Barry University Institutional Repository

Theses and Dissertations

2013

Raising Awareness of Melanoma in Hispanic Farmworkers

Sandra Giraldo Perez

This work is brought to you for free and open access by the Theses and Dissertations at Barry University Institutional Repository. It has been accepted for inclusion in open access Theses by an authorized administrator of Institutional Repository.

RAISING AWARENESS OF MELANOMA IN HISPANIC FARMWORKERS

CAPSTONE PROJECT

Presented in Partial Fulfillment of the Requirements for the Degree of

Doctor of Nursing Practice

Sandra Giraldo Perez

Barry University

2013

RAISING AWARENESS OF MELANOMA IN HISPANIC FARMWORKERS

CAPSTONE PROJECT

by

Sandra Giraldo Perez

2013

APPROVED BY:

Carolyn LePage, PhD, ARNP-BC Chairperson, Capstone Committee

Mary Colvin, PhD, RN Member, Capstone Committee

Karen A. Thornton, PhD, RN Member, Capstone Committee

John McFadden, PhD, CRNA Dean, College of Health Sciences Copyright by Sandra Giraldo Perez, 2013

All Rights Reserved

ABSTRACT

Background: The rate of malignant melanoma has been steadily increasing in the United States and worldwide, thus becoming an important public health concern (American Cancer Society [ACS], 2011; Centers for Disease Control and Prevention [CDC] Gordon, 2009; Rigel, Russak, & Friedman, 2010; Rouhani et al., 2010; Torrens & Swan, 2009; World Health Organization [WHO], 2012). Skin cancer comparison rates were conducted within Florida and the U.S., and it was found that male Hispanics had greater risk of melanoma mortality compared to Whites. Not only are Hispanics overall at risk for developing melanoma, but Hispanic farmworkers are at an increased risk for developing melanoma due to their sun and pesticide exposures (Cormier et al., 2006; Hu et al., 2009; Hu, Soza-Vento, Parker, & Kirsner, 2006; Rouhani et al., 2010).

Purpose: This Capstone Project aimed to assess the knowledge of the risks of melanoma among the farm-working population in South Florida. It also aimed to develop a tailored educational program that may increase melanoma knowledge of farmers.

Theoretical Framework: This project was guided by constructs adapted from Pender's Health Promotion Model (HPM).

Methods: A survey tool was utilized to assess and collect data regarding farmworkers' knowledge of their risks of melanoma. A descriptive analysis was performed to analyze collected data. Based on the results and analysis of the study, educational materials including a brochure and pictorial were developed.

Results: Despite farmworkers' lack of knowledge regarding melanoma, the vast majority of the participants utilized protective clothing when working outdoors. Additionally, 43% of the farmworkers felt that they were more likely of acquiring skin

cancer compared to other people of their race. This increased protective behavior and risk awareness were attributed to pesticide exposure by the farmworkers.

Conclusions: Considering the heavy financial burden and cost of life of melanoma, this health promotion and disease preventive project may raise awareness among farmworkers, Hispanics, and healthcare providers regarding this population's risk of melanoma, thus catching this disease at its earlier stages and improving survival rates.

ACKNOWLEDGMENTS

First and foremost, I would like to thank God for granting me the energy, strength and perseverance to accomplish my dreams. I would like to thank my husband and my family for always supporting me and believing in me. I will forever be grateful to my professors, who mentored and guided me through this process, Dr. Carolyn LePage, Dr. Mary Colvin, Dr. Karen Thornton, and Dr. Andra Hanlon.

I owe my greatest gratitude to the farmworkers who participated in this study. I would like to thank RCMA and Open Door for welcoming me and allowing the completion of my study at their facilities. I would also like to thank the expert panel for their guidance and assistance with this project, Professor Majka, Ms. Perez, and Dr. Hu. I would also like to thank Kyle Amber for assisting me with the data analysis.

DEDICATION

To my wonderful husband, Oscar, and child Ethan for their encouragement,

understanding and unconditional love.

TITLE PAGE	i
SIGNATURE PAGE	ii
COPYRIGHT PAGE	iii
ABSTRACT	iv
ACKNOWLEDGMENTS	vi
DEDICATION	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	xii
LIST OF FIGURES	xiii
CHAPTER ONE: Nature of the Project and Problem Identification	1
Problem Statement	4
Purpose of the Study	4
Theoretical Framework	5
Project Objectives	
Significance of the Study to Nursing	
Advanced Nursing Practice Healthcare Delivery Healthcare Outcomes Healthcare Policy	
Summary	17
CHAPTER TWO: Review of the Literature	19
Risk Factors for Melanoma	
Melanoma Among Minority Populations	
Health Promotion and Disease Prevention	

TABLE OF CONTENTS

Preventive Measures and Education	
Screening	
Summary	
CHAPTER THREE: Methodology	
Purpose of the Project	
Project Objectives	
Project Design	
Identification of Participants in Project	
Ethical Considerations	30
Objective I	
Setting Recruitment	
Outcome Measures	
Objectives I and II Objectives III and IV	
Dissemination of Findings	35
Budget Proposal	35
Summary	
CHAPTER FOUR: Results and Discussion	
Discussion of Findings	
Assessment of Farmworkers' Knowledge Analysis of Needs Assessment Development of Pictorial Development of Tailored Educational Brochure Correlation to DNP Essentials	
Strengths and Limitations of the Project	

Significance of this Project	73
Advanced Nursing Practice	
Nursing Research Healthcare Delivery and Outcomes	
Theatmeater Derivery and Outcomes	
Future Research	77
Recommendations for Future DNP Scholars	78
Guide for Future DNP Scholars	80
Incorporating Photographs and Graphics in Publications	
Post-Doctoral Trajectory	86
Summary	
REFERENCES	89
APPENDIX A: BARRY UNIVERSITY IRB LETTER	100
APPENDIX B: MELANOMA AMONG THE MINORITY POPULATION M	ATRIX103
APPENDIX C: PREVENTIVE MEASURE AND EDUCATION MATRIX	108
APPENDIX D: PREVENTIVE MEASURES AND SCREENING MATRIX	112
APPENDIX E: BARRY UNIVERSITY COVER LETTER	113
APPENDIX F: FLYER – OPEN DOOR HEALTH CENTER	114
APPENDIX G: FLYER - RCMA	116
APPENDIX H: QUESTIONNAIRE	118
APPENDIX I: BUDGET AND MANAGEMENT PLAN	122
APPENDIX J: OPEN DOOR LETTER OF SUPPORT	123
APPENDIX K: RCMA LETTER OF SUPPORT	125
APPENDIX L: PERMISSION FROM BETH SWAN	127
APPENDIX M: PERMISSION FROM PETER MURCHIE	131
APPENDIX N: CORRESPONDENCE FROM NCI	133

APPENDIX O: PERMISSION FROM THE SKIN CANCER FOUNDATION
APPENDIX P: PERMISSION FROM ELLA TOOMBS 142
APPENDIX Q: DR. SHASA HU'S CURRICULUM VITAE 143
APPENDIX R: EUGENE MAJKA'S CURRICULUM VITAE 155
APPENDIX S: EVELINDA PEREZ'S CURRICULUM VITAE
APPENDIX T: RCMA'S COMPREHENSIVE REPORT 168
APPENDIX U: PICTORIAL DEPICTING SKIN CANCER IN HISPANICS 171
APPENDIX V: TAILORED EDUCATIONAL BROCHURE FOR FARMWORKERS
(OUTSIDE PANELS)
APPENDIX W: TAILORED EDUCATIONAL BROCHURE FOR FARMWORKERS
(INSIDE PANELS)
VITA

LIST OF TABLES

Table 1	Farmworkers'	Demographic Data	44
Table 2	Farmworkers'	Personal Risk of Melanoma	46
Table 3	Farmworkers'	Melanoma Knowledge	50

LIST OF FIGURES

Figure 1. Pender's Revised HPM (Pender et al., 2006)	8
Figure 2. Pender's HPM as adapted by Torrens and Swan (2009) and modified by Sand	ra
Giraldo Perez.	11
Figure 3. Protective behavior of farmworkers.	48

CHAPTER ONE

NATURE OF THE PROJECT AND PROBLEM IDENTIFICATION

The rate of malignant melanoma has been increasing steadily in the United States and worldwide, thus becoming an important public health concern (American Cancer Society [ACS], 2011; Centers for Disease Control and Prevention [CDC], 2011; Gordon, 2009; Rigel, Russak, & Friedman, 2010; Rouhani et al., 2010; Torrens & Swan, 2009; World Health Organization [WHO], 2012). According to the WHO (2012), 132,000 cases of melanoma occur throughout the world each year, and the global incidence of melanoma continues to increase. According to the Cancer Society of New Zealand (2011) and the Australian Government Department of Health and Aging (2011), New Zealand and Australia have the highest melanoma rates in the world.

Skin cancer is the most common form of cancer in the United States with more than one million Americans diagnosed with skin cancer each year (CDC, 2011; Glanz, Schoenfeld and Steffen, 2010). It was further reported by the CDC in 2011 that 61,646 people were diagnosed with melanoma in the U.S., and 9,199 people died in the U.S. from melanoma in 2009. Furthermore, the ACS (2011) estimated that about 70,230 new melanoma cases would be diagnosed in the U.S. in 2011. It was later reported by the ACS (2012) that an estimated 81,240 people would be diagnosed with melanoma in the U.S. by the end of 2012, and an estimated 12,190 people would die from melanoma in the U.S. by the end of the year. It was further estimated by the ACS (2012) that the number of new melanoma cases in the state of Florida would total 5,450 cases by the end of the year. Although historically there have been higher trends of melanoma among the white population in the United States, data from the Florida Cancer Data System (FCDS) and Surveillance Epidemiology and End Results (SEER) from 1990 through 2004 have been compared and shown higher rates of melanoma among black Non-Hispanic women and Hispanic men in Florida than in other U.S. states (Cormier et al., 2006; Hu et al., 2009; Hu, Soza-Vento, Parker, & Kirsner, 2006; Rouhani et al., 2010). Although according to Rouhani et al. (2010), causation of melanoma among nonwhites could not be inferred based on their study, they believe that these trends can be partly attributed to ultraviolet ray (UVR) exposure in Florida. Rouhani et al. (2010) further contended that these melanoma disparities "may be due to biological behavior and/or implications of lower socioeconomic position and health disparities" (p. 745).

Cormier et al. (2006) reported that "lower extremity and acral lentiginous melanomas were more common among minorities" (p. 1907). According to Cormier et al. (2006), "given the reported rarity of its occurrence and its unusual presentation, it is not surprising that the diagnosis of melanoma is often delayed in minority populations, resulting in more advanced stages of disease at presentation" (p. 1907). The researchers further contended that there is 1.96 to 3.01 greater risk of melanoma mortality in minorities compared to whites (p. 1907). Hu et al. (2009), Hu et al. (2006), and Rouhani et al. (2010) all had similar findings as Cormier et al. (2006) as they related to higher mortality rates among these minority groups due to melanoma's late-stage presentation. Hu et al. (2009) further believed that "it is more likely that casual factors such as socioeconomic status, skin cancer awareness, and cultural and social values ultimately affect melanoma stage at diagnosis" (p. 1373).

Furthermore, Hu et al. (2009) reported that "Florida is the second among states for melanoma incidence (4430), accounting for 7% of all cases in the United States" (p. 1370). It was further reported by Hu et al. (2009) that Florida is among the states "with the largest Hispanic populations and also has a black population that is higher than the national average" (p. 1370). Lastly, according to City-Data.com (2011), 86.2% of Miami-Dade's population is nonwhite comprised of Hispanics (68.5%) and blacks (17.7%). Additionally, Cormier et al. (2006) reported that the U.S. Census Bureau "has projected that the population of Hispanics and Asians in the United States will increase by 30% from 2000 to 2010 and that the overall incidence of melanoma continues to rise" (p. 1907). Hence, this increased risk of melanoma among this population is a major health concern in South Florida.

Malignant melanoma is the result of mutation and uncontrolled growth of melanocytes; eventually, these cells enter the bloodstream and travel to an organ, leading rapidly to death. Therefore, it is a type skin cancer that has a high rate of metastasis (ACS, 2011; Gordon, 2009; Rigel, Russak, & Friedman, 2010). Bradford, Goldstein, McMaster, and Tucker (2009) reported malignant melanoma as the most deadly type of skin cancer, accounting for 78% of overall skin cancer deaths. Therefore, raising awareness of melanoma among dark-skinned individuals is essential for early diagnosis, which can decrease the late-stage diagnosis and mortality of this preventable disease.

Not only are Hispanics overall at risk for developing melanoma, but Hispanic farmworkers are at an increased risk for developing melanoma due to their sun and pesticide exposures. According to Levy, Wegman, Baron, and Sokas (2006), working outdoors increases farmworkers' chances of developing skin cancer. Additionally, this increased risk has been attributed to the sustained number of hours this population is exposed to the harmful rays of the sun (Donham & Thelin, 2006; Marlenga, 1995; Salas, Mayer, & Hoerster, 2005). Furthermore, it was reported by Gaetano et al. (2009) that "farming is considered a high-risk occupation for intense sun exposure" (p. 25). Literature also showed that minority groups are at an increased risk of acquiring skin cancer due to their low socio-economic status and lack of healthcare (Cormier et al., 2006; Hu et al., 2006; Hu et al., 2009; Reyes-Ortiz, Goodwin, Freeman, & Kuo, 2006; Rouhani et al., 2010; Torrens & Swan, 2009)

According to Larson (2000), there was an estimated a total of 12,666 migrant and seasonal farmworkers in Dade County, although it is difficult to ascertain an accurate estimate of farmworkers due to transitory and legal status. Considering the significant amount of farmworkers working the land in South Florida and their increased risk of developing melanoma, it is of outmost importance to develop and implement primary and secondary preventive measures in order to decrease their incidence of acquiring this deadly disease.

Problem Statement

The problem is that there is an increased incidence of advanced stage melanoma among dark-skinned individuals at the time of diagnosis.

Purpose of the Study

The purpose of proposed Capstone Project is twofold. First, it aimed to assess the knowledge of the risks of melanoma among the farm-working population in South Florida. Next, it aimed to develop a tailored educational program that may increase the

knowledge of farmers to identify signs and symptoms of melanoma leading to early intervention and ultimately improving survival rates for this population.

Theoretical Framework

Health promotion and disease prevention have always been of paramount importance to nursing and healthcare, since they are necessary processes in order for patients to achieve optimal health. It is more sensible to prevent the occurrence of diseases or to stop them early than to delay treatment until the process results in irreversible damage to the body, especially as it relates to melanoma, one of the most preventable types of cancers. According to McCullagh (2004), health promotion improves levels of well-being and self-actualization, while health prevention stops diseases prior to their occurrence. Through health promotion and disease preventive efforts, minority populations may be reached earlier and at curable stages of melanoma, thus decreasing mortality rates (Cormier et al., 2006; Hu et al., 2009; Hu et al., 2006; Rouhani et al., 2010). Education regarding skin cancer's preventive measures includes but is not limited to full-body self-examinations, skin cancer protective measures such as proper sun protection, and medical advice when finding abnormal moles.

This project was guided by constructs adapted from Pender's Health Promotion Model (HPM). According to Pender, Murdaugh, and Parsons (2006), HPM first appeared in nursing literature in the early 1980s. According to Pender et al. (2006), the Health Promotion Model proposes to integrate behavioral science and nursing science on factors related to health behaviors. The HPM can be utilized as guidance for exploration of biopsychosocial processes that assist individuals in achieving health enhancement behaviors. Pender et al. (2006) further stated that "the HPM is an attempt to depict the

multidimensional nature of persons interacting with their interpersonal and physical environments as they pursue health" (p. 50). They further explicated that the "HPM integrates a number of constructs from expectancy-value theory and social cognitive theory, within a nursing perspective of holistic human functioning" (Pender et al., 2006, p. 50). Pender et al. (2006) contended that the expectancy-value model is based on economical and rational behavior. An individual engages in a particular action if this action leads to a positive outcome that has personal value. Furthermore, according to Pender et al. (2006), "in social cognitive theory, environmental events, personal factors, and behavior act as reciprocal determinants of each other. The theory places major emphasis on self-direction, self-regulation, and perceptions of self-efficacy" (p. 41). The revised version of the HPM contains variables in the following two categories, which are of particular importance to this Capstone Project: a) individual characteristics and experiences and b) behavior-specific cognitions and affect. According to Pender et al. (2006), "each person has unique personal characteristics and experiences that affect subsequent actions" (p. 51).

It was the researcher's objective to assess the farmworkers' knowledge, characteristics, and experiences as they relate to their behavior and personal factors concerning melanoma. It was further explicated by Pender et al. (2006) that "behaviorspecific variables within the HPM are considered to have major motivational significance" (p. 52). As such, through the implementation of this Capstone Project, the researcher inquired as to farmworkers' perceived barriers and interpersonal/situational influences so that a tailored melanoma education may address and possibly overcome these barriers in order to decrease the high incidence of late-stage diagnosis of melanoma. The revised version of the HPM, which was published in 1996, is depicted in Figure 1.

Pender's Revised HPM

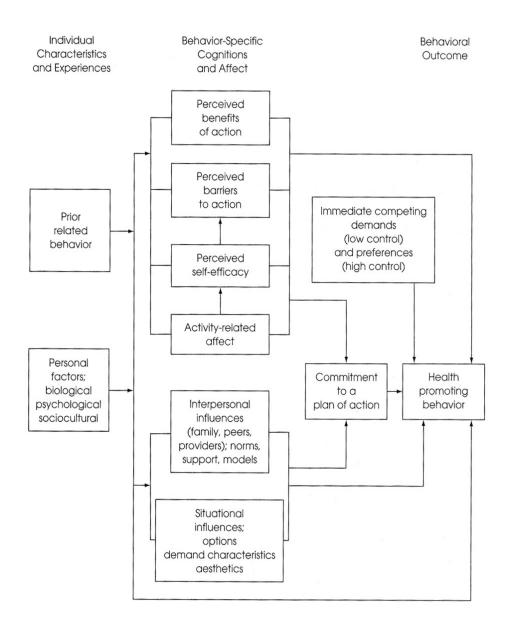


Figure 1. Pender's Revised HPM (Pender et al., 2006).

A tailored Health Promotion Model guided this project in order assess farmworkers' characteristics and experiences as they relate to the risks of acquiring melanoma, as well as possible personal factors that may increase the incidence of advanced stage melanoma at time of diagnosis. According to the ACS (2007), melanoma's major risk factors include the following: family and/or personal history of the disease, the presence of moles, excessive exposure and sensitivity to the sun, occupational exposure to certain substances, and a history of squamous or basal cell carcinoma. According to Fortes et al. (2007), chemicals such as pesticides increase the risk of melanoma as well.

The Health Promotion Model guided the assessment of farmworkers' perceived barriers such as lack of knowledge and limited time and resources as they relate to their higher risk for this deadly disease. The population of interest for this Capstone Project included Hispanic farmworkers who frequented Open Door Health Center, a public health clinic for the indigent; Redlands Christian Migrant Association, a daycare facility for the farmworkers' children; and Centro De La Salle, an afterschool facility for farmworkers' children. A barriers assessment of this particular population was essential in order to understand their specific needs. Once these risks and needs were ascertained through this Capstone Project, it was possible to tailor a melanoma educational brochure and pictorial depicting melanoma in order to increase this population's knowledge regarding melanoma, thus possibly decreasing their high incidence and late-stage diagnosis of melanoma.

Lastly, the Health Promotion Model guided the assessment of this population's interpersonal and situational influences, such as family sun protection habits, societal pressure/peer pressure, lack of sun protection role models, and lack of guidance from primary healthcare professionals as it related to melanoma. Based on the information gathered through the utilization of Pender's Health Promotion Model, culturally sensitive health promotion educational materials tailored to meet the educational needs of farmworkers regarding the signs of melanoma may increase their knowledge of this deadly disease. As part of this tailored educational program, a tailored educational brochure and a pictorial depicting melanoma on dark-skinned individuals were developed. According to Hay et al. (2006), self-skin exams and sun protection behavior are improved in patients who view photos of suspicious lesions. Torrens and Swan (2009) further cited, "in accordance with Pender's tenet that increased self-efficacy changes behavior, the patients attributed the change in behavior to an increased selfconfidence in assessing skin lesions which may be abnormal" (p. 121). Figure 2 depicts Pender's Health Promotion Model as adapted Torrens and Swan (2009) and modified by Sandra Giraldo. Permission was also sought and granted by Beth Ann Swan (Appendix L), the author of the "Adapted Health Promotion Model Applied to Melanoma Prevention by the Patient," which was published in her article regarding health promotion and early recognition of melanoma (Torrens & Swan, 2009, p. 117).

Individual Characteristics & Experiences

Prior Related Behavior:

-History of sunburns

-Outdoor lifestyle

-Indoor tanning salon use

Personal Factors:

-Onset of nevi in adulthood

-High number of nevi

-Nevi in adulthood

-History of dysplastic nevi

-Family history of melanoma, basal or squamous cell carcinomas

-Personal history of melanoma, basal or squamous cell carcinomas Behavior-Specific Cognitions & Affect

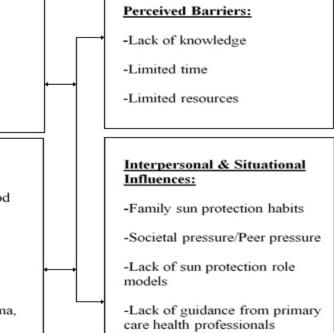


Figure 2. Pender's HPM as adapted by Torrens and Swan (2009) and modified by Sandra Giraldo Perez.

Project Objectives

Based on the information outlined in the literature review regarding the late-stage diagnosis of melanoma among the dark-skinned individuals in South Florida, the project objectives were as follows:

- 1. Assess farmworkers' knowledge regarding their risks of melanoma.
- 2. Analyze the data received in the assessment of the farmworkers who completed the questionnaire.
- 3. Develop a pictorial depicting melanoma on dark-skinned individuals
- 4. Develop a culturally sensitive and tailored educational brochure based on the needs of the farmworkers who completed the questionnaire.

Significance of the Study to Nursing

By raising awareness among farmworkers in South Florida regarding melanoma, this type of cancer may be caught at curable stages, possibly decreasing mortality among this population. Primary and secondary prevention are important in decreasing the incidence of melanoma among dark-skinned individuals, including farmworkers. This project was significant in the areas of nursing practice, healthcare delivery, healthcare outcomes, and healthcare policy.

Advanced Nursing Practice

According to Cormier et al. (2006) and Hu et al. (2009), there is a significant lack of awareness among the medical community and the dark-skinned population in South Florida about the overall effects and presentation of melanoma. This lack of awareness may be partly attributed to the fact that most of literature pertaining to melanoma focuses mainly on its presentation in the white population. By creating a tailored educational brochure and pictorial that may be implemented throughout South Florida's medical and nursing community and farm-working population regarding the risk factors and presentations of melanoma, there may be an increase in awareness among these populations regarding skin cancer. Nursing science may be enriched by discovering this population's knowledge about skin cancer since there is scarcity of literature on this topic. Furthermore, nursing science may be enhanced by creating and providing a culturally sensitive educational brochure and pictorial that were tailored specifically for farmworkers. Such educational tools are also lacking in the literature and educational sources. Lastly, nursing science and practice may be enhanced by creating tailored educational programs for not only the farm-working community but also for healthcare providers about the risks of sun and pesticide exposure and how to avoid acquiring skin cancer.

It is critical for farmworkers and healthcare providers to acknowledge the highrisk nature of their occupation, which exposes them to many elements that may affect their health, including but not limited to heat exposure, sun exposure, and pesticide exposure. In addition to raising awareness regarding skin cancer among this population, proper screening is also important in order for healthcare providers to diagnose melanoma at a more curable stage, thus decreasing mortality rates. According to Hu et al. (2006), Hispanics and blacks are screened less frequently for skin cancer than whites. Nurse practitioners must take a leading role in health promotion and preventive measures to reduce melanoma among dark-skinned individuals including farmworkers. This may be achieved by implementing educational programs and advocating screening measures throughout South Florida.

Healthcare Delivery

In today's economy with skyrocketing healthcare costs, efficient and innovative means of delivering healthcare are paramount. According to Woolf, Jonas, and Kaplan-Liss (2008), it is critical to shift healthcare delivery from tertiary to primary and secondary levels of care since late-stage interventions in healthcare cost trillions of dollars per year. Primary prevention involves the prevention of illness. Strategies included in this type of prevention include immunizations, safety, and education. Earliest detection to reduce a disease impact is the premise of secondary prevention. Secondary prevention is commonly practiced in the form of screenings. Tertiary prevention involves specific intervention to help those affected by disease limit the effects of their disease or disability. Therefore, through proper education of the risks and presentations of melanoma among farmworkers and healthcare providers, healthcare outcomes may be improved. It may also reduce the inflated expenses related to tertiary care. This Capstone Project capitalizes on one of the areas nurses must address in clinical practice: health promotion and disease prevention. According to Pender et al. (2006), "nurses play a pivotal role throughout the world in mobilizing forces for change in individual, family and organizational health behaviors. Thus, the development of nurses for leadership in health promotion is an international priority" (p. 5).

According to Cormier et al. (2006) and Hu et al. (2009), there is a significant lack of awareness among the medical community and the dark-skinned population in South Florida about the overall effects and presentation of melanoma. This lack of awareness may be partly attributed to the fact that most literature pertaining to melanoma focuses on its presentation in the white population. Melanoma's unique presentation among darkskinned individuals is also a key factor in the knowledge deficit among providers and patients. Healthcare delivery may be improved as a direct result of the implementation of this Capstone Project.

By implementing proper screening practices among healthcare providers who care for farmworkers and educating this population of monthly full-body self-exams, skin cancer may be detected at its earlier stages, thus allowing for earlier treatment at a more curable stage. These strategies may impact survival rates of this preventable disease among the farm-working population.

Healthcare Outcomes

Healthcare outcomes may be improved as a direct result of the implementation of this Capstone Project through health promotion and disease preventive measures. Little is known about farmworkers' knowledge of melanoma; hence, this project's goal was to assess these individuals' knowledge and to tailor an educational program that would address any misconceptions or lack of awareness regarding skin cancer. Addressing the high incidence of late-stage melanoma diagnosis and treatment among dark-skinned individuals at earlier stages may improve survival rates. The implementation of educational programs throughout South Florida targeted to Hispanic farmworkers regarding the risks of melanoma may improve their screening practices. Specifically, programs will address full-body self-exams, awareness of the signs and symptoms of melanoma, and the importance of prompt medical attention at a more curable stage of the disease. In addition to raising this population's awareness of melanoma, this project may also raise awareness of this disease among clinicians through the preparation of informational pictorials that show melanoma presentation on Hispanic individuals. Cormier et al. (2006) stressed the importance of clinicians' understanding regarding the manifestations and outcomes of melanoma among minorities. Such understanding is key in providing appropriate care for this community, as well as decreasing healthcare delivery disparities among this minority population. As a result of these educational programs, dark-skinned individuals and healthcare providers may be better equipped to diagnose this disease on a timely manner, thus decreasing the higher mortality rates.

Healthcare Policy

The findings of this project may enhance healthcare policy. Healthcare policy may be enacted in the form of public health policy recommendations to minimize the imminent dangers that the farmworkers face in acquiring melanoma. The nursing profession has the power in numbers to enact proactive policy. Presently, most educational campaigns regarding skin cancer are targeted toward the white community. According to Hu et al. (2006), "Public education regarding melanoma risk in black and Hispanic persons and delivery of skin cancer screening and examinations represent the main potential areas of intervention to improve the stage at diagnosis of melanoma in these populations" (p. 707). Efforts must be made to enact public educational campaigns to include minorities as also being at risk for melanoma. Enacting certain guidelines in order to properly screen for melanoma among high-melanoma-risk dark-skinned individuals with the goal of earlier diagnosis at a more favorable stage is crucial. These guidelines may improve survival rates of this population through early screening for melanoma.

More funding should be allocated towards public education of high-risk individuals, thus raising awareness of the dangers of melanoma. According to Cormier et al. (2006), melanoma is a public health concern wherein the public must be educated regarding the presentation of this disease among minority populations for earlier detection and saving lives. In addition to screenings, public policy can be improved by launching skin cancer campaigns and raising awareness among this population regarding sun exposure and skin cancer.

Finally, healthcare policy may be enacted to include protective gear among migrant workers to protect themselves from the harmful effects of UVR exposure while working at the fields. Additionally, state monies should be allocated toward melanoma prevention among dark-skinned individuals including the migrant workers.

Summary

Skin cancer is the most common form of cancer in the United States with more than one million Americans diagnosed with skin cancer each year (CDC, 2011; Glanz et al., 2010). Recent studies have shown higher rates of melanoma among black Non-Hispanic women and Hispanic men in Florida than in other U.S. states (Cormier et al., 2006; Hu et al., 2006; Hu et al., 2009; Rouhani et al., 2010;). Hu et al. (2009), Hu et al. (2006), and Rouhani et al. (2010) all had similar findings as Cormier et al. (2006) as they related to higher mortality rates among these minority groups due to its late stage presentation. The late diagnosis of malignant melanoma among dark-skinned individuals in South Florida is a major health concern. Through the utilization of the revised Pender's Health Promotion Model as a guiding framework, this Capstone Project assessed farmworkers' knowledge of melanoma. Based on the information gathered through this project, a culturally sensitive tailored educational brochure and pictorial were prepared in an effort to provide educational materials to increase the farmworkers' knowledge of this deadly disease.

It is imperative that an educational program be implemented in South Florida to raise awareness among Hispanic farmworkers regarding the dangers and presentations of melanoma. These educational programs must also be extended to include healthcare providers, thus raising awareness of melanoma presentation in dark-skinned individuals. Healthcare delivery and outcomes may be improved as a result of the implementation of these health promotion and disease preventive measures.

Healthcare policy may be enacted to reflect the imminent dangers that darkskinned individuals face secondary to this deadly disease. Lastly, more funding should be allocated towards public education in Hispanic farmworkers, which would further pursue the goal of raising awareness of the dangers of melanoma among this population.

CHAPTER TWO

REVIEW OF THE LITERATURE

As previously discussed, the rate of malignant melanoma has been steadily increasing in the United States and worldwide. Although the white population has been at high risk for acquiring this disease, new findings show that male Hispanics and black women are being diagnosed with this disease at late stages (Bradford et al., 2009; Cormier et al., 2006; Eide & Weinstock, 2005; Hu et al., 2006; Hu et al., 2009; Rouhani et al., 2010; Torrens & Swan, 2009).

It was further reported that socioeconomic factors such as poverty and the lack of health insurance compromise minorities' access to skin cancer education, prevention, screening, and treatment (Cormier et al., 2006; Hu et al., 2006; Hu et al., 2009; Rouhani et al., 2010; Torrens & Swan, 2009). According to Reyes-Ortiz et al. (2006), a low socioeconomic status results in low survival rates for patients diagnosed with melanoma. Healthy People 2020's main goals include an increase in the quality of years of healthy life and the elimination of health disparities. This Capstone Project addressed both goals by assessing farmworkers' knowledge of skin cancer and developing tailored educational materials that may raise awareness among farmworkers, Hispanics, and healthcare providers regarding the dangers of skin cancer, thus possibly improving these populations' survival rates.

Pertinent literature from 2004 until present was found regarding this topic in the following search engines: Cumulative Index to Nursing and Allied Health Literature (CINAHL) Plus, Medline, PubMed, Google, and Google Scholar. The following key words were utilized in these search engines: skin cancer, melanoma, minorities, blacks,

Hispanics, farmworkers, occupational exposure, educational materials for farmworkers, photographs depicting skin cancer among Hispanics, and U.S. Surveillance Epidemiology and End Results data.

Risk Factors for Melanoma

Literature showed that major risk factors for melanoma include personal or family history, the presence of moles or other skin eruptions, excessive sun exposure, occupational exposure to certain substances, tanning booth exposure, and immunosuppressant diseases (American Cancer Society, 2011; Gordon, 2009; Stapleton, Turrisi, Hillhouse, Robinson, & Abar, 2010; Torres & Swan, 2009). According to Fortes et al. (2007), chemicals such as pesticides increase the risk of melanoma. According to Nagore et al. (2010), tobacco smoking, acute and chronic intense sun exposure, and tumor susceptibility associated with melanoma risks in patients who are 60 years of age or older. According to Emmons et al. (2010), "Chronic unprotected exposure to the sun's ultraviolet (UV) light and/or intermittent, but intense exposures such as those that occur on beaches are thought to be a primary cause of skin cancer" (p. 282). Cormier et al. (2006) also attributed tumor characteristics to the late diagnosis of melanoma among minorities. Furthermore, according to Eide and Weinstock (2005), although there is a correlation between increased UV index and lower latitude of sun exposure in non-Hispanic whites, there is no evidence to support such a correlation between blacks and Hispanics.

This Capstone Project assessed the knowledge of melanoma among farmworkers in South Florida. Once this information was ascertained, a culturally sensitive tailored educational brochure and pictorial was developed in order to educate this population, other Hispanics and healthcare providers regarding the presentations of melanoma among farmworkers and Hispanics overall; in an effort to increase their awareness and reduce the risks of the late stage diagnoses of this disease.

Melanoma Among Minority Populations

Although the majority of melanomas are diagnosed in Caucasians, recent studies showed trends of increased incidence of melanoma among minority groups (Bradford et al., 2009; Cormier et al., 2006; Eide & Weinstock, 2005; Hu et al., 2006; Hu et al., 2009; Rouhani et al., 2010; Torrens & Swan, 2009) (See Appendix B: Melanoma Among the Minority Population Matrix). Researchers further found through the review of the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute that there was a higher proportion of lower extremity and acral lentiginous melanoma as well as lower survival rate among minorities (Bradford et al., 2009; Cormier et al., 2006; Eide & Weinstock, 2005). Hu et al. (2006) and Hu et al. (2009), in their articles about late-stage melanoma diagnosis, analyzed data gathered from the Florida Cancer Data System (FCDS) in order to compare the different stages at which melanoma was diagnosed among white, black, and Hispanic patients in Miami, Florida, from 1997 to 2002 and found that late-stage diagnosis was more common among Hispanic and black patients compared to white patients. Various studies found that latestage diagnoses and poorer survival rates were more common among Hispanics and blacks than in the white population throughout the U.S. (Eide & Weinstock, 2005; Cormier et al., 2006; Hu et al., 2006; Hu et al., 2009; Rouhani et al., 2010).

Furthermore, Hu et al. (2006) reported that "late-stage diagnosis was more common among Hispanic (26%) and non-Hispanic black patients (52%) compared with non-Hispanic white patients (16%)" (p. 704). Hu et al. (2006) further concluded that poorer outcomes were the result of the late diagnosis of melanoma among this group of patients. Additionally, Hu et al. (2009) further reported that 18% of Hispanic patients had regional or distant-stage melanoma at the time of diagnosis as compared with 12% of white non-Hispanic patients.

Moreover, Cormier et al. (2006) and Bradford et al. (2009) reported that melanoma among minority populations is more commonly found in unusual locations on the body such as the palms of the hands and the soles of the feet. Cormier et al. (2006) further confirmed that it was not surprising that the diagnosis of melanoma was made at a late stage among minorities due to its unusual presentations and the rarity of its occurrences. "This delay in diagnosis is critical because early detection and treatment of thin melanomas results in better survival" (Cormier et al., 2006, p. 1907). Additionally, according to Reyes- Ortiz et al. (2006), poor prognosis of melanoma is directly related to belonging to lower socio-economic groups.

Through the implementation of this Capstone Project, tailored educational material was geared toward farmworkers and Hispanic populations and healthcare providers in South Florida. As such, knowledgeable patients may be more aware of melanoma presentations and seek medical care at earlier stages of the disease, thus decreasing the incidence of late-stage melanoma diagnosis. Additionally, healthcare providers may be better equipped to properly screen this population. As stated by Torrens and Swan (2009), "The health care community needs to recognize the increasing diversity in melanoma's presentation" (p. 119).

Health Promotion and Disease Prevention

Preventive Measures and Education

Studies show that prevention of melanoma is key in avoiding the catastrophic health and economic consequences of skin cancer (American Cancer Society, 2011; Gordon, 2009; Torrens & Swan, 2009) (Appendix C: See Preventive Measures and Education Matrix). Although skin cancer rates are increasing, it is one of the most preventable types of cancer. According to Housman et al. (2003), skin cancer is one of the most expensive diseases to treat in the United States. Studies show that skin cancer preventive measures include protecting the skin from intense sun exposure; avoiding sun and indoor tanning; adopting sun-protection habits including the use of sunscreen, hats, shirts, and sunglasses; performing regular skin self-examination; and seeking professional evaluation of suspicious skin changes (American Cancer Society, 2011; Glanz et al., 2010; Gordon, 2009; Rigel et al., 2010; Stapleton et al., 2010; Torrens & Swan, 2009). Nevertheless, according to Glanz et al. (2010), levels of knowledge, concern, and the practice of prevention and early detection remain relatively low.

In 2010, Glanz et al. conducted a randomized clinical trial that demonstrated that the utilization of "tailored communications had a modest positive impact on skin cancer prevention practices" (p. 739). The authors further contended that the intervention showed an improvement in overall sun protection habits such as the use of sunglasses and hats, as well as the performance of skin self-examinations. Glanz et al. (2010) stated that "Tailored messages have the potential to focus prevention efforts on those who can most benefit from them, thereby increasing the efficiency and effectiveness of health promotion and cancer prevention interventions" (p. 740).

Creating a tailored educational intervention in this Capstone Project included the preparation of a culturally appropriate brochure which included general information and definition of skin cancer, the utilization of the ABCD acronym (Asymmetry, Border irregularity, Color variegation, Diameter greater than 6 mm) in a more simplified version for better understanding of material by farmworkers. It also included education about full-body skin self-examination and photographs depicting normal and malignant moles for comparison. Additionally, a pictorial was created depicting skin cancer in Hispanics. This pictorial may be utilized not only by farmworkers and Hispanics but also by healthcare providers in order to have educational and screening guidance. The implementation of primary preventive measures and education tailored to the specific populations regarding the dangers of melanoma would decrease the incidence of melanoma and ultimately save lives (Glanz et al., 2010; Hu et al., 2006; Kantor & Kantor, 2009; Stapleton et al., 2010).

Various studies reported that late-stage diagnosis of melanoma among Hispanics was attributed to their lack of awareness (Hu et al., 2006; Rouhani, et al., 2010). Hu et al. (2006) further reported that Hispanics did not perceive themselves at risk of melanoma since many melanoma educational programs targeted white communities. Furthermore, according to Hu et al. (2009), lack of awareness about the early signs, as well as risks, of skin cancer may delay timely treatment; thus, emphasis on primary prevention was further supported. Hu et al. (2009) also contended that "skin cancer awareness and health care provider education among minority populations represents areas of intervention to improve melanoma diagnosis in these populations" (p. 1373). Lastly, Hu et al. (2009) called for a development of melanoma awareness program that includes "sun protection, sun-smart behavior" and self-examinations among the Hispanic communities (p. 1374).

According to Emmons et al. (2010), "education and biometric feedback improves skin cancer prevention practices and raises awareness of suspect moles" (p. 287). Biometric feedback entails utilizing a Dermascan analyzer and ultraviolet (UV) reflectance photography that highlights sun damage on participants. Such findings may be useful in tailoring educational interventions that would impact the amount of sun exposure people would be willing to receive without proper protection. Stapleton et al. (2010) performed a randomized clinical trial where they sought to identify indoor tanning subgroups and test the efficacy of an appearance-focused handbook intervention. This clinical trial revealed that tailored "interventions significantly reduced indoor tanning for the low-knowledge subgroups" (p. 181). Hence, said intervention proved its efficacy in lowering indoor tanning usage among participants. In addition to public education regarding the risks of melanoma among Hispanics, Torrens and Swan (2009) stated that "it is incumbent upon primary care providers to act on Pender's proposition and clearly define incentives for sun avoidance with all patients" (p. 119). Through the implementation of this Capstone Project guided by Pender's Health Promotion Model, competent and thorough melanoma education tailored to the farm-working population may increase their self-efficacy in avoiding risky behaviors that may increase the chances of developing melanoma.

Screening

According to the ACS (2011) and CDC (2011), early melanoma detection is paramount in order to effectively treat this type of skin cancer. However, the U.S. Preventive Service Task Force recommendations (2009) stated that there is insufficient evidence to recommend screening for melanoma. Hence, there is a lack of clinical guidelines on screening procedures for both the general population and those individuals at high risk. Kantor and Kantor (2009) further confirmed that, although an estimated 62,480 new melanoma cases were diagnosed in 2008 in the U.S., there is still a lack melanoma screening guidelines. Furthermore, the ACS, the American Academy of Dermatology, Skin Cancer Foundation, and the 1992 National Institutes of Health Consensus Conference on Early Melanoma recommend annual full-body selfexaminations, especially for those individuals at highest risk for melanoma (ACS, 2011; Rigel et al., 2010). Rigel et al. (2010) further contended that "Total Skin Exam is a noninvasive, quick, and sensitive (89% to 97%) screening procedure when performed by a physician who is qualified to identify skin cancers" (p. 304).

Kantor and Kantor (2009) found that "most melanomas detected in a general practice dermatology setting were found as a result of dermatologist-initiated full-body skin examinations (FBSE), not patient complaint" (p. 873). The authors further "found that dermatologist detection was associated with thinner melanomas and an increasing likelihood of the melanoma being in situ" (p. 873). Kantor and Kantor (2009) further contended that full-body skin examinations may minimize the financial and health impact of melanoma in the U.S. Hu et al. (2006) also recommended the delivery and

accessibility of cancer screening and examinations in order to improve melanoma staging at the time of diagnosis in minority populations.

Better secondary prevention in the form of screening would improve not only melanoma detection but also early detection, thus decreasing the poorer outcomes among this population. Hu et al. (2006) further reported that, according to the National Health Interview Surveys of adults in the U.S., Hispanics are not screened for skin cancer as often as whites. Torres and Swan (2009) further contended that healthcare providers' decreased awareness of minority populations' melanoma risks coupled with time constraints would explicate the lack of full-body skin examinations. Through the implementation of this Capstone Project, increased awareness regarding the benefits of full-body skin self-examinations by this population and healthcare providers may improve not only the late staging of this disease but also survival rates. (See Appendix D: Preventive Measures and Screening Matrix.

Summary

There is an evident problem among dark-skinned individuals in South Florida regarding risk, assessment, and late-stage diagnosis of melanoma. Primary preventive measures must be implemented in order to raise awareness, not only to the dangers of melanoma in dark-skinned farmworkers, but also to their susceptibility. Healthcare providers must also be educated regarding this population's risk and presentation of melanoma in order to improve secondary preventive measures in the form of screening.

Factors such as poverty and lack of health insurance should not be road blocks in raising awareness and improving timely diagnosis of melanoma among this vulnerable population. This Capstone Project's goal was to assess the farmworking community's knowledge of melanoma and to create culturally sensitive educational materials in order to improve preventive measures, education, and screening of melanoma among this population and healthcare providers.

CHAPTER THREE

METHODOLOGY

This chapter outlines the different phases of this project including project design, identification of participants, ethical considerations, and budget proposal. Setting, recruitment, procedures, and outcome measures was contained in each of the phases of this project.

Purpose of the Project

The purpose of the Capstone Project was twofold: to assess the knowledge of the risks of melanoma among the farm-working population in South Florida and to develop culturally appropriate educational materials. These tailored educational materials may increase the knowledge of the farmers and healthcare providers to identify signs and symptoms of melanoma leading to early intervention and ultimately improving survival rates for this population.

Project Objectives

The purpose of this project was achieved through the following objectives:

- 1. Assess farmworkers' knowledge regarding their risks of melanoma.
- 2. Analyze the data received in the assessment of the farmworkers' who completed the questionnaire.
- 3. Develop a pictorial depicting skin cancer in Hispanics.
- 4. Develop a tailored educational brochure based on the needs of the farmworkers who completed the questionnaire.

Project Design

Based on this project's stated purpose and objectives, a survey tool was utilized to assess and collect data regarding farmworkers' knowledge of their risks of melanoma. A descriptive analysis was performed to analyze collected data. Based on the results and analysis of the study, educational materials including a brochure and pictorial were developed.

Identification of Participants in Project

The inclusion criteria for the population of interest included dark-skinned individuals exclusively Hispanic Farmworkers who are 18 years of age or older. These individuals were able to read, write, and/or understand English and/or Spanish. The exclusion criteria included white individuals and those who were younger than 18 years old.

Ethical Considerations

Approval for this project was obtained from the Institutional Review Board (IRB) at Barry University. IRB approval was not required at the different locations where this project took place, including Open Door Health Center and Redlands Christian Migrant Association (RCMA). A cover letter (Appendix E) accompanied the questionnaire, which notified potential participants of their rights. Since participant identification was not required for the completion of the questionnaire, consent forms were not needed. Individuals had the choice not to complete the questionnaire at any time. There were no known risks anticipated in this project. Cover letters and questionnaire were translated from English to Spanish and back to English by an independent interpreter. The participants' involvement assisted the DNP student to assess farmworkers' knowledge regarding their risks of melanoma. Direct benefits to the participants in this study included increased knowledge regarding this deadly disease and a \$10.00 gift certificate from Walmart. To maintain confidentiality, there were no identifiers on the questionnaire, and participants were directed to place the completed questionnaire in sealed envelopes in a drop box. Once data were received, all information was kept in a locked file cabinet in the home of the DNP student. At the completion of the project, when all data has been used to its fullest extent, data will be kept in a lock cabinet for a period of five years. All documents will be destroyed after five years.

Objective I

In order to accomplish the first objective of assessing farmworkers' knowledge regarding their risks of melanoma, the following process occurred.

Setting

The project took place at two non-profit facilities: Open Door Health Center and Redlands Christian Migrant Association (RCMA). Open Door Health Center provides medical care to the indigent including farmworkers; while RCMA provides day care services to the farm-working population in Homestead, Florida. This population was comprised mainly of Hispanics, thus fulfilling the skin color pigmentation criteria for this project. Additionally, this population is at higher risk of melanoma due to its occupational sun and pesticide exposure as farmworkers. Letters of support were obtained from these facilities. IRB approval was not required from each facility.

Recruitment

Open Door Health Center and RCMA were contacted to finalize the details for the project, and arrangements were made to have the questionnaire completed by the farmworkers at their facilities.

Once permission from IRB was obtained, flyers (Appendices F and G) announcing the recruitment of participants for the study were prepared in English and Spanish and strategically placed in the above stated locations. The flyer stated that participants were being sought to participate in a study that was being conducted to ascertain farmworkers' knowledge regarding melanoma. The flyers also specified the locations and times of the study. Participants were directed to go to the specified locations where the study was conducted at the specified times. The flyer also stated that interested participants would be completing a questionnaire in Spanish or English (whichever was their preferred language) and that the completion of questionnaire would not take more than 20 minutes. The DNP student's contact information appeared at the bottom of the flyer so that participants could contact the DNP student should they have any additional questions regarding the study. Additionally, incentives in the form of gift cards were offered to encourage participation. Gift cards valued at \$10.00 were provided to participants that completed the questionnaire.

The questionnaire (Appendix H) were based on an instrument developed by Jackson, Wilkinson, and Pill (1999) and implemented by Murchie and Iweuke (2010) to identify those at high risk of melanoma in Cheshire, United Kingdom and Northeast Scotland. This instrument has been used in various studies that have shown reliable and valid results. According to Jackson et al. (1999), "the validity of the self-report

32

questionnaire was assessed using kappa values, and the statistical significance of other comparisons was obtained using chi-square values or logistic regression" (p. 200). Specific permission was obtained to revise and utilize this questionnaire in this Capstone Study (See Appendix M). The questionnaire was also modified based on the adapted Pender's Health Promotion Model as well as making it pertinent to the farm-working population in South Florida. The questionnaire contained a total of 32 questions. The first 10 questions gathered data on demographics and the respondent's personal experience of melanoma. The remaining 22 questions collected information on 4 domains: participant's personal risk of melanoma (10 questions), level of concern about melanoma (5 questions), self-reported behavior to protect themselves from melanoma (3 questions), and knowledge about melanoma (4 questions). This questionnaire included closed-ended questions as well as Likert scale questions for selected items (See Appendix H).

The questionnaire were distributed at the specified dates and times at Open Door Health Center and RCMA once the cover letter was read, explained, and understood by the willing participants. On the participants completed the questionnaire, they were directed to place the questionnaire in blank envelopes and deposit them in a drop box. Snowball sampling via word of mouth was also utilized to increase participation. The cover letter, questionnaire, and flyer were translated by an independent interpreter from English to Spanish and back to English for confirmation of translation.

Outcome Measures

Objectives I and II

Results from the adapted questionnaire assessing the knowledge of the risks of melanoma among the Hispanics and blacks in the identified clinics were analyzed. A statistician was consulted to assist in performing data analysis. A descriptive statistical analysis was performed to characterize the sample's responses to the questionnaire utilizing frequency distribution.

Objectives III and IV

Results from the completed questionnaire were utilized to assist the researcher in preparing tailored educational materials for the farmworker, Hispanics, and healthcare providers. These tailored educational materials included the development of a colored pictorial depicting skin cancer in Hispanics. Additionally, a tailored educational brochure was developed for the farmworkers and included culturally sensitive information regarding melanoma, risks of acquiring melanoma, and proper ways of protection along with instructions on how to perform proper full-body self-examinations.

The researcher also contacted dermatology experts in search of colored photographs depicting melanoma among Hispanic individuals. These photographs were utilized in preparation of the pictorial depicting skin cancer in Hispanics . These experts were selected to provide these photographs based on their significant research database and the body of literature published by the dermatology experts. Permissions to utilize these photographs were obtained by the dermatology professionals and organizations that possessed the rights to these photographs. The researcher prepared a culturally sensitive skin cancer brochure based on the research and information gathered through the completed questionnaire . The completed questionnaire provided insightful information regarding this population's knowledge or lack thereof regarding melanoma, its risks, and prevention. Additionally, guided by Pender's HPM, the questionnaire provided data regarding participants' perceived barriers and interpersonal/situation influences. A three dermatology expert panel was ascertained in order to obtain an expert panel consensus ensuring that the pictorial and tailored melanoma educational brochure were accurate and complete.

Dissemination of Findings

The researcher will disseminate the pictorials depicting skin cancer in Hispanic individuals along with the tailored educational brochure as part of her post-Doctorate in Nursing Practice. Should the DNP student be accepted for presentation, the DNP student will attend conferences at the American Academy of Dermatology and Migrant Clinicians Network in order to disseminate results of the study. Additionally, various possible interested groups such as the American Cancer Society, CDC, and public media will be approached with the findings of this study for further dissemination.

Budget Proposal

The budget for this project reflected the following costs: Editing costs totaling \$173; supplies that included paper, staples, copying costs totaling \$60; marketing and communication materials including educational materials and colored pictorials depicting skin cancer in Hispanics totaling \$52; gift cards for 100 participants totaling \$1,000; and travel and mileage expenses to and from Open Door Health Center and RCMA totaling

\$260. The total cost of this Capstone Project was \$1,545. A detailed itemization and budget proposal is attached as Appendix I.

According to Stapleton, Turrisi, Hillhouse, Robinson, and Abar (2009) and Housman et al. (2003), skin cancer treatment costs the United States \$1 billion annually, making it one of the most costly preventable illnesses to treat. The cost benefit analysis of the implementation of this Capstone Project with a proposed budget of \$1,510 show that such a project would not only save millions of dollars in costs of treatment but also and more importantly—save lives.

Summary

This project fulfilled its purpose and objectives in three phases including an assessment of the farmworkers' knowledge regarding melanoma. Objective I took place at Open Door Health Center and RCMA. Objective II, a descriptive analysis of data gathered in the assessment, was performed to formulate the educational materials for Objective IV. Objectives III and IV were fulfilled with the development of a pictorial depicting skin cancer in Hispanic individuals, and the development of a tailored educational brochure based on the needs of this population. A three-expert panel was ascertained to ensure accuracy and completeness of pictorial and educational brochure. Considering the heavy financial burden and cost of life of melanoma, this health promotion and disease preventive program may raise awareness among Hispanic individuals and healthcare providers regarding this population's risk of melanoma, thus catching this disease at its earlier stages and possibly improving survival rates.

CHAPTER FOUR

RESULTS AND DISCUSSION

Farmworkers represent a critical agricultural labor source in the United States. However, despite their economic contributions, farmworkers are one of the most marginalized populations in the entire country. According to Bechtel, Davidhizar, and Spurlock (2000), migrant farmworkers have a "Third World health status" (p. 300). According to Gaetano et al. (2009), ultraviolet radiation exposure are among the many barriers that this population encounters on a daily basis to obtain and maintain optimal health. Gaetano et al. (2009) further contended that ultraviolet radiation exposure increases the farmworkers' risk of developing skin cancer. Although the majority of melanomas diagnosed have involved the Caucasian population, recent studies show trends of increased incidence of melanoma among minority groups such as Hispanics. (Bradford et al., 2009; Cormier, et al., 2006; Eide & Weinstock, 2005; Hu et al., 2009; Hu et al., 2006; Rouhani et al., 2010; Torrens & Swan, 2009)

The purpose of the proposed project was twofold: to assess the knowledge of the risks of melanoma among farmworkers in South Florida, and to develop a tailored educational brochure and pictorial to increase knowledge so that farmworkers can identify signs and symptoms of skin cancer which will lead to early intervention, and ultimately improve survival rates for this population. This project involved the following steps: Distributing a questionnaire to assess farmworkers' knowledge regarding melanoma and tailoring a culturally sensitive educational brochure for the farmworkers. Additionally, a pictorial depicting skin cancer in Hispanics was created in order to raise awareness of skin cancer among Hispanics and healthcare providers.

Discussion of Findings

Assessment of Farmworkers' Knowledge

The first objective of assessing farmworkers' knowledge regarding melanoma was accomplished by having the farmworkers complete questionnaire. The questionnaire was prepared based on an instrument developed by Jackson et al. (1999) and implemented by Murchie and Iweuke (2010) to identify those at high risk of melanoma. Specific permission was sought to revise and utilize the implemented questionnaire in this Capstone Project and obtained by Peter Murchie (Appendix M). The questionnaire was further modified based on the adapted Pender's Health Promotion Model to make it pertinent to the farm-working population in South Florida. Permission was also sought and granted by Beth Ann Swan (Appendix L), the author of the "Adapted Health Promotion Model Applied to Melanoma Prevention by the Patient," which was published in Torrens and Swan's (2009) article regarding health promotion and early recognition of melanoma (p. 117). This adapted Pender's Health Promotion Model was further revised and utilized by the researcher as guidance in the assessment of the farmworkers' knowledge and possible risks at acquiring melanoma, barriers to health and healthcare, interpersonal and situational influences that the farmworkers may experience which may increase their risks of melanoma. Lastly, the Doctor of Nursing Practice (DNP) student also attempted to tailor said questionnaire to be culturally sensitive for this population.

Research shows that the majority of the farmworkers are a semi-invisible population due to their migratory lifestyles and undocumented status. Thus, the element of fear of being deported to their countries was eminent (Kim-Godwin, Alexander, Felton, Mackey, & Kasakoff, 2006). Additionally, according to Kim-Godwin et al.

(2006), "little is known about the cultural sensitivity, knowledge, and abilities/skills needed to provide culturally competent care to Migrant Mexican farmworkers" (p. 28). Yet, having the opportunity to connect with this population in a setting where fear was not a barrier to assess their knowledge regarding melanoma was of utmost importance. Studies have shown that the utilization of community key informants, family members, farmworkers, as well as partnering with facilities that not only provide services to this community, but embrace the integration of culturally sensitive norms, establish trust between the farmworkers and the researcher, thus creating meaningful connections with the farmworkers (Anthony, Williams & Avery, 2008; Bergland, Heuer, & Lausch, 2006; Clingerman, 2007a; Clingerman, 2006; Hess, 2009; Kim-Godwin et al., 2006; Lausch, Heuer, Guasasco, & Bengiamin, 2003; Meade & Calvo, 2001; Yeo, Villalobos, & Robinson, 2011). Furthermore, a phenomenological qualitative research conducted by Lausch et al. in 2003 showed that migrant health nurses' immersion with the farmworking population established "rapport that led to a trusting relationship" (p. 67). This immersion allows nurses to provide culturally sensitive and adequate care for this population. Lastly, it was reported by Hess (2009) that "cultural sensitivity in health planning, communication and intervention is instrumental in making a meaningful connection with migrant farm worker patients" (p. 95).

The questionnaire was completed by the farmworkers at two sites: Open Door Health Center and Redlands Christian Migrant Association (RCMA). This population is comprised mainly of Hispanics; this fulfills the skin color pigmentation inclusion criteria for this project. Additionally, this population is at higher risk of melanoma due to its occupational sun and pesticide exposure as farmworkers. Letters of support to conduct the study were obtained from these two facilities (Appendix J and K). IRB approval from each facility was not required. Although the DNP student had contacted Centro De La Salle, and verbal agreement was obtained for the completion of this study at that facility, the DNP student was unable to obtain the letter of support from that facility. Although the DNP student had explained to the point of contact the absolute anonymity and privacy of the participants, it was the point of contact's view that due to the sensitivity and lack of trust among the farmworkers that written documents were not going to be furnished to the DNP student.

Once approval from Barry University's Institutional Review Board was obtained, the study commenced. Open Door Health Center and RCMA were contacted to finalize the details for the project and arrangements were made to have the questionnaire completed at their facilities. Recruitment flyers (Appendix G) in English and Spanish were strategically placed at both sites. Information included in the flyers included the purpose of the study, inclusion criteria, requirements for participation, length of time of the study, dates, locations, and incentives for participation. Lastly, the contact information for the DNP student, committee chair, and IRB point of was provided if the participants had additional questions.

Once the cover letter was read, explained, and provided to willing participants, assuring them that anonymity and confidentiality would be maintained, the questionnaire was distributed at Open Door Health Center and RCMA. Although the researcher provided the questionnaire in English and Spanish to be filled by the farmworkers who could read and write English and/or Spanish, 97 out of 100 participants requested the third-party members verbally administer the questionnaire. Interviews lasted from 15 to

20 minutes. Once the questionnaire was completed by the participants and third-party members, the questionnaire was placed in sealed envelopes and placed in a drop box. Confidentiality agreements were executed by these third-party members prior to their assistance in the study. The questionnaire was distributed at Open Door Health Center on the following dates and times: April 6, 2013 from 8:00 a.m. until noon; April 10, 2013 from 9:00 a.m. until 2:30 p.m.; and April 11, 2013 from 9:00 a.m. until 2:30 p.m. The questionnaire was also distributed at RCMA on April 8th, 2013 from 3:00 p.m. until 6:00 p.m.; April 10, 2013 from 3:00 p.m. until 6:00 p.m. and April 11, 2013 from 3:00 p.m. until 6:00 p.m. These particular dates and times were scheduled with point of contacts at each facility based on their schedules as well as efforts to capture the majority of the farmworkers. The DNP student attempted to capture as many farmworkers as possible by completing the survey during peak season, which in Florida extends from October until the end of April. Scheduling of the study was also of utmost importance with the RCMA farmworkers since these were the times they picked up their children from day care and possibly the best time to capture their responses.

A total of 100 farmworkers participated in this study. Thirty-five participants completed the questionnaire at Open Door Health Center. It is important to note that the people who frequented Open Door Health Center were not exclusively farmworkers. Open Door Health Center provides primary care services to the uninsured poor population of South Dade, not solely farmworkers. Additionally, the DNP student realized that there was a pattern of farmworkers who refused to participate in the study at Open Door Health Center but were willing to complete the survey at RCMA. In contrast, 65 participants completed the questionnaire at RCMA. This may be due to the fact that RCMA is a daycare facility that provides services to farmworkers only. Additionally, RCMA has built a trusting relationship with the farmworkers. Although RCMA has been providing child daycare services to the farm working community since 1965, farmworkers did not trust RCMA to care for their children from its inception. It was not until RCMA implemented a culturally sensitive program wherein immigrant mothers were hired to care for the children of the farmworkers that the daycare center began to thrive. (RCMA, n.d.) Thus, the DNP student was able to survey and connect with the farmworkers at a location where fear and lack of trust would not hinder their participation in the study.

Research showed that offering meaningful incentives are useful for successful recruitment, participation in educational and preventive programs, as well as treatment of the farmworkers (Bergland et al., 2006; Hess, 2009). It was further reported by Hess (2009) that "culturally sensitive, financially beneficial and socially appropriate incentives need to be developed" to initiate and maintain treatment of farmworkers (p. 100). The DNP student also provided the farmworkers with incentives in the form of Walmart gift certificates in the amount of \$10.00. Although these incentives proved to be useful, some of the farmworkers approached at Open Door Health Center still refused to complete the questionnaire. However, the utilization of an environment where trust was established such as RCMA, the recruitment of Hispanic/bilingual volunteers, and the incentives were pivotal to client participation.

Analysis of Needs Assessment

Results from the adapted questionnaire assessing the knowledge of the risks of melanoma among the farmworkers were analyzed, thus fulfilling the second objective of this project. A descriptive statistical analysis was performed to characterize the sample's responses to the questionnaire utilizing frequency distribution. The following data analysis provides information regarding the farmworker's responses in the five major areas contained in the questionnaire: Demographics, personal risks, level of concern, protective behavior, and melanoma knowledge.

In order to properly analyze the participants' responses to the questionnaire, the researcher developed a key categorizing and numbering each Likert scale response in order to enter data in an Excel spreadsheet. Once all of the responses were entered and accounted for in the Excel spreadsheet, the data were then inputted into the Statistical Package for the Social Sciences (SPSS) in order to perform a descriptive statistical analysis based on the data collected.

The demographic findings of this study were consistent with national trends that showed that the majority of farmworkers were of Hispanic descent, spoke Spanish, and were minimally educated (Anthony et al., 2008; Clingerman, 2006; Kim-Godwin et al., 2006; Sologaistoa, 2011; Yeo et al., 2011)

Table 1

Farmworkers' Demographic Data

Characteristic	Percentage
Gender	Male (35%)
	Female (65%)
Age	Mean 37.14
Primary language	Spanish (100%)
Highest level of education completed	Elementary (58%) High school (31%) Other (8%)
	None (1%) Unanswered (2%)
Do you have access to healthcare	Yes (74%)
information/knowledge and healthcare?	No (26%)
Job	Farm work (88%) Nursery work (8%) Landscaping (4%)
Do you think you are at risk of skin cancer?	No (31%) Yes (69%)
Have you ever been diagnosed with melanoma or skin cancer?	Yes (2%) No (98%)

As the results of Table 1 show, 65% of the farmworkers who participated in the study were comprised mainly of women. This high percentage of women who participated in the study may be due to the fact that the majority of the participants women who were picking up their children at RCMA. Research also shows that there was an increase in Mexican-American women involved in farm work over the past decade throughout the country (Clingerman, 2006; Clingerman, 2007a; Clingerman, 2007b). Additionally, it was also noted that although the majority of the participants were farmworkers (88%), nursery workers (8%) also participated in this study. Nursery workers and landscapers were allowed to participate in the study was well as the farmworkers, since these type of workers are also at risk to melanoma due to sun exposure.

Table 2

Farmworkers' Personal Risk of Melanoma

Personal Risk	Percentage
Ability to tan	Tans easily (79%)
	Always tans (13%)
	Tans with difficulty (6%)
	Never tans (2%)
Does your skin freckle?	Yes (53%)
-	No (47%)
Do you have moles with irregular edges and color?	Yes (12%)
	No (88%)
How many moles do you have?	None (5%)
5	<20 (75%)
	>20 (20%)
Natural hair color	Black (36%)
	Brown (64%)
What is your ethnic origin?	Hispanic (100%)
How many times have you had a bad sunburn?	None (39%)
	<3 (32%)
	>3 (29%)
My chances of getting skin cancer compared with other people	More likely (43%)
of my race is	The same (31%)
-	Less likely (22%)
	Don't know (4%)
Total amount of sun exposure on a weekly basis hours	10% 40 or less
Total amount of sun exposure on a weekly basis hours	10% 40 or less 90% >40

As shown in Table 2, farmworkers' responses regarding personal risks vary greatly. However, it is important to note that 53% of the farmworkers responded that their skin freckles might increase their risk of melanoma. Additionally, 12% of the respondents reported having moles with irregular edges and color. Lastly, of worthy importance, is the amount of sun exposure experienced by the farmworkers. Based on the participants' responses, 90% of the farmworkers are exposed to the harmful rays of the sun more than 40 hours per week. Research shows that farmworkers are at risk for developing skin cancer due to sun exposure (Gaetano et al., 2009).

This study showed an increased level of concern among the farmworkers regarding skin cancer. Results showed that 43% of the farmworkers believed that they were more likely to acquire skin cancer compared with other people of their race. Additionally, all participants (100%) admitted to checking their skin for moles periodically. This is a significant finding, since research has shown that Hispanics overall had lower level of skin cancer awareness and performed less frequent skin examinations (Hu et al. 2009; Hu et al. 2006; Rouhani et al. 2010). Additionally, when farmworkers were asked if they noticed a new or changing mole, 45.5% of the participants responded that they would seek medical advice while 50.5% of the participants responded that they would not seek medical advice. Although this questionnaire was solely based on melanoma risk and exposure, there was an incidental finding that farmworkers were extremely concerned not only with their sun exposure but also the pesticide exposure. This fear is not unfounded since approximately 300,000 farmworkers are poisoned with pesticides yearly (NCFH, 2013) Therefore, these participants were more vigilant in checking and protecting their skin against the harmful

rays of the sun than non-farmworker Hispanics. Research has also shown that sun and pesticide exposure are harmful to the farmworkers (Culp & Umbarger, 2004; Fortes et al., 2007; Hess, 2009;).

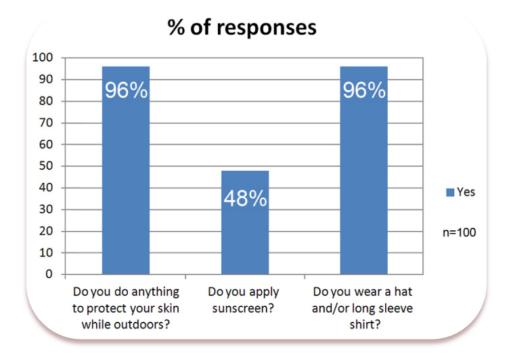


Figure 3. Protective behavior of farmworkers.

As Figure 3 shows, 96% of farmworkers wear some protective clothing while working outside in the sun and in the fields. However, only 48% of the farmworkers apply sunscreen to protect their skin from the sun. This is extremely important, as certain clothing many not afford appropriate protection from the sun; thus, sunscreen must be applied under the clothing to ensure proper protection from the harmful rays of the sun. Some farmworkers admitted to not wearing sunscreen lotion because they thought that it would increase their risks of skin cancer. Research further showed that farmworkers are among the poorest populations in the country (Culp & Umbarger, 2004); thus, farmworkers may not be able to afford to purchase sunscreen lotion when other needs such as food, medicine, and shelter take higher priority.

Table 3

Farmworkers' Melanoma Knowledge

Farmworkers' Knowledge of Melanoma	Percentage	Reponses
How knowledgeable are you	2%	I know a lot about skin cancer
regarding melanoma or skin cancer?	29%	I know little about skin cancer
	69%	I do not know anything about skin cancer
Do you know the major clinical	3%	Yes
signs of early melanoma?	97%	No
Which of the following skin cancers	2%	Melanoma only
have you heard of?	1%	Basal Cell and squamous cell only
	97%	Have not heard of melanoma,
		basal cell, or squamous cell
		cancer

As shown in Table 3, farmworkers' knowledge regarding melanoma is dismal. Hence it is extremely important to raise their awareness through education regarding this deadly disease. Through proper implementation of tailored educational programs geared specially for this population, their lack of awareness of melanoma may be reduced, thus possibly improving healthcare outcomes in this population.

The first component of the adapted Pender's HPM entails the farmworkers' individual characteristics and experiences. According to Srof and Velsor-Friedrich (2006), these characteristics and experiences include unmodifiable factors such as gender, age, and genetics. Hence, this data was obtained through the Demographics and Personal Risk sections of the questionnaire completed by the farmworkers. Data obtained in the Demographics section of the questionnaire revealed 35% of the respondents were male while the remaining 65% of the respondents were females. Additionally, the mean age of the participants was 37.14. Lastly 100% of the participants were of Hispanic origin. Inquiries were also made as to the farmworkers' prior related behaviors, which included history of sunburns, where 39% of the respondents reported not having a history of sunburns while 32% reported having less than 3 sunburns, and 29% of participants reported having more than 3 sunburns in their lifetime. Ninety percent of farmworkers responded that they were exposed to the sun over 40 hours per week. Questions addressing personal factors yielded the following results: 12% of the farmworkers reported having nevi or moles with irregular edges and color, while only 2% of the respondents reported having being diagnosed with melanoma or skin cancer in the past.

The second component of the adapted Pender's HPM entails the farmworkers' behavior-specific cognitions and affects, which according to Pender et al. (2002) entails perceived benefits and barriers to health promotion. Questions addressing behavior-specific cognitions and affect included perceived barriers such as lack of melanoma knowledge. This lack of melanoma knowledge was evident as an overwhelming 96% of the respondents were unaware of the major clinical signs of this type of cancer, and 69% of the respondents had no knowledge about skin cancer overall. In addition, research showed that some of the barriers to health and healthcare among farmworkers include poverty, lack of insurance, time constraints, transient lifestyles, language barriers, cultural norms, illegal immigration status, transportation, fear of deportation, low educational level, occupational risks, and dawn to dusk work days (Anthony et al., 2008; Bechtel et al., 2000; Clingerman, 2007b; Culp & Umbarger, 2004; Gaetano et al., 2009; Hess, 2009; Kim-Godwin et al., 2006; Lausch et al., 2003; Meade & Calvo, 2001; NCFH,

2013; Reed, 2004; Sologaistoa, 2011; Yeo et al., 2011). The barrier of time constraints was evident by not only research but also supported by the farmworkers' labor intensive jobs described as working 12-hour-shifts five to seven days per week. Questionnaire questions number 5 and 6 inquired as to farmworkers' access to healthcare information and healthcare. Although 74% of the respondents admitted to having access to healthcare, most participants admitted to only seeking medical care only when acutely ill, while others admitted to working long hours and not having time to seek medical care. "Workers often seek consultation from traditional healers or use folk remedies to solve health problems, seeking health care only for a serious injury or illness" (Culp & Umbarger, 2004, p. 388). Additionally, it was reported that farmworkers are less likely to seek medical care including routine cancer screening due to lack of sick days benefits, time, and lack of babysitting services. Furthermore, according to Kim-Godwin et al. (2006), "migrant farmworkers have one of the highest work-related injury, morbidity, and mortality rates in the United States" (p. 28).

Moreover, research showed that farmworkers face limited resources. According to Culp and Umbarger (2004), "poverty is the main risk factor that affects every aspect of migrant worker's lives" (p. 387). It was further reported that the median annual family income is between \$7,500 and \$9,999 (Anthony et al., 2008; Culp & Umbarger, 2004; NCFH, 2013, 2013). According to the NCFH (2013), 48% of farmworkers lack proper authorization to work in the United States. It was further reported by Bechtel et al. (2000) that illegal farmworkers are illegible for most public assistance, "and because many do not report wages, even benefits such as social security as not available" (p. 302). These barriers further exacerbate farmworkers' precarious economic situation.

Linguistic and cultural barriers were also evident in the farmworkers' responses to questionnaire with the primary language of many of the farmworkers who completed the questionnaire being Spanish (98%) along with a few participants who also spoke a native Mexican dialect. Other farmworkers were concerned with the quality of communication with healthcare providers who were not bilingual. According to the National Advisory Council on Migrant Health (1995), bilingual and/or bi-cultural status was the most important component of culturally competent care for farmworkers. Additionally, Kim-Godwin et al. (2006) stated that "difference in language between health care providers and the farmworkers is a significant barrier to providing care for this population" (p. 30).

Based on Pender's adapted model, the following were the findings under the Interpersonal and Situational Influences: 96% of farmworkers answered that they used some form of sun protection while outdoors. Based on this research study, their level of protection may not be optimal based on their environmental exposure, but they are aware that some protection is necessary from the harmful rays of the sun and chemicals in order to prevent illness. According to Gaetano et al. (2009), "the nature of farming and other outdoor work is a barrier to reducing skin exposure to the sun. Therefore, prevention education focused on the necessity of sunscreen use and protective clothing is imperative" (p. 28). Additionally, based on research and data gathered through this project, there is a lack of sun protection role models. Employers must proactively provide a safe working environment for the farmworkers, and labor laws must be enforced. Lastly, research shows that primary care physicians are not screening this population for skin cancer, thus resulting in a lack of guidance from healthcare professionals to prevent this deadly disease and possibly increasing the incidence of late stage diagnosis of melanoma among Hispanics. Pender's Health Promotion Model may also be utilized in future research to develop new knowledge that can facilitate positive health outcomes for this population.

Development of Pictorial

This project's third objective was met through the preparation of a pictorial depicting skin cancer in Hispanics. According to Cockburn et al. (2006), most prevention marketing materials focus on the Caucasian population . Additionally, Hu et al. (2006) stated that it is of outmost importance for the healthcare community to expand educational and marketing materials to minority populations. Therefore, it was the researcher's objective through this project to create a tailored pictorial depicting skin cancer in the Hispanic population. It was further reported by Hay and colleagues (2006) that showing melanoma photographs to patients improved sun protective behavior. This pictorial may be not only helpful to the farmworkers, but also Hispanics overall as well as healthcare providers as a reference and guide of the morphology of skin cancer in this population. Through the implementation of a health promotion and disease prevention initiative to raise awareness among this population, healthcare providers are in prime positions to educate this minority population of the importance of sun protection and overall risks of acquiring melanoma.

Although the researcher contacted local dermatologists/melanoma experts in search of colored photographs depicting melanoma among Hispanics, the process of acquiring these photographs was extremely challenging. Although a thorough search was made for photographs depicting skin cancer in Hispanics, this search yielded limited images depicting melanoma in Hispanics, thus confirming the lack of photographs and educational resources available to the non-white population on melanoma. Two photographs were found at the Skin Cancer Foundation website. The Skin Cancer Foundation's managing editor was contacted and permission to utilize the melanoma photographs of Hispanics contained on the website was granted (Appendix O). Furthermore, two photographs depicting skin cancer were found in Women's Dermatologic Society website. According to Women's Dermatologic Society's website (2008), these photographs were provided by Dr. Ella Toombs. Dr. Toombs was contacted and permission to utilize these photographs in the pictorial was granted (Appendix P). However, the researcher was able to employ one of the two photographs due to their graphic quality. Only high quality and appropriate photographs were utilized in order to make the pictorial informative and adequate for the Hispanic population.

Once the pictorial was developed, the researcher enlisted the collaboration of a multidisciplinary team to achieve the evolution of the pictorial. An expert panel that consisted of a melanoma expert, a community expert, and an RCMA liaison was sought to validate the appropriateness of the pictorial. The melanoma expert confirmed the accuracy and common presentation depicted in the pictorial photographs of skin cancer among Hispanics. The RCMA liaison also commented on the usefulness and appropriateness of the pictorial as a guide for not only farmworkers and but Hispanics regarding melanoma's presentation on this population. The community expert was extremely pleased with the result and the high quality of the photographs and pictorial.

According to Anthony et al. (2008), healthcare providers must be aware of farmworkers' level of education and should consider alternative methods of education such as pictorials or culturally sensitive education. Furthermore, Meade and Calvo (2001) reported that educational materials and media developed with community input ensure cultural and educational relevance. As part of the post DNP research, the DNP student plans to have the pictorial translated into Spanish and further verify its cultural and educational relevance with the Hispanic farmworker population. Once this verification is acquired , the DNP student plans to seek grants in order to create a commercially viable product that may be mass produced and disseminated to not only Hispanic farmworkers, but also healthcare providers; thus assisting to improve health and decrease the lack of knowledge regarding melanoma among this community. A copy of the pictorial is provided in Appendix U.

Development of Tailored Educational Brochure

The fourth objective was met through the development a tailored educational brochure based on the literature review, analysis of needs assessment, and feedback of the farmworkers and the expert panel. The researcher further compared the tailored educational brochure prepared for farmworkers regarding melanoma with other educational resources for farmworkers published by reputable sources. While these educational pamphlets were informative and helpful, they were also extensive, cumbersome, and not particularly tailored for this population. The tailored educational brochure prepared by the DNP student included the following information regarding melanoma: the definition of melanoma, a description of abnormal moles, the possible risks of acquiring melanoma, instructions on how to properly inspect the skin through self-full-body examinations, instructions on how to properly protect the skin from the harmful rays of the sun, drawings and images depicting farmworkers utilizing proper clothing and gear for proper sun and pesticide protection, and a chart containing normal and malignant moles.

The tailored educational brochure went through multiple phases and changes. Since the researcher was originally concerned with completing a brochure that was scholarly, accurate, comprehensive, and appropriate not only for the farmworkers but also comparable to the other high quality educational pamphlets, the original version of the brochure was too advanced, poorly understood and overwhelming to the farmworkers. The brochure was condensed from a four-panel brochure to a two-panel brochure. It was further noted that the level of language in which the brochure was originally written was too advanced for this population. Based on the Center for Medicare and Medicaid Services' Toolkit for Making Written Material Clear and Effective, the Fry Graph Readability Formula (FRY) and the Simple Measure of Gobbledygook (SMOG) tools were utilized to verify that the language utilized in the brochure was at a fifth-grade level. This level of literacy was observed based on research and data analysis, which revealed that the highest level of education of 58% of the farmworkers was an elementary education.

The DNP student searched for photographs depicting normal and abnormal moles to be included in the brochure so that the farmworkers may be have visual guidance as to the presentations of this deadly disease. Permission to utilize these photographs in both the pictorial and brochure were sought and obtained from the Skin Cancer Foundation. The National Cancer Institute's (NCI's) rules and regulations were followed for the utilization of their photographs and images. According to the National Cancer Institute (NCI) Visual Online (n.d.), each image is labeled as "Public Domain," which means that the image is free to use or "Copyright Protected," which means proper permission must be sought prior to usage. It was further reported that the majority of the images in this library were public domain and that no special permission was required for the utilization of public domain images. NCI only requests that the researcher reproducing these images "acknowledge NCI as the originator, the NCI Web site, www.cancer.gov, as the source and/or the image creator" (para. 4). The researcher contacted NCI in order to confirm that the above stated information from their website was accurate. An NCI representative confirmed permission to use public domain images and provided a copy of NCI's "Copyright and Reuse of Graphics and Text" statement (Appendix N).

Furthermore, according to USA.gov (2013) photographs found in the "public domain or U.S. government works" may be utilized without fee or permission. However, they also warn that some images may be licensed or copyright protected, therefore, disclaimers must be read prior to utilizing any of these images. It was further explicated by the Library of Congress' United States Copyright office (2013) that:

A work of authorship is in the "public domain" if it is no longer under copyright protection or if it failed to meet the requirements for copyright protection. Works in the public domain may be used freely without the permission of the former copyright owner. (para. 7)

The DNP student diligently searched and utilized photographs contained in the NCI website that were labeled as "public domain" and for which no reuse restrictions were noted. The researcher also utilized photographs provided by the Skin Cancer Foundation depicting melanoma in order to include the highest quality photographs in the brochure. As stated earlier, permission to utilize these photographs in the brochure was also granted by this organization.

Lastly, two images for the front and back panels of the brochure were created based on the farmworkers' as well as the expert panel's recommendations. These images depicted farmworkers utilizing the necessary protection to minimize their exposure to not only the sun's harmful UV rays but also pesticide exposure. Additionally, as this was a tailored educational brochure, these images were created in order to capture the farmworkers' attention as well as provide culturally sensitive education regarding skin cancer.

The expert panel that reviewed the pictorial depicting melanoma in Hispanics also reviewed the tailored educational brochure for accuracy and appropriateness of content. The melanoma expert confirmed the accuracy of the brochure's content, although it was opined that the brochure may be "too detailed for your target audience" (S. Hu, personal communication, July 27, 2013). Dr. Hu's curriculum vitae is also attached as Appendix Q. Further revisions were made based on the community expert's feedback including simplification of the language, clarification of skin cancer, inclusion of photographs comparing and contrasting normal and malignant moles, as well as some editorial recommendations. Lastly, the community expert, Eugene Andrew Majka, recommended that RCMA and the farmworkers review the brochure for appropriateness of content. Mr. Majka's curriculum vitae was attached as Appendix R.

RCMA was contacted, and agreement was reached to have the tailored educational brochure reviewed by the center's coordinator as well as the farmworkers who frequented the facility. A comprehensive report was provided to the DNP student

with the results of the review of the brochure. The following comments and recommendation were contained in the report: the farmworkers and the center coordinator found the brochure to be "overall easy to read, informative and pleasing to the eye" (E. Perez, personal communication, July 24, 2013). The farmworkers also suggested that the image located on the front cover of the brochure be changed to illustrate farmworkers utilizing proper protective clothing including wide-brimmed-hats, long-sleeved shirts, long pants, boots, and gloves. Additional suggestions made by the farmworkers were to include all of the required protection necessary in the drawing located in the back panel of the brochure. Furthermore, upon review of the brochure with the farmworkers, the center coordinator noted there was a lack of knowledge regarding sublock protection application and the utilization of both protective clothing along with sublock when needed. Additionally, according to the center coordinator, there was apparently a misconception that some farmworkers had that sublock protection and application actually caused cancer. Both the farmworkers and the center coordinator found the photographs comparing and contrasting normal and cancerous moles to be extremely helpful. Lastly, the center coordinator reported that a farmworker was concerned about the appearance of one of her moles after reviewing the brochure and planned to seek medical advice. Evelinda Perez's Report is provided in Appendix T, and Perez's curriculum vitae is provided in Appendix S. The report from RCMA supported the DNP student's finding and scientific research of the lack of knowledge of the farmworkers regarding melanoma as well as accurately and precisely addressing some of the possible brochure's short comings. Additionally, even in its preliminary stages, the

tailored educational brochure may be already impacting some of the farmworkers who reviewed it.

The collaboration and input from the farmworkers and RCMA greatly enhanced the cultural sensitivity of the tailored educational brochure and helped establish trust between the farmworkers and the DNP student. As stated earlier, RCMA employs former farmworkers and/or family members of farmworkers, thus creating and building rapport among the agency and the population it serves. The RCMA coordinator effectively opened communication between the DNP student and the farmworkers, thus allowing the farmworkers to provide vital feedback in the development of a truly tailored educational brochure. This brochure was not only made for the farmworkers, but by the farmworkers, in order to increase their knowledge regarding skin cancer and proper screening and protection. According to Clingerman (2007a), certain qualities are necessary when selecting a community partner in order to build a trusting relationship with the farming community. Clingerman (2007a) further contends that such qualities include "knowledge, values, beliefs, and trust of the studied community" (p. S80). Furthermore, according to Meade and Calvo (2001), "involvement of community members in the development and implementation of education and screening activities helps ensure that community needs are met" (p. 1577). Lastly, research shows that culturally competent education must be developed and implemented in order to improve health and reduce health disparities in the farmworker community (Hess, 2009; Meade & Calvo, 2001). A copy of the tailored educational brochure is attached in Appendix V.

Correlation to DNP Essentials

Essential I: Scientific underpinnings for practice. This Capstone Project fulfills the American Association of Colleges of Nursing's (AACN) first essential through the utilization of scientific underpinning for practice. A thorough review of the scientific literature revealed that there is an increased incidence of advanced stage melanoma among dark-skinned individuals at the time of diagnosis. According to Gaetano et al. (2009), "agricultural workers are at risk for developing skin cancer due to exposure to ultraviolet radiation" (p. 24). Additionally, according to Fortes et al. (2007), chemicals such as pesticides increase the risk of melanoma. Thus, this disadvantaged population is at a higher risk of developing melanoma. In an effort to improve farmworkers' health outcomes, the researcher has translated this knowledge into practice through the implementation of this Capstone Project.

A scientific foundation guided this Capstone Project not only through the research, which demonstrated Hispanics' and farmworkers' risks of acquiring melanoma, but also through the adaptation of the questionnaire utilized to assess this population's personal risks, level of concern, protective behavior, and overall knowledge regarding melanoma. The questionnaire was based on an instrument developed by Jackson et al. (1999) and was modified based on the adapted middle range theory of Pender's Health Promotion Model. According to Pender (2002), patients will act in their own best interest as long as they have the knowledge, tools, and incentives to do so. This project has integrated nursing science with biopsychosocial processes in order assess farmworkers' knowledge and risk factors for melanoma, possible barriers to acquiring good health, and

the tailoring of a culturally sensitive pictorial and brochure in an effort to possibly improve healthcare delivery and outcomes in this marginalized population

Essential III: Clinical scholarship and analytical methods for evidence-based practice. The researcher has properly correlated this Capstone Project with this essential as research was translated into practice through the implementation of this project. Through scholarly integration, the researcher has critically analyzed research data in order to identify a problem and searched for innovative ways of assessing and addressing this issue. The researcher then performed a needs assessment through an adapted questionnaire in order to obtain data that is pertinent to this population. Based on the study's results, there is lack of knowledge among the farm-working community regarding melanoma. The researcher applied the relevant findings in order to prepare a tailored educational brochure and colored pictorial depicting melanoma among Hispanics in an effort to improve practice outcomes. The researcher has found a lack of tailored educational programs for farmworkers and Hispanics on melanoma. The researcher has applied the learned knowledge, research, and farmworkers' knowledge deficit in an attempt to solve a problem, which was the diagnosis of melanoma among Hispanics at late stages. According to the AACN (2004), "this application involves the translation of research into practice and the dissemination and integration of new knowledge, which are key activities of DNP graduates" (As cited in AACN, 2013, p. 11).

The incorporation of an evidence-based practice approach through the utilization of acquired knowledge, current clinical practice and expertise, patients' culture and preferences must be employed in order to improve health and decrease disease processes in this population (Gaetano et al., 2009). As the literature shows, melanoma among Hispanics is being diagnosed in its late stages. Research also demonstrates that farmworkers are at an increased risk of acquiring skin cancer due to their exposure to the harmful rays of the sun as well as pesticides. Thus, a tailored educational program along with a pictorial depicting melanoma among Hispanics provide an innovative way to accomplish an evidenced-based educational program, which may increase this population's knowledge regarding this deadly disease. Through the collaboration of the farm-working community, facilities that provide services to farmworkers such as Open Door Health Center and RCMA, a community expert, and a melanoma expert, the researcher was not only able to translate this research into practice but also evaluate the appropriateness of the tailored educational brochure and pictorial.

The researcher plans to disseminate the pictorials depicting melanoma on Hispanics along with the tailored educational program as part of her post-Doctorate in Nursing Practice. Should the researcher be accepted for presentation, the researcher will attend conferences at the American Academy of Dermatology and Migrant Clinicians Network in order to disseminate results of the study. Additionally, various possible interested groups such as the American Cancer Society, CDC, and the public media will be approached with the findings in this study for further dissemination of the study's findings.

Essential V: Healthcare policy for advocacy in health. Through the research and implementation of this Capstone Project, the researcher discovered a lack of policy and enforcement of regulations designed to protect farmworkers from not only environmental exposure of the sun and chemicals, but also ensuring safety, protection, and overall well-being of the farmworkers. According to Gaetano et al. (2009): Nurses working in occupational settings need to become more proactive in influencing policy makers, professional associations, and employers to support an expanded role for non-physician providers in skin screening and health promotion by increasing the availability of skin cancer assessment training to interested clinicians, especially occupational health nurses, nurse practitioners, and physician assistants. (p. 30)

The findings of this project may provide the impetus to enhance healthcare policy among this disfranchised population. Healthcare policy may be enacted in the form of public health policy recommendations to minimize the dangers that farmworkers face in acquiring melanoma. Efforts must be made to enact public educational campaigns to include farmworkers as also being at risk for melanoma. Enacting certain guidelines in order to properly screen for melanoma among farmworkers with the goal of earlier diagnosis at a more favorable stage is crucial. These guidelines may improve survival rates of this population through early screening for melanoma.

Public policy must also be enacted, and stringent rules must be enforced for farm owners, crew chiefs, owner operators, and contract employers to properly accommodate farmworkers and provide sufficient fresh water, shelter, and toilet facilities. The farmworkers ought to be allowed breaks throughout their long and arduous days of working the land under the intense heat and sun, and healthcare policy needs to be implemented and enforced to protect this disadvantaged population.

Finally, healthcare policy may be enacted to provide proper protective gear among farmworkers to guard themselves from the harmful effects of UVR exposure while working in the fields. Additionally, state monies should be allocated toward melanoma prevention programs among dark-skinned individuals including farmworkers. Additional funding should be allocated towards public education of high risk individuals, thus raising awareness of the dangers of melanoma. In addition to screenings, public policy can be improved by launching skin cancer campaigns and raising awareness among this population regarding sun exposure and skin cancer.

Essential VI: Interprofessional collaboration for improving patient and population health outcome. From inception to completion, it would have been impossible to successfully accomplish this project's objectives without the proper utilization and collaboration of a multidisciplinary team. Through the preparation of this Capstone Project, the DNP student enlisted the collaboration of the farmworker community, leaders, facilities that provide services to farmworkers, a community expert, an RCMA liaison, and a melanoma expert in an effort to assess and prepare a culturally sensitive educational brochure along with pictorial with the goal of increasing this population's level of knowledge regarding melanoma. According to Hess (2009), it is important to involve "valued persons" and leaders of the farming community in the education of this population (p. 100). It was further reported by Hess (2009) that through the involvement of the farming community, key "stakeholders and culturally competent providers, trust and rapport with the health care system may be established and improve health outcomes" (p. 101). Effective collaboration with a multidisciplinary team has resulted in the preparation of a tailored educational brochure and pictorial geared specifically for farmworkers in efforts to improve their healthcare and healthcare outcomes.

Through the collaboration of a multidisciplinary team, trusting relationships emerged, thus allowing the DNP student to obtain valuable information and feedback from the farmworkers. As a result of these relationships, a tailored educational brochure and pictorial was achieved. Literature shows a lack of culturally sensitive education for the farmworkers, thus the brochure and pictorial may bridge this gap, allowing for accurate, proper, culturally sensitive skin cancer education especially tailored for this population. According to AACN (2004), "In order to accomplish the IOM mandate for safe, timely, effective, efficient, equitable, and patient-centered care in a complex environment, healthcare professionals must function as highly collaborative teams" (as cited in AACN, 2013 p. 14). Thus, this collaborative team has worked efficiently with the common goal of better health for this marginalized community. Culp and Umbarger (2004) found that "dynamic interaction with community leaders so that education about the needs of migrant farmworkers occurs in an effective manner. This results in culturally competent care and establishes links with community organizations" (p. 389).

Furthermore, according to Culp and Umbarger (2004), farmworkers are a disadvantaged population that faces occupational health risks, health, and social disparities. As a result of these multi-level disparities and complexities involved in the care of farmworkers, a multidisciplinary approach is of utmost importance. In order to improve farmworkers' overall health, a trusting relationship must be maintained with this community and its leaders. Collaboration is also key with community leaders. Strong partnerships must be maintained with an interdisciplinary team including healthcare professionals in order to maintain a patient-centered approach and address many of the health issues that affect farmworkers' lives. This Capstone Project may serve as

guidance for future nurses and DNP students interested in serving this community on how to successfully assess, implement, and evaluate future research and prepare culturally relevant educational interventions geared for the betterment of this community. According to Meade and Calvo (2001), "involvement of community members in the development and implementation of education and screening activities helps ensure that community needs are met" (p. 1577). Through the completion of this Capstone Project, the DNP student has established strong relationships with farm-working community leaders, facilities, and experts. These trusting relationships will allow the DNP student to translate and disseminate the brochure and pictorial, thus ensuring that these educational materials will reach the farm-working community in the future. According to Meade and Calvo (2001), "the process of developing sustainable community partnerships involves a strong sense of mutual commitment and a shared goal among partners" (p.1582). Additionally, according to Robinson et al. (2004), evidence shows that skin cancer preventive programs result in positive change in sun-safety behavior.

Essential VII: Clinical prevention and population health for improving the nation's health. Through the analysis of epidemiological data from the Florida Cancer Data System (FCDS) and Surveillance Epidemiology and End Results (SEER) from 1990 through 2004 and research, the DNP student has become aware of higher rates of melanoma among Hispanics (Cormier et al., 2006; Hu et al., 2006; Hu et al., 2009; Rouhani et al., 2010). The DNP student's goal was to assess this population knowledge regarding melanoma. This project has shown there is a great deficit in melanoma knowledge among farmworkers in South Florida. Addressing the high incidence of latestage melanoma diagnosis and treatment among Hispanics at earlier stages may improve survival rates. The implementation of this health promotion and disease preventive measures through the development of a culturally sensitive tailored educational brochure and pictorial may be the impetus necessary to create programs throughout South Florida targeted to farmworkers regarding the risks of melanoma, thus possibly improving their protection and screening practices. Future programs must address full-body self-exams, proper protection against chemicals and sun exposure, awareness as to the signs and symptoms of melanoma, and the importance of prompt medical attention at a more curable stage of the disease. According to Gaetano et al. (2009):

An occupational safety and health objective of *Healthy People 2010* directs occupational health nurses to reduce occupational skin diseases or disorders among workers by providing annual health screenings, exposure and protection education, and primary and secondary prevention. (p. 29)

In this same manner, *Healthy People 2020*'s main goals include an increase in the quality of years of healthy life and the elimination of health disparities (Healthy People, 2013). Farmworkers are among the most disfranchised and poor population in the United States. Therefore, it is imperative that healthcare providers take an active role in improving their health through health promotion and disease prevention initiatives with the goal of improving this population's overall health.

In addition to raising awareness regarding melanoma of this population, this project may also raise awareness of this disease among clinicians through the preparation of informational pictorials, which show melanoma presentation on Hispanics. Such understanding is key in providing appropriate care for this community, as well as decreasing healthcare delivery disparities among this minority population. As a result of these educational programs, farmworkers, Hispanics, and healthcare providers may be better equipped to catch this disease in a timely manner, decreasing the higher mortality rates. According to Torrens and Swan (2009), "Primary care practitioners, including nurse practitioners and physician assistants, are in the ideal role to mentor their patients in respect to safe-sun practices and to conduct routine skin examinations" (p. 120). Further, according to Meade and Calvo (2001), nurses have unique opportunities to develop culturally relevant educational tools in order to eliminate healthcare disparities and improve the nation's health.

Essential VIII: advanced nursing practice. Farmworkers are at an increased risk for the development of skin cancer due to their occupational sun and pesticide exposure. According to Gaetano et al. (2009), mid-level providers such as nurse practitioners may be properly trained in order to implement primary and secondary health promotion and disease prevention programs. It was further reported by Gaetano et al (2009) that "these screenings may significantly enhance early detection of cutaneous malignant melanoma" (p. 30). Furthermore, Meade and Calvo (2001) stated that "unique opportunities for nurses are present to develop appropriate outreach initiative and culturally relevant health education tools and screening interventions, improve health outcomes and advance the nation's health" (p. 1582). Lastly, Meade and Calvo (2001) stated and farmworkers need culturally sensitive and literacy appropriate educational materials and programs in order to properly address this population and their healthcare needs.

Through the DNP education and completion of this Capstone Project, the DNP student has gained invaluable expertise with the farm working population and evidence-

based skin cancer prevention, education, screening, and treatment. Through the implementation of this Capstone project, the DNP student has conducted a systematic assessment of the farmworker's population knowledge and risks of melanoma. Based on this needs assessment, evidenced-based research, and farmworkers' and experts' feedback, the DNP student prepared a culturally sensitive and tailored educational brochure as well as pictorial for the farm-working population as well as the Hispanic population regarding melanoma. Since there is a lack of culturally sensitive and tailored educational materials for the farmworkers regarding skin cancer, the brochure and the pictorial will facilitate primary and secondary care and education for this population.

As part of her post-DNP work, the student plans to utilize the educational brochure and pictorial to educate the farm working community. Open Door Health Clinic and RCMA have requested that the student returns to their facilities to implement an educational program for the farmworkers regarding melanoma. The farmworkers have also requested that educational programs be implemented on this very important topic. It is the DNP student's intent to develop and sustain a strong connection with the farmworking community in search of better care and outcomes for this community.

Based on AACN 2004 Essentials of Doctoral Education for Advanced Nursing Practice, the DNP student has shown "advanced level of clinical judgment, systems thinking, and accountability in designing, delivering, and evaluating evidence-based care to improve patient outcomes" (p. 17) through the proper implementation of this Capstone Project as delineated in this chapter. The DNP student has also created a tailored educational brochure as well as pictorial depicting melanoma in order to educate farmworkers and Hispanics overall of the dangers, presentation, screening, and protection of melanoma in an attempt to decrease the incident of late-stage diagnosis of melanoma among this population.

Strengths and Limitations of the Project

A key strength of this project was the development of a trusting relationship with the farmworkers as well as farm-working community leaders. This is a pivotal point in order to obtain the necessary data in order to assess this population's knowledge regarding melanoma. Through this trusting relationship, it was possible to develop a tailored educational brochure and pictorial that were geared specifically for this population, since there is a significant lack of resources for the farm-working population on this topic. Such a study and the end product may assist other researchers in gaining a better understanding of this population's needs as well as providing tools for farmworker educational programs regarding skin cancer. Additionally, there are a lack of pictorials depicting melanoma in Hispanics; thus, this pictorial provides immense opportunity to educate both Hispanics healthcare providers on skin cancer.

Additionally, the proper utilization of an interdisciplinary team in order to accomplish the project's goals in a relatively short period of time was one of this project's most important contributions. Equally important, this project also addressed an issue wherein there is limited amount of research as well a data, thus shedding some light regarding this deadly disease on the dark-skinned population.

One of the limitations of this study was the small sample size. Only farmworkers who frequented two facilities, Open Door and RCMA, were interviewed, limiting the generalizability of the results. Additionally, due to time constraints, the full implementation of a tailored educational program in order to increase farmworkers' awareness regarding melanoma was not possible. However, the researcher plans to disseminate the findings and provide skin cancer education to the farmworkers as part of post doctorate endeavors.

Significance of this Project

The results of this project have the following implications in nursing practice, nursing research, healthcare delivery, and healthcare outcomes:

Advanced Nursing Practice

This project demonstrated that there is a significant lack of awareness among the farm-working population in South Florida about the overall effects and presentation of melanoma. The data analysis showed that 97% of the respondents had never heard of melanoma, basal cell, or squamous cell cancer. Additionally, 97% of the participants did not know the major clinical signs of early melanoma. Therefore, there is a significant lack of knowledge among the farmworker community regarding the presentation, risks, and necessary protection against melanoma. Additionally, although based on the data analysis, farmworkers appear to be proactive in their efforts to protect their skin while outdoors, but proper protection was lacking. There were some misconceptions regarding the type of clothing to be used for protection as well as the proper utilization and application of sunscreen lotion. Therefore, it is imperative to utilize specialized assessment tools that are not only pertinent for this population but also culturally sensitive and at the appropriate educational level.

This lack of awareness may be partly attributed to the fact that most of literature pertaining to melanoma focuses mainly on its presentation in the white population. The development of a tailored educational brochure and pictorial that is culturally sensitive may increase the farmworkers' awareness regarding skin cancer. The implementation of skin cancer educational programs for farmworkers in South Florida is desperately needed. In fact, participants inquired not only to the surveyors but also to RCMA about an educational programs regarding skin cancer. RCMA also requested that the DNP student return to their facility to do educational presentations for the farmworkers regarding the findings of the study and melanoma. Open Door also requested that the researcher furnishes the tailored educational brochure and pictorial so that they may educate their farmworker patients about melanoma. Nurses must take a leading role in health promotion and preventive measures to reduce melanoma among farmworkers. This may be achieved by implementing educational programs and advocating screening measures throughout South Florida.

Additionally, according to Gaetano et al. (2009), "occupational health nurses are in a key position to educate the work force about sun-exposure practices and encourage compliance with health related recommendations" (p. 30) Gaetano et al. (2009) further recommend that nurses educate policy makers, professional organizations, and employers to provide training for accurate screening of skin cancer, thus allowing for screening to occur at farmworkers' places of employment and non-clinical sites. Furthermore, Meade and Calvo (2001) state that nurses possess the necessary skills to foster relationships with communities in order to enhance their health and prevent illnesses.

In order to successfully create and maintain any health promotion and disease prevention initiative with the farm-working community, trusting relationships must be established and maintained with not only the farmworkers but also key community leaders and facilities that cater to this population. Through these trusting relationships, an accurate assessment of this population may be achieved. Additionally, proper educational materials may be prepared which are tailored for this particular population. Furthermore, mutual goals for health may be set by the healthcare providers and the farmworkers, and these may be attained in an attempt to decrease the health disparities suffered by this marginalized population.

Nursing Research

There is a gap in the literature regarding melanoma and its effects on Hispanics and the farm-working community. This Capstone Project does not only shed some light regarding farmworkers lack of knowledge regarding melanoma but also their risks of acquiring melanoma. Furthermore, this project has demonstrated the importance of translating research into practice, wherein a lack of awareness regarding melanoma was found among farmworkers and a tailored educational brochure with colored pictorial was develop in an effort to educate this population regarding this highly preventable and deadly disease. This Capstone Project has the potential to actually save lives. Findings of this research may encourage other nurses and nurse practitioners to become more involved with this community, addressing their needs and searching for innovative ways to improve their health through scientific research. There are also opportunities for further research regarding melanoma among farmworkers, since there is little research about this population's knowledge base and preventive measures for melanoma.

Healthcare Delivery and Outcomes

This project also demonstrated that there is a lack of cultural sensitive education regarding melanoma among farmworkers. The preparation of a tailored educational brochure along with the pictorial provides an excellent opportunity to educate this community of the dangers of melanoma. Due to their increased risk of acquiring melanoma, it is critical for farmworkers to learn about melanoma, its presentation on their specific skin type, signs, and symptoms as well as prevention. This fundamental knowledge may ultimately save their lives. Therefore, through proper education of the risks and presentations of melanoma, healthcare outcomes may be improved. It may also reduce the inflated expenses related to tertiary care.

The educational brochure and pictorial could be the foundation for additional tailored educational resources that are culturally sensitive that can be utilized in order to educate this population regarding melanoma. There is a need for the implementation of a tailored educational program throughout the country in order to raise the farmworkers' awareness regarding this deadly disease.

This project has also shown there is a great deficit in melanoma screening among farmworkers in South Florida. Addressing the high incidence of late-stage melanoma diagnosis and treatment among dark-skinned individuals at earlier stages may improve survival rates. The implementation of educational programs throughout South Florida targeted to healthcare providers regarding Hispanics' risks of melanoma may improve their screening practices. Specifically, programs should address full-body self-exams, awareness of melanoma presentation in Hispanics, and the importance of prompt medical attention at a more curable stage of the disease.

In addition to raising melanoma awareness in this population, this project may also raise awareness of this disease among clinicians through the preparation of informational pictorials that show melanoma presentation in Hispanics. Such understanding is key in providing appropriate care for this community, as well as decreasing healthcare delivery disparities among this minority population. As a result of these educational programs, farmworkers, Hispanics, and healthcare providers may be better equipped to catch this disease on a timely manner, thus decreasing the higher mortality rates. This Capstone Project has also highlighted the importance of culturally sensitive care for this population as well as the importance of creating, promoting, and maintaining a trusting relationship in order to successfully implement health promotion and disease prevention programs that could make a difference in farmworkers' lives.

Future Research

Further research should be performed regarding skin cancer effects on farmworkers since little is known regarding this issue. Future research would be beneficial in not only validating the researcher's findings, but also in finding innovative ways to address the late stage diagnosis of melanoma among dark-skinned individuals, thus decreasing healthcare disparities in this population. Through the completion of this DNP project, the DNP student hopes to inspire future DNP students to serve this disadvantaged community. The translation into Spanish and implementation of the tailored educational brochure and pictorial would assist in closing the educational gap and increasing the awareness of farmworkers and Hispanics at large regarding melanoma, its effects, and presentation among this population.

The researcher also recommends that future DNP students who are interested in working with the farm-working community maintain a culturally sensitive approach. This approach must permeate the entire project, from inception, to committee member selection, to materials used and interventions. This will help not only in facilitating the process but also assuring that the entire project accurate and appropriate for this population.

Recommendations for Future DNP Scholars

The actual number of farmworkers surveyed at Open Door Health Center was below the target number. The researcher aimed to collect approximately 50 questionnaires from Open Door Health Center. Although the clinic may treat up to 50 patients per day, the researcher realized that not all of the patients who attended the clinic were farmworkers. The clinic provides care to people with low resources including farmworkers. Additionally, approximately 10 farmworkers declined to do the survey at the clinic. It was further noted by the DNP student that some of the farmworkers who declined completing the questionnaire at Open Door Health Clinic were willing to complete the questionnaire at RCMA. It was evident that the farmworkers were more willing to participate in the study while it was being conducted at RCMA. As discussed, RCMA has developed a trusting relationship with this community throughout the years, and that trust was evident when conducting the study at this location. One of the researcher's contacts at Open Door Health Center suggested contacting the Farmworkers Association in order to enlist a larger and broader number of farmworkers for future research. In order to improve farmworkers' overall health, collaboration with facilities that have built a trusting relationship with this community is of critical importance.

Moreover, through the implementation of adapted HPM, the researcher found that certain categories, while applicable to the white population did not apply to the farmworking community. These categories included questions regarding indoor tanning salon use and societal pressure/peer pressure. All of the respondents denied using an indoor tanning salon. Additionally, farmworkers have many stressors and pressure from financial, labor intensive, environmental/occupational health risks, and health and social disparities, thus according to the literature societal or peer influences to tanning are inconsequential to this population. Furthermore, when the farmworkers were asked about sun-tanning when on holiday, while pertinent to the general population, 88% of the farmworkers stated that they did not have the resources nor time to vacation much less tan when on holiday.

Additional research, assessment including farmworkers' family history of melanoma, in addition to the data gathered through this Capstone Project may bring forth vital information as to the etiology of late-stage melanoma among Hispanics in an effort to promote health and prevent disease in this population. Likewise, future DNP students must properly plan the format in which items in a survey are asked and answered in a quantitative study. Lack of proper format of certain questions, especially open-ended questions, would make quantitative data challenging to analyze.

Further, when preparing the original version of the tailored educational program, the researcher did not realize that the quest to complete a scholarly product comparable to other educational brochures for farmworkers about skin cancer would result in a product too advanced and complicated for the target audience. Since the DNP student is of Hispanic descent, it was also assumed that she had the cultural competence and knowledge to assess and create a tailored educational brochure and pictorial for Hispanic farmworkers. This assumption could not have been further from the truth. Although the farmworkers who were surveyed in this study were of Hispanic descent, their psychosocial and cultural makeup was unique to that population; thus, preconceived notions of their overall knowledge and sun-safety practices were at times erroneous. Therefore, it is important to be aware of one's cultural biases in order to be sensitive to other's people cultures. While the farmworkers' feedback to the brochure was also unanticipated, the result exceeded the DNP student's expectations and the realization that all of the different steps taken to complete an accurate, appropriate, readable, culturally sensitive educational brochure were worth all the effort.

Guide for Future DNP Scholars

The utilization of photographs depicting conditions or diseases of the skin is an essential component of treatment, education, research, and publication in medicine and most importantly in the field of dermatology. Should future DNP scholars have the desire to capture photographs of patients in order to create a customized pictorial or brochure, the following section delineates the process necessary in obtaining these photographs in a legal and ethical manner. According to Scheinfeld (2004), "photographic image capture, assembly, and storage have legal implications" (p. 473). Since law and research about this subject is limited in the United States, the researcher has included domestic as well as British policy related to patient photography.

No discussion on patient photography, which is part of the patient's medical record and Protected Health Information (PHI), would be complete without a detailed discussion of how photographic images utilized for research are protected and/or exempt according to the Health Insurance Portability and Accountability Act (HIPAA) of 1996 and the Privacy Rule. According to the U.S. Department of Health and Human Services' (HHS) Protecting Personal Health Information in Research, the Privacy Rule is a federal regulation that protects health information. Moreover, according to Cole and Fleisher (2003), HIPAA Privacy Rules strictly prohibits improper disclosure and utilization of health information. It was further explicated by Cole and Fleisher (2003) that the Privacy Rules stipulates that if one or more identifiers apply, that such patient record is deemed "protected," these identifiers include but are not limited to such items as name, contact information including e-mail address and telephone numbers, Social Security numbers, and full-face photographic images. It was further concluded by Cole and Fleisher (2003) that according to the Privacy Rule, patient's full face or "any photographic or other information that could be used to identify an individual" (p. 186) may not be used or disclosed without "a written HIPAA authorization" (p. 186). On the other hand, Horner and Wheeler (2005) report that if all identifiers are removed, the information no longer qualifies as protected health information.

Additionally, according to the U.S. Department of Health and Human Services' Office for Civil Rights (OCR) Summary of the HIPAA Privacy Rule (2003), an entity may disclose or use protected information without the individual's authorization for research purposes so long as proper approval is obtained by an Institutional Review Board or Privacy Board. Additionally, the researchers must declare that the use of the protected health information is solely for research purposes and that this access to this information is necessary for the research. However, failure to comply with HIPAA's Privacy Rule may result in civil money penalties as well as criminal penalties.

In the same fashion, Scheinfeld (2004) contended that HIPAA "requires that health care providers control and track those who have access to identifiable digital medical information" (p. 473). Moreover, it is unclear if images acquired by treating

physicians for publication or clinical trial are deemed part of the medical record. Taking photograph of patients without informed consent may expose the researcher to not only violation of HIPAA and Privacy Rules but also cause issues with the publication of research, not to mention costly and unnecessary litigation. Therefore, it is highly recommended that proper consent be obtained from the patient who is going to be photographed. Furthermore, Cunniff et al. (2000) recommends that the patient receive a copy of the executed consent. This consent should contain the photographer's contact number should the patient have any questions or decide to withdraw the consent in the future. The patient must be made aware that although removing these photographs from the Internet site, teaching documents, and medical record can be done, printed and downloaded images from the Internet site cannot be retracted. Thus, the consent and this information must be properly explained to the patient prior to photographing them. The British Department of Health's Good Practice in Consent Implementation Guide: *Consent to Examination or Treatment*, further contends that "the person must be made aware that you may not be able to control future use of the material once it has been placed in the public domain" (p. 24).

Additionally, should the DNP student plan to acquire these photographs during their clinical rotations, a mentor/preceptorship agreement must delineate what the preceptor/facility will allow the DNP student to do, including but not limited to, obtaining permission from the facility to obtain, utilize, print, and/or publish patients' photographs. It is equally important for the DNP student to be aware that this process will require IRB approval from Barry University as well as the site where these photographs are being captured. Thus, proper planning and timing for these procedures must be observed. Further, future DNP students must ascertain the venue in which these photographs will be obtained. Should the DNP student desire to obtain photographs of patients in a hospital setting, hospital protocol must be followed. Any photographs taken in a hospital or medical facility are the property of that entity, not the healthcare provider who is capturing these photographs.

Just as HIPAA is an important guideline for the protection and utilization of Protected Health Information (PHI), no discussion of medical photography would be complete without mentioning and acknowledging the Institute of Medical Illustrators' (IMI) influence and guidance on this topic. The IMI has set and maintained medical illustration standards since 1968 in the United Kingdom and internationally. The 2006 IMI National Guidelines as well as British Department of Health's Good Practice in Consent Implementation Guide: Consent to Examination or Treatment provides an excellent resource for clinical photography and informed consent procedures. According to the 2006 IMI National Guidelines, "obtaining informed consent is the responsibility of the clinician" (p. 3). Furthermore, the 2006 IMI National Guidelines state that the three levels of consent are the following: "1. For use in the medical records only. 2. For use in teaching healthcare staff and students. 3. For publication" (p. 3). Thus, for the purpose of creating, printing, and publishing pictorials and brochures depicting patient, the DNP student must obtain a level three consent for publication. Should researcher/photographer have proper authorization to keep these photographs, it is extremely important to properly safeguard patient data in accordance with HIPAA regulations. According to Erlen (2005), "researchers need to examine the procedures that they have implemented to ensure that

data are maintained properly and that there is no unauthorized access to the data" (p. 142).

Lastly, it might be good practice to have the facilities' legal department review the protocol, consents, and any documentation that will be utilized to capture these patients' photographs in order to ensure that patient confidentiality and privacy rights are being observed as well as following legal and ethical considerations under the law.

Incorporating Photographs and Graphics in Publications

Whether utilizing images and graphics captured by the researcher or utilizing images and graphics that had been previously published, the DNP student must be aware of the legal and ethical requirements for publishing these images. Although each journal or publication may have its own requirements for publication of images and photographs, there is a consensus among the publishing community that the Health Insurance Portability and Accountability Act of 1996, other U.S. federal and state laws relating to privacy of personally identifiable information, and the European Union Directive requirements must be followed when publishing photographs depicting patients (International Committee of Medical Journal Editors, 2005; "Elsevier Policy", 2012; and Graf et al, 2007). Additionally, as stated earlier, the 2006 IMI National Guidelines provide guidance as to the level of consent required for publication. Thus, for the purpose of creating, printing and publishing pictorials and brochures depicting patients, the DNP student must obtain a level three consent for publication.

Should future DNP student desire to obtained published photographs, proper permission must be obtained from the creator of the image, who is usually the copyright holder, to reproduce previously published materials (International Committee of Medical Journal Editors, 2005). Furthermore, it was stated that unless the photographs contain no identifiable information of the patient, written permission is required to utilize the photographs was necessary (International Committee of Medical Journal Editors, 2005). Lastly, Elsevier Policy (2012) stated that no formal consents are necessary for "entirely anonymised images from which the individual cannot be identified" (para. 3).

Moreover, according to Arbon (2008), if the photographs are acquired during the course of employment or under contract, the copyright belongs to the employer or whoever contracted the photographer to do the work. Permission must be obtained from the facility's "information governance officer or legal department to retain the photographs" (Arbon, 2008, p. 454). If issues or questions arise as to who owns an image, the British General Medical Council and the Department of Health (DH) state that:

where a photograph contains sensitive personal data, it will generally be necessary for the individual to give their explicit consent to the photograph being taken and they should be notified of all the purposes for which the photograph will be used. (Arbon, 2008, p. 454)

If it is requested by the publisher to sign over copyright for future reprints of the article, "then contact your information governance officer or legal department, or clearly state that copyright belongs to the author's employer" (Arbon, 2008, p. 455). Arbon (2008) further discourages forwarding pictures electronically to other clinicians in order to avoid further reproduction of photographs without an audit trail. The DNP student may also choose to employ a clinical photographer. Clinical photographers are important

resources who can assist in the proper photographing of patients as well as imparting advice on publishing issues (Arbon, 2008).

Post-Doctoral Trajectory

The DNP student plans to have the brochure and pictorial translated into Spanish and back into English for translation verification. She also plans to have the brochure and pictorial reviewed by the farmworkers at RCMA, hence ensuring that the information contained in both the brochure and the pictorial are appropriate for the target population and addressing the divergence of opinion among the RCMA liaison and the dermatology expert.

The DNP student further plans to copyright both the brochure and pictorial. Once ownership has been secured, DNP student will seek grants in order to create a commercially viable product that may be mass produced and disseminated to not only Hispanics but also healthcare providers, thus assisting to improve health and decrease the lack of knowledge regarding melanoma and improving survival rates. Copies of the brochures as well as pictorials will be delivered to facilities that provide services for the farmworkers, including but not limited to Open Door Health Center, RCMA, Farmworkers Association, Coalition of Florida Farmworkers Organization, and all healthcare clinics that provide medical services to this population . The DNP student also plans deliver these brochures and pictorials to farmworkers in the fields. Additionally, schools will be made aware of these resources so that medical and nursing students may be educated on the importance of full-body screening and examination for this particular population. As previously requested by the Skin Cancer Foundation's managing editor, the DNP student will also provide a copy of the brochure and pictorial in order to have this valuable information posted on Skin Cancer Foundation's website. Other skin cancer organization will be approached, and requests will be made to further publicize the brochure and pictorial in those particular websites. Textbook publishing companies will also be approached in order to include this valuable information in future publications.

Should the researcher be accepted for presentation, she will attend conferences at the American Academy of Dermatology and Migrant Clinicians Network in order to further disseminate results of the study. Additionally, various possible interested groups such as the American Cancer Society, CDC, and public media will be approached with the findings in this study for further dissemination of the study's findings.

Lastly, the DNP student will submit manuscripts to the appropriate journals in an attempt to publish her findings, thus contributing to the limited amount of research currently available on the subject as well as providing tangible resources for healthcare professionals to utilize in order to raise awareness regarding this deadly disease among Hispanics and farmworkers.

Summary

This project fulfilled its purposes and objectives in three phases including an assessment of the farmworkers' knowledge regarding melanoma. Objective I took place at Open Door Health Center and RCMA. Objective II, a descriptive analysis of data gathered in the assessment, was performed to formulate the educational program for Objective IV. Objectives III and IV were fulfilled with the development of a pictorial depicting melanoma on Hispanics and the development of a tailored culturally sensitive educational brochure based on the needs of this population. An expert panel was ascertained to ensure accuracy and completeness of pictorial and educational brochure. Considering the heavy financial burden and cost of life of melanoma, this health promotion and disease preventive program may raise awareness among farmworkers, Hispanics, and healthcare providers regarding this population's risk of melanoma, thus catching this disease at its earlier stages and improving survival rates.

REFERENCES

American Association of Colleges of Nursing. (AACN). (2004). AACN position statement on the practice doctorate in nursing. Washington, DC: Author.

- American Association of Colleges of Nursing. (AACN). (2013). The Essentials of Doctoral Education for Advanced Nursing Practice. Retrieved from http://www.aacn.nche.edu/
- American Cancer Society (ACS). (2007). What you need to know about skin cancer. Retrieved from http://www.cancer.org/docroot/PED/content/ped_7_1_What_You_Need_To_ Know_About_Skin_Cancer.asp
- American Cancer Society (ACS). (2011). Detailed guide: Skin cancer-melanoma. What are the key statistics about melanoma? Retrieved from

http://www.cancer.org/index?gclid=CLvR6riu36UCFUHs7Qodyidz0g

- American Cancer Society (ACS). (2012). Cancer Facts & Figures 2012. Retrieved from http://www.cancer.org/index
- Anthony, M., Williams, J. M. (2008). Health needs of migrant and seasonal farmworkers. *Journal of Community Health Nursing* 25, 153-160.
- Arbon, G. (2008). Medical Photograph: Your Questions Answered? Journal of Wound Care, 17(10), 454-455.
- Australian Government Department of Health and Aging. (2011). Fact sheet on melanoma. Retrieved from http://www.health.gov.au/internet/skincancer/publishing.nsf/Content/fact-

melanoma

89

- Bechtel, G. A., Davidhizar, R., & Spurlock W. R. (2000). Migrant farm workers and their families: Cultural patterns and delivery of care in the United States. *International Journal of Nursing Practice*, 6, 300-306.
- Bergland, J. E., Heuer, L., Lausch, C. (2006). Diabetes lay educator case study: One woman's experience working with the Hispanic migrant and seasonal farmworkers. *Journal of Cultural Diversity*, 13(3), 152-157.
- Bradford, P. T., Goldstein, A. M., McMaster, M. L., & Tucker, M. A. (2009). Acral lentiginous melanoma. *Archives of Dermatology*, 145(4), 427-434.
- Cancer Society of New Zealand. (2011). Skin cancer facts and figures. Retrieved from http://www.cancernz.org.nz/reducing-your-cancer-

risk/sunsmart/about-skin-cancer/skin-cancer-facts-and-figures/

- Centers for Disease Control and Prevention (CDC). (2011). Skin cancer. Retrieved from http://www.cdc.gov/cancer/skin/
- City-Data.com. (2011). *Miami, Florida*. Retrieved from http://www.citydata.com/city/Miami-Florida.html
- Clingerman, E. (2007a). An insider/outsider team approach in research with migrant farmworker women. *Family & Community Health/Supplement 1*, S75-S84.
- Clingerman, E. (2007b). A situation-specific theory of migration transition for migrant farmworker women. *Research and Theory for Nursing Practice: An International Journal*, 21(4), 220-230.
- Clingerman, E. M. (2006). Conceptualizations of health among Mexican and Mexican American women employed in migrant farm work. *Hispanic Health Care International, 4*(1), 45-55.

- Cockburn, M. G., Zadnick, J., & Deapan, D. (2006). Developing epidemic of melanoma in the Hispanic population of California. *Cancer*, *106*(5), 1162-1168.
- Cole, L. J., & Fleisher, L. D. (2003). Update on HIPAA privacy: Are you ready? *American College of Medical Genetics*, 5(3), 183-186.
- Cormier, J.N., Xing, Y., Ding, M., Lee, J.E., Mansfield, P.F., Gershendwald, J. E., ... Du,X. L. (2006). Ethnic differences among patients with cutaneous1 melanoma.Archives of Dermatology, 166, 1907-1914.
- Culp, K., & Umbarger, M. (2004). Seasonal and migrant agricultural workers: A neglected workforce. *American Association of Occupational Health Nursing*, 52(9), 383-390.
- Cunniff, C., Byrne, J. L., Hudgins, L. M., Moescler, J. B., Haskins Olney, A., Pauli, R.
 M. ... Figone, C. (2000). Informed consent for medical photographs. *Genetics in Medicine*, 2(6), 353-355.
- Donham, K. J., & Thelin, A. (2006). Agricultural skin diseases and cancer in agricultural Populations. Agricultural medicine: Occupational and environmental health for the health professions (pp. 145-172). Ames, IA: Blackwell Publishing.
- Eide, M. J., & Weinstock, M. A. (2005). Association of UV index, latitude, and melanoma incidence in nonwhite populations – U.S. surveillance, epidemiology, and end results (SEER) program, 1992 to 2001. *Archives of Dermatology, 141*, 477-481. Retrieved from CINAHL Plus Barry University database.
- Elsevier. (2012). Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals.

- Emmons, K. M., Geller, A. C., Puleo, E., Sanghamitra, S., Hu, S. W., Gorham, S., and
 Werchniak, A. E. (2010). Skin cancer education and early detection at the beach:
 A randomized trial of dermatologist examination and biometric feedback. *Journal of the American Academy of Dermatology 64*, 282-289.
- Erlen, J. A. (2005). HIPAA: Implications for research. *Orthopaedic Nursing*, 24(2), 139-142.
- Fain, J. A. (2009). *Reading, understanding, and applying nursing research* (3rd ed.).Philadelphia, PA: F.A. Davis.
- Fortes, C., Mastroeni, S., Melchi, F., Pilla, M.A., Alotto, M., Antonelli, G., . . . Pasquini,
 P. (2007). The association between residential pesticide use and cutaneous melanoma. *European Journal of Cancer*, 43, 1066-1075.
- Gaetano, D. E., Hodge, B., Clark, A., Ackerman, S., Burdick, P., & Wranesh Cook, M. L.
 (2009). Preventing skin cancer among a farming population. *American Journal of Occupational Health Nurses*, 57(1), 24-31.
- Glanz, K., Schoenfeld, R. R., & Steffen, A. (2010). A randomized trial of tailored skin cancer prevention messages for adults. *American Journal of Public Health*, 100, 735-741.
- Gordon, R. M. (2009). Skin cancer: More than skin deep. Advances in Skin & Wound Care, 22(12), 574-580.
- Graf, C., Wager, E., Bowman, A., Fiack, S., Scott-Lichter, D., & Robinson, A. (2007).
 Best practice guidelines on publication ethics: A publisher's perspective. *International Journal of Clinical Practice*, 61, 1-26.

- Hay, J. L., Oliveria, S.A., Dusza, S. W., Phelan, D. L., Ostroff, J. S., & Halpern, A. C. (2006). Psychosocial mediators of nurse intervention to increase skin self-examination in patients at high risk for melanoma. *Cancer Epidemiology, Biomarkers & Prevention*, 156, 1212-1215.
- Healthy People. (2011). About healthy people. Retrieved from http://www.healthypeople.gov/2020/about/default.aspx
- Healthy People. (2013). Access to health services. Retrieved from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId-1
- Hess, J. E. (2009). Culturally sensitive health promotion plan for tuberculosis prevention and treatment in Mexican migrant farm workers populations. *Online Journal of Rural Nursing and Health Care*, 9(2), 95-102.
- Horner, J., & Wheeler, M. (2005). HIPAA: Impact on clinical practice. *American* Speech Language Hearing Association, 10-12.
- Housman, T. S., Feldman. S. R., Williford, P. M., Fleischer, A. B., Jr., Goldman, N. D.,
 Acostamadiedo, J. M., & Chen, G. J. (2003). Skin cancer is among the most
 costly of all cancers to treat for the Medicare population. *Journal of the American Academy of Dermatology* 48, 425-429.
- Hu, S., Parmet, Y., Allen, G., Parker, D., Ma, F., Rouhani, P., & Kirsner, R. S. (2009).
 Disparity in melanoma: A trend analysis of melanoma incidence and stage at diagnosis among whites, Hispanics, and blacks in Florida. *Archives of Dermatology*, 145(12), 1369-1374.

- Hu, S., Soza-Vento, R. M., Parker, D. F., & Kirsner, R. S. (2006). Comparison of stage at diagnosis of melanoma among Hispanic, black, and white patients in Miami-Dade County, Florida. Archives of Dermatology, 142, 704-708.
- Institute of Medical Illustrators. (IMI). (2006). IMI National Guidelines. Consent to clinical photography. Retrieved from http://www.imi.org.uk
- International Committee of Medical Journal Editors. (2005). Uniform requirements for manuscripts submitted to biomedical journals. *Journal of Manipulative & Physiological Therapeutics*, 20, 433-442.
- Jackson A., Wilkinson C., and Pill, R. (1999). Moles and melanomas who's at risk, who knows, and who care? A strategy to inform those at high risk. *British Journal of General Practice*, 49, 199-203.
- Kantor, J., & Kantor, D. E. (2009). Routine dermatologist-performed full-body skin examination and early melanoma detection. *Archives of Dermatology*, *145*(8), 873-876. Retrieved from CINAHL Plus Barry University database.
- Kim-Godwin, Y. S., Alexander, J. W., Felton, G., Mackey, M. C., & Kasakoff, A. (2006).
 Prerequisites to providing culturally competent care to Mexican migrant farmworkers: A Delphi study. *Journal of Cultural Diversity 13*(1), 27-33.
- Larson, A. C. (2000). Migrant and seasonal farmworker enumeration profile study. Retrieved from http://www.ncfh.org/enumeration/PDF2%20California.pdf
- Lausch, C., Heuer, L., Guasaco, C., & Bengiamin, M. (2003). The experiences of migrant health nurses employed in seasonal satellite nurse-managed centers: A qualitative study. *Journal of Community Health Nursing*, 20(2), 67-80.

- Levy, B. S., Wegman, D. H., Baron, S. L., & Sokas, R. K. (Eds.). (2006). Occupational and environmental health: Recognizing and preventing disease and injury (5th ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Marlenga, B. (1995). The health beliefs and skin cancer prevention practices of Wisconsin dairy farmers. *Nursing Forum*, 22(4), 681-686.
- Mateo, M., & Kirchhoff, K. (Eds). (2009). *Research for advanced practice nurses*. New York, NY: Springer Publishing.
- McCullagh, M. C. (2004). Health promotion. In S. J. Peterson & T. S. Bredow (Eds.), *Middle range theories: Application to nursing research* (301 ed., p. 288).
 Philadelphia, PA: Lippincott, Williams, & Wilkins.
- Meade, C. D., & Calvo, A. (2001). Developing community-academic partnerships to enhance breast health among rural and Hispanic migrant and seasonal farmworker women. *Oncology Nursing Forum*, 28(10), 1577-1584.
- Murchie, P., & Iweuke, F. C. (2010). Comparing personal risk, melanoma knowledge and protective behavior in people with and without melanoma: A postal survey to explore educational needs in northeast Scotland. *Journal of Cancer Education*, 26, 341-347. doi: 10.1007/s13187-010-0181-z

Nagore, E., Hueso, L., Botella-Estrada, R., Alfaro-Rubio, A., Serna, I., Guallar, J.P.,
... Guillen, C. (2010). Smoking, sun exposure, number of nevi and previous neoplasias are risk factors for melanoma in older patients (60 years and over). *Journal of European Academy of Dermatology and Venereology*, 24, 50-57.
Retrieved from CINAHL Plus Barry University database.

- National Advisory Council on Migrant Health. (NACMH). (1995). *Recommendations of the National Advisory Council on Migrant Health: Losing ground, the condition of farmworkers of the America*. Bethesda, MD: National Advisory Council on Migrant Health. Washington DC.
- National Cancer Institute. (NCI). (2012). *Copyright and Reuse of Graphics and Text*. Retrieved from http://www.cancer.gov/global/web/policies/copyright
- National Cancer Institute. (NCI). (n.d.). NCI Visuals Online. Retrieved from http://visualsonline.cancer.gov/browseaction.cfm?topicid=201
- National Center for Farmworker Health, Inc. (NCFH). (2013). Farmworker Occupational Health and Safety. Retrieved from http://www.ncfh.org/docs/fs-Occ%20Health.pdf
- Pender, J. J., Murdaugh, C. L., & Parsons, M. A., (2002). *Health promotion in nursing practice* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Pender, N. J., Murdaugh, C. L., & Parsons, M. A., (2006). *Health promotion in nursing practice* (5th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- RCMA. (n.d.) About RCMA. Retrieved from http://www.rcma.org/about.html
- Reed, D. B. (2004). The risky business of production agriculture: Health and safety for farm workers. *American Academy of Occupational Health Nursing*, 52(9), 401-409.
- Reyes-Ortiz, C. A., Goodwin, J. S., Freeman, J. L., & Kuo, Y. F. (2006). Socioeconomic Status and survival in older patients with melanoma. *Journal of the American Geriatrics Society*, 54(11), 1758-1764.

- Rigel, D. S., Russak, J., &Friedman, R. (2010). The evolution of melanoma diagnosis:
 25 years beyond the ABCDs. *CA Cancer Journal for Clinicians*, 60, 301-316.
 doi:10.3322/caac.20074
- Robinson, J. D., Silk, K. J., Parrott, R. L., Steiner, C., Morris, S. M., & Honeycutt, C. (2004). Healthcare providers' sun protection promotion and at-risk clients' skincancer-prevention outcomes. *Preventive Medicine*, 38(3), 251-257.
- Rouhani, P., Pinheiro, P. S., Sherman, R., Arheart, K., Fleming, L. E., MacKinnon, J., & Kirsner, R. S. (2010). Increasing rates of melanoma among nonwhites in Florida compared with the United States. *Archives of Dermatology*, *146*(7), 741-746.
- Salas, R., Mayer, J. A., & Hoerster, K. D. (2005). Sun-protective behaviors of California farm workers. *Journal of Occupational and Environmental Medicine*, 47(12), 1244-1249.
- Scheinfeld, N. (2004). Photographic images, digital imaging, dermatology, and the law. *Archives of Dermatology*, *140*, 473-476.
- Sologaistoa, E. (2011). Farmworkers in the Southeast. Florida Association of Community Health Centers Report.
- Srof, B. J., & Velsor-Friedrich, B. (2006). Health promotion in adolescents: A review of Pender's health promotion model. *Nursing Science Quarterly*, 19(4), 366-373.

Stapleton, J., Turrisi, R., Hillhouse, J., Robinson, J.K., & Abar, B. (2010). A comparison of the efficacy of an appearance-focused skin cancer intervention within indoor tanner subgroups identified by latent profile analysis. *Journal of Behavioral Medicine*, 33, 181-190. doi:10.1007/s10865-009-9246-z

- The Library of Congress' United States Copyright Office. (2013). Definitions. Retrieved from http://www.copyright.gov/help/faq/faq-definitions.html
- Torrens, R., & Swan, B. A. (2009). Promoting prevention and early recognition of malignant melanoma. *Dermatology Nursing*, 21(3), 115-122.

United Kingdom Department of Health. (n.d.). Good practice in consent implementation guide: Consent to examination or treatment. Retrieved from http://www.health.wa.gov.au/mhareview/resources/documents/UK_DOH_implem entation_guide.pdf

- USA.gov. (2013). U.S. Government Photos and Images. Retrieved from http://www.usa.gov/Topics/Graphics.shtml
- U.S. Department of Health and Human Services. (2003). Office for Civil Rights (OCR) Summary of the HIPAA Privacy Rule. HIPAA Compliance Assistance.
- U.S. Department of Health & Human Services. (2013). *Health Information Privacy*. Retrieved from http://www.hhs.gov/ocr/privacy/
- U.S. Department of Health & Human Services. Agency for Healthcare Research and Quality. (2009). Screening for skin cancer: U.S. Preventive Services Task Force recommendation statement. Retrieved from

http://www.guideline.gov/content.aspx?id=13695&search=skin+cancer

Woolf, S. H., Jonas, S., & Kaplan-Liss, E. (2008). Health promotion and disease prevention in clinical practice (2nd ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

World Health Organization. (2012). Skin cancers. Retrieved from

http://www.who.int/uv/faq/skincancer/en/index1.html

Yeo, G., Villalobos, F., & Robinson, G. (2011). Outcomes and challenges of familias saludables: A rural Latino chronic disease screening and management project. *Hispanic Health Care International*, 9(3), 137-143.

APPENDIX A

BARRY UNIVERSITY IRB LETTER



OFFICE OF THE PROVOST INSTITUTIONAL REVIEW BOARD

> Research with Human Subjects Protocol Review

Date:

April 8, 2013

130303

Protocol Number:

Title:

Approval Date:

Name: Address:

Sponsor:

Raising Awareness of Melanoma among Migrant Workers

4/1/13

Ms. Sandra Giraldo

Dr. Carolyn LePage Department School of Nursing

Dear Ms. Giraldo:

On behalf of the Barry University Institutional Review Board (IRB), I have verified that the specific changes requested by the IRB have been made. Therefore, I have granted final approval for this study as exempt from further review.

As principal investigator of this protocol, it is your responsibility to make sure that this study is conducted as approved by the IRB. Any modifications to the protocol or consent form, initiated by you or by the sponsor, will require prior approval, which you may request by completing a protocol modification form.

It is a condition of this approval that you report promptly to the IRB any serious, unanticipated adverse events experienced by participants in the course of this research, whether or not they are directly related to the study protocol. These adverse events include, but may not be limited to, any experience that is fatal or immediately lifethreatening, is permanently disabling, requires (or prolongs) inpatient hospitalization, or is a congenital anomaly cancer or overdose.

The approval granted expires on March 20, 2014. Should you wish to maintain this protocol in an active status beyond that date, you will need to provide the IRB with and IRB Application for Continuing Review (Progress Report) summarizing study results to date.



If you have questions about these procedures, or need any additional assistance from the IRB, please call the IRB point of contact, Mrs. Barbara Cook at a second or send an e-mail to the second second finally, please review your professional liability insurance to make sure your coverage includes the activities in this study.

Sincerely,

maelle Bruch &

Linda Bacheller, Psy.D., J.D. Chair, Institutional Review Board Barry University

Cc: Dr. Carolyn LePage

Note: Note: The investigator will be solely responsible and strictly accountable for any deviation from or failure to follow the research protocol as approved and will hold Barry University harmless from all claims against it arising from said deviation or failure.

APPENDIX B

MELANOMA AMONG THE MINORITY POPULATION MATRIX

Author/Date	Design/Purpose	Subjects	Key	Clinical	Clinical
		Ū	Findings	Recommendations	Relevance
Bradford, P.	Population-based	A total of 1413	The	Physicians to	ALM makes
T., Goldstein,	registry study.	subjects with	proportion	maintain a high	up a much
A. M.,	The purpose of	histologically	of ALM	index of suspicion	higher
McMaster, M.	the study was to	confirmed	among all	in all ethnic groups	proportion of
L., & Tucker,	examine	cases of ALM.	melanoma	and closely examine	cutaneous
M. A. (2009).	incidence and		subtypes	a patient's palms,	malignant
Acral	survival patterns		was	soles, and nail beds	melanoma in
lentiginous	of acral		greatest in		darker-
melanoma.	lentiginous		blacks.		skinned
Archives of	melanoma		Hispanic		individuals.
Dermatology	(ALM) in the		whites had		ALM patients
145(4), 427-	U.S.		worse		have a poor
434.			survival		survival rate
			rates that		due to
			other		diagnosis
			groups due		delays.
			to its late		Primary care
			stage at the		providers
			time of		should be
			diagnosis.		more vigilant
					when
					encountering
					this types of
					patients.

Author/Date	Design/Purpose	Subjects	Key Findings	Clinical	Clinical
	B F	~~j····	9-	Recommendations	Relevance
Cormier, J.N., Xing, Y., Ding, M., Lee, J.E., Mansfield, P.F., Gershendwald, J. E., Ross, M.I., & Du, X. L. (2006). Ethnic differences among patients with cutaneous melanoma. <i>Archives of</i> <i>Dermatology</i> , <i>166</i> , 1907- 1914.	Multivariate analysis was performed to evaluate the relationship between race/ethnicity and clinicopathologic factors.	SEER search from 1992 to 2002 for primary invasive cutaneous melanoma cases which identified 48,143 whites, 932 Hispanics and 251 African Americans.	Lower extremity and acral lentiginous melanomas were more common among minorities. Obstacles: Tumor characteristic and socioeconomic status contribute to late diagnosis of melanoma among minorities. Physician misdiagnosis and delay of treatment. Shorter survival rates with nodular and acral lentiginous melanomas, which are common in minorities.	Efforts to increase melanoma awareness should include educational programs developed for primary care physicians and patients that include the unique features of melanoma in minority patients to successfully provide screening for early detection in people of all ethnic backgrounds.	Melanoma is a public health concern for all ethnic populations. Differences in disease stage at presentation contributes to disparities in survival. Understanding melanoma in minority populations may lead to early detection and ultimately save lives.

Author/Date	Design/Purpose	Subjects	Key Findings	Clinical	Clinical
Tutilo1/Dute	Designit di pose	Subjects	incj i mungs	Recommendations	Relevance
Hu, S.,	Cross-sectional	Melanoma	Both white	Rising melanoma	Study results
Parmet, Y.,	and	cases with	Hispanics and	incidence among	should
Allen, G.,	retrospective	known stage	blacks had	white non-	motivate the
Parker, D.,	analysis. The	and	significantly	Hispanics and	expansion of
Ma, F.,	purpose of the	race/ethnicity	more advanced	white Hispanics	melanoma
Rouhani, P.,	study was to	reported from	melanoma at	emphasizes the	awareness
& Kirsner, R.	examine and	1990 to 2004.	presentation.	need for primary	and
S. (2009).	compare the			prevention and	screening
Disparity in	temporal trends		Obstacles:	secondary	campaigns to
melanoma:	in melanoma		Socioeconomic	prevention.	the minority
A trend	incidence and		status, skin		communities,
analysis of	stage at		cancer	Skin cancer	which can
melanoma	diagnosis among		awareness, and	awareness and	ultimately
incidence and	whites,		cultural and	healthcare provider	alleviate the
stage at	Hispanics, and		social values.	education.	disparities of
diagnosis	blacks in Florida				melanoma
among	from 1990 to		Delayed	Primary prevention	outcome in
whites,	2004.		diagnosis may	efforts targeting	these
Hispanics,			reflect lower	sun protection, sun-	populations.
and blacks in			skin cancer	smart behavior, and	
Florida.			awareness	skin cancer	
Archives of			among	awareness needs to	
Dermatology,			Hispanics.	be emphasized.	
145(12),					
1369-1374.			Lack of public		
			and health		
			provider		
			education on		
			melanoma risk		
			and prevention		
			in minority		
			groups		

Author/Date	Design/Purpose	Subjects	Key Findings	Clinical	Clinical
	8	0	v o	Recommendations	Relevance
Author/Date Hu, S., Soza- Vento, R. M., Parker, D. F., & Kirsner, R. S. (2006). Comparison of stage at diagnosis of melanoma among Hispanic, black, and white patients in Miami- Dad e County, Florida. Archives of Dermatology, 142, 704-708.	Design/Purpose Retrospective analysis. The purpose of the study was to compare the stage at which melanoma was diagnosed between non- Hispanic white, non-Hispanic black and Hispanic patients.	Subjects Melanoma cases reported to the Florida Cancer Data System with known stage and race/ethnicity information, for residents of Miami- Dade County, Florida from 1997 to 2002.	Key Findings Advance stage of melanoma diagnosis among Hispanic and black patients suggests suboptimal secondary prevention efforts in minority populations. Obstacles: Disparity in secondary prevention of melanoma in minorities. Suboptimal media attention on skin cancer education.		

APPENDIX C

PREVENTIVE MEASURE AND EDUCATION MATRIX

Author/Date	Design/Purpose	Subjects	Key Findings	Clinical	Clinical
				Recommendations	Relevance
Glanz, K.,	Randomized	Home	Tailored	Further test	Tailored
Schoenfeld,	clinical trial.	(primary	communications	inexpensive,	messages
R.R., Steffen,	Evaluate the	care); <i>n</i> =	had a modest	convenient	have the
A. (2010). A	impact of	724; mean	positive impact	interventions such	potential to
randomized	tailored	age 42 y/;	on skin cancer	as tailored	focus
trial of	interventions on	high risk	prevention	communications.	prevention
tailored skin	skin cancer		practices. The		efforts on
cancer	prevention and		intervention		those who can
prevention	skin self-		yielded		most benefit
messages for	examination		significant		from them,
adults.	among adults at		increases in		thereby
American	high and		overall sun		increasing the
Journal of	moderate risk for		protection		efficiency and
Public Health	skin cancer in a		habits, use of		effectiveness
100, 735-741.	randomized trial		hats and		of health
			sunglasses, and		promotion
			performance of		and cancer
			skin self-		prevention
			examinations as		interventions.
			well as use of		
			sunscreen.		

Author/Date	Design/Purpose	Subjects	Key Findings	Clinical	Clinical
	BF	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	9-	Recommendations	Relevance
Nagore, E.,	Case control	Community	Tobacco	A better design and	Efforts to
Hueso, L.,	study. The aim	(members of	smoking,	educational	decrease
Botella-	of the study was	Older Person	intense	campaigns in this	tobacco
Estrada, R.,	"to elucidate	Health	(chronic and	population to better	smoking
Alfaro-Rubio,	which risk	Promotion	acute) sun	their outcomes.	and intense
A., Serna, I.,	factors are	program); n	exposure and		(chronic and
Guallar, J.P.,	related to	= 160; mean	constitutional		acute) sun
Gonzales,	melanoma in	age 65; high	tumor features		exposure
I., Ribes, I.,	patients aged 60	risk	are all risk		can
Guillen, C.	years and over."		factors for		decrease
(2010).	(p. 51)		melanoma in		incidence of
Smoking, sun			patients who		melanoma
exposure,			are 60 years		among the
number of			and older.		elderly
nevi					population.
and previous					
neoplasias are					
risk factors					
for melanoma					
in older					
patients (60					
years and					
over).					
Journal of					
European					
Academy of					
Dermatology					
and					
Venereology					
24.					
50-57.					

Author/Date	Design/Purpose	Subjects	Key Findings	Clinical	Clinical
	0	0		Recommendations	Relevance
Stapleton, J.,	Randomized	University; n	The	Utilization of the	The booklet
Turrisi, R.,	Clinical Trial.	= 362; mean	intervention	appearance-focused	shows
Hillhouse, J.,	The purpose was	age, 19 y;	significantly	booklet which	promise in
Robinson,	to identify indoor	women who	reduced	provides	reducing
J.K., Abar, B.	tanning	use indoor	indoor	information about	indoor
(2010). A	subgroups and	tanning	tanning for	UV-induced	tanning
comparison of	test the efficacy		the low-	appearance and	tendencies
the efficacy of	of an appearance-		knowledge	health damage and	among low-
an	focused		subgroup.	healthy alternatives	knowledge
appearance-	handbook			to indoor tanning at	tanners.
focused skin	intervention		The booklet	tanning salons.	
cancer	within each		has the		
intervention	group.		potential to		
within indoor			be widely		
tanner			distributed		
subgroups			and it is a		
identified by			relatively low		
latent profile			cost		
analysis.			intervention		
Journal of					
Behavioral					
Medicine 33,					
181-190.					

APPENDIX D

Author/Date	Design/Purpose	Subjects	Key Findings	Clinical	Clinical
		-		Recommendations	Relevance
Kantor, J., and	Retrospective	Private	Most	Data on melanoma	Most
Kantor, D.E.	analytical case	dermatology	melanomas	detection among	melanomas
(2009).	series. The	practice in	detected in a	patients in whom	detected in a
Routine	purpose of the	Florida; $n =$	general	the pigmented	general-
dermatologist-	study was to	126; mean	practice	lesion was not the	practice
performed	determine the	age 59.9;	dermatology	primary complaint	dermatology
full-body skin	proportion of	low risk	setting were	may help to	setting were
examination	patients in		found as a	promote education	found as a
and early	private		result of	and encourage	result of a
melanoma	dermatology		dermatologist-	future patients to	dermatologist-
detection.	practice in		initiated full-	avail themselves of	initiated full-
Archives of	whom		body self -	full-body self-	body self -
Dermatology,	melanoma was		examinations,	examinations.	examination.
145(8), 873-	detected but was		not patient		Furthermore,
876.	not the		complaint.	All patient	the authors
	presenting		Dermatologist	regardless of chief	demonstrated
	complaint.		detection was	complaint should	a clinical
			associated	have full-body	significant
			with thinner	examinations.	association
			melanomas		between
			and an		thinner
			increasing		melanomas
			likelihood of		and
			the melanoma		dermatologist
			being in situ.		detection.

PREVENTIVE MEASURES AND SCREENING MATRIX

113

APPENDIX E

BARRY UNIVERSITY COVER LETTER

Barry University Cover letter

Dear Research Participant:

Your participation in a research project is required. The title of the study Increase Melanoma Awareness among migrant farmworkers. Research is being conducted by Sandra Giraldo, a student in the department of nursing at Barry University, and seeks information that will be useful in the field of nursing/dermatology. The research objectives are to assess the knowledge of migrant farmworkers about their risk of skin cancer, and develop an educational program tailored for this population. In line with these objectives, the following procedures will be used: A questionnaire assessing the knowledge of migrant farmworkers regarding their risks of cancer (melanoma) will be administered, and tailored educational program will be developed with regards to the signs of cancer (melanoma). We anticipate the number of participants will be approximately 100.

If you decide to take part in this investigation, you will be asked to do the following: Complete a questionnaire to assess your knowledge about skin cancer. The estimated time to complete these research procedures is approximately 20 minutes.

Consent to be a research participant is strictly voluntary and if you refuse to participate or decide to withdraw at any time during the study, there will be no adverse health effects.

There are no known risks to you related to your participation in this study. Your participation in this study will help medical providers determine your risk of melanoma. Direct benefits to participating in this study include increased awareness of skin cancer as well as receiving a \$10.00 gift card as appreciation for you time and participation to this study. A free educational brochure about skin cancer (melanoma) will be provided at the request of the participants once the individualized education program is completed.

As a research participant, the information you provide will be confidential, ie, no names or other identifiers will be obtained in any of the instruments used. The data will be stored in a locked file in the investigator's office. By completing and returning this survey, you have shown agreement to participate in the study.

If you have any questions or concerns regarding the study or your participation in the study, please contact me, Sandra Giraldo, at my supervisor. or Dr. Carolyn LePage, at or the Institutional Review Board contact, Barbara Cook, at

Thanks for participating.

Sincerely, Sandra Giraldo Approved by Barry University IRB :

Signature s

Date :

APR 1 - 2013 Sml ABar Leela, PryD., 30

APPENDIX F

FLYER - OPEN DOOR HEALTH CENTER

Volunteers Needed!

A Barry University Doctor of Nursing Practice Student is doing a study to improve understanding about skin cancer among migrant farmworkers.

Who is eligible?

-Migrant farmworkers who are 18 years or older who understand English and/or Spanish.

What will you do?

-You will answer questions about your skin.

How long will it take?

-Total time: About 20 minutes.

Date and Time:

April 6, 2013 8 am - 12 Noon April 10, 2013 9 am - 2:30 pm Abril 11, 2013 9 am - 2:30 pm

Location:

- Open Door Health Center

Thank you gift:

- \$10.00 Gift card.



Contact:

if you are interested in participating. You may also contact my supervisor. Dr. Carolyn LePage at or the Institutional

Review Board point of contact, Barbara Cook, at if you have any further questions.

This study is being conducted by Sandra Giraldo, RN, BSN, Barry University's Doctor in Nursing Practice Student.

Your responses will be confidential and no identification will be required.

APPENDIX G

FLYER - RCMA

Volunteers Needed!

A Barry University Doctor of Nursing Practice Student is doing a study to improve understanding about skin cancer among migrant farmworkers.

Who is eligible?

-Migrant farmworkers who are 18 years or older who understand English and/or Spanish.

What will you do?

-You will answer questions about your skin.

How long will it take?

-Total time: About 20 minutes.

Date and Time:

April 8, 2013 3:30 pm - 5 pm April 10, 2013 3:30 pm - 5 pm April 11, 2013 3:30 pm - 5 pm

Location:

- RCMA

Thank you gift:

- \$10.00 Gift card.



Contact:

if you are interested in participating. You may also contact my supervisor, Dr. Carolyn LePage at or the Institutional Review Board point of contact, Barbara Cook, at if you have any further questions.

This study is being conducted by Sandra Giraldo, RN, BSN, Barry University's Doctor in Nursing Practice Student.

Your responses will be confidential and no identification will be required.

APPENDIX H

QUESTIONNAIRE

Questionnaire (Page 1 of 4)

Demographics

- 1. What is your gender? Male _____
 Female_____
- 2. How old are you?
- 3. What is your primary language? English__ Spanish__ Creole __ Other __
- What is the highest level of education you have completed? Elementary _____
 High School _____ Other ____
- 5. Do you have access to healthcare information/knowledge and healthcare?

Yes No

- 6. Where do you currently obtain healthcare information/knowledge and healthcare?
- 7. What is your job?
- 8. Do you think you are at risk of skin cancer? Yes __ No__
- 9. Have you ever been diagnosed with melanoma or skin cancer? Yes ___ No ___
- 10. How knowledgeable are you regarding melanoma or skin cancer:

I know a lot about skin cancer ____

I know little about skin cancer ____

I do not know anything about skin cancer ____

Personal risk

11. What happens to your skin in sun?

Never tans _____ Tans with difficulty _____ Tans easily _____ Tans always____

12. Does your skin freckle?

Yes _____ No ____

Questionnaire (Page 2 of 4)

1	3.	Do	vou	have mole	es with	irregular	edges	and color?	
			J						

Yes _____ No _____

14. How many moles do you have?

None _____ Less than 20 _____ More than 20 _____

15. What is your natural hair color?

Black _____ Brown _____ Red ____ Fair _____

16. What is your ethnic origin?

White ____ Black ____ Hispanic ____ Asian ____ Other ____

17. How many times have you had a bad sunburn?

Never _____ Once or twice _____ Three or more _____

18. My chances of getting skin cancer compared with other people of my race is:

Less likely _____ The same _____ More likely _____

19. What is the total amount of sun exposure on a weekly basis?

20. Did you ever have a blistering sunburn at the following ages (years)

< 5 _____ 6-15 _____ 16-20 ____ 21-30 _____ 31 - 40 _____ >40 ____

Level of concern

21. Do you ever check your skin for moles? Yes _____ No _____

If yes,

1 or 2 times a year _____ Once a month _____ More frequently_____

22. If you noticed a new or changing mole would you seek medical advice?

Yes _____ No _____

Questionnaire (Page 3 of 4)

23. How worried would you be if you noticed a mole for the first time that:

Grew in size? _____

Became irregular in color? _____

Became irregular in shape? _____

- 24. If you noticed a new mole, would you ignore it? Yes _____ No_____
- 25. If a mole came to your attention for the first time, would you seek medical advice immediately or within 3 months?

Protective behavior

- 26. Do you try to get a suntan when on holiday?
- 27. Have you used or do you use a sunbed?
- 28. Do you do anything to protect your skin while outdoors?

If yes, do you wear a hat and/or long sleeve shirts?

If yes, do you apply sunscreen?

Melanoma knowledge

- 29. Do you know the major clinical signs of early melanoma?
- 30. Which of the following skin cancers have you heard of:

Malignant melanoma _____ Basal cell carcinoma _____

Squamous cell carcinoma

31. Can malignant melanoma be:

Completely prevented _____ Heal without treatment _____

Be cured if treated early _____ Lead to death if not treated _____

Questionnaire (Page 4 of 4)

32. Most common site of melanoma in men or women?

 Face _____
 Back _____
 Leg _____
 Other (Specify) _____

 Don't know _____

This questionnaire is based on an instrument developed by Jackson, Wilkinson, and Pill (1999) and implemented by Murchie and Iweuke (2010).

APPENDIX I

BUDGET AND MANAGEMENT PLAN

Budget Categories	Cost	Reason for need
Salaries and Wages		
Editor fees at \$30 per hour for a total of 5 hours	173	
Salaries and Wages Subtotal	173	
Equipment and Supplies		Office supplies needed to complete project.
Office supplies (paper, ink cartridges, pens, etc)	60	
Equipment and Supplies Subtotal	60	
Marketing and Communications		Production of brochure and pictorial prototype
Patient educational materials including brochure and pictorial prototypes	52	
Marketing and Communications Subtotal	52	
Events and Meetings		
Gift cards in the amount of \$10.00 for 100 partiipants	1,000	
Events and Meetings Subtotal	1,000	
Travel / Mileage		
Mileage for S. Giraldo, RN to travel between Pembroke Pines and Homestead Florida (52.02 miles RT x \$.50 per mile x 10 trips) = \$260	260	Gas, wear, and tear on vehicle necessary for transportation to and from facility where Capstone project will be completed.
Travel and Mileage Subtotal	260	
TOTAL:	1,545	

APPENDIX J

OPEN DOOR LETTER OF SUPPORT



COLLABORATORS:

ALLEGANY FRANCISCAN MINISTRIES, INC.

BAPTIST HEALTH SOUTH FLORIDA

SCIENCES

AMERICAN MEDICAL ASSOCIATION FOUNDATION

BARRY UNIVERSITY, SCHOOL OF GRADUATE MEDICAL

COMMUNITY VOLUNTEERING

PHYSICIANS FROM BAPTIST HEALTH SOUTH FLORIDA

DR. JOHN T. MACDONALD FOUNDATION

HEALTH FOUNDATION OF SOUTH FLORIDA, INC.

MIAMI-DADE AHEC, INC. OPEN HOUSE MINISTRIES

PEACOCK FOUNDATION

SUSAN G. KOMEN FOR THE CURE - MIAMI/FT LAUDERDALE AFFILIATE THE ETHEL & W. GEORGE KENNEDY FAMILY FOUNDATION, INC.

PROJECT SCREEN ROBERT WOOD JOHNSON FOUNDATION

INC.

MEDICINE

Appendix J

8/21/12

To whom it may concern:

This letter serves as confirmation that we will allow Sandra Giraldo to conduct her Capstone Project here at the

We agree to have Ms. Giraldo use our waiting room to querie patients and their families regarding malignant melanoma and to give a class on the same. Ms. Giraldo will assume complete responsibility for the details of her Project and will not be using office supplies, equipment or staff time and will not interefere with daily operations of the clinic.

Please feel free to contact me should you have any questions/concerns.

Sincerely,

dam Basyl

Laura R. Bazyler, MS, RD, LD/N, CDE Clinic Administrator

124

THE MIAMI FOUNDATION UNITED WAY OF MIAMI-DADE, UNIVERSITY OF MIAMI, MILLER SCHOOL OF

> Sponsored by

Health Foundation Of South Florida

APPENDIX K

RCMA LETTER OF SUPPORT

Appendix K



REDLANDS CHRISTIAN MIGRANT ASSOCIATION FLORIDA CITY ARE's OFFICE 19280 SW 378 Sr., FLORIDA CITY, FLORIDA 33034 (305) 242-5946 F.XX (305) 242-5948 EMAIL: floridacityao@rcma.org

August 17, 2012

To Whom It May Concern,

Please be advised that after discussing Sandra Giraldo's Capstone Project, we have agreed to allow her to conduct her study at our facility.

Should you have any questions, please do not hesitate to contact me

Sincerely

Hunsin neguet /

Margarita Hinojosa Area Coordinator RCMA Florida City Office(305) 242-5946 Fax(305) 242-5948 margarita@rcma.org





APPENDIX L

PERMISSION FROM BETH SWAN

RE: Permission Request - Giraldo, Sandra (Barry Student)

Page 1 of 3

RE: Permission Request

Giraldo, Sandra (Barry Student) <

Mon 8/12/2013 4:50 PM

To:Beth Swan

Thank you so much Dr. Swan. God bless.

Sincerely,

Sandra Giraldo ARNP/DNP Student Barry University

From: Beth Swan < Sent: Monday, Au)gust 12, 2013 2:46 PM To: Giraldo, Sandra (Barry Student) Subject: RE: Permission Request

Sandra,

To follow-up our telephone conversation, yes, you permission.

Thank you and good luck,

Beth Ann

Beth Ann Swan, PhD, CRNP, FAAN Dean and Professor Jefferson School of Nursing Thomas Jefferson University

From: Beth Swan Sent: Monday, August 12, 2013 11:11 AM

https://outlook.office365.com/owa/

8/25/2013

RE: Permission Request - Giraldo, Sandra (Barry Student)

Page 2 of 3

To: 'Giraldo, Sandra (Barry Student)' Subject: RE: Permission Request Importance: Low

Dear Sandra,

Thank you for your email. I just left you a voicemail message. I am glad you found the article informative. The health promotion model that was used in the article published in the Journal of Dermatology Nursing is Nola Pender's health promotion model (not our model).

For the article, Rachel and I adapted Pender's model for use with patients with malignant melanoma.

When you are writing about the model with Hispanic farmworkers, it will be important to cite Nola Pender's health promotion model.

Thank you for your interest,

Beth Ann

Beth Ann Swan, PhD, CRNP, FAAN Dean and Professor Jefferson School of Nursing Thomas Jefferson University

From: Giraldo, Sandra (Barry Student) [mailto Sent: Saturday, August 10, 2013 12:48 PM To: Beth Swan Subject: Permission Request

Good afternoon Dr. Swan,

My name is Sandra Giraldo. I am an ARNP/DNP student attending Barry University in Miami, Florida. I am seeking permission to utilize/adapt *The Health Promotion Model Applied to Melanoma Prevention by the Patient* that you published with Ms. Rachel Torrens in the article titled "Promoting Prevention and Early Recognition of Malignant Melanoma" in the Journal of Dermatology Nursing in June of 2009.

I have found your article not only fascinating, but it has also inspired my research. With your permission, I would like to utilize the above-mentioned health promotion model as guidance in order to ascertain Hispanic farmworkers' risks, perceived barriers, and interpersonal and situational

https://outlook.office365.com/owa/

8/25/2013

RE: Permission Request - Giraldo, Sandra (Barry Student)

Page 3 of 3

influences related to melanoma in South Florida. With your permission, I would like to tailor the model to reflect the population of interest, and I will be addressing only the stated sections of the model. The model will be properly referenced giving credit to you and Ms. Torrens as the original authors. Please let me know if you will grant me permission to adapt this model in my Capstone Project as soon as you have an opportunity.

I am also attempting to contact Ms. Rachel Torrens, the co-author of the publication, but I have been unable to ascertain her e-mail address. Please let me know if I need both authors' permission to utilize/adapt the health promotion model.

Thanking you in advance for your prompt assistance.

Sincerely,

Sandra Giraldo ARNP/DNP Student Barry University

The information contained in this transmission contains privileged and confidential information. It is intended only for the use of the person named above. If you are not the intended recipient, you are hereby notified that any review, dissemination, distribution or duplication of this communication is strictly prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

CAUTION: Intended recipients should NOT use email communication for emergent or urgent health care matters.

https://outlook.office365.com/owa/

8/25/2013

APPENDIX M

PERMISSION FROM PETER MURCHIE

RE: Research Project

Appendix M

Page 1 of 1

Reply Reply All Forward Chat

RE: Research Project

Murchie, P.

Giraldo, Sandra (Barry Student)

To:

Tuesday, August 21, 2012 2:28 PM

Thank you so much Peter.

I truly appreciate it.

Sincerely, Sandra Giraldo, RN, BSN Doctor in Nursing Practice Student

From: Murchie, P. Sent: Tuesday, August 21, 2012 5:27 AM To: Giraldo, Sandra (Barry Student) Subject: RE: Research Project

Hi Sandra

Delighted for you to use and adapt the questionnaire.

With best wishes Peter

From: Giraldo, Sandra (Barry Student) [mailto Sent: 20 August 2012 22:47 To: Murchie, P. Subject: Research Project

Good afternoon,

I am a Doctorate in Nursing Practice student at Barry University in Miami, Florida. I am doing a research project on raising awareness among dark-skinned individuals regarding melanoma. I would like to request permission to adapt the questionnaire you utilized in your article titled "*Comparing Personal Risk, Melanoma knowledge and Protective Behaviour in People with and without Melanoma: A Postal Survey to Explore Educational Needs in Northeast Scotland".* I would like to adapt your questionnaire in order to assess my participants' knowledge and attitudes regarding skin cancer.

Should you have any questions regarding my request, please do no hesitate to contact me.

Thank you so much for your anticipated assistance.

Sincerely, Sandra Giraldo, RN, BSN

https://ch1prd0106.outlook.com/owa/?ae=Item&a=Open&t=IPM.Note&id=RgAAAAD8O... 8/21/2012

APPENDIX N

CORRESPONDENCE FROM NCI

Page 1 of 2

National Cancer Institute Response [Inquiry: 130814-000075]

NCI Cancer.gov Staff Wed 8/14/2013 4:08 PM To:Giraldo, Sandra (Barry Student)

Thank you for contacting the National Cancer Institute. Below is a response to your recent request for information.

Subject • National Cancer Institute Response

Discussion Thread Response Via Email (NCI Agent)

08/14/2013 01:07 PM

Thank you for your request for information from the National Cancer Institute's (NCI) Cancer Information Service (CIS). We are providing the following information as a public service. Below are links to the information that was discussed and/or requested during our conversation.

Web Policies: Copyright and Reuse of Graphics and Text http://www.cancer.gov/global/web/policies/copyright

NCI Visuals Online: Melanoma (click on each image for individual reuse restrictions) http://visualsonline.cancer.gov/searchaction.cfm?q=melanoma

What You Need To Know About Melanoma and Other Skin Cancers http://www.cancer.gov/cancertopics/wyntk/skin/page1/AllPages

Please do not respond to this e-mail. If you have follow-up questions or would like to request more information, please contact NCI's Cancer Information Service again.

PHONE: NCI's Cancer Information Service (CIS)

English or Spanish, Monday-Friday, 8am-8pm ET

LIVEHELP: Live, online assistance through NCI's LiveHelp instant messaging service English, Monday-Friday, 8am-11pm ET

E-MAIL US: http://www.cancer.gov/contact

FOLLOW US: Twitter, YouTube, Facebook, RSS

Important note: This information is not a recommendation by the National Cancer Institute or its Cancer Information Service, and is not a substitute for a doctor's advice. A person's health care provider should be consulted before making decisions about health care. References to non-

https://pod51034.outlook.com/owa/

National Cancer Institute Response [Inqui... - Giraldo, Sandra (Barry Student)

government organizations, products, services, manufacturers, or companies do not constitute endorsement or recommendation by the NCI or the U.S. Government.

Question Reference #130814-000075

Date Created: 08/14/2013 01:07 PM Last Updated: 08/14/2013 01:07 PM Status: Completed

[---001:001696:33699---]

Page 2 of 2

https://pod51034.outlook.com/owa/

Copyright and Reuse of Graphics and Text - National Cancer Institute

Page 1 of 2

National Cancer Institute

at the National Institutes of Health

Web Policies

In English Updated: 04/25/2012

Copyright and Reuse of Graphics and Text

You May Reuse Information from the National Cancer Institute Website

Most of the information on the National Cancer Institute (NCI) website, www.cancer.gov, is in the public domain and is not subject to copyright restrictions. No special permission is required to use or reproduce public domain material. NCI's public domain information includes health professional and patient information in NCI's Physician Data Query (PDQ®) cancer information database and patient education brochures, booklets, and fact sheets.

However, any reproduced material should acknowledge NCI as the originator and the NCI website, www.cancer.gov, as the source. The source can be cited as:

The website of the National Cancer Institute (http://www.cancer.gov)

You Do Not Need Permission to:

· Use text from NCI information products in your own materials.

- However, you cannot use the registered trademark logos for NCI, NIH, Department of Health and Human Services (DHHS), or PDQ in your materials because NCI has not reviewed or approved your product.
- · Translate text from NCI products into other languages.
 - However, you cannot use the NCI, NIH, DHHS, or PDQ logos on your translations because NCI has not reviewed or approved your translations.
- · Link to NCI websites.

Please note that many of our online health publications are continually updated as we learn more about a specific disease or condition. Occasionally, sites that copy and repost NCI materials fail to check for updates, which can result in out-of-date information being offered to their users. For that reason, we urge you to link to NCI documents rather than repost them. If you do repost, please visit the NCI website periodically to check for document revisions.

http://www.cancer.gov/global/web/policies/copyright

Copyright and Reuse of Graphics and Text - National Cancer Institute

You Do Need Permission to Use Registered Trademarks and Copyrighted Material:

- · NCI's logo is trademarked and cannot be used without consent.
 - Questions regarding use of the NCI logo should be directed to the NCI Office of Communications
 Services at
- PDQ is a registered trademark and its use requires a licensing agreement with NCI.
 - Information about licensing PDQ is available from the NCI Office of Cancer Content Management at the following URL: http://www.cancer.gov/licensing.
- Artwork, graphics, and text developed for NCI by private-sector designers, photographers, and writers under contract to the federal government is owned by the originators.
 - Permissions, including credit line and/or fees for use of privately owned material, must be negotiated directly with the private-sector contractor, independent of the government.
 - To inquire about the ownership of NCI materials or to obtain contractor contact information, send e-mail to the NCI Office of Communications Services at cancergovstaff@mail.nih.gov or write to:

Office of Communications Services Office of Communications and Education National Cancer Institute, NIH, DHHS

http://www.cancer.gov/global/web/policies/copyright

Page 2 of 2

APPENDIX O

PERMISSION FROM THE SKIN CANCER FOUNDATION

RE: Permission to utilize photographs - Giraldo, Sandra (Barry Student)

Page 1 of 3

RE: Permission to utilize photographs

Paul Melia

Thu 8/8/2013 7:56 AM To:Giraldo, Sandra (Barry Student)

1 attachment ABCDEs - HiRes.zip;

Hello Sandra,

Here are the images you requested.

All the best, Paul

Paul Melia

Managing Editor The Skin Cancer Foundation



From: Giraldo, Sandra (Barry Student) Sent: Wednesday, August 07, 2013 5:19 PM To: Paul Melia Subject: RE: Permission to utilize photographs

Good afternoon Paul,

Thank you so much for granting me permission to utilize Skin Cancer Foundation photographs on melanoma for my project. I will be sure to give credit to your organization in the brochure and pictorial. Would it be too much to ask if you could also send me the photographs contained in the melanoma section under the ABCDE's. It would be extremely helpful for my graphic designer to get

https://pod51034.outlook.com/owa/

RE: Permission to utilize photographs - Giraldo, Sandra (Barry Student)

Page 2 of 3

the best quality photographs, so that he may incorporate them in the brochure. I hope it is not too much bother.

Thanks again for everything. God bless.

Sincerely,

Sandra Giraldo ARNP/DNP Student Barry University

From: Paul Melia Sent: Tuesday, August 06, 2013 12:23 PM To: Giraldo, Sandra (Barry Student) Subject: RE: Permission to utilize photographs

Dear Sandra,

I am pleased to grant you permission to use Skin Cancer Foundation images in your Capstone project. The Skin Cancer Foundation possesses full rights to all of the images we use. In regards to your request for Hispanic images, please take a look at http://www.skincancer.org/prevention/skin-cancer-and-skin-of-color. This article, written by two Spanish-speaking dermatologists, contains two images that you are welcome to use. The source image is attached.

Best of luck with your project and thank you for your efforts in educating the public about skin cancer.

Sincerely Yours, Paul Melia

Paul Melia

Managing Editor The Skin Cancer Foundation



From: Giraldo, Sandra (Barry Student) Sent: Monday, August 05, 2013 9:44 PM

https://pod51034.outlook.com/owa/

RE: Permission to utilize photographs - Giraldo, Sandra (Barry Student)

Page 3 of 3

To: Paul Melia Subject: Permission to utilize photographs

Good evening Paul,

It was a true pleasure speaking with you today. As discussed, I am an ARNP/DNP student doing a Capstone Project in order to raise awareness among Farmworkers regarding melanoma in South Florida. There are some melanoma photographs on your website under the "Warning Signs: ABCDEs of Melanoma" (<u>http://www.skincancer.org/skin-cancer-information/melanoma</u>) that I would like to include in a brochure I have created to inform farmworkers about melanoma. I am seeking permission to include these melanoma photographs in the brochure. Additionally, I would like to utilize any photographs depicting melanoma in Hispanics in a pictorial I am also preparing for my project.

As discussed, please confirm that Skin Cancer Foundation has full release rights for these images and that it is not necessary for me to track down the original owner of these photographs to request permission to use.

Thank you so much for your prompt response. Should you have any questions, please do not hesitate to contact.

Sincerely,

Sandra Giraldo ARNP/DNP Student Barry University

https://pod51034.outlook.com/owa/

APPENDIX P

PERMISSION FROM ELLA TOOMBS

RE: Request for permission - Giraldo, Sandra (Barry Student)

Page 1 of 1

RE: Request for permission

Giraldo, Sandra (Barry Student) wed 8/21/2013 9:12 PM

To:Ella Toombs

Good evening Dr. Toombs,

There is no need to apologize. I understand.

Thank you so much. I truly appreciate it.

God bless,

Sandra Giraldo

From: Ella Toombs Sent: Friday, August 16, 2013 2:37 PM To: Giraldo, Sandra (Barry Student) Subject: Re: Request for permission

Good Afternoon Ms Barry:

Sorry you caught me at a time when I was very busy:

Yes, you may use the photo in you article.

Dr. Toombs

On Fri, Aug 16, 2013 at 5:54 AM, Giraldo, Sandra (Barry Student) wrote:

Good morning Dr. Toombs,

I am a Nurse Practitioner student in the process of completing a Doctorate in Nursing Practice, and I am doing a Capstone project on raising awareness on melanoma among Hispanic farmworkers in South Florida. As part of my project, I am preparing a pictorial and a brochure to educate Hispanic farmworkers about melanoma. I would like to request permission to incorporate your photographs depicting melanoma in Hispanics in the pictorial. Your images will be cited accordingly, giving you recognition for your work.

https://pod51034.outlook.com/owa/

APPENDIX Q

DR. SHASA HU'S CURRICULUM VITAE

Shasa Hu, M.D.

shu@med.miami.edu 4205 Anderson Rd, Miami, FL 33146 CITIZENSHIP: U.S.A.

EDUCATION

9/1994 – 6/1998	STANFORD UNIVERSITY Palo Alto, CA Bachelor of Science in Civil and Environmental Engineering
8/1999 - 5/2003	WASHINGTON UNIVERSITY SCHOOL OF MEDICINE (WUSM) St. Louis, MO Doctor of Medicine, awarded Alpha Omega Alpha POST DOCTORAL TRAINING
6/2003 - 6/2004	Intern MOUNT SINAI MEDICAL CENTER Department of Internal Medicine Miami Beach, FL
7/2004 - 6/2005	Wound Healing Research Fellow UNIVERSITY OF MIAMI/JACKSON MEMORIAL HOSPITAL Department of Dermatology and Cutaneous Surgery Miami, FL
7/2005 - 6/2007	Resident UNIVERSITY OF MIAMI/JACKSON MEMORIAL HOSPITAL Department of Dermatology and Cutaneous Surgery Miami, FL
7/2007 – 6/2008	Chief Resident UNIVERSITY OF MIAMI/JACKSON MEMORIAL HOSPITAL Department of Dermatology and Cutaneous Surgery Miami, FL ACADEMIC POSITIONS
7/2008 – Present	Assistant Professor UNIVERSITY OF MIAMI Department of Dermatology and Cutaneous Surgery, Sylvester Comprehensive Cancer Center Miami, FL HONORS AND AWARDS

6/1997	Research Fellowship Major Grant Winner		
3/2000	Stanford University Dean's Grant for Summer Overseas Research		
5/2000	WUSM		
4/2000	Dean's Award for Summer Research Fellowship		
	WUSM		
6/2002, 6/2001	Dean's Commendation for Outstanding Academic Performance		
12/2002	WUSM		
12/2002	Janet M. Glasgow Memorial Achievement Award American Medical Women's Association		
12/2002	Alpha Omega Alpha		
	WUSM		
8/2004	Review Article Incentive Award		
	American Society for Dermatologic Surgery		
2/2005	Everett C. Fox Award for Outstanding Clinical Research		
12/2006	63 rd Annual American Academy of Dermatology Meeting		
12/2006	American Academy of Dermatology (AAD) Travel Grant		
	To attend the 21 st World Congress of Dermatology at Buenos Aires, Argentina, 10/2007		
2/2007	Women's Dermatologic Society (WDS) 2007 Mentorship Award		
2/2007	Melanoma and dermoscopy, Mentor: Scott Menzies, MBBS, Sydney		
	Melanoma Diagnostic Center, Sydney, Australia		
4/2007	WDS 2007 International Retreat Scholarship		
2/2010	AAD Leadership Forum Participant		
7/2010 - Present	Dermatology Foundation Career Development Award in Health Care		
	Policy, 3 year funding		
3/2013 – Present	AAD Academic Dermatology Leadership Program Member		
	Selected to attend a year-long program on developing leadership skills		
GRANT SUPPORT			
2010 – Present	Dermatology Foundation Career Development Award in Health Care		
	Policy		
	RESEARCH EXPERIENCE		
4/1997 – 4/1998	Research Fellowship, Stanford University, Hunan & Beijing, China		
4/1997 - 4/1998	"How administration framework affects the implementation of		
	environmental impact assessment at the local level in China."		
	Advisor: Leonard Ortolano, Ph.D		
2/1999 - 7/1999	Research Assistant, Department of Pathology, WUSM		
	Studied polymerization and synthesis of surfactant protein D.		
	Advisor: Erica Crouch, M.D., Ph.D		
5/2000 - 9/2000	Summer Research Fellowship, Department of Neurology, WUSM		
	"Patient knowledge and sources of knowledge about stroke."		
	Advisor: Lisa Yanase, M.D.		
6/2000 - 8/2000	Internship, World Health Organization, Geneva, Switzerland		

	Analyzed the impact of the Internet on health care and medical education in developing countries.
	Advisor: Nick Drager, M.D.
7/2002 - 9/2002	Dermatology Research, Department of Dermatology, WUSM
	Studied post-operative wound healing in Mohs patients.
	Advisor: Jeffrey E. Petersen, M.D.
4/2003 - 7/2003	Dermatology Research, Department of Dermatology, University of Miami
	Evaluated the role of ultraviolet radiation in melanoma and non-Hodgkin's
	lymphoma in Hispanics.
	Advisor: Robert S. Kirsner, M.D., Ph.D.
6/2003 - 11/2003	Project Coordinator, American Telemedicine Association,
	Teledermatology Special Interest Group
	"Current Status of US Teledermatology Activities and Reimbursement
	Survey."
	Advisor: Anne E. Burdick, M.D., M.P.H.
7/2004 - 3/2005	Sub-Investigator, Department of Dermatology, University of Miami
	A Double-Blind, Randomized, Vehicle-Controlled, Sequential-Dose-
	Escalation Study Assessing the Safety, Clinical Pharmacology, Systemic
	Disposition, and Pharmacokinetics of MRE0094 Gel Versus Matching
	Vehicle Gel When Applied Topically to Subjects with Diabetic,
	Neuropathic, Foot Ulcers.
	Sponsor: King Pharmeceutical
7/2004 - 6/2005	Sub-Investigator & Study Coordinator, Department of Dermatology,
	University of Miami
	A Prospective, Randomized, Controlled, Blinded, Multi-center Pivotal
	Trial of AutoloGel TM Versus Control When Added to the Standard of Care
	in the Treatment of Non-healing Diabetic Foot Ulcers.
	Sponsor: Cytomedix
7/2004 - 6/2005	Sub-Investigator, Department of Dermatology, University of Miami
	A Randomized, Controlled, Multicenter Trial of Vacuum Assisted Closure
	Therapy in the Treatment and Blinded Evaluation of Venous Stasis Ulcers.
	Sponsor: Kinetics Concepts, Inc
7/2004 - 6/2005	Sub-Investigator, Department of Dermatology, University of Miami
	A Phase II Randomized, Double-blind, Placebo-controlled, Parallel Study
	of Single and Multiple Dose Regimens with Subcutaneous CNTO 1275
	(Human Monoclonal Antibody to IL-12) in Subjects with Moderate to
	Severe Psoriasis.
	Sponsor: Centocor
6/2006 - 7/2008	Principal Investigator, Department of Dermatology, University of Miami
	Trend Analysis of Melanoma Incidence and Stage at Diagnosis Among
	Hispanics, Blacks and Whites in Florida 1990-2004
	Advisor: Robert S. Kirsner, M.D., Ph.D.
4/2007 - 12/2008	Principal Investigator, Department of Dermatology University of Miami
	Assessment of Fitzpatrick skin type, sun protection practice, and skin
	cancer awareness by race and ethnicity among medical students at
	University of Miami

	Advisor: Robert S. Kirsner, M.D., Ph.D.
4/2010 - 5/2012	Principal Investigator
	Clinical study to determine the safety and effectiveness of the SciBase III
	Device for detection of malignant melanonomas.
	Sponsor: SciBase AB
7/2010 - Present	Principal Investigator
	Disparities in the Incidence of Late Stage Melanoma: The Impact of Race,
	Ethnicity, and Poverty.
	Supported by the Dermatology Foundation
5/2011 - Present	Sub-Investigator
	A Phase III, Multinational, Multicenter, Randomized, Double-Blind,
	Parallel-Group, Sham-Controlled Study to Evaluate the Safety,
	Tolerability and Efficacy of CureXcell™ as an Adjunct to Good Wound
	Care Measures in Treating Lower Extremity Chronic Ulcers in Adults with
	Diabetes Mellitus
	Sponsor: MacroCure
	Principal Investigator: Robert S. Kirsner, MD, Ph.D.
2/2013 - Present	Principal Investigator
	How Does Race, Ethnicity, Knowledge and Behavior Affect Non-
	Melanoma Skin Cancer Outcome?
	Investigator initiated study
	PUBLICATIONS

Published Peer-reviewed Articles

Zhang P, McAlinden A, Li S, Schumacher T, Wang H, <u>Hu S</u>, Sandell L, and Crouch E. The amino-terminal heptad repeats of the coiled-coil neck domain of pulmonary surfactant protein D are necessary for the assembly of trimeric subunits and dodecamers. *J of Bio Chem.* 2001;276:19862-70

<u>Hu S</u>, Ma F, Collado F, Kirsner RS. Ultraviolet radiation and incidence of non-Hodgkin's lymphoma among Hispanics in the U.S. *Cancer Epidemiol Biomarkers Prev*. 2004;13(1):59-64

<u>Hu S</u>, Ma F, Collado-Mesa F, Kirsner RS. UV radiation, latitude, and melanoma in US Hispanics and blacks. *Arch Dermatol*. 2004;140(7):819-24.

<u>Hu S</u>, Parker DF, Thomas AG, Kirsner RS Advanced presentation of melanoma in African Americans: the Miami-Dade County experience. *J Am Acad Dermatol*. 2004;51(6):1031-2

<u>Hu S</u>, Federman DG, Ma F, Kirsner RS. Skin cancer and non-Hodgkin's lymphoma: examining the link. *Dermatol Surg.* 2005;31(1):76-82.

<u>Hu S</u>, Bakshandeh H, Kerdel FA, Rongioletti F, Romanelli P. Eccrine syringofibroadenoma of clear cell variant: an immunohistochemical study. *Am J Dermatopathol*. 2005;27(3):228-31 <u>Hu S</u>, Soza-Vento R, Parker DF, Kirsner RS. Comparison of Stage at Diagnosis for Melanoma Among Hispanics, Blacks and Whites in Miami-Dade County. *Arch Dermatol*. 2006 Jun;142(6):704-8

<u>Hu S</u>, Kirsner RS, Falanga V, Phillips T, Eaglstein WH. Evaluation of Apligraf persistence and basement membrane restoration in donor site wounds: a pilot study. *Wound Repair Regen*. 2006 Jul-Aug;14(4):427-33

Blasini W, <u>Hu S</u>, Gugic D, Vincek V. Papillary eccrine adenoma in association with cutaneous horn. *Am J Clin Dermatol*. 2007;8(3):179-82

Ma F, Collado-Mesa F, <u>Hu S</u>, Kirsner RS. Skin cancer awareness and sun-protection behaviors in white Hispanic and white non-Hispanic high school students in Miami, Florida, U.S. *Arch Dermatol* 2007;143(8):983-8

Burk C, <u>Hu S</u>, Lee C, Connelly EA. Netherton Syndrome and Trichorrhexis Invaginata: A Novel Diagnostic Approach. *Pediatr Dermatol*. 2008;25(2):287-8

Rouhani P, <u>Hu S</u>, Kirsner RS. Melanoma in Hispanics. *Cancer Control*. 2008;15(3):248-53

Viera M, Amini S, Huo R, <u>Hu S</u>, Oliviero M, Bassalo S, Rabinovitz H. A new look at fibroepithelioma of pinkus: features on confocal microscopy. *J Clin Aesthet Dermatol*. 2008 Jul;1(2):42-4.

<u>Hu S</u>, Parmet Y, Allen G, Parker D, Ma F, Rouhani P, Kirsner RS. Disparity in Melanoma: A Trend Analysis of Melanoma Incidence and Stage at Diagnosis Among Whites, Hispanics, and Blacks in Florida. *Arch Dermatol.* 2009 Dec;145(12):1369-74

Torchia D, Miteva M, <u>Hu S</u>, Cohen C, Romanelli P. Papuloerythroderma 2009: Two New Cases and Systematic Review of the Worldwide Literature 25 Years after Its Identification by Ofuji et al. *Dermatology*. 2010;220(4):311-20.

Patel SS, Nijhawan RI, Stechschulte S, Parmet Y, Rouhani P, Kirsner RS, <u>Hu S</u>. Skin cancer awareness, attitude, and sun protection behavior among medical students at the University of Miami Miller School of Medicine. *Arch Dermatol*. 2010 Jul;146(7):797-800

Yin N, Parker DF, <u>Hu S</u>, Kirsner RS. Geographic Distribution of Melanoma in Miami-Dade County, Florida. *Arch Dermatol*. 2011 May;147(5):617-8.

Chen AF, Chimento SM, <u>Hu S</u>, Sanchez M, Zaiac M, Tosti A. Nail damage from gel polish manicure.

J Cosmet Dermatol. 2012 Mar;11(1):27-9

Weiss J, Kirsner RS, <u>Hu S.</u> Trends in primary skin cancer prevention among US Hispanics: a systematic review. *J Drugs Dermatol*. 2012 May;11(5):580-6.

Sanchez M, <u>Hu S</u>, Miteva M, Tosti A. Onychomatricomas have channel like structures on reflectance confocal microscropy. *Submitted*

Published Comments/Editorials

Kirsner RS, <u>Hu S</u>. Comment on: Hand ezcema prognosis. *J Invest Dermatol*. 2007;127(9):2072

Blyumin ML, <u>Hu S</u>, Kirsner RS. Comment on: Filaggrin Gene Mutations Mediate Severity of Alopecia Areata When Associated with Atopic Dermatitis. *J Invest Dermatol*. 2007;127(11):2494

Blyumin ML, Hu S, Kirsner RS. Insight into photocarcinogenesis. 2007;127(12):2700.

Rajpara V, <u>Hu S</u>, Kirsner RS. Comment on: The role of Gadd45a in the survival of melanocytes and melanoma cells. *J Invest Dermatol*. 2008;128(1):4

Romagosa Y, <u>Hu S</u>, Kirsner RS. Chronic diseases and non-melanoma skin cancer: is there an association? *J Invest Dermatol*. 2008;128(4):768

Romagosa Y, <u>Hu S</u>, Kirsner RS. Wound healing without hair. *J Invest Dermatol*. 2008;128(5):1058

Martin LK, <u>Hu S</u>, Kirsner RS. Catestatin: a new member of the cutaneous defense system. *J Invest Dermatol*. 2008;128(6):1350.

Zell D, <u>Hu S</u>, Kirsner RS. Catestatin: a new member of the cutaneous defense system. A paradigm shift in the mechanisms of graft rejection. *J Invest Dermatol*. 2008;128(8):1874

Poocheron V, <u>Hu S</u>, Kirsner RS. Allogeneic cell therapy for epidermolysis bullosa. J Invest Dermatol. 2008;128(9):2134

Fernandez A, <u>Hu S</u>, Kirsner RS. Sirolimus: a potential chemopreventive agent. *J Invest Dermatol*. 2008;128(10):2352

<u>Hu S</u>, Kirsner RS. Suboptimal skin cancer screening and delayed melanoma diagnosis in Hispanics: comment on "Cutaneous melanoma and other skin cancer screening among Hispanics in the United States". *Arch Dermatol.* 2011 Jun;147(6):745-6.

BOOK CHAPTERS

Romanelli P, <u>Hu S</u>. Calciphylaxis. In: Falabella A, Kirsner RS, eds. Wound healing. Marcel Dekker, NY: 2006

Rouhani P, <u>Hu S</u>, Kirsner RS. Non-Melanoma Skin Cancers in Non-White Populations. In: Nouri K ed. Skin cancer. McGraw-Hill Professional, 2007

Rouhani P, <u>Hu S</u>, Kirsner RS. Melanoma in Non-White Populations. In: Nouri K ed. Skin cancer. McGraw-Hill Professional, 2007

Burdick AE, <u>Hu S</u>. Chapter 3: Utilization Survey. In: Pak H, ed. Teledermatology: A User's Guide. Brooke Army Medical Center, San Antonio, Texas. March 2008

POSTERS & PRESENTATIONS

Bouman P, <u>Hu S</u>, Romanelli P. Ofuji's papuloerythroderma, a case report. Gross & Microscopic Dermatology Symposium. Oral Presentation. 2004 American Academy of Dermatology Annual Meeting, Washington D.C.

Burdick AE, <u>Hu S</u>. Current Status of US Teledermatology Activities and Reimbursement Survey. Oral Presentation. 2004 Ninth Annual Meeting & Exposition of the American Telemedicine Association, Tampa, FL

<u>Hu S</u>, Ma F, Collado-Mesa F, Kirsner RS. UV radiation, latitude, and melanoma in US Hispanics and blacks. Oral Presentation. Resident & Fellow Symposium, 63rd Annual American Academy of Dermatology Meeting, New Orleans, LA. 2005

<u>Hu S</u>, Nousari CH, Elgart G. Paraneoplastic pemphigus in a patient with chronic lymphocytic leukemia. Oral Presentation. Gross & Microscopic Dermatology Symposium. 65th Annual Meeting of the American Academy of Dermatology, Washington, DC, February 2007

Jacob SE, Schwartzfarb EM, Burk CJ, Barland C, Zaiac M, Blyumin M, Ricotti C, Lanuti E, <u>Hu S</u>, Roberts B, Elgart GW, Connelly EA, Blasini W, & Romanelli P. Clinicodermatopathologic Highlights from University of Miami/Miller School of Medicine - Jackson Memorial Hospital. Poster. 65th Annual Meeting of the American Academy of Dermatology, Washington, DC, February 2007

<u>Hu S</u>, Parker D, Allen G, Ma F, Kirsner RS. Disparity in Melanoma. Oral Presentation. Department of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine, 50th Anniversary Meeting, Miami, Florida, March 2007

<u>Hu S</u>, Ma F, Parker D, Allen G, Kirsner RS. Trend analysis of melanoma stage at diagnosis among whites, Hispanics, and blacks in Florida, 1995-2004. Poster. 68th Society of Investigative Dermatology Annual Meeting, Los Angeles, California, 2007

<u>Hu S</u>, Ma F, Parker D, Allen G, Kirsner RS. Trend analysis of melanoma stage at diagnosis among whites, Hispanics, and blacks in Florida, 1990-2004. Poster. 21st World Congress of Dermatology, Buenos Aires, Argentina, October, 2007

Nijhawan RJ, <u>Hu S</u>, Jacob SE, Kirsner RS. Skin cancer screenings at University of Miami Miller School of Medicine health fairs for the underserved populations of the Florida Keys from 2003-2006. Poster. American Academy of Dermatology 66th Annual Meeting, San Antonio, TX, February 2008

EDITOR/REVIEWER RESPONSIBILITIES

1/2008 - Present	Editor, Journal of Aesthetic and Clinical Dermatology	
6/2007 - Present	Editor, Medical Editorial Staff. Journal of Drugs in Dermatology	
4/2007 - Present	Reviewer. Archives of Dermatology	
2007 – Present	Reviewer. Dermatologic Surgery	
2010 - Present	Reviewer. Journal of Investigative Dermatology	
MENTORSHIP		

Stacy Chimento, BS, medical student at University of Miami - Miller School of Medicine. Mentored on research project on osteopontin in calcific uremic arteriopathy. 2006-2007

Rajiv Nijhawan, BS, medical student at University of Miami - Miller School of Medicine. Mentored on research project on skin cancer screenings at the Florida Keys Health Fair. 2007-2008

Shalu Patel, BS, medical student at University of Miami - Miller School of Medicine. Supervised research project on Fitzpatrick skin type and ethnicity. 2007-2009

Margaret Sanchez, BS, melanoma research fellow at University of Miami. Supervises research in confocal microscopy and melanoma diagnosis. 2009 – Present

Kyle Amber, BS, medical student at University of Miami - Miller School of Medicine. Mentor and Supervisor on health disparity research. 2013 – Present

Martha Viera, MD, dermatology resident at University of Miami - Miller School of Medicine. Mentor on health disparity research. 2013 – Present

Sandra Giraldo, RN, Doctor of Nursing candidate, Barry University. Mentor on skin cancer and melanoma research. 4/2013 - Present

INVITED LECTURES

March 2008: Hair and Nail Disorders. University of Miami Miller School of Medicine Dermatology curriculum for second year medical school students.

March 2009: Hair and Nail Disorders. University of Miami Miller School of Medicine Dermatology curriculum for second year medical school students.

May 21, 2009: In Vivo Reflectance Confocal Microscopy: evaluation and management of melanocytic lesions, PHARCOS Meeting, Department of Dermatology at U of Miami

November 6, 2009: Introduction to In Vivo Reflectance Confocal Microscopy. Pan-American Virtual Conference in Dermatology (PVCD) series 2009. University of Miami Miller School of Medicine.

February 13, 2010: Dermatology Case Morbidity and Mortality. Session 9B. Pri-Med Annual Conference, Ft. Lauderdale, FL

April 16, 2010: Hair and Nail Disorders. University of Miami Miller School of Medicine Dermatology curriculum for second year medical school students.

July 9, 2010: Introduction to In Vivo Reflectance Confocal Microscopy. Pan-American Virtual Conference in Dermatology (PVCD) series 2010. University of Miami Miller School of Medicine.

November 7, 2010: Reflectance Confocal Microscopy in Challenging Melanocytic Lesions. Florida Society of Dermatologic Surgeons 2010 Annual Meeting. Ritz Carlton Orlando Grande Lakes, FL. November 15, 2010: Melanoma Disparities. Miami Dermatologic Society Meeting, Miami, FL.

February 18, 2011: Cutaneous Manifestations of Systemic Diseases. American College of Physicians Recertification Course for Internal Medicine. Orlando, FL.

April 21, 2011: Hair and Nail Disorders. University of Miami Miller School of Medicine Dermatology curriculum for second year medical school students.

August 19, 2011: X-ray in Dermatology. Pan-American Virtual Conference in Dermatology (PVCD) series 2011. University of Miami Miller School of Medicine.

February 18, 20103: Hair and Nail Disorders. University of Miami Miller School of Medicine Dermatology curriculum for second year medical school students.

March 5, 2013: Focus session director, presenter,: Melanoma Equality of Care: Obstacles and Solutions. 2013 American Academy of Dermatology Annual Meeting, Miami, FL

June 15, 2013: The impact of race, ethnicity and poverty on late stage melanoma. Dermatology Department Grand Round. Miami, FL.

ACADEMIC MEETINGS

Poster Session Moderator: Psoriasis and Autoimmune Diseases. March 6, 2009 American Academy of Dermatology Annual Meeting, San Francisco, CA.

Poster Session Moderator: Psoriasis and Hair, March 6, 2010. 2010 American Academy of Dermatology Annual Meeting, Miami, FL

Poster Session Moderator: Melanoma, SCC, Infection, March 7, 2010. 2010 American Academy of Dermatology Annual Meeting, Miami, FL

Poster Session Moderator: Cancers, February 7, 2011. 2010 American Academy of Dermatology Annual Meeting, New Orleans, LA.

Focus session director, presenter, March 5, 2013: Melanoma Equality of Care: Obstacles and Solutions. 2013 American Academy of Dermatology Annual Meeting, Miami, FL

COMMUNITY/PUBLIC HEALTH SERVICES

1999 – 2000	Volunteer, Saturday Neighborhood Health Clinic, Hypertension & Stroke
	Risk Screening, and Students Teaching AIDS to Students
1999 - 2001	Coordinator, Forum for International Health & Tropical Medicine, WUSM
1999 - 2001	Coordinator, Domestic Violence Awareness, St. Louis
2004 - 2008	Annual Florida Keys Health Fair, Florida
	Little Haiti Health Fair, Miami, Florida
2004 - Present	Camilus House Dermatology Clinic, Miami, Florida
2009	Annual Pap Corps Walkathon Skin Cancer Screening, Boca Raton, FL

April 2010	Skin Cancer Foundation Road to Healthy Skin, Skin Cancer Screening, Kendall, Miami, FL (April 1, 2010)	
April 2013	Melanoma 5K Run, skin cancer screener, Miami, FL (April, 13, 2013) MEMBERSHIPS	
1999 – 2000	Legislative Coordinator, WUSM American Medical Association (AMA) student chapter	
1999 – 2000	Legislative Coordinator, WUSM American Medical Women's Association (AMWA) student chapter	
2000	Contributing writer, Auscultations, a student-run magazine at WUSM	
2000 - 2001	Secretary, WUSM AMA student chapter	
2000 - 2001	President, WUSM AMWA student chapter	
2000 - 2001	Coordinator, Erlanger-Graham Academic Society	
2004 – Present	Miami Dermatologic Society	
2006 – Present	Member, Women's Dermatologic Society (WDS)	
	Member & Fellow, American Academy of Dermatology (AAD)	
2008 – Present	Florida Medical Association	
2010 – Present	Fellow, Skin Cancer Foundation	
COMMITTEES / LEADERSHIPS		
2008 - Present	DOCS (Department of Community Services) Faculty Advisory Committee	
2009 - 2011	Academic Dermatology Committee, WDS	
2011 - Present	AAD Poster Exhibit Task Force, Member	

2012 – Present Annual Meeting Planning Committee, WDS

APPENDIX R

EUGENE MAJKA'S CURRICULUM VITAE

CURRICULUM VITAE Eugene "Gene" Andrew Majka 3321 N.E. 17th Way Oakland Park, Florida 33334-5315 954-630-3208 Cell-954-295-5608 Fax-954-630-3356 gmajka@bellsouth.net

EDUCATION	DEGREE	DATE	MAJOR
Barry University		2005-2007	ABD
Barry University	Post-master's Education Certificate	2005	Nursing
DePaul University	MS Nurse	2000	Nursing, Adult
Chicago,	Nuise		Practitioner
DePaul University Chicago, IL	BS	1998	Nursing
Ravenswood Hospital School of Nursing, Chicago, IL	Diploma	1993	Nursing
PROFESSIONAL LICENSURE Florida – ARNP initially issued 2001, status current			
Illinois- RN, initially issued 1994, status inactive			

PROFESSIONAL EXPERIENCEPositionOrganizationDatesAdjunct ProfessorBarry University, Miami Shores, FLAugust 13-currrentCurrrentCurrentCurrent

	Florida International University, Miami FL	August 13 -	
current			
Assistant Professor	Barry University, Miami Shores, FL	July 07 -July	
13(retired)			
Instructor - FTE	Barry University, Miami Shores, FL	Aug 03- July	
07			
Adjunct-Clinical Instructor	Barry University, Miami Shores, FL	Sept 02-Aug	
03			
PT- Staff RN	Vitas Hospice, Pembroke Pines, FL	Mar 02-May	
03			
Health Care Case Manager	Lakeview Shelter, Chicago, IL	Dec 98-Sept	
01			
Staff RN	Lutheran General Hosp. Park Ridge, IL	Sept 95-Dec	
99			
Staff RN	St. Alexis Hosp. Hoffman Estates, IL	May 94-Sept	
95			
Independent Contractor	Various Food Service Caterers	1988 – 1992	
PROFESSIONAL EXPERIENCE			
Medical Services Advisor	Zenith Electronic Corporation,		
	Glenview, IL	Mar 82-Dec	
87			
Sr. Utilization Review Coord	d. Augustana Hospital, Chicago, IL	Mar 75-Mar	
82			
Coordinator, Supervisor	Chicago Foundation for		
	Medical Care, Chicago	Mar 72-Mar	
82			
Lab Technician	IL Institute of Tech. Research Inst., Chicago	Oct 69-Aug 71	
HONORS AND AWARDS			
YearName1994Composition & R		ization rsity School of	

Name	Organization
Composition & Rhetoric Awards	DePaul University School of
	Liberal Arts & Sciences

1997	Celebration of Excellence in Essay Writing	Phi Kappa Phi Honor Society
1998	Dean's Award for Scholastic Excellence	DePaul University
1998/1999	Albert Schweitzer Fellowship	Chicago Chapter
2004	Apple Award	Barry University Commuters
	Affairs	
	Community Action Award	Florida Nurses Assoc.
District 5		
	Outstanding Service Award	Barry University School of
Nursing		
2005	Melba Cather Award for Excellence	
	in Education	Lambda Chi Chapter, Sigma
Theta		
		Tau
2006	Finalist Health Care Hero Award	Greater Miami Chamber of
		Commerce
	Apple Award	Barry University Community
	Affairs	
	Beyond Barriers Recognition	Redlands Christian Migrant
Assc.		
2006	Apple Award	Barry University Community
Affairs		
	School of Nursing Caritas Award	
	for Outstanding Service	Barry University School of
Nursing		
	Dean's Award for Exquisitely Implementing	
	the Community-Focused Curriculum	Barry University School of
Nursing		
HONORS Year	S AND AWARDS Name	Organization
1 61		Organization
2007	Apple Award	Barry University Community
Affairs	Five year Service Award	Barry University

2008	Community Health Faculty Award	Florida Nursing Students
		Association
	WECARE 2008 Caring Award	WECARE of South Florida
2009	Apple Award	Barry University Community
Affair	s	
	The Great 100 Nurses Award-Role Model	Florida Nurses Association
2010	Appreciation Award Miami-	Consortium for a Healthier
	1 viidini	Dade
	Member of the Year Award District 5	Florida Nurses Association
	Community Provider Training Award Education	Miami-Dade Area Health
		Center
	MCN Unsung-Hero Award	Migrant Clinicians Network
2011	FNA Community Action Award	Florida Nurses Association (State recognition)
2012	Community Engagement Educator of the Year Award	Florida Campus Compact
	Community/Professional Service Award	Barry University, Division of Nursing
	The above award changed to the "Gene Majka Community/Professional Service Award	Barry University, Division of Nursing
2013	Outstanding Educator Award	WeCare of South Dade
Repre	Exceptional Citizen Award sentatives	Florida House of
Nursir	Victoria Schoolcraft Award for Excellence In Leadership	Barry University, Div. of
chapte	Lambda Chi Excellence Award for Lifetime Achievement er	Barry University STTI

	LY ACTIVITIES		
Other Gran Date	ts Role	Funding Agency	
Amo	unt		
11/28/98	Principle Investigator	VNA Foundation Grant	
\$67,0	036		
3/18/99	Principle Investigator	Baxter Allegiance	
\$15,0	000		
4/18/99	Principle Investigator	DePaul Nursing Alumni Assoc.	\$1,500
4/30/99	Principle Investigator	Northern Trust Co.	\$3,500
7/15/99	Principle Investigator	Health & Medicine Policy Research	\$1,000
2/29/00	Principle Investigator	Baxter Allegiance	
\$15,0	000		
4/15/00	Principle Investigator	Walgreen's	\$500
6/27/00	Principle Investigator	Patrick & Anna Cudahy	\$3,800
6/30/00	Principle Investigator	Foundation for Health Enhancement	\$5,000
7/25/00	Principle Investigator	Blowitz Ridgeway	
\$10,0	000		
8/18/00	Principle Investigator	VNA Foundation Grant	
\$46,500			
9/25/00	Principle Investigator	Health & Medicine Policy Research	\$1,000
	LY ACTIVITIES		
<u>Other Gran</u> Date	ts Role	Funding Agency	
Amo			
12/19/00	Principle Investigator	Grant Hospital Healthcare Found.	
\$15,000			
3/19/01	Principle Investigator	Walgreen's	\$500
4/26/01	Principle Investigator	Volunteers in Healthcare	\$2,000
5/11/01	Principle Investigator	Northern Trust Company	\$3,500
7/13/01	Principle Investigator	Volunteers in Healthcare	\$4,848
8/10/01	Principle Investigator	Blowitz Ridgeway	
\$10,0	000		

Total

\$205,684

Other Grants

The previous grants were given to create, implement and support a primary care center (Sick Bay) in an emergency homeless shelter in Chicago. Funds were secured for over the counter medications, medical supplies, prescription medication, eyeglasses, transportation, medical equipment, office equipment, nurse salary and benefits, and office supplies. The "sick bay" continues today at the shelter.

Funds were used to purchase peak flow meters for migrant children with asthma. Education sessions were held for the Redland Christian Migrant Association Child Day Care Center staff and the children's parents. Funds were also use to purchase laundry soap for "Project Wash" to teach migrant families how to separate their work clothing from their leisure clothing for washing to prevent spread of pesticides.

12/1/04	American Lung Association	\$2,000
12/1/01	i meneun Bung i issociation	$\psi =,000$

Funds will be used to purchase medical supplies for blood pressure and diabetes screening for the poor and underserved populations in Homestead and Florida City area with a primary focus on migrant farm workers.

12/1/06	Area Health Education Center	\$1,000
11/1/07	Area Health Education Center	\$1,000
12/1/08	Area Health Education Center	\$1,000
12/1/09	Area Health Education Center	\$1,000
12/1/10	Area Health Education Center	\$1,000

Secured grant to implement tobacco cessation programs into the curriculum with colleagues.

12/1/08	Area Health Education Center	\$10,000
10/1/09	Area Health Education Center	\$7,000
10-1-10	Area Health Education Center	\$7,000
10-1-11	Area Health Education Center	\$7,000

Unfunded Research

2004 - 2009	Clinical Data retrieval in	Medically underserved communities
		South Dade, Florida.
2009 investigating	Team participant	Qualitative research project
in to sugaring		HESI progression and the timely licensure of graduates.
2011 Willingness to	Team Participant	Quantitative research on the
w mingless to		Service Project

Publications

Neese, Ruth, Majka, Gene, & Tennant, Geneiva (2007). The ultimate challenge: Three situations call American Nurses to think and act globally. In M. H. Oermann & K.T. Heinrich (Eds.), Annual Review of Nursing Education, Volume 5, 2007 (pp. 153-171). New York: Springer Publishing Company.

Majka, E.A. (2001). A case management, education, and prevention program at a small emergency shelter for homeless men: One nurse's experience. Journal of Emergency Nursing, 27, 255-259.

	UCTIONAL ACTIVITIES ag Responsibilities		
Course	Course Title	Content Focus	#
Semeste	ers		
NUR		Theory/Clinical	
481	Community Health Nursing	Theory and Clinical	15
380	Mental Health Nursing	Theory	13
		Clinical	20
490	Public Health Nursing	Theory and Clinical	7
220	Individuals, Families &		
	Communities	Theory	3
		Clinical	5

Graduate Program, Nurse Practitioner Clinical Evaluator	15
Service Learning lecture to ACE orientation students	14
Smoking Cessation lecture to Barry nursing students	12

Development of New Courses

Spring 2004	NUR 490 Public Health Nursing	
Summer 2003	NUR 481(Baptist Hospital Cohort) Clinical sites in	
	Homestead and Florida City	
Fall 2011	NUR NEW 481 Community/Public Health Nursing for new	
	curriculum	

UNIVERSITY GOVERNANCE

Barry University

2003 to present	Library Advisory Committee
2004 to 2009	Bookstore Advisory Committee
2005 to 2006	Strategic Planning Student Experience Committee
2007/2008	Task Force Center for Community Initiatives
2007/2008	Senate Communication and Technology Committee
2010/2013	Retention and Dismissal Committee
2011/2013	WIN Committee

School of Nursing, Barry University

2003/2004	Academic Affairs Committee
2004 - 2013	Faculty Affairs Committee
2008 -2013	Community Coordinator
2010	Curriculum Committee

MEMBERSHIPS IN PROFESIONAL ORGANIZATIONS (year joined) 1997

Health Care for the Homeless Clinician Network

Sigma Theta Tau	1997
Albert Schweitzer Fellow, Chicago Chapter	1998
American Nurses Association	1999
Florida Nurses Association	2001
Migrant Clinicians Network	2010

MEMBERSHIPS IN PROFESIONAL ORGANIZATIONS (year joined)

Florida Public Health Nursing Association	2005
Southern Nursing Research Society	2005
Association of Community Health Nursing Educators	2007

MEMBERSHIPS IN COMMUITY ORGANIZATION Theater Historical Society	S (year joined) 1995
American Association of Retired Persons	1997
The Honor Society of Phi Kappa Phi	1998
American Red Cross, HIV/AIDS Instructor	1999
Medi-Van, The Elderly Interest Fund, Inc.	2001
We Care of South Dade	2003
Citizen's Health Care Working Group	2006
Mobile Van Coalition South Dade Homeless Housing Coalition	2007 2007
Consortium for a Healthier Miami/Dade Health Promotion and Disease Prevention Committee Community Health Guardian Award Committee Community Health Outreach Committee	2008 2009 2009
South Florida Regional Homeless Awareness Council	2010
The Miami-Dade Homeless Provider's Forum	2010

PROFESSIONAL SERVICE Service to Professional Societies

American Assembly of Men in Nursing Board of Directors, 2001 Lambda Chi Chapter of Sigma Theta Tau International, Treasurer, 2003 Florida Nurses Association, Convention Delegate, 2003, 2005, 2007 Florida Nurses Association District 5, Nominating Committee, 2004 Lambda Chi Chapter of STTI, Chair Finance Committee, 2005 Florida Nurses Association District 5, Secretary, 2006-2007, Re-elected 2008-2010 Florida Nurses Association, Elected Nominating Committee 2008-2010 Florida Nurses Association, Transition Team 2008-2010 Florida Nurses Association, South Region 6 Leadership Council 2010-2013

Service to the Community

Lakeview Homeless Shelter, Volunteer Nurse, 1996-1997 Howard Brown Health Center, Volunteer Nurse, 1998-2001 Night Ministry Bus, Volunteer Nurse, 1997-2001 American Red Cross, HIV/AIDS Instructor, 2001 to 2010 Medi-Van, Volunteer Nurse, 2001 - 2007

Service to the Community

Medical Reserve Corps, 2007 to present

HOPE in Miami Beach, 2010 to present

PRESENTATIONS

Poster Presentation: Co-presenter with D. Carr, "Nursing students reaching out through community partnerships to help underserved populations", April 6-8, 2005, Cocoa Beach, FL sponsored by Golf-South Summit on Service Learning and Civic Engagement through Higher Education.

Poster Presentation: Co-presenter with D. Carr, "Nursing Students Reaching Out to the Underserved Population in Miami-Dade County", May 20, 2004, Fort Lauderdale, Florida, the Primary Care for the Underserved Conference, sponsored by Northeastern University and Barry University Schools of Nursing.

Podium Presentation: "A Community-Based Model of Care for South Florida's Migrant Population", developed in conjunction with Dr. Pegge Bell and Dr. Linda Perkel, October 16, 2004, Nashville, TN. The National Nursing Centers Consortium sponsored by Vanderbilt University School of Nursing and the U.S. Department of Health & Human Services.

Podium Presentation: "2000 Homeless Men and One Nurse-- An Experience of a Life Time, Part I: Creation and Implementation", May 22, 2004, Fort Lauderdale, Florida, the Primary Care for the Underserved Conference, sponsored by Northeastern University and Barry University Schools of Nursing.

Podium Presentation: "2000 Homeless Men and One Nurse-- An Experience of a Life Time, Part II: Data and Evaluation", May 22, 2004, Fort Lauderdale, Florida, the Primary Care for the Underserved Conference, sponsored by Northeastern University and Barry University Schools of Nursing.

Podium Presentation: "A Concept Analysis of Spirituality" adapted from "Spirituality in Nursing and Health-Related Literature," April, 2008, Davie, Florida, Lambda Chi Chapter of Sigma Theta Tau International, sponsored by Barry University School of Nursing.

PRESENTATIONS

Poster Presentation: "The Migrant Farm Workers: History and Health Care." April 8, 2009, Davie, Florida, Lambda Chi Chapter of Sigma Theta Tau International, sponsored by Barry University, Division of Nursing.

Poster Presentation: "Native American and Alcoholism." March 31, 2010, Davie, Florida, Lambda Chi Chapter of Sigma Theta Tau International, sponsored by Barry University, Division of Nursing.

Panel Discussion: Innovators in Leadership, February 17, 2012, Davie, FL, Lambda Chi Chapter of Sigma Theta Tau International, sponsored by Barry University, Division of Nursing.

APPENDIX S

EVELINDA PEREZ'S CURRICULUM VITAE

Evelinda Perez

820 E. Mowry Drive Apt. #1001 Homestead Florida, 33030 *Cell:(786) 210-8297 * E-mail:evelinda02@comcast.net

OBJECTIVE

Provide leadership and responsibility for the operation (management and administration) of a RCMA Child Development Center. Provide direct supervision of degreed and non-degreed staff. Create and maintain a trusting relationship with children, families, staff, and the community served.

EXPERIENCE

Center Coordinator

October 2007-Present RCMA Fernando Pro Jr. CDC (MHSP), Homestead, Florida

- Insure recruitment, screenings, and selection policies and procedures established by RCMA are followed.
- Insure nutritional meals are provided to children according to USDA guidelines.
- Assure the center provides a developmentally appropriate and healthy Early Childhood Program.
- Maintain safety standards and complete necessary reports in accordance with RCMA policy, state and federal regulations.
- Insure that: Licensing Standards are met; facilities are maintained; and Human Resources and Fiscal administration is accomplished accurately and timely.

Early Childhood Specialist Assistant

Sept. 2005-Sept.2007 RCMA South Dade CDC, Homestead, Florida

- To assist as a person in-charge and open and close the center.
- Assist economically disadvantaged families in a community setting.
- Support ECS with screenings, assessments staff trainings and supervision of classrooms.
- Inputting data, pulling, reading and interpreting reports.

Teacher Level II (Pre-Elementary)

August 1998- September 2005 RCMA Redlands CDC, Homestead, Florida

- Creates and maintain a warm, secure, affectionate, social-emotional climate for young children.
- Plan and implement a classroom and outside environment using the High Scope Curriculum.
- Establishes and maintain a safe and healthy classroom and outside environment.
- Develop partnerships with families.
- Manages classroom.

Part-Time Caregiver

June 1997-August 1998 RCMA Redlands CDC, Homestead, Florida

- Support a classroom and outside environment that supports the physical, social, and cognitive growth of preschools.
- Follow rules and procedures that establish and maintain a safe and healthy classroom and outside environment.
- Commit to professionalism and RCMA.

EDUCATION

South Dade Senior High School, Homestead, Florida

High School Diploma

Miami Dade College, Homestead, Florida

Associates in Art Degree – Early Childhood/Elementary

Miami Dade College, Homestead, Florida

- Bachelor of Applied Science Degree (Supervision and Management)
- August 2011 Present

CERTIFICATIONS

August 2010 Renewal Certification in Child Development Association (CDA National) Pre-School (5 years)

May 2013 Renewal Certification in Directors Credential Advanced Level (5 years)

June 2009 Renewal Certification in Notary Public (5 years)

September 2010, The Florida Family Development Leadership Credential

APPENDIX T

RCMA'S COMPREHENSIVE REPORT



July 24, 2013

To Whom It May Concern:

I had the pleasure of meeting Sandra Giraldo, a student from Barry University earlier this year, and I have assisted her in making the necessary arrangements for her to conduct her study with the farmworkers at our facility. Ms. Giraldo has approached me recently, and she requested that I evaluate the pictorial and the brochure she has prepared in order to educate the farmworkers about skin cancer.

I have shown the pictorial and the brochure to multiple farmworkers who are the parents of children we care for at RCMA, and the following is a comprehensive review:

- The farmworkers and I found that the brochure and pictorial were overall easy to read, informative and pleasing to the eye.
- I have found the pictorial very useful not only to educate farmworkers but all Hispanics about the presentations of skin cancer on their type of skin.

- Although the farmworkers and I agreed that the photograph located in the front the brochure captured our attention, we all agreed that if this was a pamphlet made to provide education for farmworkers regarding skin cancer and proper sun protection, <u>all</u> the farmworkers in the picture should be wearing protective clothing, which they are not.
- The farmworkers thought that wearing protective clothing was enough to avoid the harmful rays of the sun. They did not know that the sun could penetrate through their clothing, so it may be helpful to stress this point in the brochure. There also appears to be some misconceptions regarding the use of sunblock including comments made by a few farmworkers who said that they thought that sunblock could actually cause cancer.
- I found that the photographs at the bottom of the second panel inside the brochure of normal and cancerous moles extremely helpful in showing what to look for in melanoma. The farmworkers really liked these photographs, and they felt it was a great guide as to what to look for in a mole.
- The farmworkers felt that the back panel with the heading "Protect Yourself from the Sun" was incomplete. They suggested that all of the gear necessary for protection against the sun and pesticides be included. The farmworkers stated that this gear included a wide brim hat, long sleeve shirt, long pants, boots, gloves, sunglasses, and a handkerchief to protect their faces.
- A couple of farmworkers mentioned that some agricultural sites provide tents so that they could seek shade from the sun but that not all farmworkers used them. While other farmworkers complained that not all agricultural sites provide appropriate shelter and water.
- Many farmworkers were very appreciative of seeing a brochure made specifically for them and geared to teach them about such an important topic.
- Many farmworkers appeared very receptive to the information provided and asked if there was going to be a presentation on this topic.
- One of the farmworkers came to me a couple of days after seeing the brochure, and was concerned about a mole she noticed was a little different from the others, and she was going to seek medical attention soon.

It is my wish that this comprehensive review of the brochure will help Ms. Giraldo successfully complete her project, as we are looking forward to having her come back to our facility once she graduates to give a couple of lectures to our farmworkers regarding this topic. Ms. Giraldo also requested that I provide a copy of my resume, which I am enclosing with this letter. If you have any questions, please do not hesitate to contact me.

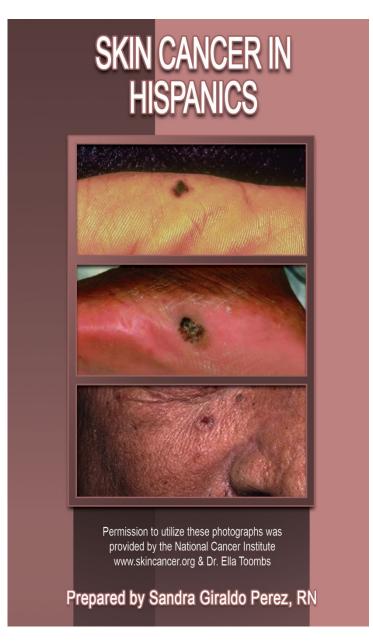
Sincerely,

sier

Evelinda Perez Center Coordinator Fernando Pro Jr. CDC

APPENDIX U

PICTORIAL DEPICTING SKIN CANCER IN HISPANICS



APPENDIX V

TAILORED EDUCATIONAL BROCHURE FOR FARMWORKERS

(OUTSIDE PANELS)



APPENDIX W

TAILORED EDUCATIONAL BROCHURE FOR FARMWORKERS

(INSIDE PANELS)

What is Skin Cancer?

Melanoma is a cancer of the skin. This is the most dangerous type of skin cancer. Spending too much time in the sun causes skin cancer. Both the sun and chemicals like pesticides increase your chances of getting this type of skin cancer. If this type of cancer is not treated in time, it can spread to the lungs, liver and other organs of the body.

Should you worry about getting Skin Cancer?

Since you work outdoors, you need to protect youself from the bad rays of the sun. This type of skin cancer is also caused by everyday sun damage.

Can Hispanic farmworkers get Skin Cancer?

Even though skin cancer has been more common in white people in the past, new studies show that Hispanics are also at risk of this type of skin cancer.

Can Skin Cancer be Avoided and Cured?

Since you work outside in the sun, you need to protect your skin from the harmful rays of the sun in order to avoid skin cancer. Skin cancer can be cured if it is caught early.

What does this type of Skin Cancer look like?

In the early stages, this type of skin cancer looks like a normal mole or birthmark. These rules can help you find skin cancer:

- One half of the mole does not match the other half.
- The borders of the mole are not smooth and even.
- The color of the mole changes from tan, brown and black. The mole can also look blue, white and red.
- The size of the mole is more than the size of a pencil eraser.
- Watch out for moles that change, itch, or bleed

If a mole or birthmark on your skin has any of these traits, talk to your doctor at the clinic right away.

Early Detection Saves Lives - Know your Risks!

You run a higher risk of getting skin cancer if these apply to you:

- If you have light color skin that burns easily in the sun.
- If you or your family had skin cancer in the past.
- If you have had 2 or more bad sunburns as a child.
- If you have been exposed to the sun for many years.
- If you have moles or birthmarks.
- If you are exposed to pesticides at work.

Check your Skin!

Check your whole body including the palms of your hands, the soles of your feet, and the scalp every month. Have a family member help you check the back and areas of your body you cannot see. If you see any changes to a mole, see your skin doctor right away. Have doctor perform a head to toe skin exam each year.

Use Sunscreen

Since you work outdoors for long periods of time, you need the extra protection of a water-proof sunscreen with sun protection factor (SPF) of 30 or more. Be sure to put plenty of sunscreen at least 15 minutes before going out in the sun and reapply often, especially if you are sweating. Make sure you check the expiration date on the sunscreen bottle. It is important to know that no sunblock can fully protect you from the bad rays of the sun. But using both sunscreen and protective clothing lowers your exposure to the sun. *Sunscreen lotion application does not cause skin cancer.

Protect your Skin!

Cover yourself: The best thing you can do to protect yourself against skin cancer is to cut down your exposure to the sun.

- Wear clothes that protect your skin from the sun. You should use big hats, long sleeved shirts, pants,
- boots, gloves, and a face mask.

Remember, if light passes easily through the clothing, so do the bad rays of the sun. So you must use sunscreen under your clothing.

Seek shade whenever possible. Sun rays are the strongest between 10am and 4pm



Skin Cancer



*Note: If you have a mole that looks like skin cancer, do not cut the mole out yourself. Go to a clinic right away!

VITA

SANDRA GIRALDO

CAREER OBJECTIVE: To acquire a challenging position where I can utilize my education and work ethic experience to effectively care for patients in a safely and caring manner.

SUMMARY OF QUALIFICATIONS:

- Goal-oriented, hard worker with supporting background and education capabilities.
- Energetic-self-starter with highly effective problem solving skills.
- Demonstrate organizational effectiveness. Strong on follow-up.
- Proven interpersonal and negotiating skills.
- Excellent in dealing with management, staff and patients.
- Good listener and cooperative
- Responsible, trustworthy, and a versatile team player.

EDUCATION:

Barry University

Masters/Doctorate in Nursing Practice 2009-2013 Graduation date: December 2013

Barry University

Bachelor's in Nursing 2006-2008

Barry University

Bachelor's in Arts with Legal Studies Specialization 2002-2004

Miami Dade Community College

Associate in Arts 1998-2002

Florida International University

Paralegal Certificate 1996-1998

Katharine Gibbs School

Legal Secretary Program 1994-1995

AFFILIATIONS:

American Academy of Nurse Practitioners Member since October 2013 Nurse Practitioner Council of Miami-Dade Inc. Member since October 2010

Sigma Theta Tau International Honor Society of Nursing Delta Epsilon Iota Academic Honor Society National Association for Legal Assistants Certified 2004

NURSING EXPERIENCE: Dr. Hector Fabregas-Cherenek

Adult/Geriatric Nurse Practitioner Intern Pembroke Pines, Florida May 2013 - Present

Memorial Hospital Miramar

Registered Nurse Pembroke Pines, Florida May 2008 - May 2013

LEGAL EXPERIENCE: Herzfeld & Rubin, P.A.

Paralegal Miami, Florida November 2004 – August 2006

Zebersky & Associates, P.A.

Paralegal Plantation, Florida October 2002 – October 2004

Adorno & Yoss, P.A.

Paralegal Miami, Florida February 1998 – September 2001

Reisman & Abraham, Esquire

Paralegal Coral Gables, Florida December 1995 – January 1998

Hogan & Sumner, Esquire

Paralegal, Court Interpreter Warwick, Rhode Island June 1993 – December 1995

SKILLS:

Bilingual (Spanish/English) Computer proficient

REFERENCES:

Available upon request.