Her husband is already on his way back to the United States through Mexico, and Juanita is extremely worried for his safety. She hopes to hear from him sometime in his two-week journey.

Juanita and her husband initially came to work in Kentucky, because her sisters live there. She and her husband got jobs in the restaurant business, but only stayed in Kentucky for one year. They were dissatisfied with the pay rate and came to Florida in search of better pay in jobs at a nursery. In Kentucky, Juanita made only \$300 after working seven full days a week, whereas the nursery jobs in Florida offered \$7.31 per hour. Working 9 hours per day, she managed to make \$329, working only Monday through Friday.

WORK

Juanita became pregnant soon after arriving in Florida. She worked in the packing station, standing in front of a conveyor belt. It made her very dizzy, so she asked her supervisor to move her to another section. They moved her to the planting section. Both jobs involved constant standing and offered two 15-minute breaks and one 30-minute lunch. Juanita continued to work in the nursery until the day she gave birth.

When I asked about the nursery's practices around pesticides, Juanita explained: The nursery is a large operation that includes approximately another 10 nurseries. The management rotates the workers throughout the different nurseries in order to close down operations in each nursery after it has been sprayed with pesticides. This way, workers can avoid being exposed to the pesticides before they settle on the ground and other surfaces. This nursery provides its workers with protective gloves and scissors. Juanita explains that she and her baby are both healthy, so they probably were not exposed to pesticides. She added that she had to continue working for the money, particularly after her husband's deportation.

Juanita started working at another nursery approximately two months after giving birth. She says she plans to return to Guatemala with her new baby by the end of the year.

Virginia

Virginia came to the United States 12 years ago. She came to join her husband, who had started working in Florida nurseries with his brother three years earlier. Virginia and her husband have two boys, ages 10 and 6. The owners of the nursery agreed to house the family for free in a trailer home a few yards from the nursery. In exchange, Virginia and her husband are in charge of the nursery at night and on the weekends.

WORK

When Virginia arrived, she went straight to work at the nursery, where their home is now located. She worked for a little over a year and then quit because she was pregnant and felt very nauseous. At that time, she did not know the dangers of pesticides.

Some of her duties at the nursery included the following: preparing the orders for clients, putting soil in planting cups, making seed dishes, spacing plants, or cleaning the nursery. When she first started working, management gave them two 15-minute breaks and one 30-minute lunch break. She explained that people didn't want to take their second 15-minute break, so management took it away. Then added, "but now you can go to the bathroom whenever you want."

HOUSEHOLD

Today, she is a homemaker, occasionally helping her husband on the weekends, when there is additional work to do at the nursery. One of the main reasons why Virginia is not employed at the nursery is that her 10-year old son has muscular dystrophy. He requires additional care for everyday tasks, like bathing himself or brushing his teeth. Their second son, age six, is in good health and thriving.

Virginia does not think that working at the nursery affected her first pregnancy. She explained that it couldn't have affected her, because she quit working soon after she got pregnant. However, Virginia believes that the chemicals being sprayed in the nursery are dangerous. The nursery management has given workshops about pesticide safety twice since her husband started working there. She doesn't know the specific ways in which these chemicals are harmful, but she knows that the 12 hour waiting period for entering a room after spraying is very important and must be respected. Sometimes, she can perceive a smell of chemicals in the air around her home and is not sure if living in such close proximity to the nursery is a bad thing.

Virginia emphasized the great advantage of living on the nursery property; no monthly rent payments. Her son's muscular dystrophy requires her full attention and does not allow her to work full-time to contribute to the household finances. Whether living so close to the nursery is dangerous or not, her family chooses to seize the opportunity to live rent-free. However, Virginia was quick to point out that the bosses expect her husband to spray pesticides on the weekends, water plants when needed, and care for the property in general on evenings and weekends without paying for the extra hours of work.

HEALTH

She has no ailments of her own, but her husband sometimes complains of strong headaches. They attribute the headaches to the sun and the heat inside of the nurseries. On particularly hot days, the nursery management tries to provide extra water for the workers. Her husband also has high triglycerides and complained of chest pains in the past. Nothing has come of either condition; he has not addressed either health issue.

Virginia finds herself very disconnected from the community because of their living conditions. She keeps to herself in the home and doesn't interact much with workers in the nursery. There are no "neighbors" living next to the nursery.

Camila

Camila arrived in Arizona in 1987 with her parents. She was a teenager when she arrived and was able to learn English with ease. She was 14 when she stopped attending school in Mexico. Her parents and other relatives still live in Arizona.

Camila and her husband have been married for 20 years; they moved to Florida soon after their marriage. They have four daughters, ages 18, 15, 12 and 4, who still reside with them.

WORK

Camila's first job in Florida was at a nursery planting gardenias. She worked there for two months. Her next job was at another nursery in Apopka, which was Chinese-owned and the working conditions were very bad. There were no toilets in the nursery, so workers were obliged to ask for permission to use the toilet inside the owner's home. The boss often asked Camila to wait or to "go outside of the nursery, instead of walking all the way to the house." Camila refused to do this on several occasions. She quit after three months.

Her next job was at the nursery, where her husband has worked for the past 16 years. They lived on the nursery property at the time of her first and second pregnancies. She worked at this nursery for several months, but quit after her first month of pregnancy because she was too nauseous and because, as she put

it, “we could afford it.” There was a lapse of about a year without working because she was at home with her first daughter. Camila went to work at a fourth nursery and stayed there for a couple of years. She left that nursery when she was seven months pregnant with her second daughter. She generally enjoyed the work at the fourth nursery, but left because she could no longer lift heavy things and did not want to burden her co-workers.

Today, Camila works sporadically at the same nursery as her husband. For example, she worked full-time at the nursery over the summer vacation while her 15 and 12 year-old daughters cared for the littlest one at home. Meanwhile, her eldest daughter attends college full-time; she is studying to become a pediatrician. Camila has opted for staying home with her youngest daughter throughout the rest of the school year. She sells Mary-Kay products to supplement her husband’s income.

PESTICIDES

Camila is very familiar with pesticide-related issues because her husband has been in charge of spraying at the nursery for the past 10 years. “Cuando se esprayaba allí, no nos dejaban entrar. Siempre nos decían que no entráramos allí... También, trataban de esprayar el fin de semana, a menos que hubieran animalitos, entonces esprayaban durante la semana.” [*“When they sprayed there, they wouldn’t let us inside. They always told us not to enter...they also tried to spray on the weekends, unless there were little critters, then they would spray during the week.”*] When they were still living on the nursery property, she sometimes became concerned because of their proximity to all the chemicals.

When thinking about the health effects of pesticides, Camila brought up the case of her brother-in-law; he works at a small neighboring nursery. Eight months ago, he developed a severe skin rash, first on one arm and then it extended to his whole body. He talked to the nursery owner, “pero el le dijo que no le parecía que los químicos fueran la causa.” [*“but (the owner) told him that he didn’t think that the chemicals had caused it.”*] The brother-in-law then reached out to Camila’s husband, who told him to ask his doctor for documentation of the rash that proved that it was caused by chemicals at work. Both the doctor in Florida and his doctor in Mexico have independently come to the conclusion that his skin rash was caused by the harsh chemicals with which he works. The brother-in-law has continued to work at the same nursery in the same position. Camila explained that the reason he stayed is because he is making approximately \$16 per hour and that other types of jobs would not pay as much to someone with his skills. [NOTE: There are two issues here: First, this “high” paying job is the only job where the brother-in-law will be paid as much. Second, the brother-in-law may feel that it is acceptable to have a direct adverse impact on his health because he is being paid well.]

HEALTH

When I asked directly about the effects of pesticides on her family’s health, Camila quickly responded with confidence that they had not been affected by it. However, we later discussed her daughters’ health and Camila revealed that all four of her daughters were diagnosed with asthma; there is no history of asthma on either side of the family. All four girls outgrew their asthma by age three. They have also outgrown their eczema. However, two of the girls still have allergies. Camila explained: “esa cosa vuela, quien sabe si uno está inhalando eso.” [*“That stuff flies, who knows if you are inhaling it.”*] She thought back and added “vivíamos al lado cuando las niñas tenían asthma.” [*“We lived next to the nursery when the girls had asthma.”*]

FINANCES

As of late, Camila’s husband has been earning less and less money, because the nursery bosses continue to reduce his work hours (he makes \$15/hour). Camila explained that it is due to the decrease in plant sales, which was caused by the slow economy elsewhere. The family recently had to lower their house

payments. They have a 30-year mortgage. They've been living in this house for six years. It is possible that Camila will return to work in a nursery after her youngest daughter is of age to attend a public school.

NOTE: The researcher tried to contact the brother-in-law to document his case in further detail, but he declined to participate in the research out of fear of losing his job.

Rosa Maria

Rosa Maria has been in the United States for 22 years. She is married and has three sons, ages 26 (math teacher), 25 (works in stock market) and 19 (will start college). The whole family has legal documented status within the US.

Her husband arrived alone in the United States to work in 1983. He was homeless when he first came and ended up sharing an abandoned bus with 6 other men. He would send money back to Mexico, but even with his American income, the family was living week to week. Rosa Maria explained, "un cheque nos duraba una semana." [*"One check would last us one week."*] He returned to Mexico to be with his family only one month out of the year.

It was after a couple of years of living this way that Rosa Maria and her husband decided to move the family to the US. They settled in an old empty trailer without AC and heat, nor a single mattress. Rosa Maria vividly remembers the three weeks they slept together on the floor and saw cockroaches roaming about on the same floor. Their situation improved with time and they eventually moved into a home set inside a nursery property; they lived there for five years.

WORK

Rosa Maria started to work at the nursery when her youngest son was of preschool age. She worked at one nursery for five years, working mostly with the soil in the greenhouse. Her second job was at another nursery owned by an Asian family and she worked there for another five years. Rosa Maria explained that there was an advantage to working for her Asian bosses. First, they use a lot of hand gestures to make themselves understood in English. Second, her bosses have a strong accent in English and, according to Rosa Maria, Americans pretend not to understand them. There was a niche for someone who spoke English. Despite her imperfect English, Rosa Maria quickly moved into a sales and shipping job at the nursery. She clarified that the work still took place inside the nursery (hot) and it was still very physically demanding (preparing the orders and packing plants). But it was because of her English skills that she became indispensable to her Asian bosses, and for this reason they allowed her more flexible working hours.

Work at this nursery was not ideal. Pesticide safety was not strictly practiced, but Rosa Maria managed to protect herself, "yo siempre he sido resongona, no me dejaba esprayar encima. Cuando el (esprayador) echaba (pesticidas) yo me salía...el esprayador si se protegía pero a nosotros nos echaba encima" [*"I have always been rebellious, I wouldn't let myself get sprayed on. When the sprayador sprayed, I would get out...the sprayador did protect him/herself, but would spray right on top of us."*]. Rosa Maria decided to help make signs in Spanish telling workers not to enter the nursery after spraying. Rosa Maria also remembers that they were not allowed any bathroom breaks outside of the official break times. "La gente se aguanta por la falta de papeles y la necesidad." [*"People put up with it because they are undocumented and in need."*] There were also multiple incidents where the bosses randomly subtracted hours from people's weekly checks. "si (los trabajadores) reclamaban porque le quitaron horas, el patron les pasaba la tarjeta y no explicaban" [*"If (workers) asked why they subtracted hours, the boss would simply hand them the card without explaining."*]. If workers arrived five minutes late, bosses would subtract half an hour from the time card. "Si la secretaria era hispana, pues cuidaba su puesto y no ayudaba a los trabajadores con las quejas. Si era Americana, simplemente decía que esas son las reglas" [*"If the secretary was*

Hispanic, she would safeguard her job and wouldn't help the workers with the complaints. If she was American, she would simply say that those were the rules.”]. Whenever someone developed a rash, bosses would provide “una pomadita” [*generic word for cream or ointment, “a little cream”*] and that’s as far as they helped.

Nevertheless, Rosa Maria stayed at this nursery because they gave her more flexible hours in order to spend more time with her eldest son (26), who is legally blind. She explained that it is not easy to switch to a new job, because the places that hire undocumented immigrants prefer young workers.

HEALTH

Rosa Maria and her husband were able to give their eldest son medical services for his eye condition while they were in Mexico. However, the family could not afford the same medical services in the United States and opted to stop the treatment. The boy received treatment again at age 9, when he gained his “papeles” or legal migratory status. Rosa Maria explains that despite his blindness, her son is able to do many things that other kids do, like play basketball. Her son is now a math teacher and Rosa Maria drives him to and from work every day.

The family’s health status changed dramatically after arriving in the United States, not only because of the lack of access to medical services (due to cost, unfamiliarity, and linguistic barriers), but also because of the well-documented dietary trap of cheap, convenient, processed foods. Her husband developed high cholesterol; Rosa Maria developed diabetes (after gaining approx. 100lbs); one of her sons has high triglycerides “Yo no sabía que la hamburguesa hacía daño, las papas fritas, la leche entera...” [*“I didn’t know that hamburgers could be harmful, that fries could be harmful, whole milk...”*] Despite her sixth grade education, Rosa Maria decided to arm herself with information and learned to balance her blood sugar through diet and exercise. She now follows a vegetarian diet and has slowly introduced healthy alternatives to unhealthy foods in her family pantry.

(NOTE: Rosa Maria is an empowered woman and her story is one of hardship and success. She often reminds her sons: “acuerdate que vinieron de la nada, de lo mas bajo. Nunca olviden eso (referring to the three weeks when they slept on the floor of a roach-infested trailer) porque el día en que lo olviden, ese día van a pasar por encima de todo el mundo sin importarles.” [*“remember that you came from nothing, from the lowest. Never forget that (referring to the three weeks when they slept on the floor of a roach-infested trailer) because the day that you forget that, that day you will step over everyone else without caring.”*])

Flor

Flor first came to the United States in 1999 to join her husband, who had been going back and forth since 1992. She left her daughters in Mexico in the care of her parents. Less than a year after her arrival, Flor sent for her daughters because she missed them terribly. However, in 2002, Flor and her second daughter returned to Mexico because Flor’s father died. Flor and her daughter returned to the US in 2004. The family chose to settle in Florida, because Flor’s eldest daughter has lived here with her husband since 1997.

WORK

Flor started working at nurseries when she arrived. The work pace would vary with the season. The regular schedule was from 7am to 4:30pm, with two 15-minute breaks and one 30-minute lunch, Monday through Friday. She made \$600 every two weeks. Flor remembers working seven days a week during the “temporada” [*high season for work, it can refer to planting or harvest season*]. She stayed for 2.5 years at her first nursery job, until they closed it down.

“De allí salí acabada.” [*“I left that place physically deteriorated.”*] Flor slipped while rushing to turn off a water hose. She scraped her hands and one arm, her elbow and shoulder were also injured. “Me llevaron al médico y luego me llevaron a trabajar.” [*“They took me to the doctor and then they took me back to work”*]. Flor did not want to lose her hours of work from earlier that day so she continued to work that day. The nursery covered the visit to the doctor. “Alguien me dijo que iba a recibir terapias (para rehabilitar el codo y hombro) pero nunca dijeron nada más. Y yo no dije nada para que no me corrieran, mi necesidad era grande.” [*“Someone told me that I would get physical therapy for (my elbow and shoulder), but they never said anything else. I didn’t ask, so that they wouldn’t fire me. I was in great need”*]. Flor still feels pain in her arm and shoulder when she moves them in a particular way; her elbow still hurts on cold days.

Independent of her fall, the skin on Flor’s hands was also constantly irritated and peeled. One of her duties was to wash plant trays, which have soil residue. She thinks that the chemicals in the soil caused the skin on her hands to peel off. She never saw a doctor about this because it is too expensive. Flor explained that pesticides are very strong chemicals and, although nursery bosses sometimes gave out gloves, they didn’t give them out often enough. The gloves would wear out and people would simply work with their bare hands. Today, she cannot touch household cleaning products (like Windex or Clorox), because her fingers start to peel. Flor specified: “en México (los productos de limpieza) no me pelaban los dedos.” [*“Back in Mexico, my fingers didn’t used to peel”*].

Her subsequent nursery jobs were short term and mostly as an extra employee during the “temporadas” [*“high seasons”*]. Flor’s last job at a nursery was four years ago. She started working there with her daughter, Marianna. However, Flor had to quit after only eight days, because there was no one to care for Marianna’s baby. Since Flor can’t drive and Marianna can, the rational decision was for Flor to stay with the baby.

OTHER WORK

Flor’s husband and four daughters have all worked at nurseries in the past but have found jobs in different industries. Her daughters were able to find jobs in cleaning, administrative positions, and retail because they speak English and can drive and own cars. Her husband worked at a door factory 45 minutes from Apopka, and after that, at a recycling facility 20 minutes from Apopka. He was able to take these jobs because he can drive and owns a car. However, he drives without a license, which involves the risk of deportation. Nevertheless, Flor views nursery work as physically demanding and potentially hazardous and supports her husband’s choice of work even if it means significantly more driving.

When asked why she and her family had remained in these nursery jobs for so long, Flor replied: “La necesidad y el miedo de no encontrar otro trabajo. Nos daba miedo hasta pedir un permiso (para ir al médico).” [*“The need and the fear of not finding another job. We were even afraid of asking for permission to go see the doctor”*].

After a year of caring for Marianna’s baby, Flor started to find jobs through an employment agency that matches day laborers and temporary workers with labor needs in different industries in the area. She worked at a laundromat, a soda packing factory, and a juice factory. The organization provided transportation to some of these, often, distant factories. Flor explained that it wasn’t a good source of work because there were many days when there was simply no work available. (NOTE: earning money on a daily basis is very important to these families because they literally live from paycheck to paycheck.) In addition, Flor explained that the employment agency mentioned above now requires more documentation from its laborers.

Today, Flor cares part-time for her youngest granddaughter and cares for her other eight grandchildren after school.

Marianna

Marianna arrived with her two sisters in 2000. Her parents and eldest sister awaited them in Florida. Marianna was 16 years old and started working right away.

WORK

Her first job was in a nursery in Apopka. Her duties included setting plants onto a moving belt with empty pots and prepping orders of large pots (carrying up to three large pots in each hand). She pointed out that although she was on her feet all day, the worst pain was in her hands.

In describing the work atmosphere, Marianna explained that workers were constantly rushed as if they were paid “por contrato” (by contract, that is, per X units of plants or trays) instead of by the hour. Marianna knows about that form of payment because her husband is a seasonal farmworker picking cucumbers and apples during six months each year. He is paid by the bucket and makes \$100 per day. (NOTE: In contrast, nursery workers make an average of \$300 per week and work at a similar pace.) She remembers that workers were so rushed, that there wasn’t any conversation among them.

Despite the lack of conversation, Marianna saw one of her co-workers develop a rash on her face and arms from one of the plants. Marianna learned that the “patron” took her co-worker to the company doctor, who assured the co-worker that the rash was not due to the plants there. “(ella) siguió trabajando ya. Si quiere curarse, tiene que ir al doctor por su propia cuenta.” [*“(she) continued working and that was that. If you want to be cured, you have to go to the doctor on your own dime.”*]

Marianna worked in the nursery for a few months. She quit to join her father, working at a door factory. (NOTE: It was easier for Marianna to transition into a different type of job, 40 minutes from Apopka, because she could catch a ride to and from work with her father, who had been working there for some time before Marianna’s arrival in the U.S.) She worked alongside her father at the door factory for several months. Unfortunately, Marianna’s maternal grandfather died, so she and her mother went back to Mexico. They remained in Mexico for two years.

Upon her return to the U.S. in 2004, Marianna worked at a nursery again, but only for a few months until she managed to get a job alongside her father once more. This time, they worked in a recycling plant, 20 minutes from Apopka. Marianna explained that recycling work is better because they pay overtime. (NOTE: In contrast, nurseries pay a flat rate regardless of the number of hours worked per week.) She pointed out that in addition, they increase workers’ pay rate by 50 cents every year. Marianna left this job after a couple of years, because she and her husband were expecting a baby.

After some time, Marianna went back to work at a nursery. Her job was to prepare chemicals inside an air-conditioned lab in the nursery. It involved working with large trays holding dozens of small glasses filled with a hot substance that would later be added to soil. They had to shake the trays in order to mix the substance while it was still hot. The nursery provided gloves for everyone working there. The liquid would sometimes splash onto her clothes. There was a book in the lab indexing the different chemicals in the lab. She was having a lot of pain in one of her arms, so one day, Marianna snuck in to read the book. She learned that the chemicals were quite toxic and had to be handled with a lot of protection. Since then, she would put her shirt over her nose and mouth. She remarked that the nose and mouth covers were administered only to the lab staff that worked with plants that need to be protected from human contamination. When her bosses found out that she was pregnant, they moved her outside of the lab, to the planting area. She worked at that nursery for three years, but quit at the end of her last pregnancy.

Today, Marianna works part-time as a clerical/administrative staff at a local organization.

HEALTH

The family has had a variety of health issues. During her second pregnancy, Marianna developed a rash on her entire body. Marianna attributes it to the chemicals on her husband's clothes when she washed them. The rash continued for over two years. The doctors did not know what to do when the different medications didn't work. Marianna opted for homeopathic medicine (form of alternative medicine). The 20-day treatment cost her over \$400, but it finally took the rash away.

Marianna's husband also suffers from severe allergies. Medications, like Allegra, do not have any effect. When picking apples last year, one of his hands became so swollen that he could not move it; he was unable to work for over a week. He also complains about his back, especially after working in cucumber farms.

Marianna's three children have had a variety of health issues. Her oldest (7 years) has gastrointestinal issues and cannot ingest tomatoes, spicy foods, orange juice or other acidic foods; he is on medication. He has always had constant allergies and sinus issues. He also had respiratory difficulties when he was two months old and had to be rushed to the emergency room. Her second child (5 years) also had respiratory complications when she was six months old. Doctors had to operate on her nose at age four as part of her treatment for her respiratory condition. She has also developed asthma. Marianna's third child (1.5 years) had a condition in which her cranium closed prematurely. She had surgery at four months old in order to open the cranium. She wore a special helmet for 8 months and must be closely monitored by an ophthalmologist every six months. (NOTE: It is not the role of this research to determine what caused the various health issues that Marianna's children face. What's important is to understand the role of these health issues in Marianna's decision to return to work at nurseries time and again.)

FINANCES

The family finances are very unstable. Marianna pointed out that, although her husband could make \$100 per day, his job was very unstable because of its migratory nature. In addition, his absence takes a toll on the family unit. It is because of this that he decided to take this year off from migrant farm work. Instead, he has found a part-time job in trailer maintenance.

In addition to the decreased income, the family is in debt. It all started when Marianna's husband got pulled over and had no driver's license. As a result, the family had to pay several hundred dollars in fees and immigration sent Marianna's husband to Miami to await his fate. Marianna got a lawyer to plead their case asking law enforcement not to deport him, based on the children's various health conditions that require specialized treatment. Currently, they are \$6,000 in debt. The lawyer will cost them another \$12,000.

Abigail

Abigail arrived in 2002. After her husband died, she decided to leave her three sons with her mother in Mexico, in search of better opportunities in the United States.

Her brother was living in Michigan at the time and offered her a place to stay. He helped her find a job at a restaurant. She didn't like life there and quickly ran out of money. She decided to join a group of people from her hometown who were headed to Florida. She initially stayed with her cousin, but the arrangement didn't last. Abigail then lived with different people a few months at a time. Today she lives with her second husband, their son (1.5 years old), and the husband's nephew (adult). She is pregnant with her fifth child.

WORK

Abigail has worked in nurseries and as a cleaner in restaurants. Abigail has had difficulty finding jobs that last longer than a few months. The exception was a job at a nursery; it lasted four years. Abigail was

forced to quit after the owner sold the nursery. It has been difficult to find other jobs since then. She only gets hired for short periods of time, “no es nada estable” [*“It’s not stable at all”*]. Abigail explained that not having a ride to work is another important barrier that further reduced the choices of jobs available to her. Being pregnant has further complicated matters, because it makes Abigail very nauseous. (NOTE: It will be harder to get work when her belly starts to show.) She had not found any work for the past month at the time of the interview. She worries about not being able to send money to her mother and sons in Mexico. She sends money every two weeks or once per month.

Abigail’s second husband also worked in nurseries and mushroom farms for approximately five years. He used to get allergies when they asked him to spray pesticides. “...le daba mucha tos y le salían ronchitas con manchas blancas. Llegaba (del trabajo) con la piel lleno de ronchas en todo el cuerpo. Los ojos estaban rojos cuando esprayaba. Le duraban las ronchas y los ojos rojos como 2 o 3 días... Cuando esprayaba, le daban mascararas, guantes y trajes que protegen. Pero es tan fuerte el químico, porque le pasaban (los químicos). Ahora, que no trabaja en eso ya no le dan esas alergías. Por eso me di cuenta yo que era por el químico de la nurseria.” [*“...he would cough a lot and get little bumps with white blotches on his skin. He would come (from work) with his skin covered in bumps throughout his body. His eyes were red when he had to spray. The bumps and red eyes would last for 2 or 3 days...when he sprayed they gave him face masks, gloves and suits to protect him. But the chemical is so strong, it would pass through. Now that he doesn’t work in that, he no longer gets those allergies. That’s how I realized it was due to the chemical at the nursery.”*]

Her husband stopped working at the nursery because the owner started requiring social security numbers. Abigail explained, “pero el se sabe defender, el habla inglés y así logró conseguir algo más” [*“but he knows how to handle himself, he speaks English and that’s how he was able to find something else”*]. Two years ago, he found a job doing the maintenance of the apartment buildings in which they live. Abigail emphasized that the job worked out because her husband can communicate with the owners and the tenants who speak English. She feels that he is at a great advantage because of his English.

LEARNING ENGLISH

Abigail explained that most people don’t speak English and don’t have much choice. “Uno busca como pasar la necesidad, como mandar dinero para su familia. Por eso es que la gente soporta eso (trabajo en nurseries)... Entre trabajadores se pregunta uno: Si te gusta tu trabajo? Pues no! pero hay la necesidad. Si nos salimos de aquí (la nurseria), batallamos para encontrar otro trabajo. Lo primero es aprender el inglés.” [*“One looks for ways to get through the needy times, ways to send money home to the family. That is why people put up with this (nursery work)... Amongst workers we ask ourselves: you like your job? Well no! but there is the need. If we get out of here (the nursery), we’ll struggle to find another job. The first thing is to learn English.”*]

FINANCES

Abigail’s husband makes \$400/week. The nephew is a gardener, but has also had financial difficulty because his crew gets fewer jobs than previously. When employed, Abigail manages to earn between \$280 and \$300 per week working at a nursery. She pays one of the neighbors \$65 per week to babysit her 1.5 year old son while she works. Her rent costs \$650/month. “Mi marido si gana y me da dinero. Pero como no es el padre de mis hijos (en Mexico), pues me toca seguir buscando (trabajo) para mandar (dinero a México).” [*“My husband does earn money and gives me some. But since he is not the father of my children (in Mexico), well, I have to keep looking (for work) to send (money to Mexico).”*]

HEALTH

Abigail sometimes has “blood pressure problems.” She often feels hot, sleepy, tired, and with a dry mouth. She used to blame it on her last pregnancy, but since her fourth son was born, she decided to control the problem by drinking Coke or Pepsi. She had tuberculosis in 2004 and claims that one of her

arms still hurts (since the TB illness). She also has a pain which she describes as, “something that gets pinched between the womb and the spine,” when she bends over. She thought that it was her IUD (Intra Uterine Device), and therefore, had it removed. She switched to the contraceptive injection for one year. She stopped taking the contraception for one year while she was in Mexico, and then became pregnant three weeks after her return to the US. She gave birth and went back on the contraceptive injections, but stopped after a year because they were making her gain weight. She and her second husband then started using condoms.

Abigail also has a problem with her eye. She doesn't know the medical term for it, but her parents explained it to her as the result of a childhood illness: “Cuando tenía 2 o 3 años me dio sarampion. En el rancho no había cuidado médico. Y a mi no me toco las vacunas de bebe.” [“*When I was 2 or 3 years old I had measles. There wasn't any medical care at the ranch. And I didn't get any of the baby vaccinations*”]. She explained that indigenous moms and their babies would hide from vaccination campaigns, because they heard that vaccines gave the babies fever. “Eran muy indígenas la gente en esa epoca.” [“*People were very indigenous back then.*” *The connotation on “indigenous” in this instance being ignorance*]. The doctors in Mexico said there was a treatment for her eye, but she didn't have the money for it. The Farmworker Association staff gave her the contact information of a place where she could be helped. She hasn't looked into it because she has no money, no car, and until recently had no time to take off from work. (Their car broke down over a year ago).

The unit where they live is very dilapidated, and the sheet rock is heavily damaged by humidity. The paint on every wall is stale, and the vinyl floors look old and used.

Miriam

Miriam arrived with her husband in the United States, 8 years ago. They have two children, ages 6 and 2, and were expecting their third child at the time of this interview. The couple came straight to Florida.

Miriam's husband began working in nurseries right away. However, he soon switched to work in construction because it pays a little better. He was able to find a more stable job with a particular construction crew.

WORK

Miriam didn't work for the first two years. She explained that she has always worked in nurseries and that her duties have included: cutting plants, sweeping the floors, cleaning mud off of surfaces and floors and weighing plants. All of these activities take place inside the nursery, where it is significantly hotter than the ambient air. She specified that bosses provided water and allowed workers to get out for fresh air.

At the nursery where Miriam currently works, they spray pesticides in the evenings and weekends, when the workers are not inside the nurseries. They also use a fertilizer that turns the water blue and is not harmful to people, according to her bosses. Miriam and her five co-workers are often sent to other nurseries when work is slow at their usual nursery. She said it's hard to know whether these other nurseries are careful with their use of pesticides. Last year, Miriam participated in focus groups to discuss pregnancy and pesticide exposure. She is four months pregnant and continues to work in the nursery, despite the knowledge she gained at these sessions. (NOTE: The choice to work in conditions that she knows may threaten the health of her fetus may exemplify the extent to which Miriam's family needs her earnings.)

“Nos mandan prestadas”. [“*They lend us out.*”] She used these words to highlight that they feel very used, but that bosses do not see things this way because the nursery pays them what it deems “fair wages”. She added: “no reconocen que uno les está sirviendo a ellos...pero igual nosotros les estamos trabajando, les estamos sirviendo así que nos deben respetar.” [“*they don't realize that we are being*”]

used...but nevertheless we continue to work for them, we continue to be of use to them so they should respect us.”] Her tone was one of indignation at the fact that bosses “lent” them out to other nurseries.

Miriam explained that part of the reason why people don’t say anything about the abuses or unsatisfactory working conditions is that they are afraid. However, she added that at this particular nursery, employees can express themselves with their bosses. But then added, that one of the things that make Latinos so good for this industry, is that they are hard workers and they never complain.

FINANCES

Miriam and her husband have had to send money back to their relatives in Mexico for a number of years. Her grandparents are very ill, and although her brother returned to Mexico to help them out, his job as a construction worker and as a seasonal farmworker in Mexico does not pay enough money to support him and the grandparents. Miriam sends them \$150 each month. In addition, the couple sends \$100 per month to a blind uncle. Miriam explained that life in the United States is full of additional stresses, “el trabajo es estresante, lo que tú ganas no es para ti, es para la renta, las cosas básicas y para enviar (a Mexico)...” [*“The work is stressful, what you earn is not for you, it is for rent, the basic amenities and to send (to Mexico).”*]

Her sister, the sister’s husband and their children returned to Mexico voluntarily after working 7 years in a chicken factory in Michigan. Then, she added, “Ahora se sienten mejor, no tienen la presión que tenían aquí. Pero en México también esta difícil.” [*“Now they feel better, they don’t have the pressure that they had here. But things in Mexico are also tough.”*]

Fear of deportation is an additional stress, because it constantly threatens the lives that they worked so hard to build in the United States. She explained that, although immigration laws are not as fierce in Florida as in other states, deportation is still a possibility that plants a constant fear in their minds and hearts.

Miriam’s husband makes an average of \$400 per week; she makes \$200 per week. This puts them right above the bracket of eligibility to receive Medicaid for their children.

We had to end the interview because Miriam had to see the doctor.

Liliana

Liliana came to the United States 18 years ago. She came with the father of her three children (17, 16 and 14 years old). They came directly to Florida.

WORK

Liliana worked in different kinds of farm work, during the first few years of coming to the U.S. She spent a few months picking carrots, other months working with cactus growers, other months in ferneries and nurseries. It was difficult to work for long periods of time in a single place, because the work availability was not predictable, and because it was hard to find caregivers for her children. After a couple of years of constant instability, Liliana and the father of her children decided that it was best if she stayed at home with the young children. Her husband was able to move on from nursery work into transport of produce. Today, he works as a delivery man to supermarkets for various kinds of fresh produce.

(NOTE: The interview was interrupted here because it was finally time for Liliana’s medical appointment. She had been waiting for 2.5 hours. She was worried because she asked for the day off at work in order to complete multiple errands. It would be difficult to complete the rest of the errands after spending so much time at the clinic. She needed to sort out something with her food stamps. She also wanted to meet with a lawyer about processing her residency.)

In addition, she pointed out with a little anger that she had participated in a focus group study about pregnancy and pesticides. Her tone demonstrated that she felt that she had already responded to questions about pesticides and nothing changed; now I was here asking more questions.

It is hard to ask people whose livelihood depends on every minute that they are working, to spend time answering questions, for which they will see no immediate reward.

Melisa

Melisa and her sister have been in the United States for 13 years. They came directly to Florida and Melisa went straight to work at a nursery. She remained working there for 13 years. She was staying at home with her newborn baby at the time of this interview.

WORK

Melisa has always worked from Monday through Saturday, from 7am to 5pm, with two 15-minute breaks and one 30-minute lunch break. Her duties at the nursery include: weeding, cleaning plants, cutting plants, planting, watering, fertilizing and preparing orders. She explained that it is very hot inside the nursery, so it is imperative to drink lots of water. It's also important to bring good shoes, because the floor is slippery with mold and water. Her mother-in-law was present during the first 20 minutes of the interview. She recounted a few of her own experiences while working at nurseries. Her mother-in-law fell several times, but they couldn't send her to the doctor because "el patron estaba en quiebra... todavía están en quiebra." [*"The boss was going bankrupt...they are still going bankrupt."*] The mother-in-law chose to clean the nursery floors voluntarily on the weekends, so that no one else would slip and fall anymore.

Melisa explained that the nursery has been kept in worsening conditions for many years, under the pretext that they are going bankrupt. "Hubo un tiempo en que ni agua nos daban. Ni papel higiénico!" [*"There was a time when they didn't even give us water. Nor even toilet paper!"*]

They never provided workers with gloves, so workers had to buy their own. Melisa calculated that a box of gloves lasts less than a couple of weeks.

During the height of the nursery success, the company had two nurseries employing over 80 workers. Melisa's bosses used to offer workers a "special contract" once per week and on the weekends. The "contract" consisted of paying workers based on the number of plants or trays that they produced. This special contract was meant as an incentive to push people to work even faster. They used to offer paid vacation, sick leave, 401K's and even English lessons. However, Melisa said they never showed them any videos on pesticides nor explained anything about the dangers of using them.

"A veces esprayaban a dos líneas de uno y con el movimiento del aire igual nos caía todo el espray...antes (personas externas) iban a chequear las nurseries, entonces ponían los avisos de no entrar despues de sprayar." [*"Sometimes they would spray two rows from you and with the movement of the air, all the spray would still land on us ...before, (people from outside) would come to check on the nurseries, so they would put up the signs saying not to enter because they had just sprayed."*] But now, since no one has come to check whether nurseries follow the regulations set for pesticide use, the safety practices at the nursery have been widely ignored. "Incluso el que espraya (el pesticida) no tiene ni el traje (traje de protección) porque el traje ya está muy Viejo." [*"The guy who sprays (the pesticides) doesn't even have the suit (protective suit) because the suit is so old now."*]

Today, the nursery is only open for three days per week and the workforce was reduced to 14 employees. Melisa described the nursery as, "very deteriorated." They used to pay someone to clean the workers' toilets. Today, the workers have to take turns cleaning the toilets every week.

HEALTH

Melisa worked at the nursery throughout her four pregnancies except for six months during the first pregnancy. Her children are 11, 8, and 5 years old and 1 month old. Her 11 year old son has constant sinus infections. Her 8 year old son had complications during birth (placenta previa). He has had asthma since birth and was recently diagnosed with ADHD (Attention Deficit Hyperactivity Disorder). He takes medication for both conditions and goes to therapy for his ADHD. Her 5 year old daughter was born with a skin rash; her 1 month old baby also has skin rashes. Melisa recently took her baby to the nursery for her co-workers to see the baby, “pero solo al break room, no la iba a meter a la nurseria!” [*“but only to the breakroom, I wasn’t going to put him inside the nursery!”*], she exclaimed, acknowledging the dangers of the pesticides.

Melisa was diagnosed with hypothyroid two years ago. Melisa was also diagnosed with “diverticulitis” (condition affecting the large intestine). She attributes this to the stress during a very low point in her life, three years ago. She had no money for rent, her daughter tested positive for the H1N1 flu, her son had an asthma attack, and they had no food stamps - all within the same period of time. (NOTE: As mentioned in other interviews, it is impossible to know whether or not her exposure to pesticides is in any way connected to her and her children’s health issues. But these health issues are, nevertheless, an additional strain in Melissa’s life, and they incur additional expenses and may help to explain her inability to leave the only job she has had in the US.)

HOUSEHOLD

Melisa lives with her husband and four children. Her husband works in construction and leaves for work for several weeks at a time. Melissa keeps very busy running the household by herself most of the time and caring for her four children. Their health issues and the 8 year old’s ADHD are particularly time consuming. The school often calls her with complaints about the boy. Her 11 year old son is in the gifted and talented program in his school, and Melisa tries to be involved in his homework and extra assignments. For example, they surf the internet on her phone, when he needs to do online research. In addition, Melisa is in a legal battle with the father of her 5 year old daughter because he does not pay the child support.

Melisa’s husband has asked her to stop working, so that she can dedicate more time to the children. Melisa explained that her husband also has two other children for whom he pays child support, and that she doesn’t feel it is right for her husband to completely support the children that are not his. In addition, Melisa feels that the household finances would simply not be enough without two incomes. She exemplified “hay veces tengo que ir a las Iglesias para que me ayuden con la renta.” [*“Sometimes I have to go to the churches, so that they can help me with the rent.”*]

Luis

Luis arrived in the US 24 years ago. He first worked in California as a farmworker and then moved to Florida, where most of his family had already settled. Six of his brothers already worked in nurseries when he arrived. Luis became a US resident over a decade ago.

WORK

Luis worked at the same nursery for the past 23 years. “Al principio, eramos solo unos cuantos trabajadores.” [*“At first, we were just a few workers.”*] Today, the nursery employs over 20 workers. Luis’ boss uses a ticket system to help the owners track the exact time required to complete different tasks at the nursery. Luis became the person in charge of giving out the tickets for the tasks that had to be completed each day. His duties included: shifting workers around from task to task as well as planting, moving pots and transplanting plants himself. The boss made him supervisor after 12 years of working in the nursery. Luis has six employees under his supervision. Luis described his relationship with his boss as

follows: “el es el hijo de los dueños. Son suecos, yo le entiendo el ingles, pero no lo hablo mucho...a veces, nos trata mal, a veces bien.” [*“It is the owner’s son. They are Swedish. I understand English, but I don’t speak it much...sometimes he treats us badly, other times well.”*]

Luis explained that the nursery deals with very expensive seeds and very time-sensitive planting processes. He was responsible for ensuring that the seeds and potted plants have the right treatments at the right time. He explained that lagging behind on certain processes or not keeping the plants at the right temperature, could mean a loss of thousands of dollars in ruined seeds or plants.

When discussing pesticides, Luis explained “la gente se quita cuando el esprayador pasa, pero igual quedan a tan solo 5 metros del area esprayada.” [*“people move over when the sprayer passes by, but they still end up only 5 meters from the sprayed area.”*] He added that, in any case, they don’t spray very strong chemicals; that there is some regulation because “vienen a chequear que los químicos se usen bien, chequean la tierra, chequean la limpieza.” [*“they come to check that the chemicals are properly used, they check the soil, they check for cleanliness.”*] However, he couldn’t recall the last time he saw people coming to check.

HOUSEHOLD

His wife started working at the same nursery a few years after Luis, and she is still working there full time. She stopped working for a few years, after she became pregnant, and returned to work after their only son started pre-school. During this time, Luis’ wife complemented his salary by running an informal daycare in their home. Her pregnancy and birth were normal, but the baby had low birth weight, (5.0lbs=2,260g, low birth weight as defined by the World Health Organization is less than 2,500 grams.) Luis’ son is now in seventh grade. Luis is very proud of his son, whom he describes as a skinny, good boy with a good attitude and very “aplicado” [*“applied or dedicated.”*] Luis pointed out that his wife never had any miscarriages but they simply had one son.

Luis and his wife started buying their home over 15 years ago. They live there with their son. Their mortgage is \$450 per month with 12 years to go. The home is quite old, but Luis has repaired it significantly.

HEALTH

Luis was diagnosed with diabetes, 8 years ago. He also has hypertension and is overweight. Luis had to stop working 9 months ago because of the most debilitating of his health issues, his vision. He has trouble seeing stairs. Sometimes he sees double and, in general, he cannot estimate distance or depth. Luis started using glasses five years ago. The doctors tell Luis that the vision problems are associated with diabetes. In the past, he had eye surgery due to internal bleeding in the eye. The most recent operation was to correct what Luis explained as the “fallen retina” in one of his eyes. He describes the pain as the feeling of high pressure inside his eyes.

Luis explained that working in the nursery did not help his condition. First, he often strained his eyes when working with very small seeds. In addition, Luis attributes the episode of internal bleeding in the eyes to the heat and the stress he experienced at work. After that, he had difficulty sleeping from the stress of covering medical bills and staying at work: “...no dormía y mi ojo no sanaba.” (...I couldn’t sleep and my eye wouldn’t heal.)

Luis has not received disability coverage, social security, sick leave or any form of financial support for his health crisis. This is one of the reasons why his wife continues to work at the nursery. However, Luis is enrolled in a program for blind people and will start therapy that may partially restore his sight. At the time of this interview, he had just received a formal letter from his doctor with which he hopes to start receiving disability money.

Luis' wife has not been to the doctor in years, but Luis was quick to clarify that it was because they have no insurance. The thing she complains the about most is the pain in the joints in her hands. Luis suspects it is associated with her work in the nursery.

Ingrid

Ingrid arrived in the United States in 1993 with her husband. They came directly to Florida to work in ferneries and nurseries. They had their US residency by 1998.

WORK AND HEALTH

Ingrid and her husband's first job was at a fernery; they worked there for 6 years. Ingrid explained that it was somewhat dangerous, because they were always bending over or kneeling and there were lots of snakes and critters. She explained that there was a type of infection that caused swelling and worms, inside the skin of the hands. Over the six years, she saw several cases of co-workers who developed this infection. She also remembers running into a rattle snake in the fernery, five days before giving birth. "No avisaban sobre los riesgos y a uno le tocaba sanarse con su (propio) bolsillo." [*"They wouldn't tell us about the risks and you had to cure yourself with your own money or pocket."*] She explained that workers were never told about the employer's responsibility or role, if there was a work injury.

Ingrid developed a serious back injury after six years of working at the fernery. One day, she simply could not bend over anymore; one of her friends had to take her to the hospital. She left the fernery and stopped working for one year.

Her second job was at a nursery. "También era pesado, mucho sol, humedad con la lluvia, mucho frío en el invierno... bultos y plantas pesadas, y sobre todo: movimientos rutinarios." [*"It was also heavy work, lots of sun, humidity with the rain, and very cold in the winter...loads and heavy plants, and most of all: repetitive movements."*] Ingrid developed carpal tunnel syndrome from constantly working with a large pair of garden clippers. Another one of her duties was to spray a 5-gallon mixture of water and pesticide. "Ese espray mareaba y te adormecía. No daban nada para protegerse, ni guantes, ni gafas, ni mascara." [*That spray made you dizzy and sleepy. They didn't give you anything to protect yourself, no gloves, no goggles, no facemask."*]

Ingrid remained 10 years at that nursery. She initially mistook the pain and partial stiffness of her arm to be a sign of heart failure, so she rushed to the hospital on several occasions. Ingrid's doctor mistakenly thought the pain was due to fatigue and simple soreness. He suggested that she rest for a few months. Ingrid and her husband simply could not afford it, because her medical bills had gotten them \$7000 into debt. She tried to manage the pain with over-the-counter medications for approximately four years. Ingrid and her husband covered all the costs. She explained, "al principio yo lo confundía (el dolor) con cansancio, pero cuando ya no podía con el dolor de las manos fué que empecé a buscar ayuda y ya fué cuando descubrieron que tenía eso (Carpal Tunnel Syndrome)". [*"At first I confused it (the pain) with fatigue, but when I couldn't bare the pain in my hands, I started seeking help and that was when they discovered that I had that (Carpal Tunnel Syndrome.)"*] In addition, her back injury evolved into two dislocated disks in her spine and a hernia.

When asked why she didn't ask her employer to give her time off or to cover some of the medical expenses, Ingrid replied: "Es que quejarse que algo le duele es como firmar su renuncia en este tipo de trabajo. Entonces, le aseguró que todos los que sienten dolor pues se lo aguantan." [*"Complaining that you have some pain is like signing your resignation letter, in this type of job. So I can assure you that everyone who feels pain just puts up with it."*]

Nevertheless, Ingrid reached a point of desperation and decided to take the doctor's report of her lumbar disk and carpal tunnel condition to her boss to ask for a different task in the nursery. The boss sent Ingrid to the company doctor, who said she had nothing wrong and prescribed four strong pain medications. Ingrid had to stop taking them because they were making her extremely drowsy and nauseous. She went back to the company doctor, who again said she had nothing wrong. So, she turned to an independent rehabilitation clinic for another exam. They confirmed that she had Carpal Tunnel and back problems. The company doctor replied by saying she had to return to work. This is when Ingrid sought legal advice at a local community organization. She threatened to sue the nursery's insurance company. The company paid for surgery for one of her hands.

Today, her hands hurt when the weather is cold. At night, her hands and forearms tingle with numbness. She has lost all feeling in her right thumb.

Things weren't the same at work after the surgery. "Si uno se lástima, y el patrón lo sabe, poco a poco le dan menos horas... No me gusto el trato que me dieron el último año que estuve allí. Querían que yo renunciara." ["If you get hurt and the boss knows it, little by little they give you less work hours... I didn't like the way they treated me the last year I was there. They wanted me to quit."] Ingrid quit in 2011, after what she described as several incidents of unfair cutting of her hours and general mistreatment. Ingrid explained that they couldn't just fire her like any other undocumented person, because she was a US resident since 1998. She claims her employers discriminated against her because of her damaged hands, until she finally quit. Ingrid's husband still works for this nursery, and, therefore, Ingrid decided not to pursue the matter any further. She fears for her husband's job.

After 12 years of working in the nursery, Ingrid's husband is also physically deteriorated; he has knee and back pains. Ingrid thinks he feels the financial pressure and is sticking to his job because she has no income. Ingrid explained that if she could get a job, then he could get a lower paying and less physically demanding job. At the same time, she feels that he is scared of changing jobs, because maybe they would fire him more easily at a new place. She emphasized that his job at this nursery is not a "secure" job, but he feels more secure at this nursery because he knows exactly what they expect of him and he can deliver. She added, "(hoy) trabaja como lo hizo el primer día" ["(Today) he works like he did on the first day."] Ingrid's husband has been a U.S. citizen since 2006.

FINANCES

Ingrid receives unemployment benefits, totaling \$600 per month. Her husband continues to earn a little over minimum wage. The nursery filed for bankruptcy, so what used to be \$40,000 of her husband's 401K, suddenly became \$10,000 (subtracted by the \$5000 going to taxes). Ingrid explained that the family started living on credit since she stopped working. They owe an additional \$10,000 of living expenses to a credit card company. They still have 8 years of mortgage payments left on the house.

FAMILY

Ingrid and her husband have three children (19, 15, 9 years of age). She recalls that her pregnancies went well. Ingrid tried to stop working during some parts of her pregnancies, because she feared the pesticides and fertilizers could affect her babies. Her children are relatively healthy, but her 9 year old daughter is very overweight. Ingrid is implementing all of the dietary and exercise guidelines that the pediatrician gave her. Ingrid is glad to be home to dedicate time to her daughter. She regrets the past years, when she spent so much time away from her children to work in the nursery.

"Debemos mucho dinero, pero yo necesito un trabajo que me permita estar aquí cuando (mis hijos) salen de la escuela." ["We owe a lot of money, but I need a job that allows me to be home when (my kids) get out of school."] It is hard to find a job because the jobs she can get involve physical labor, and she has to report her carpal tunnel and back lesions in the job applications.

Ingrid asked me to specifically put the following remarks in my report:

“Cuando un campesino se siente enfermo, el reportar sus síntomas al patrón es estar firmando su renuncia.” [*“When a farmworker feels ill, reporting his/her symptoms to the boss is like signing his/her own resignation.”*]

“(Yo quiero) que exijan un examen físico del trabajador par aver cual es el impacto de trabajar aquí en el campo.” [*“(I want) that they demand a physical exam of the worker to see what is the impact of working here on the fields.”*]

“Si se enferma, quien va a perder es el trabajador, el patrón no tiene ninguna responsabilidad.” [*“If you become ill, the one on the losing end is the worker, the boss has no responsibility.”*]

Elias

(NOTE: Elias’ parents were present for a portion of the interview. They provided a rich background to Elias’ life-long link to farm work.)

Elias was born in the United States. His parents migrated from Mexico in 1978. They lived in Los Angeles, but eventually moved to rural Florida after multiple gang shootings in their neighborhood. Elias’ uncle, who lived in Florida at the time, helped Elias, his nine siblings, and his parents set up their new lives as farmworkers.

Elias’ dad had experience as a mechanic in L.A., but was only able to find farm work. He made less than a third of what he earned in L.A. Elias’ father had a variety of jobs when he first arrived. His first job was at a nursery, but he only stayed there one week, after seeing the conditions of the workers. He changed jobs constantly in search of something better. He worked at an orange grove for 1 year, then at a milk factory for 6 months, and then settled into a job at a mushroom farm for 8 years. Elias’ father explained that the jobs at the orange grove and the milk factory came to an end after his bosses tried to pay him less than what had been agreed. He added that what lured him to this particular mushroom farm was the hierarchy of jobs that he could potentially attain.

Meanwhile, Elias grew up as a second generation Mexican American. He is bilingual, finished high school, and started working summers and afterschool at age 14. At age 18, he fathered a child with his high school girlfriend (now his wife), and started working fulltime in construction. Elias wanted to develop more skills in the construction business, so he entered part-time classes to become an electrician. However, he was unable to continue his education because the school was very far, the gasoline was expensive, and his pay rate had decreased due of the economic crisis. Elias started getting less and less hours with his construction crew, so he started to work at a nursery.

WORK

“Sin más educación, se me va a ser difícil encontrar un trabajo que no sea en nurseria o en construcción.” [*“Without further education, it will be difficult for me to find a job that is not in a nursery or in construction.”*]

He began working on the nursery floor, but soon became a driver (because he has a license). His job is to distribute large plants to different clients. It entails loading the truck, driving to different areas, and unloading the potted plants. He described the plants as large and heavy.

He has been working at the nursery for the past year and a half. The nursery has 6 employees who receive annual pesticide training. They spray pesticides on Saturdays, so that no one is exposed for 48 hours after application. They also send the manager several times per year to training to learn about the latest on

plant treatments and pesticide safety along with providing safety equipment. However, Elias highlighted “they don’t offer medical coverage, overtime, paid sick leave, nor paid vacation!” (NOTE: This was the first time that any interviewee mentioned this with such surprise. It made me realize that having been raised with American standards for quality of life, Elias had different expectations than many of his farmworker peers, who are immigrants.) Elias cannot afford health insurance, and he and his wife do not qualify for government aid because he earns more than the minimum wage.

HEALTH

Five months ago from the time of this interview, Elias hurt his knee while playing basketball. Since the family has no health coverage, they opted to see a “sobador” (bone-setter), who re-positioned his knee manually and on the spot. Elias did not get an MRI to know what exactly happened to his knee, because his family cannot afford it. He continued working with a “busted knee” for several months. His boss tried giving him different jobs within the nursery, “but none of them worked out”. Three weeks before this interview, his boss told him to go home and rest. Elias realized that his being home meant a huge financial cut, so he immediately went to a local community organization for help. Elias explained that the family is very short on money this month because they are living on his wife’s salary. She also works at a nursery.

Elias’ wife is also a second generation Mexican American. She is 26 years old and has a high school diploma. “Trabaja en un laboratorio de nurseria, en un clean room, con mascara y aire acondicionado...ponen muchisimo chloro en el cuarto.” [“*She works in a lab in a nursery, in a “clean room” with a mask and AC...they put a lot of chlorine (disinfectant) in the room.*”] She started working at the nursery after their first son was five. She worked during her second pregnancy and quickly went back to work after the delivery.

Their oldest son is now 8 years old. He had asthma since birth, but in recent months he has improved significantly. Their second son, 5 years old, has had epileptic seizures since he was 9 months old. He has developed a speech impediment associated with the seizures. Elias explained that he also had seizures as a little boy, and he also has some difficulties with speech. One doctor explained that in relation to the seizures, Elias has a thinner skull than the average man, which makes him very sensitive to sun and heat.

(NOTE: This case reflects the cycle of poverty that even American citizens can fall prey to. Elias chooses to work in conditions of heat and lifting heavy plants despite his neurological disorder and his “busted knee.” He sees no other alternatives. Three weeks ago, they entered a desperate economic situation, one that they don’t know how to weather unless Elias gets medical attention for his knee.)

REFERENCES

1. Kandel, W. "Profile of Hired Farmworkers A 2008 Update". USDA, ERS Economic Research Report No.60, July, 2008.
2. Goldstein B, Howe B, Tamir I. "Weeding out abuses: Recommendations for law abiding farm labor system" A collaboration between Oxfam America and Farmworker Justice 2010.
3. "Litany of Abuses: More – not fewer - protections needed in the H-2A Guestworker program" Farmworker Justice. December 2008.
4. Environmental Protection Agency Worker Protection Standards for Agricultural Pesticides. <http://www.epa.gov/agriculture/twor.html>
5. Roka, Fritz M., "Immigration Reform: Implications for Farmers, Farm Workers, and Communities". Labor issues Confronting Florida Tomato and Orange Growers. University of Florida, Southwest Research & Education Center. Immokalee, FL. <http://migration.ucdavis.edu/cf/files/2010-may/roka-paper-labor-issues-confronting-florida.pdf>
6. Dade County Farm Bureau. Action Center. Legislative Accomplishments 2009. <http://www.dade-agriculture.org/old-site-8-3-11/documents/2009countyissues-FINAL.pdf>
7. Abell A, Juul S, and Bonde JP: Time to pregnancy among female greenhouse workers. *Scand J Work Environ Health* 2000; 26:131–136.
8. Idrovo A J, Sanin LH, Cole D, Chavarro J, Caceres H, Narvaez J, Restrepo M: Time to first pregnancy among women working in agricultural production. *Intl J Occup Med Environ Health* 2005; 78:493–500.
9. Curtis KM, Savitz DA, Weinberg CR, Arbuckle TE: The effect of pesticide exposure on time to pregnancy. *Epidemiology* 1999; 10:112–117
10. McDonald AD, McDonald JC, Armstrong B, Cherry NM, Cote R, Lavoie J, Nolin AD, Robert D: Fetal death and work in pregnancy. *Br J Ind Med* 1988; 45:148–157.
11. Savitz DA, Whelan EA, Kleckner RC: Self-reported exposure to pesticides and radiation related to pregnancy outcome—Results from National Natality and Fetal Mortality Surveys. *Public Health Reports* 1989; 104:473–477.
12. Thomas DC, Petitti DB, Goldhaber M, Swan SH, Rappaport EB, Hertz-Picciotto I: Reproductive outcomes in relation to malathion spraying in the San Francisco Bay Area, 1981– 1982. *Epidemiology* 1992; 3:32–39.
13. Zhang J, Cai WW, Lee DJ: Occupational hazards and pregnancy outcomes. *Am J Ind Med* 1992; 21:397–408.
14. Levario-Carrillo M, Amato D, Ostrosky-Wegman P, Gonzalez-Horta C, Corona Y, Sanin LH: Relation between pesticide exposure and intrauterine growth retardation. *Chemosphere* 2004; 55:1421–1427.
15. Whyatt RM, Rauh V, Barr DB, Camann DE, Andrews HF, Garfinkel R, Hoepner LA, Diaz D, Dietrich J, Reyes A, Tang D, Kinney PL, Perera FP: Prenatal insecticide exposures and birth weight and length among an urban minority cohort. *Environ Health Perspect* 2004; 112:1125– 1132.
16. Nurminen T, Rantala K, Kurppa K, Holmberg PC: Agricultural work during pregnancy and selected structural malformations in Finland. *Epidemiology* 1995; 6:23–30.
17. Garry VF, Schreinemachers D, Harkins ME, Griffith J: Pesticide applicers, biocides, and

- birth defects in rural Minnesota. *Environ Health Perspect* 1996; 104:394–399.
18. Shaw GM, Wasserman CR, O'Malley CD, Nelson V, Jackson RJ: Maternal pesticide exposure from multiple sources and selected congenital anomalies. *Epidemiology* 1999; 10:60–66.
 19. Engel LS, O'Meara ES, Schwartz SM: Maternal occupation in agriculture and risk of limb defects in Washington State, 1980–1993. *Scand J Work Environ Health* 2000; 26:193–198.
 20. Kristensen P, Irgens LM, Andersen A, Bye AS, Sundheim L: Birth defects among offspring of Norwegian farmers, 1967–1991. *Epidemiology* 1997; 8:537–544.
 21. Alexander FE, Patheal SL, Biondi A, Brandanse S, Cabrera ME, Chan LC, Chen Z, Cimino G, Cordoba JC, Gu LJ, Hussein H, Ishii E, Kamel AM, Labra S, Magalhaes IQ, Mizutani S, Petridou E, de Oliveira MP, Yuen P, Wiemels JL, Greaves MF: Transplacental chemical exposure and risk of infant leukemia with MLL gene fusion. *Cancer Res* 2001; 61: 2542-2546.
 22. Borkhardt A, Wilda M, Fuchs U, Gortner L, Reiss I: Congenital leukaemia after heavy abuse of permethrin during pregnancy. *Arch Dis Child Fetal Neonatal Ed* 2003; 88(5):F436-437.
 23. V Rauh VA, R Garfinkle, FP Perera, HF Andrews, L Hoepner, DB Barr, R Whitehead, D Rang and RW Wyatt. 2007. Impact of Prenatal Chlorpyrifos Exposure on Neurodevelopment in the First Three Years of Life Among Inner City Children. *Pediatrics* 118 (6): e1845-e1859. Available from: www.pediatrics.org.
 24. Lander F, Hinke K: Indoor application of anti-cholinesterase agents and the influence of personal protection on uptake. *Arch Environ Contam Toxicol* 1992; 22:163-166.
 25. Flocks J et al. Female Farmworkers' Perceptions of Pesticide Exposure and Pregnancy Health. *Journal of Immigrant Minority Health* 2011