# Breast Cancer in Mexican American Women: Creating a Culturally and Linguistically Appropriate Tool for Patient Education

Item Type	text; Electronic Dissertation
Authors	Ibanez, Viridiana
Publisher	The University of Arizona.
Rights	Copyright © is held by the author. Digital access to this material is made possible by the University Libraries, University of Arizona. Further transmission, reproduction or presentation (such as public display or performance) of protected items is prohibited except with permission of the author.
Download date	22/05/2018 07:09:24
Link to Item	http://hdl.handle.net/10150/626666

# BREAST CANCER IN MEXICAN AMERICAN WOMEN: CREATING A CULTURALLY AND LINGUISTICALLY APPROPRIATE TOOL FOR PATIENT EDUCATION

by

Viridiana Anahi Ibañez Robledo

Copyright © Viridiana Anahi Ibañez Robledo 2017

A DNP Project Submitted to the Faculty of the COLLEGE OF NURSING

In Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF NURSING PRACTICE

In the Graduate College

THE UNIVERSITY OF ARIZONA

# THE UNIVERSITY OF ARIZONA GRADUATE COLLEGE

As members of the DNP Project Committee, we certify that we have read the DNP project prepared by Viridiana Anahi Ibañez Robledo entitled "Breast Cancer in Mexican American Women: Creating a Culturally and Linguistically Appropriate Tool for Patient Education" and recommend that it be accepted as fulfilling the DNP project requirement for the Degree of Doctor of Nursing Practice.

Doctor of Nursing Fractice.	
Can	Date: November 16, 2017
Audrey I. Russell-Kibble, DNP, RN, FNP-C, FAANP	
Jeny a Lole Terry A. Badger, PhD, RN, PMHCMS-BC, FAAN	Date: <u>November 16, 2017</u>
Joy N. Kiviar, PhD, MSN, FNP-BC	Date: <u>November 16, 2017</u>
NOT IN LEVEL THE PROPERTY OF THE PARTY OF TH	

Final approval and acceptance of this DNP project is contingent upon the candidate's submission of the final copies of the DNP project to the Graduate College.

I hereby certify that I have read this DNP project prepared under my direction and recommend that it be accepted as fulfilling the DNP project requirement.

Date: November 16, 2017
DNP Project Chair: Andrey I. Russell-Kibble, DNP, RN, FNP-C, FAANP

# STATEMENT BY AUTHOR

This DNP Project has been submitted in partial fulfillment of requirements for an advanced degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Brief quotations from this DNP Project are allowable without special permission, provided that accurate acknowledgment of source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the head of the major department or the Dean of the Graduate College when in his or her judgment the proposed use of the material is in the interests of scholarship. In all other instances, however, permission must be obtained from the author.

SIGNED: Viridiana Anahi Ibañez Robledo

# **ACKNOWLEDGMENTS**

First, I want to thank my family, friends, coworkers and classmates for their endless encouragement, trust, reassurance, understanding and love throughout this journey. I would also like to thank my advisor and committee chair, Dr. Audrey Russell-Kibble. Your endless guidance and encouragement have been invaluable and true motivation for the completion of this project and program. I would also like to extend my gratitude to Dr. Terry Badger and Dr. Joy Kiviat for your time, support, and expertise in carrying out this project.

# **DEDICATION**

I dedicate this project to all of the patients and families I have had the privilege to care for as an RN and to those I will take care of as an NP. Your strength, courage, patience, and love have shaped me to be the nurse I am today. You have all inspired me to grow and follow my dreams.

# **TABLE OF CONTENTS**

ABSTRACT	9
INTRODUCTION	11
Background	12
Local Problem	13
Purpose	14
Study Question	15
SYNTHESIS OF EVIDENCE	15
Theoretical Underpinnings	15
Mexican American Cultural Concepts and Beliefs	18
Synthesis of Evidence	21
Breast Cancer Knowledge, Attitudes, and Screening Behaviors	22
Cultural Beliefs, Barriers, and Acculturation	24
Interventions	25
Strengths and Weaknesses of the Review of the Literature	27
METHODS	28
Design	28
Stakeholders	29
Setting.	30
Intervention	30
Data Collection	31
Data Quality	32
Ethical Considerations	34
Respect	35
Beneficence	35
Justice	35

# TABLE OF CONTENTS – Continued

STUDY PARTICIPANTS		36		
Demographics				
FINDINGS		38		
Overarching T	heme: "Language, Identity, Values"	38		
DISCUSSION.		43		
Relationship of	Relationship of Findings to Framework			
Relationship of	Relationship of Findings to Evidence			
Breast Cancer Knowledge, Attitudes, and Screening Behaviors				
Cultura	l Beliefs, Barriers, and Acculturation	46		
Interver	ntions	46		
Impact of Find	ings on Practice	46		
Strengths and l	Limitations	47		
<b>Dissemination</b>	and Future Implications for Practice	48		
CONCLUSION	N	49		
APPENDIX A:	EVIDENCE APPRAISAL	51		
APPENDIX B:	LETTER GRANTING PERMISSION TO RECRUIT FROM A LOCAL			
	SPANISH BREAST CANCER SUPPORT GROUP	60		
APPENDIX C:	RECRUITMENT FLYERS	62		
APPENDIX D:	LETTER GRANTING PERMISSION FOR USE OF STUDY SETTING	65		
APPENDIX E:	SCRIPTS FOR VIDEO	67		
APPENDIX F:	DEMOGRAPHIC QUESTIONNAIRES	74		
APPENDIX G:	FOCUS GROUP QUESTION GUIDES	79		
APPENDIX H:	IRB APPROVAL AND CONSENTS	82		
REFERENCES		92		

# LIST OF TABLES

TABLE 1.	Demographics: Focus Group Participants.	.37
TABLE 2.	Demographics: Participants' Health Care Information	.38
TABLE 3.	Focus Group Interview Questions	.40

# ABSTRACT

Mexican American women are at particular risk of being diagnosed with breast cancer at a later stage. Risk factors include genetics, limited screening practices, and delayed treatment. Evidence has shown culture to be an important factor influencing screening beliefs, health care behaviors, and breast cancer knowledge.

A culturally and linguistically appropriate educational video about breast cancer and breast cancer screening recommendations was created, in both the English and Spanish languages, to engage Mexican American women and explore their perceptions and feedback about the culturally tailored intervention.

Qualitative descriptive methodology was used to explore Mexican American women's perceptions of a culturally and linguistically appropriate educational video about breast cancer and the importance of breast cancer screenings. Using snowball recruitment from a Spanish language breast cancer support group, eight Mexican origin women participated in a focus group interview. The interview was conducted in the Spanish language.

The video production integrated Mexican cultural values and used them as instruments to present information about breast cancer and breast cancer screening recommendations. An extensive literature review and a theoretical underpinning helped guide the project purpose and intervention. The findings supported the importance of production of a culturally and linguistically appropriate education video to educate Mexican American women about breast cancer and the importance of breast cancer screenings. Analysis of the focus group discussion identified an overarching theme of "Language, Identity, Values" which supports the underlying premise that the information needed to be presented in the language spoken by the population of

focus, in ways they could identify with, using cultural values to under pin the messages presented in the video. The implications for nurse practitioners, centers on the importance of employing Mexican cultural values when imparting knowledge. More studies like this one can help further identify the impact of Mexican cultural values on health care.

# INTRODUCTION

Hereditary cancers are some of the most aggressive cancers that have been identified and specific counseling needs to be provided to families at high risk of cancer being expressed (Daly et al., 2017). Mexican American women are at particular risk of hereditary breast cancer due to common genetic origins that are found to occur in Mexican American women and in women of Ashkenazi Jewish descent (Weitzel et al., 2005; Weitzel et al., 2007). *Familia* or family is the most important cultural value to persons of Mexican origin and the loss of a mother is particularly harsh (de la Torre & Estrada, 2001). Breast cancer is the most commonly diagnosed cancer in Hispanic women, with an incidence of 19,800 cases, accounting for 29% of the cancer diagnoses in Hispanic women in 2015 (American Cancer Society [ACS], 2017). The probability of a Hispanic woman developing a significant breast cancer at 50-59 years of age, is 1.8 % (1 in 55) (ACS, 2017).

Breast cancer is the leading cause of cancer death for Hispanic women, often diagnosed at advanced stages (ACS, 2017). The ACS reported the rates of breast cancer being diagnosed at a local stage, from 2008-2012, to be 57% in Hispanic women compared to 65% for non-Hispanic white women. Delayed diagnosis can contribute to delayed treatment and advanced disease that is a factor contributing to increased mortality rates.

Low cancer screening participation in Hispanic women makes breast cancer a public health issue (Cadet, 2015). Cancer screening disparities among ethnic minorities are important to address. More specifically, taking cultural values into consideration is important to address these disparities (Gonzalez et al., 2015). Prevention and patient education interventions should not

only consider the cultural values of Mexican origin women, but should also draw upon those cultural values as engines to help carry out culturally appropriate strategies.

# **Background**

The Mexican American population is rapidly growing, and therefore, the incidence of breast cancer in this population is expected to increase (Gonzalez et al., 2015). From 2000-2010, the Mexican American population grew by 7.2 million in persons born in the United States and 4.2 million as a result of new immigrants (Pew Research Center, 2010). Incidence rates of breast cancer are higher among Mexican American women in the United States than Mexican women living in Mexico (Nodora et al., 2015). With this in mind, it is important that Mexican American women actively participate in routine breast screening practices to improve the quality of life and more importantly improve survival rates (Jin, 2014). Studies show that various risk factors exist presenting challenges to preventative health care practices within the Mexican American population (Nodora et al., 2015). Health research outlines culture as a major factor influencing screening beliefs, behaviors, and knowledge (Gonzalez et al., 2015).

Breast cancer is the leading cause of cancer death among Hispanic women in the United States (ACS, 2017). The incidence of breast cancer in Hispanic women in the United States is approximately 91.1 per 100,000 (Nodora et al., 2015). Breast cancer has become the most common diagnosed cancer among women from Mexico, and although it has a lower incidence rate than non-Hispanic white women, risk of dying from the disease is higher in Hispanic women (Martinez et al., 2010). Hispanic women are 22% more likely to die from breast cancer than non-Hispanic white women (Martinez et al., 2010). Various risk factors that contribute to the incidence and prevalence of this disease within the Mexican American population, including

lower rates of preventative screening. Low survival rates in breast cancer in Mexican American women can be linked to delayed preventive screening and treatment (Nodora et al., 2015).

Culturally sensitive interventions can be a beneficial strategy to address the clinical dilemmas underlying the Mexican American woman's reluctance to accomplish breast cancer screening, and even more importantly, can improve breast cancer screening practices among the population of Mexican American women. A bilingual, English and Spanish language, education video can present comprehensive, culturally sensitive, and appropriate education about breast cancer and screening practices. Increased funding and support for health care services granted by the Affordable Care Act promotes a more supportive environment for preventative health care screening practices for women with the underlying focus on delivering comprehensive health care to a vulnerable population (Gonzalez et al., 2012; Muhrer, 2017).

# **Local Problem**

The Hispanic population is the fastest growing minority in the United States, representing 16.3% of the total population with 64.5% of the total United States Hispanic population emigrating from Mexico (U.S. Census Bureau, 2011). Compare that with the total Hispanic population in Arizona: 2,056,000 million persons, comprising 31% of the total population of the state, with 90% of the Arizona Hispanic population being of Mexican origin (Pew Research Center, 2016). The total Mexican origin population in the state of Arizona lends to the significant importance of addressing health care problems in this population. In Arizona, the specific incidence rate of female breast cancer, in 2013 was 110.9 per 100,000, with the death rate of female breast cancer 20.4 per 100,000 (U.S. Department of Health & Human Services, Centers for Disease Control and Prevention, 2016). Specific numbers of Mexican origin women with

breast cancer in the state of Arizona were not found, but with the percentage of population of Mexican Americans in Arizona being greater than in the country as a whole, it is reasonable to expect a significant problem locally.

# **Purpose**

The purpose of this DNP Project was to create a culturally and linguistically appropriate education tool that could be used in primary care and other areas in the community with the long-term goal of improving breast cancer screening practices in Mexican American women. Cultural values are dynamically connected with persons' behaviors, attitudes, thoughts and norms. Cultural values have an impact on how one interacts, interprets or engages in health care practices (Gonzalez et al., 2015). Cultural values and knowledge about breast cancer significantly impacts health seeking behaviors (Tejeda, Gallardo, Ferrans & Rauscher, 2016). Values, such as fatalism, modesty, and lack of knowledge about risks, management or treatment of disease are barriers affecting breast cancer screening practices among Mexican American women (Tejeda et al., 2016). Various health promotion interventions address structural barriers affecting the issue of breast cancer screening in Mexican American women. Addressing cultural values through an educational community engagement strategy would be beneficial to the population (Tejeda et al., 2016).

The primary stakeholder in this project was the Mexican American woman who is presented with the opportunity to participate in breast cancer screening. Recognizing the cultural value of *familia* allows for respectful care that takes into account the needs of the family.

Mexican American families are extended cohesive networks of support (Eggenberger, Grassley & Restrepo, 2006). *Familia* serves as emotional and social support and has a vital influence on

health care decisions and behaviors (Eggenberger, et al., 2006). Reflecting on the significance *familia* plays on health, health care initiatives need to take the cultural value of *familia* into consideration in order to encourage family acceptance and promote the Mexican American woman to participate in screening practices (Eggenberger, et al., 2006). With the intention to promote education and raise cultural awareness, other stakeholders of interest include primary care providers, who may be nurse practitioners, and oncologists. Prevention is important to those providing state and federal funds for health care.

Reflecting on the impact patient education has on health outcomes, culture-specific care is hugely important in promoting health behavior changes (Gonzalez et al., 2015). This project took cultural values into consideration and used cultural values as underpinnings in an intervention to help providers promote breast cancer screening in Mexican American women.

# **Study Question**

This DNP Project aimed to develop a culturally sensitive health education and health promotion tool to influence breast cancer screening behaviors in Mexican American women, and therefore, the study question focused on a health education intervention: What are the perceptions of Mexican American women towards a culturally and linguistically appropriate breast cancer education video?

# SYNTHESIS OF EVIDENCE

# **Theoretical Underpinnings**

The goal of creating a culturally sensitive health education and health promotion tool was to establish an understanding and connection between culture and health in Mexican American women in regards to breast cancer screening. Women within the Mexican American community

hold cultural values closely, thus impacting their attitudes and behaviors in regards to health screening practices. An educational community engagement strategy would benefit from a theoretical model that not only takes culture, health beliefs, and behaviors into consideration, but uses these elements to change behavior. A model that can serve this function is Hochbaum, Rosenstock, and Kegels' Health Belief Model (HBM) (Champion & Skinner, 2008; Green & Murphy, 2014; Rosenstock, 1974).

The HBM presents the concept that health beliefs can be used as communication tools to promote change and encourage positive health behaviors (Green & Murphy, 2014). Various perceptions that can be addressed to predict and change behavior at an individual level. This theoretical framework outlines the mental reflection individuals carry out when considering making a change in behavior (Green & Murphy, 2014). Individuals can internally evaluate if the benefits of a promoted behavior outweigh the risks and costs. Individuals are then presented with the opportunity to either participate in the behavior or not. The HBM presents three categories that reflect an individual's willingness to try out a health behavior (Green & Murphy, 2014). The categories include: (a) individual perceptions, (b) modifying behaviors, and (c) likelihood of action (Green & Murphy, 2014). The HBM illustrates how an individual's perceptions about health problems, benefits, and challenges to an action will influence health promoting behaviors (Green & Murphy, 2014).

The HBM was a helpful framework to employ in obtaining an understanding of Mexican American women's decision making for engaging in or choosing not to engage in preventative health practices, such as breast cancer screening. Perceived susceptibility, perceived severity, perceived benefits, and perceived barriers reflect common perceptions about breast cancer and

prevention practices. This knowledge was used to create a culturally appropriate education tool that takes these perceptions into consideration.

Perceived susceptibility reflects an individual's belief of chances of getting the illness or disease (Austin, Ahmad, McNally & Stewart, 2002). Hispanic women commonly believe that breast cancer screening is not needed because they have a limited perception and knowledge of vulnerability to the disease (Austin et al., 2002). Sunil and colleagues (2013), reported that Hispanic women had low levels of breast cancer knowledge and perceived susceptibility.

Perceived susceptibly is tied to perceived severity. It has been shown that women who have limited knowledge of breast health will report low levels of perceived severity (Austin et al., 2002).

Perceived benefits may be limited but it is possible, in the importance of her role as the mother and keeper of the family home, the Mexican American woman may be able to perceive a benefit from breast cancer screening, to assure that she continues to be there to care for her family. The Mexican origin woman may also try to fit into her home in a new land and consider health screening as a part of that new life.

The concept of perceived barriers is important to consider on the impact of health promotion behaviors in Mexican American women. Perceived barriers entail the psychological barriers of the promoted behavior (Austin et al., 2002). Findings reveal that cultural values play a major role in perceived barriers to accomplishing health screenings. Perceived barriers to screening practices may include cultural values related to fear, fatalism, and modesty (Austin et al., 2002). These cultural values play a major role in limiting participation in health education programs as well as screening practices (Austin et al., 2002). Cultural values play a crucial role

in the perceived barriers to breast screening practices in Mexican American women (Reed, 2011; Tejeda et al., 2016).

# **Mexican American Cultural Concepts and Beliefs**

Culture underpins the values that shape the beliefs and opinions of people, no matter the origin (Reed, 2011). Cultural values and knowledge about breast cancer play a major role in health screening practices (Tejeda et al., 2016). Acculturation can play a role in the decision Mexican origin women consider when considering their participation in health screening services. Acculturation can be defined as the cultural, social, and psychological process of change that occurs when two cultures meet (Birman & Simon, 2014). An assumption can be made that as the Mexican origin woman became more acculturated, she would be more amenable to breast cancer screenings as practiced by her counterpart, a woman whose origin is the United States (US).

Mexican American women often convey cultural values that include fatalism, fear, and modesty (Ramos, Correa & Trinidad, 2015). Fatalism, or *fatalismo*, is the belief that life events are predetermined and that one holds very little control over life's experiences (Gonzalez et al., 2015). The Mexican cultural value of *fatalismo*, understood to be destiny or God's will, is a common belief among Mexican American women (Gonzalez et al., 2015). Mexican American breast cancer survivors have expressed the occurrence of the disease to be a result of sins in their past (Gonzalez et al., 2015). Spiritual and religious notions can instill fear and anxiety around health care screening practices (De Jesus, 2016). Mexican American women trust in God and faith to manage health. Faith and religion influence health perceptions and health behaviors (De Jesus, 2016).

Modesty and cultural norms regarding intimacy play a role that can limit interest and participation in breast cancer screenings, in that Mexican American women can be embarrassed or hesitant to take part in routine screening practices (Borrayo & Jenkins, 2001). *Dignidad* and *modestia*, are cultural values centered in decency and humility. In other words, Mexican American women may be reluctant to practice self-breast exams or get mammograms due to the fear of exposing their bodies, feeling embarrassed, and infringing upon their dignity (Borrayo & Jenkins, 2001). *Marianismo* is the Mexican cultural value that is based upon the figure of the Virgin Mary in the Catholic Religion (de la Torre & Estrada, 2001). The expectation is that women suffer and place the needs of the family above her own, and that she presents herself as honorable, chaste, and modest (de la Torre & Estrada, 2001). Cultural values often present barriers for Mexican American women to gain knowledge or to express an interest in participating in screening services (Ramos et al., 2015).

Familismo is the most important cultural value to the Mexican origin population.

Familismo is the cultural value that dictates that the needs of the family come first, before the needs of the individual (de la Torre & Estrada, 2001; Bouchet, Torres & Hyra, 2013). This cultural value alone may be the one to provide support for a change in perceptions of Mexican American women to breast cancer screening. The importance of the mother to the Mexican origin family would never be questioned (Bouchet et al., 2013).

Personalismo is a cultural value that affects the relationship a patient has with authorities providing health care information that will determine whether prescribed regimens are followed (de la Torre & Estrada, 2001). A health care teaching that appeals to the cultural value of personalismo has great potential for a Mexican origin woman to choose that mode of care.

The Mexican cultural value of *spiritualidad* (spirituality) is deeply rooted in cultural concepts that align religiosity and traditions in the culture. In the Mexican American community, the cultural/historical origins of religiosity are rooted in Aztec culture and the Spanish influence of Roman Catholicism (de la Torre & Estrada, 2001). Spirituality and religiosity impact the social relationship of Mexican American families within their community.

Hispanic beliefs about causes and treatments to illness are influenced by cultural values and these perceptions can then become barriers to health promotion practices such as breast cancer screening (Wallace, Pomery, Latimer, Martinez & Salovey, 2010). Nurse practitioners and other health care providers must recognize the importance of Mexican cultural values. Providers must take into consideration and identify the additional challenges that cultural values present. Mexican American women report that the acculturation process can be difficult and stressful (Wallace et al., 2010).

Language and conflicting cultural values contribute to limited interest and engagement in breast cancer screening practices (Gonzalez et al., 2015). Mexican American women report that American culture lacks the social support that Mexican culture provides. The lack of a support can create an environment with limited reassurance, assistance and encouragement (Gonzalez et al., 2015).

Overall, the HBM serves as a theoretical underpinning to help guide this project by obtaining an understanding of the impact of cultural values and perceptions Mexican American women consider when presented with breast cancer screening opportunities. This insight served to guide the underpinnings in the development of a health promotion video that promotes breast

cancer screening, in a way that is culturally respectful of the unique beliefs a Mexican American woman holds.

# **Synthesis of Evidence**

The topics of interest for this synthesis of the literature are Mexican American women's attitudes, beliefs, and knowledge about breast cancer and prevention. Health care providers are better prepared when they have a better understanding of how culture impacts the perceptions of care in Mexican American women. Such preparation can help establish a foundation of knowledge for health care providers to give culturally sensitive care. More importantly, knowing the evidence helped this author create an educational tool that is culturally sensitive and targets Mexican American women. To gain better knowledge and understanding of Mexican American women's cultural values, knowledge, and perspectives a literature search was conducted using various research databases, including PubMed, Cumulative Index of Nursing and Allied Health Literature (CINAHL), and PsycINFO. Key words that were used in the search of the database include Mexican American, breast cancer, cultural barriers, cultural values and beliefs, and breast cancer screening.

The database search strategy was limited to articles published within the last 10 years and written in the English language. Other inclusion criteria included studies that related to the population of interest: (a) Mexican American women, (b) conducted in the United States, (c) addressing breast cancer screening behaviors, (d) cultural attitudes, and (e) barriers relating to screening practices. A total of 10 articles were selected through this literature search based on the inclusion criteria. An appraisal of evidence of the selected articles is presented (Appendix A).

# Breast Cancer Knowledge, Attitudes, and Screening Behaviors

Miranda, Tarraf, and Gonzalez (2011) conducted a cross-sectional study to explore breast cancer screening disparities among ethnic and racial minority women. The authors evaluated the impact of ethnicity on breast cancer screening patterns and rates. The authors used a multivariate, multinomial regression method to evaluate self-reported mammography and clinical breast examinations in the 2007 U.S. Medical Expenditure Panel Survey. The study's results indicated that Mexican origin women reported the lowest rates of clinical breast exam. The authors explored the factors that contributed to this ethnic group's low rate of screening behaviors. The authors identified (a) health care access, (b) education, (c) income, (d) health care insurance status, and (e) cultural disparities as factors contributing to disparities in obtaining breast cancer screenings.

Sunil and colleagues (2014), in a similar study, explored Hispanic women's breast cancer knowledge, attitudes, and screening behaviors through interviews and a community based participatory research approach. This study was conducted along the Southern Texas border with a total of 2,812 participants. The authors found that 41.7% of the women had undergone a clinical breast exam within the past year. Additionally, 40.6% of the women had completed breast cancer screening with a mammogram within the past year. The authors deemed these rates to be low. Furthermore, the authors reported that screening practices were influenced by perceived knowledge, susceptibility, and barriers. Perceived barriers included embarrassment, limited education, and fear. Implications from this study suggests that factors, such perceived barriers and knowledge, should be taken into consideration when noting health disparities. More

importantly, the results supported the importance of providers taking into account a person's culture and knowledge when proposing disease prevention behaviors.

Ramos, Correa, and Trinidad (2015), in a qualitative study, examined breast cancer knowledge, as well as, the challenges to accessing breast health services. A total of 37 Hispanic immigrant women, with origins from various places including Mexico, participated in the study. The authors identified different themes, many indicating that barriers to knowledge are due to limited breast health information and screening services. A lack of knowledge of personal breast care, as well as perceived fear, pain, and modesty that contributed to limited engagement was another significant theme uncovered.

Banegas, Bird, Moraros, King, Prapsiri, and Thompson (2012) conducted a study that examined the breast cancer knowledge, attitudes, and screening practices of U.S.-Mexico border Latinas. Through interview-administered questionnaires, the objective of the questions focused on comparing data from Mexican American women and Mexican women residing along the U.S.-Mexico border. The authors recruited 128 Mexican women and 137 Mexican American women. The authors found that Mexican women had high levels of knowledge compared to Mexican American women, at 54.8 % compared to 45.2%. However, the study reported that Mexican American participants were more likely to participate in screening practices than Mexican women. The authors stress that although screening levels were higher in Mexican American than Mexican counterparts, the screening levels were still overall lower than the general population of women in the US and indicative of a need for culturally sensitive outreach programs.

# Cultural Beliefs, Barriers, and Acculturation

A focus of this project is to have a better understanding of cultural beliefs and cultural values that can affect breast cancer screening decisions and behaviors. Cultural values and cultural beliefs can act as barriers relating to illness and health behaviors. Gonzalez and colleagues (2015) explored breast cancer cause beliefs among different ethnic groups, including Mexican American breast cancer survivors. The findings of the study showed that acculturation plays a major role in beliefs and behavior (Gonzalez et al., 2015). Themes of stress and fatalism were major cultural beliefs affecting the health of Mexican American women. Women described different types of stress, like acculturation, family, and lifestyle. Family values were significant among Mexican American women stressing the impact and role the Mexican American woman holds as the "pillar" in a Mexican home (Gonzalez et al., 2015).

Fatalismo is an influential cultural value and theme common among Mexican American study participants. Fatalistic beliefs revolve around fate, destiny and predetermined causes (Gonzalez et al., 2015). Mexican American women view breast cancer as a punishment (Gonzalez et al., 2015). The themes found in this study reinforce the significant role culture plays in health beliefs and health behaviors. In a similar study conducted by Tejeda, Gallardo, Ferrans, and Rauscher (2016) cultural values and beliefs among Latina women were explored.

Importantly, Tejeda and his colleagues study explored the extent to which cultural values impacted screening behaviors in Latina women (2016). Mexican origin women totaled 60% of the study sample who were also breast cancer survivors (Tejeda et al., 2016). The most common belief found among the participants was faith; women believed that God would protect them from breast cancer (Tejeda et al., 2016). Modesty was another important finding. Women

believed that if a breast lump is touched or pressed often, it will become cancerous, and if surgically cut open, will spread quickly (Tejeda et al., 2016).

Acculturation is important to take into consideration regarding health promotion and screening behaviors. Acculturation was considered in study findings, indicating that some factors impacting cultural beliefs are education, income, and overall lower acculturation (Tejeda et al., 2016). In a similar study by Nodora and colleagues (2015), acculturation was studied in relation to overall behavioral risks and family history of breast cancer. As higher levels of acculturation occur, the hope is for women to improve their health behaviors. Nodora and colleagues (2015) found that acculturation was associated with various lifestyle factors both positively and negatively impacting risk of breast cancer. Results indicate that Mexican American women are more likely to report a family history of breast cancer (Nodora et al., 2015). Groups with higher levels of acculturation are more likely to drink alcohol, smoke cigarettes, be physically inactive, and have a greater body mass index, putting them at higher risk of breast cancer (Nodora et al., 2015).

#### **Interventions**

Cultural awareness of Mexican American women's beliefs about breast cancer and prevention is essential in creating and implementing health promotion interventions. Davis, Buchanan, and Green (2013) conducted a cross-sectional study that used the Health Belief Model to explore various ethnic groups' beliefs about cancer prevention. Results of the study supports the notion that, of all ethnic groups, there should be a focus on education and empowering Hispanics to partake in cancer prevention practices (Davis et al., 2013). Hispanics are more likely to believe that they have a lesser chance of getting cancer. As a result, Davis, Buchanan,

and Green (2013) call for the creation of effective, culturally suited cancer education and screening recommendations.

Consequently, there has been a growing interest and participation in studies that have a focus on culturally sensitive interventions. Goel and O'Connor (2015), carried out a study that assessed the impact of a Spanish language education video on breast cancer mammogram screening. The study was carried out at two community health centers that provided care for predominantly Spanish language speaking women. The video was shown during the pre-visit time of an appointment and demonstrated how a patient can request a mammogram referral. Results revealed that a pre-visit video improved rates of mammogram screening referrals and participation in an intervention group (Goel & O'Conor, 2015). Interestingly, the video did not demonstrate a significant difference between the intervention and control group in breast cancer knowledge, perhaps calling for a need for interventions that center around education, culture and awareness.

Nuño, Martinez, Harris, and Garcia (2011) conducted a randomized control to evaluate the effectiveness of a *promotora* educational approach in a U.S.-Mexico border community. *Promotoras* are lay patient navigators who work with medically underserved populations, and have been given specific training and experiences on how to effectively engage and interact with their community. They serve an important role as educators, advocates and community health leaders. In this study, *promotoras* were recruited to lead interactive sessions in the Spanish language, encouraging education among intervention groups. The results of the study found many benefits to this type of intervention. Those participants attending the education sessions

were twice as likely to follow up with breast cancer screenings (Nuño et al., 2011). This study corroborates the significance a focused cultural intervention has on a group.

# Strengths and Weaknesses of the Review of the Literature

Many studies support the existence of various cultural and ethnic beliefs that impact health screening behaviors among Mexican American women (Nuño et al., 2011; Gonzalez et al., 2015). Many of the studies used theoretical frameworks that can easily be applied to studies within cultures (Davis et al., 2013; Goel & O'Conor, 2015; Ramos et al., 2015). The Health Belief Model and the Social Cognitive Theory were often used to underpin the research carried out. Both theories focus on health behaviors and knowledge (Nuño et al., 2011). All of the articles reviewed were of studies that took place in the United States. This increases the transferability of the knowledge to other contexts (Banegas et al., 2012). A weakness of the review is that many of the articles found focused on overall Hispanic or Latino populations, with a small number of samples being specifically drawn from the Mexican American population (Ramos et al., 2015). This factor can impact the generalizability of the findings (Goel & O'Conor, 2015). Lastly, many of the studies used methodology that collected self-reported data, possibly influenced by bias and social experiences (Sunil et al., 2013). Overall, there is evidence that suggests the need for culturally sensitive interventions to improve health promotion behaviors in Mexican origin women (Gonzalez et al., 2015). Evaluating strengths and weakness of the literature will aid in finding specific support to create an intervention with the objective of improving breast cancer screening behaviors within the population of Mexican American women.

The review of the literature and the synthesis of evidence, in the studies selected, indicates the need for effective culturally sensitive interventions in the Mexican American population to promote screening for breast cancer. This synthesis of the evidence in the literature provided support and good reasons for accomplishing this DNP Project, as it promotes Mexican cultural awareness and sensitivity, uses a theoretical framework as underpinnings of the work, and ultimately a specific intervention for use in the Mexican American community was created with the intention of increasing knowledge and improving screening behaviors within this culturally vulnerable population.

#### **METHODS**

# **Design**

This DNP Project used a qualitative descriptive design utilizing a focus group. This approach provided the opportunity to explore complex individual perceptions, stories, and beliefs to aid in the evaluation and further development of a culturally sensitive health education and health promotion tool to influence breast cancer screening behaviors in Mexican American women (Colorafi & Evans, 2016). Qualitative description is an appropriate method for exploration of feelings, attitudes, and perceptions that participants may have about a topic (Sandelowski, 2010; 2000). There has been an increased interest and application of qualitative descriptive designs in health science research because it presents the opportunity to use different theoretical approaches, sampling, and data collection strategies (Colorafi & Evans, 2016). Researchers use interpretative theory or conceptual frameworks to help guide the study design (Colorafi & Evans 2016). A qualitative descriptive study avoids manipulation or intervention of variables and instead studies a phenomenon of interest by observing different factors and

elements relating to the experience (Colorafi & Evans, 2016). Findings that utilize this methodological approach, help to analyze thoughts and behaviors that can present new insights and lead to change (Colorafi & Evans, 2016).

# Stakeholders

Mexican American women were recruited from a local Breast Cancer support group that is conducted in the Spanish language. A letter supporting recruitment was received from Veronica Villanueva, the current Associate Program Director of the Spanish Cancer Support Community in Phoenix, AZ (Appendix B). Invitation to participate in the study was done using face-face invitation and flyers (Appendix C). A bilingual outreach approach was employed. The flyers were produced in both the English and Spanish languages. Also, participants were encouraged to refer other participants that could be interested who met the study criteria. This approach is known as snowball sampling and allows for a trusting and engaging recruitment strategy (Polit & Beck, 2012). A focus group approach presented the opportunity to purposely select a small number of participants and study the findings intensively (Cleary, Horsfall & Hayter, 2014).

Inclusion criteria for this study were selected with the objective to include elements of interest to the topic including culture, and age. The inclusion criteria were: (a) women of Mexican descent, (b) 25-60 years of age, (c) English and/or Spanish language speaking. The expectation with the choice of these inclusion criteria was that participation barriers would be minimized by offering a bilingual avenue with a wide range allowed in the age of the women to be recruited. Demographic characteristics were collected regarding a personal history of breast cancer, to allow for documentation of diversity of knowledge, but for inclusion into the study

this was not a requirement. Women eligible to participate in the study were given the opportunity to participate in a focus group. Two separate times were offered for the focus group participation with the expectation that each focus group would consist of 3-5 participants, however with the initial recruitment the number of women wanting to participate was deemed satisfactory to hold one focus group with eight participants recruited to the focus group study.

# **Setting**

The study took place at The Phoenix Public Library-Century Branch. This setting was selected because of its central location in Phoenix. Participants had convenient access to a quiet interview conference room. Spanish language and English language directions were provided to participants directing them to a central meeting point with a guide who lead them to the conference room. Permission for use of the room at a specific date and time was arranged (Appendix D).

#### Intervention

A video was produced by Viridiana Ibanez, presenting breast cancer knowledge and spotlighting prevention screening practices specifically for the Mexican American woman. The video was produced in the Spanish and English languages and incorporated various elements to present the information in a culturally sensitive manner to positively influence breast cancer screening behaviors in Mexican American women. A script of the content in the video is provided in Appendix E. Links to the videos are provided here:

English language version: <a href="https://youtu.be/-pTMe9I3YY83">https://youtu.be/-pTMe9I3YY83</a>

Spanish language version: <a href="https://youtu.be/SA9K5xhetQk">https://youtu.be/SA9K5xhetQk</a>

Current evidence-based guidelines for breast cancer screening using information from the U.S. Preventative Services Task Force (2016) was used as the basis for the information provided within the script. Additional information from the National Breast Cancer Foundation, Inc., (2016) and Johns Hopkins Medicine (2017) was used to provide a guide to breast self-exam. The video script was reviewed by a faculty member at The University of Arizona, College of Nursing who is a Women's Health Nurse Practitioner working closely with a population of Mexican American women at a local community health center in Tucson, AZ. Feedback provided by the expert reviewer assured inclusion of breast cancer screening recommendation changes recently implemented by the U.S. Preventative Services Task Force (2016). The reviewer was uncertain as to the importance of the inclusion of questions about spirituality and faith in the video, but after further review of the literature on the topic it was decided to keep that content.

# **Data Collection**

Data collection included a questionnaire to gather participant demographic information, collected upon agreement of participation in the study (Appendix F).

Focus group interviews were carried out with participants who were recruited into the study. Focus groups are usually made up of a small number of participants, and for this study a total of eight participants were recruited to take part in a focus group. A focus group approach with an adequate number of participants supports effective data saturation (Polit & Beck, 2012). The questions presented at the focus group interviews were open ended, focusing on the experience of viewing the educational video, and asked for feedback to the information presented (Appendix G). An open-ended question approach allowed participants to express their views and experiences (Turner, 2010). As moderator, I carried out the interview process, guided group

dialogue, and asked focused survey questions (Polit & Beck, 2012). I am bilingual in the English and Spanish languages and was able to linguistically engage the participants. The goal, for the focus group interviews, was to produce a reflective and rich conversation that helped evaluate how a culturally sensitive video could impact feelings of support, respect, and value (Turner, 2010) in regards to information presented on breast cancer screening. The focus group interviews were audio-recorded to assure accuracy for transcription.

Lastly, participants were each provided a \$10 VISA gift card as an incentive and thank you for their engagement and participation in the focus group.

# **Data Quality**

The data analysis included my transcription of the interviews. The data collected were analyzed and assessed for prominent patterns and surfacing themes that are obtained from the interviews (DeSantis & Ugarriza, 2000). The data interpretation was accomplished separately and together with my DNP Project Director, searching for themes that captured and revolved around the culture and phenomena of interest (DeSantis & Ugarriza, 2000).

Trustworthiness is the underpinning element required in qualitative research (Lincoln & Guba, 1985; Polit & Beck, 2012). There are certain tenets that are required to provide for trustworthiness in the information gathered in a qualitative descriptive study. These elements include: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability (Lincoln & Guba, 1985; Schwandt, 2007).

Credibility is the level of confidence that one can have in the findings being a true representation of the views stated by the participants in the study (Lincoln & Guba, 1985; Schwandt, 2007). Credibility can be established by triangulation, peer debriefing, and referential

adequacy (Lincoln & Guba, 1985). Maintaining a field note journal is one source that helps to assure credibility and contributed to the data as a tool for triangulation (Lincoln & Guba, 1985).

Triangulation is assured when there are varying sources, tools, theories, and investigators (Lincoln & Guba, 1985). In this study triangulation occurred by the use of the video demonstration of a culturally and linguistically sensitive education tool aimed at prevention of breast cancer in Mexican American women, use of an appropriate underlying theory to evaluate the project, and oversight by myself and the DNP Project Director. Field notes were kept.

Peer debriefing occurred with my regular and ongoing contact with the DNP Project

Director who is an experienced qualitative researcher, and has accomplished research in the

Mexican American community. Referential adequacy was accomplished by the saturation of data
at the focus group interview.

Transferability is assured when the study findings can be applied to other populations (Lincoln & Guba, 1985; Schwandt, 2007). The thick description of the findings produced a detailed narrative (Lincoln & Guba, 1985). Overall, the incorporation of various research elements as well as specific design descriptions helped establish transferability and provides the opportunity for others to use project findings and make valid judgements on how findings apply to their own environment and population.

Dependability is required to assure that the findings have been obtained in a reliable manner (Lincoln & Guba, 1985; Schwandt, 2007). It was my responsibility to assure that the data were obtained in a reliable manner.

Confirmability supports the notion that the study design maintained neutrality though the data collection and analysis process. First, an audit trail documents detailed steps that were

carried out throughout the project to assure a reliable and stable data collection process (Polit & Beck, 2012). Transcripts, audits, and field note journaling produced objective data that precisely reflects participants' perceptions and experiences (Lincoln & Guba, 1985; Polit & Beck, 2012).

Another important step to carry out in the process of qualitative research methodology is reflection. Reflexivity is a process of critical self-reflection and should be done upon the start and throughout the project to evaluate any personal bias or assumptions that can influence the research process (Lincoln & Guba, 1985; Polit & Beck, 2012; Schwandt, 2007). Researchers should adequately reflect on any personal experiences or beliefs in order to ensure trustworthiness of the process. Researcher's should be aware of all personal elements and assure that data collection and analysis is being carried out with an objective approach (Polit & Beck, 2012). Assumptions that I hold are:

- 1. A contributing factor to a gap in the care of Mexican American women is limited culturally sensitive education.
- 2. There is a limited understanding of cultural values of Mexican American women and families.
- Availability of a culturally sensitive education tool will contribute to increased rates of breast cancer screening among Mexican American women thereby decreasing rates of breast cancer discovered in more advanced stages.

# **Ethical Considerations**

Respect, beneficence, and justice are important ethical elements for consideration in qualitative descriptive studies (Polit & Beck, 2012). Following these ethical principles contributed to creation of a constructive and principled project.

# Respect

This study assured that the participants had a clear explanation of the study and were provided all of the necessary information available in order for them to make an autonomous decision, based upon their best judgment, to participate. Respect was also established by taking note of all unique cultural characteristics that the participants brought to the project. More importantly, language barriers were eliminated by use of a project leader fluent in the Spanish language.

# Beneficence

Overall, the findings and feedback of the study will be used to contribute to providing culturally respectful health care education, and is expected to improve the overall health care provided to Mexican American women. It will also help improve cultural awareness for health care providers. In order to reduce any harm or risks, a respectful and caring environment was established to assure that participants experienced little fear or stress. Lastly, participant debriefing and member check-ins, assured trustworthiness of the study (Polit & Beck, 2012).

# **Justice**

Justice is an imperative ethical element that will enforce equality and privacy (Polit & Beck, 2012). All participants have the right to equal and safe participation (Polit & Beck, 2012). My actions in completing the study followed fair and equal procedures. In this project, all participants were treated with respect and justice. No one was discriminated against, no matter their willingness to participate. More importantly, all consent and pre-arranged agreements were respected and enforced to assure equality, privacy, and confidentiality of all study elements. To

ensure confidentiality and anonymity throughout the study, pseudonyms were used in all documents and in the write-up of this DNP Project.

Lastly, Institutional Review Board (IRB) approval from the College of Nursing and The University of Arizona was obtained prior to project execution (Appendix H). IRB approval assures trustworthiness in that it verifies that adequate process measures are in place to assure participant protection, privacy, and safety risks (Polit & Beck, 2012). The project was designed and implemented with the knowledge and training provided through an accredited DNP program.

### **STUDY PARTICIPANTS**

The eight Mexican American women, who participated in the initial planned focus group, were recruited from a local cancer support group that is open for breast cancer patients, survivors, family and community members (Appendix B). Three of the participants were support group members, five were family or community members recruited through snowball sampling. The eight focus group participants primarily spoke only the Spanish language. Each participant was provided with the participation consent and demographic questionnaire (Appendix H). Seven of the eight participants completed the consenting and demographic questionnaire using the Spanish language version that was provided, and so the focus group was conducted in the Spanish language. The participant who completed the consent and demographic questionnaire in the English language was fluent in both English and Spanish languages.

### **Demographics**

Participant responses to a demographic questionnaire (Appendix H) were collected and aggregated into a data set using IBM SPSS 23.0 (2017) for descriptive statistical analysis.

Pseudonyms are used to assure confidentiality of the focus group participants. The focus group

participants were Mexican origin women, ages 32-59, with a mean of their ages at 45.25, living in Phoenix, AZ. Of the eight participants, 87.5% (n = 7) considered themselves to be the matriarch of the home, whereas 75% (n = 6) stated they were mothers (Table 1).

TABLE 1. Demographics: Focus Group Participants

Name	Age	Matriarch of the Family	Mother
Ana	32	Yes	Yes
Belen	34	No	No
Carla	43	Yes	Yes
Daniela	43	Yes	Yes
Elsa	45	Yes	Yes
Flor	51	Yes	Yes
Gabriela	55	Yes	Yes
Honor	59	Yes	No

Other elements included in the demographic questionnaire included their health insurance status, having seen a primary care provider (PCP), having been provided with information about breast cancer or screenings, personal mammogram screening history, and personal and family history of breast cancer. Half of the women currently have health care insurance (n = 4), with 75% having seen a primary care provider within the last year (n = 6). In regards to having received information about breast cancer and screenings, 62.5% (n = 5) stated they had received such information with 75% (n = 6) having had a mammogram ever. Of those six participants, four had received their mammogram within the current calendar year, one had received hers 2 years ago and the other 6 years ago. One participant has a current diagnosis of breast cancer. Two others attending the breast cancer support group were there as supports to their family members. Interestingly, 50% of the participants (n = 4) have a family member with a positive history of breast cancer (Table 2).

TABLE 2. Demographics: Participants' Health Care Information

Name	Insurance	Visit PCP	BC Info	Mammo/Year	Hx BrCA	+Fam Hx
						BrCA
Ana	No	Yes	Yes	2017	No	No
Belen	No	No	Yes	Never	No	Yes
Carla	Yes	Yes	Yes	2017	No	No
Daniela	Yes	Yes	Yes	2015	Yes	Yes
Elsa	No	Yes	Yes	Never	No	Yes
Flor	Yes	Yes	No	2017	No	No
Gabriela	No	No	No	2011	No	Yes
Honor	Yes	Yes	No	2017	No	No

### **FINDINGS**

The findings of the focus group interview and project were driven by the study question: What are the perceptions of Mexican American women towards a culturally and linguistically appropriate breast cancer education video? In the video produced, different Mexican cultural concepts were incorporated and used as tools to educate and promote breast cancer screenings among Mexican American women. Concepts such as *familismo*, *marianismo*, *fatalismo*, *respeto*, and *dignidad* were included, with the goal of promoting breast cancer screening and respecting Mexican American cultural values. The demographic questionnaire was provided in both the English and Spanish languages and the focus group interview was conducted in the Spanish language. All of the participants were either bilingual Spanish/English languages or spoke the Spanish language only. The data, for this project, were collected using the demographic questionnaire, the transcript of the focus group interview and discussion, and field notes.

### Overarching Theme: "Language, Identity, Values"

The overarching theme of "Language, Identity, Values" was at the core of the focus group participant responses as they expressed their pleasure with the health education video on the

importance of breast cancer screening for Mexican American women. They repeatedly were able to recognize how incorporating Mexican cultural values into a breast cancer education tool fostered respect of a cultural identity, and thereby has more potential to increase knowledge about the importance of breast cancer screening in Mexican American women.

Review of the focus group interview transcript identified varied concepts that supported the integration of Mexican cultural values into the video production. The participants discussed characteristics of the video that they found to be especially beneficial. All eight participants identified beneficial characteristics to include: (a) presentation in the Spanish language, (b) a Mexican American presenter with whom they could identify, and (c) the incorporation of the Mexican cultural values, especially, family, faith, and modesty. Five out of eight participants specifically expressed that the incorporation of snapshots that included women and families that they could identify with was something they liked. Throughout the focus group the participants expressed the benefits of watching a video that sparked a conversation about an important topic and educated them about personal risk factors. The focus group and video also sparked up conversations between the group of women. At the conclusion of the focus group, in casual conversation, the participants specifically expressed interest and motivation to share their new knowledge with other women in their community and especially with their families thus promoting once again, the significance familia holds in the Mexican American community. The participants also identified other topics regarding health care that was significant to them, such as, limited access to health care, lack of health insurance, and limited knowledge about community resources as potential barriers.

A synopsis of the details of the focus group questions is presented with details of each. The questions are outlined in Table 3.

TABLE 3: Focus Group Interview Questions

Question 1	Please explain your overall feeling of satisfaction or dissatisfaction with this video.
Question 2	Can you explain if you found the topic for the project interesting and helpful?
Question 3	What do you think was the most valuable part of this video?
Question 4	Do you believe the illustrations, information, and overall video were presented in a culturally respectful way?
Question 5	Was it helpful to receive the information in the Spanish language?
Question 6	Did this video demonstrate respect for the cultural value of modesty?
Question 7	Did you find it respectful to address spirituality and values concerning faith in this video?
Question 8	In what way does this video help address and decrease any of your fears about breast cancer
	screening? Or did it, in any way make you more fearful?
Question 9	What is something you learned from the video?

The answers to the questions were collated and analyzed for commonalities.

Question 1: Please explain your overall feeling of satisfaction or dissatisfaction with this video.

All eight of the participants expressed full satisfaction with the educational video. Some of the discussion points that supported satisfaction were that the video was informative, the topic impacts women of various ages, the video was presented in Spanish and easy to understand and the incorporation of cultural values was clever. The participants also stated that the information in the video was presented in a very professional manner.

*Question 2:* Can you explain if you found the topic for the project interesting and useful?

Participants discussed different ways they each found the video and subject to be interesting and useful. Four of the eight participants responded to this question. They found the statistics and knowledge of screening options to be informative. The participants stated that they found the information useful and relatable with the inclusion of Mexican cultural values such as family, faith, and fear. Additionally, they noted the presenter as being unique to this type of

presentation: "And I liked that a young Mexican American woman, speaking very good Spanish presented (the information) with pride."

*Question 3:* What do you think was the most valuable part of this video?

Participants expressed their opinions of ways the video was valuable that ranged from the importance of breast cancer education to the importance cultural values. Five of the eight participants responded to this question. One participant expressed, "I learned a lot about a mammogram and self-examination. Sometimes we are indecisive or simply don't' have enough education about something and it takes us away from these practices. But after watching this video I feel more motivated to get a mammogram and perform self-examination." Another response pointed out the value of incorporating cultural values into the video, "I like that the video mentions that we feel embarrassed. We do not want to display our bodies. And we did not have the information, but knowing this information, and what we learned today, we know that it is important to educate all women in our family, especially our daughters about the importance of breast cancer screening."

Question 4: Do you think the illustrations, information and video in general were presented in a culturally respectful way? Was it useful to receive the information in Spanish?

Overall, the group consensus about the video production was positive. The illustrations, bilingual presentation, and incorporation of cultural values all supported participants' need for demonstrations of respect for their culture. One participant stated, "I like the question: how can we use our values to motivate us? All the video and its information was presented in a culturally respectful way. I liked that it was presented in Spanish and that it is respectful of our culture." *Question 5:* Did this video show respect for the cultural value of modesty?

As presented, the video included different Mexican cultural values, one being modesty. Three of the participants discussed the benefits of receiving information that addresses modesty. Different points presented included that learning about breast cancer stresses the importance of screening. The responding participants agreed that Mexican cultural values revolve around modesty and being reserved by nature. The breast self-exam and mammogram illustrations helped slowly withdraw their modesty and fear, "I liked that it talked about modesty, because Mexican women, and our cultural practices, our marriages, our families, teach us that we should be more reserved. Learning about breast cancer, and the impact it can have on us and our families was very shocking."

Question 6: Did you find it respectful to approach spirituality and values related to faith in this video?

Other Mexican cultural values incorporated into the video included faith and spirituality. The participants in the focus group all agreed on the importance of being devoted to their religion and faith. Participant feedback supported using faith, spirituality, and religiosity as tools and resources to guide screening behaviors. Participants expressed that faith and religion are "delicate" topics, and that the video astutely addressed those in a most delicate and respectful manner.

Question 7: How does this video help address and lessen any of your fears about breast cancer screening? Or did it, somehow make you more fearful?

The participants in the study described the new knowledge gained about breast cancer and screening practices as motivating and inspiring. One participant expressed interest in reaching out to her health care provider and asking for a mammogram. Another participant,

sister of a breast cancer patient, expressed that the video did not instill any new fears nor anxiety. Instead, cultural values like faith and family, and new knowledge all supported the importance of breast cancer screening.

Question 8: What is something you learned from the video?

Each participant shared something she had learned from the video presentation. Some noted points included learning about breast cancer facts and learning that Mexican American women are at particular risk of the disease. Also, the participants were able to note breast cancer screening options, and the importance of becoming more engaged in their health care.

### **DISCUSSION**

A qualitative descriptive design using a focus group was carried out for this project. The project findings support the overall goal of exploring Mexican American women's opinions about culturally tailored education. The Health Belief Model was used as the theoretical underpinning for this project. Primarily the model was used as a tool to help steer the video in a direction that would consider the cultural values of Mexican American women.

### **Relationship of Findings to Framework**

This project was designed to explore how Mexican American women would perceive a culturally and linguistically appropriate education video. The theoretical framework that drove this project was the Health Belief Model, a framework that helps gain better understanding of individuals' heath beliefs and behaviors through exploring individual values. The identification and integration of Mexican cultural values in the educational video helped explore the significance cultural values play in education for this population. The evidence presented outlines the impact Mexican cultural values have on perceived barriers and modifying health

behaviors (Austin et al., 2002). Various video script elements addressed perceived susceptibility, perceived severity, perceived barriers, and perceived benefits. The video script first included statistics about breast cancer. Statistics about breast cancer rates among Mexican American women and hereditary risk factors were a primary focus. Studies have reported that perceived susceptibility of breast cancer among Mexican American women is primarily connected to limited knowledge about vulnerability to the disease (Austin et al., 2002). Perceived susceptibility is connected to perceived severity. Women that had expressed limited knowledge about breast cancer risk factors and disease, also reported limited perceived severity (Austin et al., 2002). The compelling statistics, for example, breast cancer being the most commonly diagnosed cancer in Hispanic women, and breast cancer being the leading cause of death for Hispanic women (ACS, 2015-2017) were integrated into the video to address perceived severity. The concepts of perceived benefits and perceived barriers as outlined in the HBM were a focus of the video script. A Mexican American woman could perceive a benefit from breast cancer screening if this was linked to Mexican cultural values. Cultural values are important factors in women recognizing the value of taking part in screening behaviors (Austin et al., 2002). The integration of Mexican cultural values into the video script, including the incorporation of elements of fatalism, dignity, family, and faith helped the women identify with the topic. A Mexican American woman may be able to perceive a benefit from breast cancer screening if she is able to recognize the potential impact it could have on her health and her family. Moreover, Mexican cultural values were incorporated and touched on as being possible barriers in order for the women to be able to better relate to the problems limiting breast cancer screening rates.

*Fataliso* is one such Mexican cultural value that has the potential to limit breast cancer screening among Mexican American women.

The concepts provided in the HBM helped with analyzing and in understanding the data provided by this focus group study. The HBM helped with analysis of the data in relation to both cultural and non-cultural influences on participants' responses to this educational video, which demonstrated the usefulness of the HBM framework for this study.

### Relationship of Findings to Evidence

Overall, the findings of this project supported different elements that originated from the synthesis of evidence. More specifically, the focus group demographics, discussion, and overarching theme were further corroborated by the evidence that was presented.

### Breast Cancer Knowledge, Attitudes, and Screening Behaviors

Although there are limited number of studies that exist in exploring perceptions of culturally appropriate education tools about breast cancer, those presented in the synthesis of evidence did explore an association between Mexican American culture and breast cancer screening behaviors. A study by Miranda et al. (2011) found Mexican American women to have low rates of breast cancer screening behaviors. Factors identified as possible causes included limited access, less education, and cultural disparities (Miranda et al., 2011). Ramos, Correa, and Trinidad (2015), also presented a qualitative study that identified barriers to breast cancer screening. Barriers discussed in the literature included lack of knowledge, perceived fear, and modesty. The elements of limited knowledge, perceived fear, and modesty were strategically incorporated into the video to undertake the barriers identified and were easily identified by the focus group participants as evidenced in the overarching theme.

### Cultural Beliefs, Barriers, and Acculturation

Tejada et al. (2016) carried out a study in which the relationship between cultural values and breast cancer was analyzed to evaluate the impact on delays in breast cancer screenings in Mexican American women. The cultural values that were notably identified by studies like Tejada et al. (2016), included faith and modesty. Gonzlez et al., (2015) identified acculturation, fatalism, family, and lifestyle as common cultural values that affect health care behaviors of Mexican American women. The evidence presented was the primary support for the inclusion of various Mexican cultural values into the video script for this project.

### **Interventions**

The Gael and O'Connor (2015) study created a Spanish language education video about mammogram screening demonstrating the benefits of a linguistically appropriate education tool. The study findings reported an increase in mammogram screening referrals, and participation. In another study by Nuño et al., (2011), a *promotora* intervention approach supported the effectiveness of focused cultural interventions. The participants were motivated and more likely to relate to a *promotora* who spoke the Spanish language and who was more familiar with the community. The findings in these studies were used as support for the video that was produced and presented by a Mexican American woman who is fluent in the Spanish language.

### **Impact of Findings on Practice**

The findings of this project are novel, in that a specific cultural integration was created in order to explore Mexican American women's perceptions of a unique intervention to promote breast cancer screenings. However, the information that has been gained from this project is

insightful for nurse practitioners and other health care providers and researchers who want to carry projects like this forward.

Mexican cultural values underpinning beliefs related to breast cancer may act as barriers to breast cancer screening and care in Mexican American women (Tejada et al., 2016). Regardless of access, cultural values can impact interest and timing in seeking preventive screening services (Tejada et al., 2016). Interventions involving cultural values and beliefs have been identified as a potential place to provide action to change (Tejada et al., 2016). Having a comprehensive understanding of how different cultural values impact the perceptions and attitudes of Mexican American women towards breast cancer screening is important in helping address various problems. The incidence of breast cancer in Mexican American women is gradually increasing. Mexican American women have risk factors like genetics and low screening participation. Culture-specific interventions and care is primary in health promotion behavior changes to promoting screening practices. Nurse practitioners can play an important role in encouraging behavior changes. Nurse practitioners must understand how cultural factors influence Mexican American women's behaviors, beliefs, and overall perceptions. In turn, nurse practitioners can then use this knowledge to promote and educate Mexican American women in a more culturally respectful manner.

### **Strengths and Limitations**

The primary strength of this project is in the focus group participants being a homogenous group of Mexican American women recruited from a breast cancer support group that is conducted in the Spanish language. Homogeneity promotes trust and comfort, fostering a supportive and honest environment for participants (Polit & Beck, 2012). Also, the focus group

included a balanced number of participants, with a range of ages and roles represented, all fluent in the Spanish language. The researcher being of Mexican origin decent, and fluent in the Spanish language was a particular strength of the study. The researcher was able to provide written and verbal explanation of the project to participants in a language with which they felt very safe and comfortable expressing themselves. Overall, the project was carried out with extensive detailed planning and coordination when marketing, organizing, and recruiting participants to the focus group.

A limiting factor to the study design, using a focus group could have impacted the findings as opposed to individual interviews. Participants in group interviews can be influenced by one another and that can lead to a group discussion and consensus rather than an individual opinion (Polit & Beck, 2012). Another liming factor to consider is that the project was organized, planned, and carried out by the researcher. The focus group interviews were carried out by the researchers. Since the researcher was the person presenting the information in the video, it is possible that since she also conducted the focus group, participants could have been reluctant to be critical of her. This could be a risk for procedural, measurement, and interview bias (Polit & Beck, 2012).

### **Dissemination and Future Implications for Practice**

The primary way the project findings and recommendations will be disseminated will be through the video produced. This video will be made available to community health centers, private practices, and support groups that are interested in presenting it to their patients and communities. A formal dissemination plan will consider sharing the DNP Project through a poster presentation at local, state, regional, and/or national conferences. Additionally, the

researcher plans to submit a manuscript detailing the project and study findings to a peer-reviewed journal associated with cultural health care and advance practice nursing, such as Hispanic Health Care International, the official journal of the National Association of Hispanic Nurses.

Moreover, the future implications for nurse practitioners must center around imparting knowledge about breast cancer screening to Mexican American women to improve breast cancer screening rates. However, carrying this out with a strategy that considers cultural values is essential. The focus group interviews and feedback profile the importance of, and impact that cultural beliefs play in a Mexican American woman's perceptions regarding breast cancer screening. With the number of breast cancer diagnoses increasing, the findings of this DNP Project could be used to develop more culturally sensitive education tools and health promotion programs that address problems, such as decreased breast cancer screening participation. More studies like this one can help further identify the impact of Mexican cultural values on health care and further assess the impact Mexican cultural values have on all components of the lives of this population, not solely focusing on health.

### **CONCLUSION**

Mexican American women are a vulnerable population of interest, in part, due to barriers to health care that can make access to screening services challenging (Castañeda et al., 2014). Some of the barriers to health care include limited personal resources like health insurance or access to health care resources (Castañeda et al., 2014). As presented, acculturation, culture, language barriers, and overall knowledge can contribute to this population's vulnerability (Castañeda et al., 2014). These elements lead to a complexity of health perceptions in Mexican

American women (Mendelson, 2002). Vulnerability calls for a need for culturally sensitive and holistic interventions that can positively impact health care perceptions in a vulnerable population (Mendelson, 2002). "An individual must perceive a need for health care in order for health care utilization to occur" (Castañeda et al., 2014, p. 672).

This culturally appropriate education video can serve as an educational intervention that respects language, identity, and tailors information in a respectful manner. This approach provides viewers the opportunity to personally relate to the experience, and promotes engagement by incorporating cultural values and beliefs with which the Mexican American woman can relate. The goal of this project was to understand the perceptions of Mexican American women towards a newly developed breast cancer screening educational video and evaluate whether that culturally tailored intervention has potential to impact breast cancer screening knowledge and screening behaviors in this vulnerable population.

APPENDIX A:

EVIDENCE APPRAISAL

Reference	Research Question, Theoretical Framework, Study Design	Sample (n) and Setting	Data Collection/Data Analysis	Findings
Banegas, M. P., Bird, Y., Moraros, J., King, S., Prapsiri, S., & Thompson, B. (2012). Breast cancer knowledge, attitudes, and early detection practices in United States-Mexico border Latinas.  Journal of Women's Health, 21(1), 101-107.	Research Question: Research breast cancer knowledge, attitudes, and use of breast cancer preventive screening among U.S. Latina and Mexican women residing along the U.S Mexico border  Theoretical Framework: No theoretical framework identified  Study Design: cross sectional quantitative	Sample: Mexican (n =128) U.S. Latina (n =137) Total: 265 women Women were >40 years, randomly selected from seven participating community health centers  Setting: U.SMexico border communities: Dona Ana County, NM; Grant County, NM; Luna County, NM; and Ciudad Juarez	interviewer-administered questionnaire in participant's language of preference English/Spanish  Questions included sociodemographic information, attitudes and knowledge about breast cancer and breast cancer screening, family history of breast cancer, and breast cancer screening practices.  Data Analysis: Pearson's chi-square Fischer's exact test t tests multivariate regression analyses	Results showed Mexican women had high knowledge levels (54.8%) compared to U.S. Latinas (45.2%, p = 0.01)  18% of U.S. Latinas believed they are more likely to develop breast cancer compared to Mexican women (p = 0.013). Results show that U.S. participants had significantly greater odds of ever obtaining a mammogram/breast ultrasound (p < 0.001) and clinical breast exam (p < 0.001). Also, greater odds of performing breast self-exam (p = 0.001) than Mexican women  Participants w/ more educational had better odds of having ever had a mammogram/breast ultrasound (p < 0.05) and clinical breast exam (p < 0.01). Also, to have ever performed breast self-exam (p < 0.01).
Davis, J. L., Buchanan, K. L., & Green, B. L. (2013). Racial/ethnic differences in cancer prevention beliefs: Applying the health belief model framework. <i>American Journal of Health Promotion</i> ,	Research Question: Gain an understanding of different racial/ethnic group's beliefs about cancer prevention	Sample: N=7452 White: 5445 Hispanic: 622 African-American: 687	Data Collection: Data were collected from the 2007 Health Information National Trends Survey: a cross-sectional study that collected data through random-digit-dial telephone frame	Perceived susceptibility, perceived benefits, and self-efficacy statistically associated with race/ethnicity.  80% of each racial/ethnic group

27(6), 384-389.	Theoretical Framework: Health Belief Model  Study Design: Cross sectional Study	Asian: 202 Setting: United States	and a mailing address frame  Data Analysis: Rao-Scott v2 test multivariate logistic regression Tukey-Kramer multiple comparison adjustment	believed a benefit was that cancer, when detected early, can be cured Hispanics (46.3%) were less likely to believe they had the ability to lower their chances of getting cancer than did both African-Americans (71.6%) and Whites (76%)  Perceived susceptibility: Hispanics (OR: 1.87; 95% CI: 1.46– 2.40) Asians (OR: 2.45; 95% CI: 1.77–3.40), and African-Americans (OR:2.01; 95% CI: 1.51–2.66) were more likely to believe they had a lower chance of getting cancer in the future than whites
Goel, M. S., & O'Conor, R. (2016). Increasing screening mammography among predominantly Spanish speakers at a federally qualified health center using a brief previsit video. <i>Patient education and counseling</i> , 99(3), 408-413.	Research Question: Assess the impact of an educational video on breast cancer mammogram screening Theoretical Framework: Social Cognitive theory Study Design: RCT	Sample: N=97 Intervention: N=49 Control: N=48  Setting: Two federally qualified community health centers (FQHC).	Data Collection:  Telephone pre-test  Intervention group: Video Women assigned to the intervention group were instructed to arrive early to appointment to watch motivational video  • Video: "brief, thirty second encounter between a patient and provider. In the demonstration, the provider sets a chronic disease-focused agenda for the visit, while the patient acknowledges the chronic disease agenda and	Proportion of mammogram referrals in the video group was significantly higher than the control group, 37% vs. 15%, (p < 0.01).  Video group had a higher proportion of completed mammograms, 33% vs. 13% (p < 0.02).  No differences in breast cancer knowledge or patient activation between the intervention and control groups.

prompts the provider about her mammogram referral" Control Group-No video Telephone follow-up w/in three days after appointment to complete post-test survey Telephone interviews- evaluated breast cancer knowledge at baseline (prior to any intervention) and after their primary care appointment. Breast cancer knowledge was measured 10-item measure assessing breast cancer knowledge in five domains (1) family history, (2) breast cancer symptoms, (3) physical exam findings, (4) mammography effectiveness, and (5) curability. Telephone interviews also evaluated patient activation (knowledge, skills and confidence in health management) using 13-Item Patient Activation Measure (PAM) Post-test: Self-report of whether a mammogram was requested Chart reviews were conducted by a trained research assistant (RA) to assess receipt of mammogram referrals and mammogram completions among all participants **Data Analysis:** Simple descriptive statistics chi-square statistics and t-tests for categorical and continuous variables Wilcoxon Rank Sum tests to

Gonzalez, P., Lim, J. W., Wang-Letzkus, M., Flores, K. F., Allen, K. M., Castañeda, S. F., & Talavera, G. A. (2015). Breast cancer cause beliefs: Chinese, Korean, and Mexican American breast cancer survivors. Western Journal of Nursing Research, 37(8), 1081-1099.	Research Question: Examine causal attribution beliefs about breast cancer and their influence on health behavior change among Chinese, Korean and Mexican-American breast cancer survivors Theoretical Framework: No theoretical framework identified Study Design: descriptive, qualitative study	Sample: N= 42 survivors Chinese (n = 21), Korean (n = 11), Mexican American (n = 10) Inclusion criteria: women diagnosed with breast cancer, 1 to 5 years post diagnosis -identified as Chinese, Korean, or Mexican American, born in the United States  Setting: Los Angeles, California	compare differences in knowledge and patient activation, SAS, version 9.2 Software  Data Collection: Focus groups, lasting 90-120 min Two focus group discussions per ethnic group: 5 to 11 women in each group Semi-structured interviews, openended questions Focus group facilitators were linguistically and culturally trained Data Analysis: Focus group interviews were audiorecorded, transcribed verbatim, translated to English NVivo Software was used for data storage and coding	Themes about the cause of breast cancer were identified:  • Stress (subthemes: acculturation stress, family stress and lifestyle stress)  • Diet  • Fatalism
Miranda, P. Y., Tarraf, W., & González, H. M. (2011). Breast cancer screening and ethnicity in the United States: implications for health disparities research. <i>Breast cancer research and treatment</i> , 128(2), 535-542.	Research Question: Explore if ethnicity factors in understanding current estimates of breast cancer screening patterns and disparities  Theoretical Framework: Behavioral Model of Health Services Study Design: Cross sectional study	ethnic/racial groups included: Black, Central or South American, Cuban, Mexican, Puerto Rican, and non-Latino white. Women, 40–74 years-old N = 5,546 Setting: United States	Data Collection: Researchers examined data from the 2007 U.S. Medical Expenditure Panel Survey The data presented breast cancer screening among respondents Data Analysis: Complex survey data procedures Taylor Series Linearization approach to variance estimation Stata software 10.1	Mexican women reported the lowest rates of within past year use of mammograms (47.8%) and clinical breast exams (54.5%).  Mexican origin women reported the highest frequency of never using mammograms (18.0%).  Mexican women had twice the risk of never receiving clinical breast exam screening Compared to Black women, women of Central/South American, and Cuban women.  Education, income and insurance

Nodora, J. N., Cooper, R., Talavera, G. A., Gallo, L., Montenegro, M. M. M., Komenaka, I., & Martinez, M. E. (2015). Acculturation, behavioral factors, and family history of breast cancer among Mexican and Mexican-American Women. Women's Health Issues, 25(5), 494- 500.	Research Question: Explore the prevalence of behavioral risk factors and family history of breast cancer by level of acculturation  Theoretical Framework: No theoretical framework identified  Study Design: cross-sectional case study design	Sample: N=1,201 newly diagnosed breast cancer patients N=581 Mexican, living in Mexico N=620 Mexican American, living in USA  Setting: Mexico and United States	Data Collection: risk factor questionnaire was administered to the participants Spanish or English 93% of questionnaires were administered in person by a trained research assistant 7% were completed over the phone Data collection dated from March 2007-June 2011 prevalence of behavioral risk factors and family history of breast cancer were assessed according to acculturation level, adjusting for age at diagnosis and education Data Analysis: Multivariate logistic regression tested for associations between acculturation level and risk factors SAS 9.3 software was used for statistical analysis	coverage decreased relative risk of reporting the absence of mammogram use/ clinical breast exam  Mexican American women were significantly more likely to: Have body mass index of 30 kg/m2 or greater, consume more alcohol, and report having a family history of breast cancer than women living in Mexico. U.S. acculturation groups were significantly more likely to have lower total energy expenditure than women in Mexico. English-dominant women were less likely to ever smoke than Mexican women
Nuño, T., Martinez, M. E., Harris, R., & García, F. (2011). A promotora-administered group education intervention to promote breast and cervical cancer screening in a rural community along the US–Mexico border: a randomized controlled trial. <i>Cancer Causes &amp; Control</i> , 22(3), 367-374.	Research Question: Evaluate a promotora- administered educational approach to promote breast cancer screening among Hispanic women  Theoretical Framework: Social Cognitive Theory	Sample: N=371 Intervention: 183 Control: 188 Women  Setting: U.S. Mexico Border Yuma, AZ Participant homes	Data Collection: Intervention: Education session presented by <i>promotora</i> , (health education trained specialist). Sessions were 2 hours and included information on breast/cervical cancer, screening, and risk factors. Sessions were in Spanish Small groups were interactive and encouraging Control group: No educational	Intervention group was more likely to report having received a mammogram within past year (OR=2.0, 95% CI=1.3-3.1) 2.0 times more likely  Intervention had a higher impact on women who had not had a mammogram within past year.  Promotora-based intervention is

	Research Design: RCT		intervention, usual phone and telephone reminder of annual screening due Follow-up questionnaires, home visits  Data Analysis: Stata 10.9 used to carry out statistical analyses Descriptive statistics-baseline demographic and socioeconomic characteristics between intervention and care groups. Primary outcomes-self reported Bivariate logistic regression analyses calculated odds ration for differences between intervention and control group.	effective in improving cancer screening among Hispanic women.
Ramos, A. K., Correa, A., & Trinidad, N. (2015). Perspectives	Research Question: Explore challenges and	Sample: N=37 Hispanic	Data Collection: Focus groups were carried out	Themes: Emotional Connection to Breast
on breast health education and	opportunities in access	immigrant women,	using a semi-structured interview	Cancer Connection to Breast
services among recent Hispanic	to breast health services	ages 19 and older	guide with questions related to	Challenges to Appropriate Breast
immigrant women in the Midwest:	and information	Annual individual	participant's engagement,	Health Information and Services
A qualitative study in Lancaster		income < \$35,000	knowledge, and experience with	Lack of Information and Training
County, Nebraska. Journal of	Theoretical Framework: Health	Immigrants from	breast health services and their ideas for health promotion and	on Personal Breast Care Perceived Fear and Pain from
Cancer Education, 31(4), 666-672. doi: 10.1007/s13187-015-0886-0	Belief Model	Mexico, Colombia, Costa Rica, El	education initiatives related to	Screenings
doi: 10.1007/313107 013 0000 0	Bellet Woder	Salvador,	breast cancer.	Value of Modesty and Being
	Study Design:	Honduras, and	Groups lasted approximately an	Embarrassed During Clinical
	Qualitative Study	Venezuela	hour and a half and were conducted	Limited knowledge of free or
		G	in Spanish	low-cost breast health services
		Setting: Lancaster	Hispanic researchers who were	available within the community.
		County, Nevada	bilingual and bicultural facilitated the focus groups	Participants also shared a concern about logistical factors such as
			Data Analysis:	transportation and distance as
			Audio-recorded and transcribed in	barriers.
			Spanish and translated into English	

			NVivo 10 software was used for coding and analysis of themes Two trained coders reviewed the transcripts	
Sunil, T. S., Hurd, T., Deem, C., Nevarez, L., Guidry, J., Rios, R., & Jones, L. (2014). Breast cancer knowledge, attitude and screening behaviors among Hispanics in South Texas colonias. <i>Journal of Community Health</i> , 39(1), 60-71.	Research Question: To examine breast cancer knowledge, attitudes and screening behaviors of Hispanic women living in South Texas counties.  Theoretical Framework: Health Belief Model  Study Design: Cross Sectional Quantitative Study	Sample: Total: 2,812 individuals interviewed Maverick: 947 females , 451 males Val Verde: 902 females, 512 males Female survey participants between the ages of 40–75 were included in the present study n = 933 Setting: South Texas border Counties: Maverick & Val Verde	Data Collection: Community based participatory approach survey 30 min interviews were conducted trained local residents hired to administer surveys October 2010-March 2011 English or Spanish depending on the preference of the study participant. Survey presented two separate banks of 16 items related to clinical breast exam 17 items related to mammography. Data Analysis: Logistic regression analysis	41.7 % of the women had undergone a clinical breast exam within the past year. 40.6 % of the women had gotten a mammogram screening within the past year. Women reported low to moderate levels of breast cancer knowledge, lower levels of perceived severity of breast cancer and higher levels of overall benefits associated with early screening. Women indicated moderate to higher levels of perceived barriers to clinical breast exam and mammogram.  83.5 % of women identified PCP as their preferred and primary source for information
Tejeda, S., Gallardo, R. I., Ferrans, C. E., & Rauscher, G. H. (2016). Breast cancer delay in Latinas: the role of cultural beliefs and acculturation. <i>Journal of Behavioral Medicine</i> , <i>39</i> , 1-9. doi: 10.1007/s10865-016-9789-8	Research Question: explore the association between cultural factor and beliefs and breast cancer and how do they impact screening delays?  Theoretical Framework: No theoretical	Sample: Latina women Ages 30–79 Been diagnosed with a primary breast cancer N = 181 Mexican origin-60 % of sample Setting: Chicago	Data Collection: Interviews that included a 15-item cultural beliefs scale addressing beliefs Survey-addressing process, discovery, diagnosis and treatment each woman experienced in relation to treatment  Data Analysis: Univariable analyses examined the	Mean score for breast cancer cultural beliefs scale was 3.38 (SD = 3.7) 44 % of the women holding three or more breast cancer cultural beliefs. (1) Faith in God can protect you from breast cancer (48 %) (2) If a breast lump is touched or pressed often, the lump will turn out to be breast cancer (30 %)

fra	amework identified	relation of patient characteristics	(3) If breast cancer is cut open in
		with cultural beliefs with delay	surgery, it will grow faster (28
St	tudy Design:	variables	%).
Cı	ross-sectional survey	Chi square tests of association	
		Multivariable logistic regression	61% of women reported
		models	receiving a mammogram w/in
		Preliminary logistic regression	past 2 years before diagnosis
		models	
		Model-based standardization	24% of women reported never
		(predictive margins) was applied to	receiving a mammogram.
		the logistic regression models	Factors associated with cultural
		SAS 9.3 and STATA 13 software	beliefs (p< 0.01) included age,
		were used for Analysis	education, income, acculturation
			and insurance
			Family history of breast cancer &
			low trust in providers were
			associated with more cultural
			beliefs (p<0.20).

## APPENDIX B:

# LETTER GRANTING PERMISSION TO RECRUIT FROM A LOCAL SPANISH BREAST CANCER SUPPORT GROUP

July 19, 2017

### To Whom It May Concern:

I have received Viridiana Ibanez's request to visit, present and recruit members from the Spanish Cancer Support Community support group in Phoenix, AZ. Viridiana has provided me an explanation of her project titled "Breast Cancer in Mexican American Women: Creating a Culturally and Linguistically Appropriate Tool for Patient Education." At this time, I am happy to support this project and provide her with the opportunity to come out and meet our support group members and recruit them for her project. Feel free to contact me with any further questions.

LAC

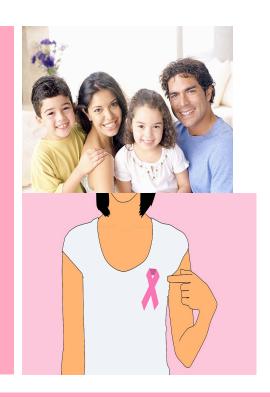
Veronica Villanueva MC, LAC, NCC Associate Program Director vvillanueva@cscaz.org (602) 262.3792 – Direct line



# APPENDIX C:

RECRUITMENT FLYERS

# BREAST CANCER SCREENING IN MEXICAN AMERICAN WOMEN



## Are You a Mexican American Woman?

Age 25-60?

English **OR** Spanish speaking?

Participants are needed for a study that will explore the need for more culturally appropriate breast ca screening education tools.

We need your input!

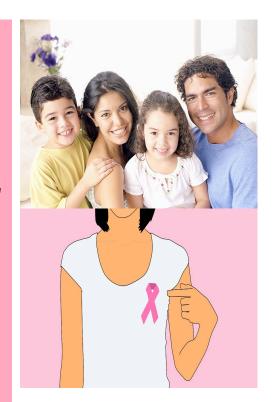
If you are interested in participating, please contact

Viridiana Ibanez

602-335-9950, vibanez@email.arizona.edu

Gratitude and compensation will be provided to participants

# DETECCION DE CANCER DE SENOS EN MUJERES MEXICO-AMERICANAS



# ¿Es usted una mujer México-Americana? ¿Entre 25-60 años?

¿Habla ingles o español?

Se necesitan participantes para un estudio que explorara la necesidad de herramientas educativas mas culturalmente apropiadas para la detección del cáncer de senos.

¡Necesitamos su opinión! Si le interesa participar, favor de contactar a Viridiana Ibañez

602-335-9950, vibanez@email.arizona.edu

Se dará gratitud y compensación a los participantes

## APPENDIX D:

LETTER GRANTING PERMISSION FOR USE OF STUDY SETTING



August 10, 2017

### To Whom It May Concern:

I have received Viridiana Ibanez's request to use Phoenix Public Library's Century Branch as a location for conducing her DNP Project. The library is located at: 1750 E. Highland Avenue, Phoenix, AZ 85016.

Viridiana has provided me with an explanation of her project titled "Breast Cancer in Mexican American Women: Creating a Culturally and Linguistically Appropriate Tool for Patient Education." I approve Viridiana's use of our meeting room to carry out her project and focus group interviews.

Viridiana has agreed to follow the library's meeting room policy and the proper procedures for reserving the meeting room. She has confirmed that the project will not interfere with any library activities or programming. The City of Phoenix and Phoenix Public Library are in no way affiliated with this project.

Sincerely,

Jasmina Jusic Branch Manager

Phoenix Public Library, Century Branch

1750 E. Highland Avenue

Phoenix, AZ 85016

(602) 261-8677

APPENDIX E:

SCRIPTS FOR VIDEO

#### SCRIPT FOR VIDEO - ENGLISH

### (Introduction)

Hi, my name is Viridiana Ibanez and I'm 28 years old. I was born in Phoenix, AZ and I am the daughter of two Mexican origin immigrants and the youngest of three girls. I am a registered nurse and currently enrolled in a graduate program to obtain my Family Nurse Practitioner certificate. Thank you for time and interest in participating in this project.

### (Mexican American Values)

Our community is proud of our culture and lifestyle. Mexican American cultural values are a blend of both Mexican and American cultures, influencing our identity, practices, and beliefs.

Traditions and celebrations drive our culture, language, and spiritual beliefs. For a Mexican American woman, *familismo* is a significant cultural value. Family and needs for family comes first. (*Familismo*, *spiritualidad*)

Having been raised in a household full of women, I witnessed first-hand family values among Mexican American women and the impact they have in creating the role the Mexican American woman holds as the "pillar" in a home. (*Personalismo*)

For these exact reasons, we need to empower each other to engage in decisions about care for our health. It is our role to serve as role models for our daughters and granddaughters for them to learn to value their health and well-being. We can start taking initiative TODAY. Today we are here to talk about breast cancer.

### (Breast Cancer)

"EL CÁNCER DE SENO NO TIENE FRONTERAS" (Breast cancer does not know borders)

Mexican American women are at particular risk of hereditary breast cancer due to common genetic origins that are found to occur in Mexican origin women. (Weitzel et al., 2007; Weitzel et al., 2005).

Breast cancer is the most commonly diagnosed cancer in Hispanic women, and is the leading cause of cancer death for Hispanic women, often diagnosed at advanced stages (ACS, 2015-2017).

Breast cancer rates are higher among Mexican American women in the United States than Mexican women living in Mexico (Nodora et al., 2015).

With this in mind, it is important that Mexican American women actively partake in routine breast screening practices to improve their quality of life and more importantly improve survival rates (Jin, 2014).

According to research, familia (family) is the most important cultural value to Mexican-American women and the loss of a mother or any woman can be particularly difficult for our

families (de la Torre & Estrada, 2001). It is with this thought in mind that we need to empower ourselves to participate in breast cancer screening.

### (Breast Cancer screening)

Sometimes we are faced with different values or recommendations that might conflict with our beliefs and promote our disinterest in participating in screening practices.

Our faith and spiritual practices sometimes guides us to act certain ways and fear for the "impossible". (fatalismo)

*Fatalismo*, at times, emphasizes that perhaps it is our destiny to get sick. But is there another way that we can think about this? How can how can we use our faith and our beliefs to help us manage our health?

What are ways that we can screen for breast cancer?

First and most important is the mammogram.

A mammogram is an x-ray picture of the breast. This provides images that help in detecting tumors

The most recent recommendations are: (U.S. Preventative Services Task Force, 2016)

A screening mammogram for women 50-74 years of age is recommended to be done every 2 years.

The decision to receive a screening mammogram every 2 years before the age of 50 years should be an individual choice with consideration of risk factors, and concern for benefits vs harm. One of those risk factors might be a history of breast cancer in your family, particularly if in a younger woman. If this is the case in your family, you might consider asking for a mammogram order starting at age 40.

### (The Breast Self-Exam)

The current evidence based guidelines have moved away from recommending breast self-exam, but it is still good for you to know how to accomplish this evaluation (U.S. Preventative Services Task Force, 2016)

A breast self-exam is a self-guided approach that allows you be familiar with your body and your breasts. If any changes are noted or lumps are felt, this can be a way for you to report a problem to your provider.

*Dignidad* and *modestia*, play a large role in this practice. We may be reluctant to practice breast self-exams or get mammograms due to the fear of exposing our bodies, feeling embarrassed, and infringing upon our dignity (Borrayo & Jenkins, 2001).

*Marianismo* reinforces our role as a Mexican American woman to present ourselves as honorable, chaste, and modest (de la Torre & Estrada, 2001).

How can we use cultural values to serve as tools to empower us to participate in screening practices?

Dignidad, modestia and marianismo are valid cultural values to respect, and, knowing that our health and wellbeing are just as important, we can understand that knowing our body and detecting a lump can be lifesaving. Although breast self-exams are no longer a strong recommendation, what I want to focus on here is that it is all right for you to be familiar with your body and for you to know what is normal or abnormal and for you to report any changes to your nipples or breasts to your health care provider.

"Forty percent of diagnosed breast cancers are detected by women who feel a lump, so establishing a regular breast self-exam is very important." (Johns Hopkins Medicine, 2017)

How should a breast self-exam be performed? (Johns Hopkins Medicine, 2017; National Breast Cancer Foundation, 2016)

A monthly breast self-exam is recommended. Try to choose the same time of the month. The breast self-exam can be performed standing, in front a mirror.

First, visually inspect your breasts with your arms at your sides. It's important to be familiar and comfortable with the way your breast look. When observing your breast, look for any changes in the usual form of the breasts, any swelling or dimpling of the skin, and any changes in the nipples.

Next, you can use the pads of your fingers to move around the entire breast in a circular pattern moving from the outside to the center, including the armpit area. One should check both breasts feeling for any lumps or thickening. Sometimes it is easier to perform this part of the exam in a shower. Then perform the same exam lying down on your back. If you notice any changes you should report these to your health care provider.

It is normal to feel a little embarrassed or shy when one thinks of, or practices a self-breast exam. *Dignidad, modestia,* and *marianismo* are strong customs that aren't easy to brush off, but remember, you are not disrespecting anyone by partaking in this practice.

As women, all women, should be familiar with the risks of breast cancer and the overall benefits of breast cancer screening. As addressed earlier, we are the "pillars" of our households, and we hold the responsibility to also prioritize our health and well-being to be able to care for the loved ones in our family.

### **SCRIPT FOR VIDEO - SPANISH**

### Introducción:

Hola, me llamo Viridiana Ibanez y tengo 28 años. Nací en México y crecí en Phoenix, AZ. Soy la hija de dos inmigrantes mexicanos y la menor de tres mujeres. Soy una enfermera registrada y actualmente estoy inscrita en un programa de posgrado para obtener mi certificado de enfermeara avanzada. Gracias por el tiempo y el interés en participar en este proyecto.

#### Valores México Americanos

Nuestra comunidad está orgullosa de nuestra cultura y estilo de vida. Los valores mexico americanos son una mezcla de culturas mexicanas y americanas, que influyen nuestra identidad, prácticas y creencias.

Tradiciones y celebraciones impulsan nuestra cultura, religión y lenguaje. Para una mujer mexico americana, el familismo es un valor cultural significativo. Las necesidades de nuestra familia siempre son lo primero.

Habiendo sido criada en una casa llena de mujeres, fui testigo de primera mano del impacto que los valores familiares mexicanos tienen en la configuración del papel que la mujer mexico americana tiene como el "pilar" en un hogar.

Por esta razón, necesitamos empoderarnos unos a otros para involucrarnos en nuestra salud y cuidado de salud. Es nuestra responsabilidad servir como modelos para nuestras hijas y nietas y enseñarles a valorar su salud y bienestar.

Podemos empezar a tomar la iniciativa HOY.

Hoy estamos aquí para hablar sobre el cáncer de senos.

Cáncer de senos: "EL CÁNCER DE SENO NO TIENE FRONTERAS"

Las mujeres mexico-americanas están en especial riesgo de cáncer de senos hereditario debido a los orígenes genéticos comunes que se encuentran en las mujeres mexico-americanas. (Weitzel et al., 2007, Weitzel et al., 2005).

El cáncer de senos es el cáncer más comúnmente diagnosticado en las mujeres hispanas, y es la principal causa de muerte por cáncer en las mujeres hispanas, a menudo diagnosticadas en estados avanzados (ACS, 2015-2017).

Las tasas de incidentes de cáncer de senos son más altas entre las mujeres mexico americanas en los Estados Unidos que las mujeres mexicanas que viven en México (Nodora et al., 2015).

Con esto en mente, es importante que las mujeres mexico americanas participen activamente en las prácticas rutinarias de detección de cáncer de senos para mejorar su calidad de vida y, lo que es más importante, mejorar las tasas de sobrevivencia (Jin, 2014).

Según la investigación, familia es el valor cultural más importante para las mujeres mexico americanas y la pérdida de una madre o cualquier mujer puede ser particularmente difícil para nuestras familias. Es con este proceso de pensamiento, que necesitamos empoderarnos unos a otros para participar en la detección recomendada.

Detección del cáncer de senos:

A veces nos enfrentamos a diferentes valores o creencias que podrían influir en nuestro interés en participar en las prácticas de detección.

Nuestra fe y religión a veces nos guía a actuar de ciertas maneras y tememos por lo "imposible".

El fatalismo, a veces, enfatiza que tal vez sea la voluntad de Dios o nuestro destino enfermarnos. Pero, ¿hay otra manera de pensar en esto? ¿Cómo podemos usar nuestra fe o nuestras creencias religiosas para ayudarnos a manejar nuestra salud?

¿Cuáles son las formas de detectar cáncer de senos?

La primera es la mamografía.

Una mamografía es una radiografía del seno. Esto puede proporcionar mejores imágenes y ayuda en la detección de tumores.

Según el Grupo de Trabajo de Servicios Preventivos de los Estados Unidos, las últimas recomendaciones son:

Mamografía de detección bienal para mujeres de 50 a 74 años

La mamografía bienal antes de la edad de 50 años debe ser individual y se debe considerar los factores de riesgo, los valores de los pacientes y evaluar los beneficios contra los daños.

El auto examen de los senos: El grupo de Trabajo de Servicios Preventivos de los Estados Unidos se está alejando de la recomendación del auto examen del seno.

Un autoexamen del seno es un enfoque autoguiado que le permite estar familiarizada con su cuerpo y su seno. Si se notan cambios o se notan bultos, esto puede ser una manera para que usted informe a su proveedor.

Dignidad y modestia, juegan un papel importante en esta práctica. Podemos reausamos a practicar exámenes de senos o hacernos mamografías debido al miedo de exponer nuestros cuerpos, sentirnos avergonzadas e infringir nuestra dignidad (Borrayo y Jenkins, 2001).

El marianismo refuerza nuestro papel como mujeres mexico americanas que se presentan como honradas, castas y modestas (de la Torre & Estrada, 2001).

¿Cómo podemos cambiar estos valores culturales para que sirvan de herramientas para que podamos participar en las prácticas de detección?

Dignidad, modestia y marianismo son valores válidos a respetar y, sabiendo que nuestra salud y bienestar son importantes, podemos llegar a la conclusión de que conocer nuestro cuerpo y detectar un bulto puede salvar la vida.

Aunque los autoexámenes de senos ya no son recomendables, lo que quiero reforzar aquí es que está bien estar familiarizado con su cuerpo y lo que es normal o anormal. Los chequeos regulares ya no se recomiendan, pero quiero asegurarme de que usted sepa que está bien que usted sienta su seno, y si nota cualquier cambio en sus pezones o senos para hacer un seguimiento con su proveedor.

"Cuarenta por ciento de los cánceres de senos diagnosticados son detectados por las mujeres que se sienten un bulto, por lo que establecer un auto examen regular de senos es muy importante." Johns Hopkins Medicine

Es normal sentirse un poco avergonzado o tímido cuando uno piensa o practica un auto-examen de senos. Dignidad, modestia y marianismo son costumbres fuertes que no son fáciles de olvidar. Pero recuerde, usted no está faltando al respeto a nadie participando en estos comportamientos.

Como mujeres, todas las mujeres, deben estar familiarizadas con los riesgos del cáncer de senos y los beneficios generales de la detección del cáncer de senos. Como se mencionó anteriormente, somos los "pilares" de nuestros hogares, y tenemos la responsabilidad de priorizar nuestra salud para poder cuidar de nuestra familia.

## APPENDIX F:

DEMOGRAPHIC QUESTIONNAIRES

## DEMOGRAPHIC QUESTIONNAIRE – ENGLISH

What is your age?
Are you the matriarch in your home?
Yes
No
Are you a mother?
Yes No
No
Do you have health care insurance?
Yes
No No
Have you visited a primary care provider in the last year?
Yes
No

Have you ever received any information about breast cancer or breast cancer screening?
Yes
No
Have you ever had the breast cancer screening mammogram?
Date:
Never
Have you ever been personally diagnosed with breast cancer?
Yes
Yes No
No

# DEMOGRAPHIC QUESTIONNAIRE - SPANISH CUESTIONARIO DEMOGRAFICO

¿Cuál es su edad?
¿Es la matriarca de su casa?
Si Si
No
¿Es madre?
Si
No
¿Tiene seguro medico?
Si
No
¿Ha visitado a un proveedor de atención medica primaria en el último año?
Si
No

¿Alguna vez ha recibido información sobre cáncer de senos sobre la detección de cáncer de senos?
Si
No
¿Alguna vez ha tenido una mamografía de detección de cáncer de senos?
Fecha:
Nunca
¿Alguna vez le han diagnosticado personalmente con cáncer de senos?
Si
No
¿Alguna persona de su familia ha sido diagnosticada con cáncer de senos?
Si
No

## APPENDIX G:

FOCUS GROUP QUESTION GUIDES

#### FOCUS GROUP QUESTION GUIDE - ENGLISH

Please explain your overall feeling of satisfaction or dissatisfaction with this video.

Can you explain if you found the topic for the project interesting and helpful?

What do you think was the most valuable part of this video?

Do you believe the illustrations, information, and overall video were presented in a culturally respectful way?

Was it helpful to receive the information in the Spanish language?

Did this video demonstrate respect for the cultural value of modesty?

Do you believe the video presentation took into consideration Mexican cultural values? What are some examples?

Did you find it respectful to address spirituality and values concerning faith in this video?

In what way does this video help address and decrease any of your fears about breast cancer screening? Or did it, in any way make you more fearful?

What is something you learned from the video?

Please explain your opinion of the look and feel of the video.

What did you like the best or least?

## FOCUS GROUP QUESTION GUIDE - SPANISH GUÍA DE PREGUNTAS DEL GRUPO FOCUS

Por favor, explique su sentimiento general de satisfacción o insatisfacción con este video.

¿Puede explicar si considera que el tema del proyecto interesante y útil?

¿Cuál cree que fue la parte más valiosa de este video?

¿Cree usted que las ilustraciones, la información y el video en general se presentaron de una manera culturalmente respetuosa?

¿Fue útil recibir la información en español?

¿Este video demostró respeto por el valor cultural de la modestia?

¿Cree usted que la presentación en video tuvo en cuenta los valores culturales mexicanos? ¿Cuáles son algunos ejemplos?

¿Le pareció respetuoso abordar la espiritualidad y los valores relacionados con la fe en este video?

¿De qué manera este video ayuda a abordar y disminuir cualquiera de sus miedos sobre la detección del cáncer de senos? ¿O lo hizo, de alguna manera hacerte más temeroso?

¿Qué es algo que aprendio del video?

Por favor, explique su opinión sobre la apariencia del video.

¿Qué le gustó más o menos?

### APPENDIX H:

IRB APPROVAL AND CONSENTS



Human Subjects Protection Program 1618 E. Helen St. P.O.Box 245137 Tucson, AZ 85724-5137 Tel: (520) 626-6721 http://rgw.arizona.edu/compliance/home

**Date:** August 29, 2017

Principal Investigator: Viridiana Anahi Ibanez Robledo

**Protocol Number:** 1708738176

BREAST CANCER IN MEXICAN AMERICAN WOMEN:

**Protocol Title:** CREATING A CULTURALLY AND LINGUISTICALLY

APPROPRIATE TOOL

Level of Review: Exempt

Determination: Approved

Documents Reviewed Concurrently:

Data Collection Tools: Ibanez - Demographic Data Collection - English.docx
 Data Collection Tools: Ibanez Demographic Data Collection - Spanish.doc
 Data Collection Tools: Ibanez - Focus Group Question Guide - English.docx
 Data Collection Tools: Ibanez - Focus Group Question Guide - Spanish.doc

HSPP Forms/Correspondence: Ibanez f107 VOTF.doc

**HSPP Forms/Correspondence:** *Ibanez f200-Application for Human Research.docx* 

 $\textbf{HSPP Forms/Correspondence:} \ \textit{Signature page.pdf}$ 

Informed Consent/PHI Forms: Ibanez t502a Informed Consent -English .doc
Informed Consent/PHI Forms: Ibanez t502a Informed Consent -English .pdf
Informed Consent/PHI Forms: Ibanez t502a Informed Consent - Spanish .doc
Informed Consent/PHI Forms: Ibanez t502a Informed Consent - Spanish .pdf
Other: Reply to Liz Baldry review of IRB Application for V Ibanez .docx

Other Approvals and Authorizations: 17 Aug 9\_27947\_lbanez\_Exempt SRC Outcome Report.pdf
Other Approvals and Authorizations: Ibanez - Copy of Letter - Permission to Recruit from Spanish Breast

CA Support Group.docx

 $\textbf{Other Approvals and Authorizations:} \ \textit{Ibanez-Letter of Support-Library.} docx$ 

**Participant Material:** Ibanez - Script for Video - English.docx **Participant Material:** Ibanez - Script for Video - Spanish.doc

Recruitment Material: Ibanez Recruitment Script EnglishSpanish.docx
Recruitment Material: Updated Ibanez DNP Project Flyer-English.docx
Recruitment Material: Updated Ibanez DNP Project Flyer Spanish.docx

This submission meets the criteria for exemption under 45 CFR 46.101(b). This project has been reviewed and approved by an IRB Chair or designee.

- The University of Arizona maintains a Federalwide Assurance with the Office for Human Research Protections (FWA #00004218).
- All research procedures should be conducted according to the approved protocol and the
  policies and guidance of the IRB.



#### The University of Arizona Consent to Participate in Research

Study Title: BREAST CANCER IN MEXICAN AMERICAN WOMEN: CREATING A CULTURALLY AND LINGUISTICALLY APPROPRIATE TOOL

Principal Investigator: Viridiana Ibanez, RN, BSN

This is a consent form for research participation. It contains important information about this study and what to expect if you decide to participate. Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether or not to participate.

#### Why is this study being done?

A culturally and linguistically appropriate video to teach Mexican American women the importance of obtaining breast cancer screenings has been produced. This video includes breast cancer facts and information on the importance of breast cancer screening. The goal of this video is to present breast cancer screening information in a manner that respects the identity and cultural values of Mexican American women.

This research project will explore the participant's perceptions of the information presented in the culturally and linguistically appropriate video. A focus group approach will provide participants the opportunity to reflect on this experience and share if the inclusion of cultural values and beliefs in the video has an impact on feelings in regards to cultural respect, identity, and knowledge.

#### What will happen if I take part in this study?

Participation will require meeting at the The Phoenix Public Library-Century Branch location for a focus group meeting to watch a video presentation and provide your opinion of the video. Written consent to participate in the research study will be obtained.

Demographic information will be collected on a questionnaire.

A focus group interview will be conducted that will last approximately 1 hour.

The focus group interview will be audio-recorded so that the information can be obtained with accuracy.

Once the audio tapes are transcribed and the information is collated, a summary will be produced, and you may be called and have that summary read to you, so that you can provide feedback as to whether the information in the summary accurately reflects the information provided in the focus group.

Consent Version: 08/22/2017

HSPP Use Only: Consent Form T302a v 2016-07



#### How long will I be in the study?

A maximum time commitment of 4 hours will be required of each individual participant for the entire project.

Participants will have the option of one of two scheduled focus group meeting times that will require approximately  $\frac{1}{2}$  hour for consenting and gathering demographic information and an additional  $1 - 1\frac{1}{2}$  hours for the focus group.

Participants may be called at a later time to provide feedback on a summary statement from information gathered at the focus groups. That phone conversation is expected to take no more than 20 minutes of time.

#### How many people will take part in this study?

There are expected to be from 5-10 total participants in this study.

#### Can I stop being in the study?

Your participation is voluntary. You may refuse to participate in this study. If you decide to take part in the study, you may leave the study at any time. No matter what decision you make, there will be no penalty to you and you will not lose any of your usual benefits. Your decision will not affect your future relationship with The University of Arizona. If you are a student or employee at The University of Arizona, your decision will not affect your grades or employment status.

#### What risks or benefits can I expect from being in the study?

There is no physical harm that will come to you from participating in this study, however we anticipate that emotions may run high as you relay your perceptions about a topic often considered to be private, with modesty at the forefront of the recognized cultural values. You may become stressed or anxious when discussing this sensitive topic. Strategies for overcoming these barriers may include: watching body language and knowing when to move on to the next question, asking you to discuss your perceptions of the video in a non-group setting, and explaining to the group, before the interview about anticipated emotions that may arise from discussing perceptions.

Expected benefits include having an opportunity to participate in creating an educational intervention that takes cultural values into consideration and can be used to help promote breast cancer screening to a vulnerable population.

#### Will my study-related information be kept confidential?

Efforts will be made to keep your study-related information confidential. Only your age and gender will be used during publication to ensure your identity is not divulged. All identifiable documentation and paperwork will be securely locked in a file at The University of Arizona,

Consent Version: 08/22/2017



College of Nursing. Also, only those involved in the study will have access to any participant information. There may be circumstances where this information must be released.

Also, your study-related information may be reviewed by the following groups:

- The University of Arizona Institutional Review Board
- Office for Human Research Protections or other federal, state, or international regulatory agencies

#### What are the costs of taking part in this study?

You are expected to be responsible for your own transportation and transportation costs to the focus group study. You will be giving up 3-4 hours of your personal time to participate in the study.

#### Will I be paid for taking part in this study?

Compensation will include a \$10 Visa Gift Card for each woman participating in a focus group.

#### Who can answer my questions about the study?

For questions, concerns, or complaints about the study you may contact Viridiana Ibanez at 602-335-9950 or vibanez@email.arizona.edu

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Subjects Protection Program at 520-626-6721 or online at <a href="http://rgw.arizona.edu/compliance/human-subjects-protection-program">http://rgw.arizona.edu/compliance/human-subjects-protection-program</a>

If you are injured as a result of participating in this study or for questions about a study-related injury, you may contact Viridiana Ibanez at 602-335-9950.

An Institutional Review Board responsible for human subjects research at The University of Arizona reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

#### Signing the consent form

I have read (or someone has read to me) this form, and I am aware that I am being asked to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I voluntarily agree to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

Printed name of subject	Signature of subject	Date
Investigator/Research Staff		
HSPP Use Only:		Consent Version: 08/22/2017 Page 3 of 4
Consent Form T502a v 2016-07		



I have explained the research to the participant or the participant's representative before requesting the signature(s) above. There are no blanks in this document. A copy of this form has been given to the participant or to the participant's representative.

Viridiana Ibanez, RN, BSN		
Printed name of person obtaining consent	Signature of person obtaining consent	Date

Consent Version: 08/22/2017

Page 4 of 4



#### La Universidad de Arizona Consentimiento Para Participar En Investigación

Titulo de Estudio: CÁNCER DE MAMA EN LAS MUJERES MEXICO-AMERICANAS: CREANDO UNA HERRAMIENTA CULTURAL Y LINGÜÍSTICAMENTE APROPIADA

Investigadora Principal: Viridiana Ibañez, RN, BSN

Este es un formulario de consentimiento para la participación en la investigación. Este contiene información importante sobre este estudio y que puede esperar si decide participar. Por favor considere la información cuidadosamente. Siéntase libre de discutir el estudio con sus amigos y familiares y hacer preguntas antes de tomar su decisión de participar o no.

#### ¿Por qué se está haciendo este estudio?

Se ha producido un video culturalmente y lingüísticamente apropiado para enseñar a las mujeres mexicano-americanas la importancia de obtener exámenes de detección de cáncer de mama. Este video incluye información sobre el cáncer de mama e información sobre la importancia de la detección del cáncer de mama. El objetivo de este video es presentar la información sobre la detección de cáncer de mama de una manera que respete la identidad y los valores culturales de las mujeres mexicano-americanas.

Este proyecto de investigación explorará las percepciones de los participantes sobre la información presentada en el video cultural y lingüísticamente apropiado. La propuesta del grupo de enfoque proporcionará a los participantes la oportunidad de reflexionar sobre esta experiencia y compartir si la inclusión de valores culturales y creencias en el video tiene un impacto en los sentimientos con respecto al respeto cultural, la identidad y el conocimiento.

#### ¿Qué ocurrirá si participo en este estudio?

La participación requerirá una reunión en la biblioteca pública en Phoenix - Century Branch para una reunión de grupo de enfoque para mirar la presentación en video y proporcionar su opinión del vídeo. Se obtendrá el consentimiento por escrito para participar en el estudio de investigación. La información demográfica se obtendrá en un cuestionario.

Se llevará a cabo una entrevista con un grupo de enfoque que durará aproximadamente 1 hora. La entrevista del grupo focal será grabada en audio para que la información pueda ser obtenida con exactitud.

Una vez que las cintas de audio hayan sido transcritas y la información haya sido recopilada, se producirá un resumen, y podrá ser llamada para que este sea leido a usted, de modo que pueda proporcionar información sobre si la información del resumen refleja con exactitud la información proporcionada en el grupo de enfoque.

Consent Version: 08/17/2017

Page 1 of 4



¿Por cuánto tiempo estaré en el estudio?

Se requiere un compromiso de tiempo máximo de 4 horas por cada participante para el proyecto entero.

Los participantes tendrán la opción de una de las dos reuniones de grupos de enfoque que requerirán aproximadamente ½ hora para consentir y recopilar información demográfica y un tiempo adicional de 1 - 1 ½ hora para el grupo de enfoque.

Los participantes pueden ser llamados en un tiempo posterior para proporcionar comentarios sobre el resumen de la información recopilada en los grupos de enfoque. Se espera que la conversación telefónica no dure más de 20 minutos.

¿Cuántas personas participarán en este estudio? Se espera entre 5 y 10 participantes en total en este estudio.

¿Puedo dejar de estar en el estudio?

Su participación es voluntaria. Usted puede negarse a participar en este estudio. Si decide participar en el estudio, puede dejar el estudio en cualquier momento. Independientemente de la decisión que tome, no habrá penalidad para usted y no perderá ninguno de sus beneficios habituales. Su decisión no afectará su relación futura con la Universidad de Arizona. Si usted es un estudiante o empleado de la Universidad de Arizona, su decisión no afectará sus calificaciones o su situación laboral.

¿Qué riesgos o beneficios puedo esperar de estar en el estudio?

No hay ningún daño físico que le podrá ocurrir de su participación en este estudio. Sin embargo, anticipe que emociones pueden correr altas cuando comparta sus percepciones sobre un tema que usted talvez considera privado, considerando que modestia es un valor cultural. Se podrá sentir estresada o ansiosa cuando discuta un tema sensible. Estrategias de cómo sobrepasar estas preocupaciones incluyen: observando el lenguaje de nuestro cuerpo y sabiendo cuando seguir adelante con otros temas, pedirle que discuta sus percepciones del video individualizada mente y pedirle que comparta con el grupo, antes de la entrevista sobre sus emociones que puedan surgir de la plática.

Beneficios incluyen tener la oportunidad de participar en creando una intervención educacional que toma en cuenta valores culturales, y que pueden ser usados para promover prácticas de prevención en una población vulnerable.

Consent Version: 08/17/2017



#### ¿Se mantendrá confidencial mi información relacionada con el estudio?

Se harán esfuerzos para mantener confidencial su información relacionada con el estudio. Solo su edad y sexo serán usados durante la publicación para asegurar que su identidad so sea divulgada. Toda documentación o papeleo que puede identificarla será seguramente asegurada en un archivo en la Universidad de Arizona, College of Nursing. También, solo esos involucrado en el estudio tendrán acceso a cualquier información sobre los parcipantes. Pueden haber circunstancias en las que esta información debe ser divulgada.

Además, su información relacionada con el estudio puede ser revisada por los siguientes grupos:

- La Junta de Revisión Institucional de la Universidad de Arizona
- Oficina de Protecciones de Investigación Humana u otras agencias reguladoras federales, estatales o internacionales

#### ¿Cuáles son los costos de participar en este estudio?

Se espera que usted se haga responsable de su propio transporte y gastos de transporte para el estudio del grupo de enfoque. Usted dará 3-4 horas de su tiempo personal para participar en este estudio.

#### ¿Se me pagará por participar en este estudio?

La compensación incluirá una tarjeta de regalo Visa de \$10 por cada mujer que participe en el grupo de enfoque.

#### ¿Quién puede contestar mis preguntas sobre el estudio?

Para preguntas, inquietudes o quejas sobre el estudio, puede comunicarse con Viridiana Ibañez al 602-335-9950 o vía correo electrónico vibanez@email.arizona.edu

Para preguntas sobre sus derechos como participante en este estudio o para discutir otras preocupaciones relacionadas con el estudio o quejas con alguien que no sea parte del equipo de investigación, puede comunicarse con el Programa de Protección de Sujetos Humanos al 520-626-6721 o en línea en

http://rgw.arizona.edu/compliance/human-subjects-protection-program

Si usted obtiene un lesión durante su participación en este estudio, o para preguntas sobre cualquier tipo de lesiones relacionadas al estudio, pueda comunicarse con Viridiana Ibanez, 602-335-9950.

Una Junta de Revisión Institucional responsable de la investigación sobre temas humanos en la Universidad de Arizona revisó este proyecto de investigación y lo encontró aceptable, de

Consent Version: 08/17/2017

HSPP Use Only:

Consent Form T502a v 2016-07



acuerdo con las regulaciones estatales y federales aplicables y las políticas de la Universidad diseñadas para proteger los derechos y el bienestar de los participantes en la investigación.

#### Firma del formulario de consentimiento

He leído (o alguien me ha leído) esta forma, y soy consciente de que se me pide participar en un estudio de investigación. He tenido la oportunidad de hacer preguntas y he tenido respuestas a mi satisfacción. Yo voluntariamente acepto participar en este estudio.

No renuncio a ningún derecho l formulario.	legal al firmar este formulario. Se	e me dará una copia de este
Nombre Impreso del Sujeto	Firma de Sujeto	Fecha
solicitar la firma (s) anterior. No	stigación   participante o al representante   hay espacios en blanco en este   participante o al representante	documento. Se ha entregado
Viridiana Ibañez, RN, BSN Nombre impreso de la persona obteniendo el consentimiento	Firms de la persona obteniendo el conse	nntimiento Fecha

Consent Version: 08/17/2017

#### REFERENCES

- American Cancer Society. (2017). Cancer facts & figures for Hispanics/Latinos 2015-2017. Atlanta, GA: Author.
- Austin, L. T., Ahmad, F., McNally, M. J., & Stewart, D. E. (2002). Breast and cervical cancer screening in Hispanic women: A literature review using the health belief model. *Women's Health Issues*, 12(3), 122-128.
- Banegas, M. P., Bird, Y., Moraros, J., King, S., Prapsiri, S., & Thompson, B. (2012). Breast cancer knowledge, attitudes, and early detection practices in United States-Mexico border Latinas. *Journal of Women's Health*, 21(1), 101-107.
- Birman, D. & Simon, C. D. (2014). Acculturation research: Challenges, complexities, and possibilities. *APA Handbook of Multicultural Psychology*, *1*, 207-230.
- Borrayo, E. A. & Jenkins, S. R. (2001). Feeling indecent: Breast cancer screening resistance of Mexican-descent women. *Journal of Health Psychology*, 6(5), 537-549.
- Bouchet, S., Torres, L., & Hyra, A. (2013). Hispanics and family-strengthening programs: cultural strategies to enhance program participation. *U.S. Department of Health and Human Services*. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/hhmi\_brief\_5\_cultural\_adaptations\_final 6 5 13 2.pdf
- Cadet, T. J. (2015). The relationship between psychosocial factors and breast cancer screening behaviors of older Hispanic women. *Social Work in Public Health*, 30(2), 207-223.
- Castañeda, S. F., Giacinto, R. E., Medeiros, E. A., Brongiel, I., Cardona, O., Perez, P., & Talavera, G. A. (2016). Academic-community partnership to develop a patient-centered breast cancer risk reduction program for Latina primary care patients. *Journal of Racial and Ethnic Health Disparities*, 3(2), 189-199.
- Castañeda, S. F., Malcarne, V. L., Foster-Fishman, P. G., Davidson, W. S., Mumman, M. K., Riley, N., & Sadler, G. R. (2014). Health care access and breast cancer screening among Latinas along the California–Mexican border. *Journal of Immigrant and Minority Health*, *16*(4), 670-681.
- Cleary, M., Horsfall, J., & Hayter, M. (2014). Data collection and sampling in qualitative research: Does size matter? *Journal of Advanced Nursing*, 70(3), 473-475.
- Colorafi, K. & Evans, B. (2016). Qualitative descriptive methods in health science research. *HERD: Health Environments Research & Design Journal*, 9(4), 16-25. doi: 10.1177/1937586715614171

- Daly, M. B., Pilarsi, R., Berry, M., Buys, S.S., Farmer, M., Friedman, S., ... & Darlow, S. (2017). NCCN guidelines insights genetic/familial high-risk assessment: Breast and ovarian, version 2.2017: Featured updates to the NCCN guidelines. *Journal of the National Comprehensive Cancer Network*, 15(1), 9-20.
- Davis, J. L., Buchanan, K. L., & Green, B. L. (2013). Racial/ethnic differences in cancer prevention beliefs: Applying the health belief model framework. *American Journal of Health Promotion*, 27(6), 384-389.
- De Jesus, M. (2016). How religiosity shapes health perceptions and behaviors of Latina immigrants: Is it an enabling or prohibitive factor? *Psychology, Health & Medicine*, 21(1), 128-133. doi:10.1080/13548506.2015.1040031
- de la Torre, A. & Estrada, A. (2001). *Mexican Americans and health: sana! sana!* Tucson, AZ: The University of Arizona Press.
- DeSantis, L. & Ugarriza, D. N. (2000). The concept of theme as used in qualitative nursing research. *Western Journal of Nursing Research*, 22(3), 351-371. doi:10.1177/019394590002200308
- Eggenberger, S. K., Grassley, J., & Restrepo, E. (2006). Culturally competent nursing care for families: Listening to the voices of Mexican-American women. *Online Journal of Issues in Nursing*, 11(3).
- Goel, M. S. & O'Conor, R. (2016). Increasing screening mammography among predominantly Spanish speakers at a federally qualified health center using a brief previsit video. *Patient Education and Counseling*, 99(3), 408-413.
- Gonzalez, P., Lim, J. W., Wang-Letzkus, M., Flores, K. F., Allen, K. M., Castañeda, S. F., & Talavera, G. A. (2015). Breast cancer cause beliefs: Chinese, Korean, and Mexican American breast cancer survivors. *Western Journal of Nursing Research*, *37*(8), 1081-1099.
- Gonzalez, P., Castañeda, S. F., Mills, P. J., Talavera, G. A., Elder, J. P., & Gallo, L. C. (2012). Determinants of breast, cervical and colorectal cancer screening adherence in Mexican–American women. *Journal of Community Health*, *37*(2), 421-433.
- Green, E. C. & Murphy, E. (2014). Health belief model. *The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society*. New York City, NY: Wiley.
- Jin, J. (2014). Breast cancer screening: Benefits and harms. *Journal of the American Medical Association*, 312(23), 2585. doi:10.1001/jama.2014.13195

- Johns Hopkins Medicine. (2017). Breast self-exams. Retrieved from http://www.hopkinsmedicine.org/breast\_center/treatments\_services/breast\_cancer\_screen ing/breast\_self\_exam.html
- Jones, P. S., Lee, J. W., Philips, L. R., Zhang, X. E., & Jaceldo, K. B. (2001). An adaptation of Brislin's translation model for cross-cultural research. *Nursing Research*, *50*(5), 300-304.
- Lincoln, Y. S. & Guba, E. G. (1985). *Naturalist inquiry*. Newbury Park, CA: Sage Publications.
- Mendelson, C. (2002). Health perceptions of Mexican American women. *Journal of Transcultural Nursing*, 13(3), 210-217.
- Miranda, P. Y., Tarraf, W., & Gonzalez, H. M. (2011). Breast cancer screening and ethnicity in the United States: Implications for health disparities research. *Breast cancer research and treatment*, 128(2), 535-542.
- Muhrer, J. C. (2017). Improving breast cancer screening in a federally qualified health center with a team of nursing leaders. *The Nurse Practitioner*, 42(1), 12-16.
- National Breast Cancer Foundation, Inc. (2016). Breast self-exam. Retrieved from http://www.nationalbreastcancer.org/breast-self-exam
- Nodora, J. N., Cooper, R., Talavera, G. A., Gallo, L., Montenegro, M. M. M., Komenaka, I., ... & Martinez, M. E. (2015). Acculturation, behavioral factors, and family history of breast cancer among Mexican and Mexican-American Women. *Women's Health Issues*, 25(5), 494-500.
- Nuño, T., Martinez, M. E., Harris, R., & García, F. (2011). A promotora-administered group education intervention to promote breast and cervical cancer screening in a rural community along the US–Mexico border: A randomized controlled trial. *Cancer Causes & Control*, 22(3), 367-374.
- Pew Research Center. (2016). Demographic profile of Hispanics in Arizona, 2014. Retrieved from http://www.pewhispanic.org/states/state/az/
- Pew Research Center. (2010). Growth of Mexican-American population. Retrieved from http://www.pewresearch.org/daily-number/growth-of-mexican-american-population/
- Polit, D. F. & Beck, C. T. (2012). *Nursing research: Generating and assessing evidence for nursing practice* (9th ed.). Philadelphia, PA: Wolters Kluwer Health Lippincott Williams & Wilkins.

- Ramos, A. K., Correa, A., & Trinidad, N. (2015). Perspectives on breast health education and services among recent Hispanic immigrant women in the Midwest: A qualitative study in Lancaster County, Nebraska. *Journal of Cancer Education*, *31*(4), 666-672. doi: 10.1007/s13187-015-0886-0
- Reed, P. G. (2011). The spiral path of nursing knowledge. In P. G. Reed & N. B. Shearer (Eds.), *Nursing knowledge and theory innovation: Advancing the science of practice* (pp.1-35). New York, NY: Springer Publishing Company.
- Sandelowski, M. (2000). What happened to qualitative description? *Research in Nursing & Health*, 23, 334-340. doi:10.1002/1098-240X(200008)23:43.0
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, *33*, 77-84. doi:10.1002/nur.20362
- Schwandt, T. A. (2007). *The Sage dictionary of qualitative inquiry* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Sunil, T. S., Hurd, T., Deem, C., Nevarez, L., Guidry, J., Rios, R., ... & Jones, L. (2014). Breast cancer knowledge, attitude and screening behaviors among Hispanics in South Texas colonias. *Journal of Community Health*, *39*(1), 60-71.
- Tejeda, S., Gallardo, R. I., Ferrans, C. E., & Rauscher, G. H. (2016). Breast cancer delay in Latinas: The role of cultural beliefs and acculturation. *Journal of Behavioral Medicine*, 39, 1-9. doi: 10.1007/s10865-016-9789-8
- Turner III, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Oualitative Report*, 15(3), 754.
- United States Census Bureau (U.S. Census Bureau). (2011). *Overview of race and Hispanic origin: 2010: 2010 census briefs*, Issued March, 2011. Retrieved http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf
- U.S. Department of Health & Human Services, Centers for Disease Control and Prevention. (2016). Breast cancer rates by state. Retrieved from https://www.cdc.gov/cancer/breast/statistics/race.htm
- U.S. Preventative Services Task Force. (2016). Breast cancer: Screening. Retrieved from https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening1
- Wallace, P. M., Pomery, E. A., Latimer, A. E., Martinez, J. L., & Salovey, P. (2010). A review of acculturation measures and their utility in studies promoting Latino health. *Hispanic Journal of Behavioral Sciences*, 32(1), 37-54.

- Weitzel, J. N., Lagos, V. I., Herzog, J. S., Judkins, T., Hendrickson, B., Ho, J. S., ... & Scholl, T. (2007). Evidence for common ancestral origin of a recurring *BRCA1* genomic rearrangement identified in high-risk Hispanic families. *Cancer Epidemiology, Biomarkers & Prevention*, 16(8), 1615-1620. doi:10.1158/1055-9965.EPI-07-0198
- Weitzel, J. N., Lagos, V. I., Blazer, K. R., Nelson, R., Ricker, C., Herzog, J., ... & Neuhausen, S. (2005). Prevalence of *BRCA* mutations and founder effect in high risk Hispanic families. *Cancer Epidemiology, Biomarkers & Prevention, 14(7), 1666-1671.* doi:10.1158/1055-9965.EPI-05-0072