

# **Skin Cancer Awareness in the Migrant Population**

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## INTRODUCTION

Skin cancer is a major problem across the world; it is the most common of all cancers and can be disfiguring and deadly if not treated in a timely fashion. While much remains to be discovered about this disease, it is primarily associated with a largely preventable risk factor, ultraviolet light exposure. Skin cancer is more common in sun-sensitive, fair-skinned individuals but can occur in any ethnic group, especially with exposure in tropical or sunny climates.<sup>1</sup> So while in the US, certain populations are at higher risk because of their ethnic origin, others are susceptible due to occupations requiring extended periods of daily sun exposure.

One example of the latter group is our farmworkers, who lead difficult and impoverished lives but serve an important role in society. They often lack basic medical knowledge as well as access to standard health care due to their cultural and societal barriers. In addition, their substandard living conditions and strenuous labor habits tend to push preventative health measures to the background of their conscious thought. The goal of this community health improvement project is to increase the awareness of skin cancer in the Hispanic farmworker population as well as to teach them basic preventative and self-diagnostic information to limit the scope of this potential problem.

## PROBLEM

Skin cancer is the number one cause of cancer in the US. One in 5 Americans will get skin cancer in the course of a lifetime. More than a million people will be diagnosed with skin cancer

this year.<sup>2</sup> Like all cancer, it is a genetic disease, caused by a lifetime of environmental risk factors often in the setting of genetic predisposition. Aside from the huge numbers of people getting skin cancer, it can be very deadly as well. The incidence of melanoma, the deadliest form of skin cancer, is rising faster than that of any other type of cancer. In America in 1935, only 1 in 1500 was struck by the disease, today it currently affects 1 in 75, and by 2010, it is projected to rise to 1 in 50.<sup>3</sup>

In spite of its monumental proportions, skin cancer often does not get the same priority as that of breast and lung cancer when it comes to prevention efforts. The reasons for this are unclear, but likely have to do with society's general acceptance of casual exposure to the primary risk factor – ultraviolet light – and also the general thought that even skin cancer itself isn't that dangerous. Nationally, there are more new cases of skin cancer each year than the combined incidence of cancers of the breast, prostate, lung, and colon, yet the smoking prevention campaigns vastly outnumber those of sun safety.<sup>2</sup> At least 90 percent of all skin cancers are caused by sun exposure, yet fewer than 33 percent of adults, adolescents, and children routinely use sun protection.<sup>2</sup>

In addition to lack of sun safety awareness, there is also a lack of recognition of a potential skin problem. Over 95% of all skin cancers and over 75% of the melanomas can be easily and completely cured if they are diagnosed on a timely basis. Unfortunately, the failure to self-examine and identify a potential problem leads to much unnecessary morbidity and mortality. Truly this is a definite problem with the potential for successful and meaningful intervention through clear means.

The lack of awareness of the problem is compounded by the acceptance of the primary risk factor. Today's society places a large degree of importance on being tan, and this has increased the disease in younger people as a result. In the past thirty years, skin cancer has tripled in women under age 40.<sup>2</sup> The incidence of melanoma is increasing rapidly in women under age 40.<sup>2</sup> It is now the most common cancer in young women aged 25-29, and second only to breast cancer in women aged 30-34.<sup>2</sup> Melanoma kills more young women than any other cancer.<sup>2</sup>

Teens may be especially susceptible to skin cancer because their cells are dividing and changing more rapidly than those of adults. It is estimated that 2.3 million teens visit a tanning salon at least once a year.<sup>2</sup> In the past 20 years there has been more than a 100% increase in the cases of pediatric melanoma.<sup>2</sup> Regular sun protection throughout childhood can reduce the risk of skin cancer by 80%. Less than half of all teenagers use sunscreen. Eighty percent of sun damage happens before age 18.<sup>3</sup> One blistering sunburn in childhood more than doubles a person's chances of developing melanoma later in life.<sup>2</sup> Clearly this is an epidemic with the potential for worsening in the future without clear societal changes.

## PATHOPHYSIOLOGY

The three major types of skin cancer are basal cell carcinoma, squamous cell carcinoma, and melanoma, which together account for nearly 100% of all cases. Each of these three cancers begins in a different type of cell within the skin, and each cancer is named for the type of cell in which it begins.

Basal cell carcinoma is the most common type of cancer in the world. Accounting for 80% of all skin cancers, this type develops in the basal cells - skin cells located in the lowest layer of the

epidermis. BCC can take several forms, varying from a translucent pearly nodule to a scab or patch of dry skin that will not heal. The linkage to sun exposure in this form of skin cancer is well-documented and supported by the fact that the most common sites include the face, ears, scalp, and upper trunk. These tumors tend to grow slowly and can take years to reach a half inch in size. While these tumors very rarely metastasize, once they begin to grow they will destroy the tissue surrounding the lesion, which because of the often prominent location, can result in impressive disfigurement and a very poor aesthetic appearance.

Squamous cell carcinoma accounts for approximately 16% of all diagnosed skin cancers.<sup>4</sup> This cancer begins in the squamous cells, which are found in the upper layer of the epidermis. Like basal cell carcinoma, squamous cell carcinoma tends to develop in fair-skinned middle-aged and elderly people who have had long-term sun exposure. It most often appears as a crusted or scaly area of skin with a red inflamed base that resembles non-healing ulcer or patch of dry skin. While most commonly found on sun-exposed areas of the body, it can develop anywhere, including the inside of the mouth and the genitalia. SCC requires early treatment to prevent metastasis, as this is a potential consequence of untreated disease.

Melanoma, although accounting for only about 4% of all diagnosed skin cancers, is the most lethal form and therefore often gets the most attention.<sup>4</sup> As its name suggests, it begins in the melanocytes, cells within the epidermis that give skin its color. This disease can spread to other organs, most commonly the lungs and liver, and it causes more than 75% of all deaths from skin cancer.<sup>5</sup> When diagnosed at an early stage usually can be cured, but melanoma diagnosed at a

late stage is more likely to spread and cause death, highlighting the importance of regular self-screening.

Melanoma most often develops in a pre-existing mole or looks like a new mole, which is why it is important for people to know what their moles look like and be able to detect changes to existing moles and spot new moles. Once the disease spreads, the prognosis is poor, but with early detection and proper treatment the cure rate for melanoma is about 95%.<sup>4</sup> In some cases, skin cancer is an inherited condition. Between 5% and 10% of melanomas develop in people with a family history of melanoma.<sup>4</sup> In dark-skinned individuals, melanoma often develops on non-sun-exposed areas, such as the foot, underneath nails, and on the mucous membranes of the mouth, nasal passages, or genitals. Those with fair skin also can have melanoma develop in these areas. This fact is particularly relevant because it points of the need to self-examine the skin on a regular basis, regardless of one's skin color or exposure to the sun.

It is well known that exposure to the sun's ultraviolet (UV) rays damages DNA in the skin. The body can usually repair this damage before gene mutations occur and cancer develops. When a person's body cannot repair the damaged DNA, which can occur with cumulative sun exposure, cancer develops. Therefore, exposure to the sun's ultraviolet (UV) rays appears to be the most important environmental factor in developing skin cancer. This makes skin cancer a largely preventable disease when sun protective behaviors are consistently practiced. Of course, UV rays from artificial sources of light, such as tanning beds and sun lamps are just as dangerous as those from the sun, and should also be avoided. Unfortunately, despite the well-known fact that both tanning and burning can increase one's risk of skin cancer, most Americans do not protect themselves from UV rays.

## POPULATION

The target population for this project is the farmworkers who spend their lives traveling from field to field, working to harvest the crops that our nation consumes on a daily basis. They work long hours doing strenuous work in difficult living conditions, predisposing them to a vast number of medical calamities. However, they often lack the time, finances, transportation, and energy to seek out and obtain health care. This population is underserved, uneducated, and often illiterate, thus providing an ideal audience for an outreach focused on primary prevention.

Studies that accurately document farmworker numbers are few. Estimates place the number of farmworkers in the United States at three to five million, including men, women, teenagers, and children who are working in fields and packinghouses.<sup>6</sup> The farmworker population is estimated to be 80% male and 20% female, with male farmworkers typically single, never married, or have spouses and families living in other states or in another country who they are working to support.

Due to their living conditions and the occupational hazards associated with farm labor, this population presents a unique set of circumstances with regards to health care. In a county known for spending more per capita than any other nation, the health status of farmworkers is comparable to third world countries. Unsanitary working and housing conditions make farmworkers vulnerable to health conditions no longer considered to be threats to the general public. Poverty, frequent mobility, low literacy, language, cultural and logistic barriers impede farmworkers' access to social services and cost effective primary health care. Lack of access to

preventative health care services is one facet of the problem. Only 15% to 20% of the farmworker population is accessing federally subsidized migrant health clinics.<sup>8</sup> The majority of farmworkers do not receive health insurance and have little money to pay for out-of-pocket services.<sup>6</sup>

Farmworkers generally live in labor camps, trailer parks, rented homes, or apartments, or their own homes; however, when no other affordable housing is available, farmworkers sometimes resort to staying in tents, vans, or cars. Although there are farmworker communities that offer comfortable, clean housing, much of the housing available to farmworkers is substandard, particularly, poorly maintained, overpriced, and/or overcrowded. A lack of conveniences such as indoor plumbing and heating is also common.

The lack of preventative or regular maintenance health care combined with substandard living conditions has resulted in striking numbers of both common and uncommon medical issues in this group. Compared to the general population, farmworkers have higher rates of infectious diseases, diabetes, hypertension, tuberculosis, anemia, parasitic infection, mental health, substance abuse, malnutrition, and dental problems. The infant mortality rate is estimated to be between 25% to 125% higher than the national average.<sup>6</sup> Farmworkers have been identified as ‘special risk’ for STDs. HIV/AIDS infection affects between 2.5% to 13%; ten times the national rate.<sup>6</sup>

Aside from these general medical conditions, they are also at greater health risk due to associated occupational hazards. According to U.S. Department of Agriculture's own data, agriculture is one of the most accident-prone industries in the United States.<sup>9</sup> Agricultural workers have the highest rate in the nation of heat related disorders (heat stroke or heat exhaustion).<sup>6</sup> The



Environmental Protection Agency estimates that 300,000 farmworkers suffer acute pesticide poisoning each year.<sup>9</sup> Dermatitis, often related to pesticide exposure, is a very common problem for farmworkers.<sup>6</sup> There is an extremely high rate of musculoskeletal problems due to prolonged and awkward farm work. In addition, their large degree of intense UV light exposure increases their risk of nearly all types of skin cancer.

In addition to the unique problems presented by the farmworkers in terms of their health care, they also present quite a distinctive challenge when attempting to provide help to them. Whether it be awareness, prevention, diagnosis, or treatment, it is often very difficult for those providing the health care to adequately serve this population. There are a number of factors involved – the farmworkers' lack of transportation or access to the clinics, the difficult schedules they face as they work into the twilight, the constant migration from field to field, all make the targets quite elusive. This was a particular challenge for this project and careful planning is a must in order to effectively get the message to the intended audience.

## PROBLEM IN THE POPULATION

Clearly the farmworkers in this country lead difficult lives with substandard living and health care conditions. Their preoccupation with basic human needs transcends far beyond sun exposure and skin cancer, so one might wonder if this is a relevant issue to this population. When these people have to deal with medical issues such as tuberculosis, AIDS, and birth control, spending time discussing sun exposure seems almost pointless. In addition, the fact that the primary ethnic origin of the majority of farmworkers today is Hispanic, their skin color will

typically offer some degree of innate protection from skin cancers. Many of the discussions I had with health care workers for this population seemed to center on this idea, as they have limited time for outreach and must focus their efforts on the highest yield areas. It is indeed true that disease is not high on the priority list for this population. However, that alone doesn't make attempts at outreach worthless.

There are two main issues that must be examined to determine if skin cancer is a legitimate risk for this population – the degree of risk determined by the specific ethnic background of the target population and whether occupational sun exposure increases the chances of developing disease in that ethnic population. Both of these topics will be examined in detail here.

Determining the incidence of skin cancers in non-white populations is very difficult, as there are very few studies addressing this problem in various ethnic backgrounds. The overall perception that this disease primarily affects Caucasians shapes both public awareness as well as scientific investigation regarding this concept. Multimedia messages usually link skin cancer warning signs and early detection strategies with having sun-sensitive skin. People without sun sensitivity did not perceive themselves as being at risk, did not learn the warning signs of skin cancer, and did not perform SSE.<sup>1</sup>

However, the assumption that this is primarily a disease of Caucasians is very dangerous. In reality, little is known about the epidemiology and risk factors of skin cancers in the Hispanic and African-American populations. Additionally, little is known about awareness of skin cancer, risk perception, and performance of skin self-examination (SSE) by people with skin that rarely burns.<sup>1</sup>

According to the NIH's Cancer Surveillance, Epidemiology, and End Results Reporting (SEER) Program from the year 2000, the incidence rate of melanoma in Hispanic persons is 3.1/100,000 compared to 15.7/100,000 for non-Hispanic whites.<sup>10</sup> Incidence data are from the 11 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose–Monterey, and Los Angeles).<sup>10</sup> Data is not available on a national level for other types of skin cancer, because basal cell and squamous cell carcinomas are not recognized by the NIH as reportable cancers. However, on a state level, the New Mexico Registry documents almost doubling in the incidence for basal cell and squamous cell carcinomas from 1977-1978 to 1989-1991 in white males (752/100,000 to 1359/100,000) and more than doubling for Hispanic males (88/100,000 to 190/100,000).<sup>11</sup> Additionally, the proportional increase in these types of skin cancers among Hispanic females during this interval (78/100,000 to 136/100,000) was greater than that for white females (403/100,000 to 502/100,000).<sup>11</sup> Certain types of basal cell carcinoma have even been found to be more common in the Hispanic population than in whites.<sup>12</sup>

Another interesting way to look at this problem in this particular population would be to examine the incidence of skin cancers in the country of origin. A report from the Histopathological Registry of Malignant Neoplasms in Mexico showed that in 1993, skin cancer was the second most frequent malignant tumor in this country (13% of all cancer cases), 2<sup>nd</sup> only to carcinoma of the cervix. Basal cell carcinoma represented 60% of all cutaneous malignancies.<sup>13</sup> While these

prevalence numbers are less than the general population figures here in the US, they still certainly account that skin cancer is a major problem in that ethnic population.

As the above data indicate, while skin cancers are far more common in Caucasians, the sheer volume of this type of cancer makes the smaller percentage of Hispanics getting skin cancer still a relevant issue. In addition, they seem to point to the fact that the incidence of these diseases is increasing, which brings to the forefront the questions over potential risk factors. Ultraviolet light exposure is typically considered the most important risk factor for Caucasians, but there is some uncertainty whether the same applies for darker-skinned populations.<sup>14</sup>

A study of skin cancer rates in darker skinned populations compared to annual ultraviolet light index (calculated by latitude) attempted to determine the whether this is indeed a risk factor for this population.<sup>14</sup> They found that the rate of melanoma in both Hispanics and blacks increased with increasing annual UV index or lower latitude

of residency.<sup>14</sup> These results suggest that UVR exposure may have a greater than expected role in the development of melanoma in darker pigmented populations.

Of course, this is only one study but they concluded that exposure to solar radiation appears to play a role in the development of melanoma in both Hispanics and blacks and that sun protection and melanoma risk education should be performed in these populations.<sup>14</sup> In a different study in Mexico, ultraviolet light exposure was noted to be the most important etiologic factor for basal cell carcinoma in that population, supported by both the history and presentation of skin lesions located on areas exposed to natural light.<sup>15</sup>

In conclusion, while it may be less of a priority than other diseases in the farmworker population, the above data prove that this is indeed a significant problem and that sun protection methods would most likely be useful in prevention efforts. In addition, this topic is one that is constant and relevant on a daily basis for these people and requires only a very small amount of effort to make a potential difference. It is very simple to practice good sun safety habits and it costs little or nothing. Skin self-examination is fast and easy to perform, but can have very important benefits by detecting disease early and allowing for successful treatment.

## GOALS/OBJECTIVES/METHODS

The goal of this project is to create a DVD presentation in Spanish, geared toward increasing the awareness of skin cancer in the Hispanic farmworker population. The rationale for this project has been previously discussed. The original idea was to provide outreach in Spanish, since vast majority of farmworkers today in the US are Spanish-speaking. According to the National of Agricultural Workers Survey (NAWS) done in 1997-1998, 84% speak Spanish while only 12% are able to speak English.<sup>7</sup> In addition, the median level of education was determined to be 6<sup>th</sup> grade.<sup>7</sup> Using school completion data as an indicator of ability to process written information, 85% of farmworkers would have difficulty in processing the written information regardless of the language in which the materials were printed.<sup>7</sup> The language and education barriers mean that this type of intervention must be very specifically designed in order for the message to be received by the intended audience. The message must be delivered quickly, be easy to understand, and provided in the Spanish language.

Originally, my objectives were two fold:

1. make a connection with a health care clinic providing services to this farmworkers in order to gain access to my desired audience
2. secure the necessary audio-visual technology to create the presentation in the media of choice, DVD.

There are three main migrant health care clinics in this area (there may be more but I know of at least these three):

1. Oak Orchard Community Health Center, Brockport and Albion, NY.  
- contact: Barb Linhart - VP for Clinical Support Services (585-637-5319 x217)  
- [www.oakorchardhealth.org](http://www.oakorchardhealth.org)
2. Geneseo Migrant Health Center,  
- contact: Bob Lynch – Director (585-658-7960)  
- [www.migrant.org](http://www.migrant.org)
3. Finger Lakes Community Health Center, 601 B W.Washington St. Geneva, NY  
- contact: Elaine – Clinical Coordinator (315-781-8448)  
- contact: Pat Rios – Director of Migrant Education Program (315-531-9102)

Based on discussion with the directors of these health care clinics, I learned that essentially there are two principal methods of provision of health care to this population. The first is what would be typically thought of as a health clinic situation, with the farmworkers coming into the clinic on a designated night. This is ideal for intervention since you have a large group in one location and there is usually time available while they wait to see the physician. However, the main problem with this setup is that it requires the worker to travel to the clinic for health care, which is often difficult or impossible given their work schedule and lack of transportation. Only one of the three migrant health care clinics in this area (Finger Lakes) has a dedicated night for this

population, the others simply accept the general population including any migrants that may come in.

The second and more common method of intervention are the groups of providers consisting mostly of nurse practitioners, nurses, translators, and other aides that travel to the camps and provide necessary care on site. This is often the only way of bringing care to the farmworkers, due to the time and logistic issues previously discussed. This makes catering to a large group of farmworkers via a specific outreach very difficult, as the audience is finely dispersed in small, isolated camps. Since everything is provided on site, there is neither time nor the appropriate venue for any type of formal didactic presentation.

At this point, I had to decide between creating a presentation in English or in Spanish. In Spanish, I would be limiting the exposure to situations where larger groups of farmworkers would congregate, such as the waiting room of a health care clinic. In English, I would be taking a “train the trainer” approach and distribute the video strictly to health care providers who work with the migrants with hopes that they could then provide a brief intervention on site. Either approach would be effective in its own way, but they certainly have different implications. Ultimately, since I wanted to create something in Spanish that is the option I chose. This was the best decision since I later realized that by creating it in Spanish, I would be able to distribute the video to a much wider spectrum of agencies that work with farmworkers, not just the health care organizations.

The next decision was in which format to create the project. I felt that this was a simple decision initially, since their high illiteracy rate would mean that a DVD presentation would be best.

However, Dr. John Benitez with the University of Rochester, in association with Finger Lakes

Regional Poison and Drug Information Center, completed a needs assessment consisting of interviews with agencies serving migrant workers and focus groups of migrant workers.<sup>16</sup> Their findings included language/cultural barriers, limited telephone access, suspicion of medical outsiders, and fear of job security.<sup>16</sup> As a result of this information, they developed a special type of booklet, a “telenovela”, for adults with the aim of demonstrating what a poison center is and why it should be used.<sup>16</sup> Typically these stories will allow the workers to act out parts, creating an active learning process that allows them to utilize their own cultural and social mannerisms. A moral or theme of the story will usually have a medical implication or pearl for them to remember in the future. A few of the directors of the health care clinics here in this area also pointed to these types of interventions as being the most effective. This data was certainly interesting, but ultimately this format was not chosen since given the chosen topic and available resources, I felt that a DVD video with images would be best.

## CHALLENGES ENCOUNTERED

The main challenges faced during this project included:

1. gaining access to a non-mainstream subject population
2. determining the best method of delivery
3. producing the desired interventional tool (DVD)

Since the first two challenges have been thoroughly discussed in the paper already, most of this section will center on the challenges faced during the creation of the actual DVD presentation. I should mention that I do have a some prior experience working with audio and visual production,



but that I am by no means an expert and basically had to learn everything needed for this endeavor from scratch.

The first consideration in this undertaking is how will it be done, what kind of resources are needed, and how does one access those types of resources. Initially, the idea was to contact WXXI, with whom our program has worked previously, to find out about the potential for usage of their equipment for production, editing, and possibly broadcasting the work. WXXI (contact Michael Collins [mcollins@wxxi.org](mailto:mcollins@wxxi.org), 258.0345 work, 472.4360 cell) is very much interested in this partnership, but they were having difficulties providing funding for multiple small projects that would essentially start from scratch each time. They were interested in providing some type of package discounted price for their involvement. At this point, this was not feasible but perhaps this can be explored more in the future since it seems promising still.

At that point, the next option for assistance was the Media and Technology Services Department of the Office of Educational Resources (contact David Rivaldo, x5-2943) (<http://www.urmc.rochester.edu/smd/education/oer/services/mediatechservices/>). They charge \$50 per hour for use of their recording studio and audio-visual production equipment. “Use of the studio and equipment” in this case actually means having staff do it for you, since no one else is allowed to touch any of the equipment. The staff member I worked with (David Rivaldo) was very helpful and he was able to explain to me very clearly what we would be able to accomplish in the time frame available to us. In 3 hours of studio time (broken up over 2 days during the course of 2 weeks), we were able to record the audio and then come back and “scan” the PowerPoint presentation to DVD. I’m not sure if this is the best method of getting to the desired end product of DVD, but it did work.

Overall I am fairly pleased with the end product, although there were a few limitations of the staff's knowledge that I think should not have been issues. First, the sound clips were all the same volume level when they were inserted into the PowerPoint presentation, but during the scan to DVD, for some reason they came out uneven. Some of them are quieter, then when you turn up the volume, others sound too loud. No reasonable explanation could be offered by staff. Secondly, the clarity of the images suffered greatly during the transfer from PowerPoint to DVD. This was likely due to the use of RCA video cables for transfer of the video images rather than S-Video or component cables (red, green, blue) which result in a much higher resolution and clearer image. This was not discovered until after the fact and there were no options for recording in a different format currently available at the media center.

## RESULTS/IMPACT

The ultimate impact of this project is yet to be determined. With the creation of a project in a media such as DVD, it is available for distribution and sharing across a wide network of resources. This is exactly the state of my project currently. It is being sent to each of the 3 major farmworker health care clinics in western NY as well as to the Farmworker Legal Services in Rochester. Thus the result of the project, while successful at this point, is to be determined since it will likely be distributed more broadly as time progresses.

Aside from that, I did want to get some feedback from my intended audience, the farmworkers. I set up a pilot showing of the presentation at the Finger Lakes Community Health Clinic (the only

one with a designated migrant clinic night). One problem here, as with many of these smaller community organizations, is that that did not have audio-visual equipment available. While I did not mind providing a television and DVD player, this certainly limits their future usage of the presentation unless they acquire this equipment. According to staff at the clinic, the night I was there was typical, with approximately 30-40 workers (or family members) coming in over the course of 4-5 hours. I showed the presentation about 7-8 times over this period. I asked for feedback or comments from each person there and although most did not have much to say, a few did. Most everyone felt it was very clear and well-presented. I was a bit apprehensive about the quality of my Spanish, since I am not a native speaker. However when they began talking to me as if I were a native speaker, I realized that they must have felt confident in my ability with the language.

Obtaining feedback at this point was difficult, since no one wanted to write anything down, I basically just started asking questions. They spoke very fast in Spanish and although I could usually determine at least what they were talking about, some of the details were lost on me. The most frequent comment I received was that I should show it to more of the workers, bring it to more places, such as their community center or church so that more of them could have access to it. This is a great idea for future distribution. Another comment I heard from one person was that it is difficult for the farmworkers to modify their activities or habits, due to their work conditions or financial limitation. For example, it is often too hot for covering with long clothes and they don't have funds for sunscreen. I believe the video emphasizes the need for self-examination enough to overcome these realities in difficulty of prevention. Also I tried to

emphasize the need to be aware of these risks for children who may be at the camp who do have more control over their sun exposure.

While there was some reluctance to provide feedback about the video, one interesting observation I had was that it seemed to spark up conversation about medical issues in general. People were relaying stories about rashes and other non-related disease such as diabetes and hypertension. The video seemed to have the interesting effect of stimulating interest and discussion about medicine, which was a surprising benefit.

Towards the end of the night, two women came in with a small child. After viewing my presentation, one of the women introduced herself as Dr. Alejandra Perez, a Spanish professor at Hobart College in Geneva. She is very involved in working with the migrant farmworkers and thought that my project was excellent. She is bilingual and noted the Spanish to be very clear and the message well-delivered. I told her that she could have a copy of the DVD and she indicated that she has many connections that she could utilize to distribute the project. It is through her that I learned of the Farmworker Legal Services option as well. This was quite a fortuitous meeting and hopefully this will allow the project more exposure than it ever would have otherwise.

Overall, I was pleased with the showing. I think it proved that my video was clear, understandable, and accurately presented the message to the audience. Of course, I know there will be skepticism since this is not the most prevalent, most noticeable, or most important medical ailment for this population, but I think the process is excellent. There certainly is the

need for more of this type of outreach for this population. While I realize that I could have picked a more relevant and more striking topic, I wanted to do skin cancer since it is related to the field that I am entering, Otolaryngology (head and neck surgery).

## FUTURE DIRECTION/SUSTAINABILITY

This project was designed to be highly sustainable in the future, simply by the fact that a DVD presentation can easily be distributed and shown to additional groups without any more work needed. The main way to increase the impact of this project would be to increase the connections with people who are providing services to farmworkers. These resources will be able to provide the forum and audience for the intervention. Typically these groups are in the business of helping the farmworkers, so ready-made educational materials is desirable for them. Initially I was focusing on the health care clinics as the main channel for getting the message out, however I have expanded the scope. Utilizing other types of farmworker services (aside from health care related) would greatly expand the number of possibilities for exposure. I have made solid connections with two of these organizations, Farmworker Legal Services and Rural Opportunities, Inc., that could certainly become partnerships for building upon this project or even other similar kinds of farmworker-targeted initiatives. The DVD I have created could be viewed as opening the door to long-standing partnerships with these organizations. There is certainly a need for more intervention targeted towards farmworkers and having good exposure for a project really increases the chances of doing something meaningful. Other options for future off-shoots of this project, as previously discussed, is a similar production but in English as

a “train-the-trainer” type of approach and the “telenovela” concept that is very popular with this population.

## CONCLUSION

Overall, I learned a great deal from this project, much more than I expected to going into the experience. Providing community health improvement is a difficult and challenging task that will undoubtedly be met with both expected and unexpected obstacles along the way. However, it is the journey of finding the appropriate solutions to these potential barriers that makes the process fun and rewarding in the end. I think that each of the steps to providing this type of service to a particular population are important to recognize and think about – from choosing a topic and an appropriate audience, determining how to best convey the message, and then creating and distributing that message. Throughout the month, in spite of all of the dead ends and disappointing realizations I experienced, I also met numerous people that were exciting about my project and clearly went out of their way to help make it even better than I originally had planned. Making these connections and eventual partnerships is key to both creating and maintaining long term sustainability of a successful project. It was actually difficult for me to let go of my project at the end of the course, since I had forged such promising relationships with various people wanting to help distribute my message. Hopefully, in one way or another, it will be carried on or even built upon in future projects.

## REFERENCES

1. Pipitone M, Robinson JK, Camara C, Chittineni B, Fisher SG. Skin cancer awareness in suburban employees: A Hispanic perspective. *Journal of the American Academy of Dermatology*. 47,1.
2. The Skin Cancer Foundation. [www.skincancer.org](http://www.skincancer.org)
3. Melanoma International. [www.melanomainternational.org](http://www.melanomainternational.org)
4. American Academy of Dermatology. [www.aad.org](http://www.aad.org)
5. American Cancer Society. [www.cancer.org](http://www.cancer.org)
6. Farmworkers Health Services. [www.farmworkerhealth.org](http://www.farmworkerhealth.org)
7. National Center for Farmworker Health. [www.ncfh.org](http://www.ncfh.org)
8. National Advisory Council on Migrant Health. 1993 Recommendations of the National Advisory Council on Migrant Health. Rockville, MD: U.S. Department of Health and Human Services, Bureau of Primary Health Care, May 1993.
9. Villarejo, D. "The Occupational Health Status of Hired Farm Workers." Davis, CA: California Institute for Rural Studies, 1999
10. Cancer Surveillance, Epidemiology, and End Results Reporting (SEER) Program 1973-1997. Bethesda (MD): US Dept of Health and Human Services, Public Health Service, National Institutes of Health; 2000.
11. Hoy WE. Nonmelanoma skin carcinoma in Albuquerque, New Mexico: experience of a major health care provided. *Cancer* 1996;77:2489-95.
12. Bigler, C, Feldman J, Hall E, Padilla RS. Pigmented basal cell carcinoma in Hispanics. *Journal of American Academy of Dermatology*. 1996;34:751-2.
13. Registro Histopatologico de Neoplasias Malignas en Mexico, Secretaria de Salud, Mexico, 1995
14. Hu S, Ma F, Collado-Mesa F, Kirsner RS. UV Radiation, Latitude, and Melanoma in US Hispanics and Blacks. *Arch Dermatol*. 2004;140:819-824
15. Maafs E, De la Barreda F, Delgado R, Mohar A, Alfeiran A. Basal cell carcinoma of trunk and extremities. *International Journal of Dermatology*, 1997, 36, 622-628.
16. Benitez J. Migrant worker access to poison control services. Poster at The 132nd Annual Meeting (November 6-10, 2004) of APHA.