

OLDER HISPANIC WOMEN WITH HEALTH CARE PROVIDER DIAGNOSED
OSTEOARTHRITIS: EXPERIENCE AND PERCEPTIONS
OF CULTURALLY COMPETENT CARE

By

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DEDICATION

This dissertation is dedicated to all of my family members and to all who participated and contributed to my development from birth to adulthood. To Trianna Oglivie, a future PhD, who chose to follow my footsteps in pursuing the terminal degree in order to be of service to the underserved population, the key word is perseverance!

In memory of my parents,

Benjamin Ulises Oglivie

and

Linneth Oglivie

To all my supporters and contributors to my edification during this journey, I thank you for your unconditional love and support during this journey.

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Arthritis is the leading cause of disability among adults in the United States over the age of 65. Osteoarthritis, the most common form of arthritis, has an incidence rate that increases with age with the highest rates among women. Hispanic women are more affected than any other racial or ethnic group. Little is known about how Hispanic women respond to

having osteoarthritis and how they manage its symptoms and limitations. Few studies have examined the specific experiences and perceptions of this population. We do not know how differences in incidence, access to care, disease burden, and activity limitations affect the treatment of Hispanic women, nor do we know if Hispanic women find the care and treatment they receive to be acceptable. Yet, it is crucial to understand how older Hispanic women manage osteoarthritis in order to provide appropriate care. Arthritis as a disparity has not been examined in older Hispanic women (McIlvane, Baker, Chivon, & Haley, 2008). There is a need to understand what older Hispanic women perceive as culturally competent healthcare services.

This study had two objectives: (a) to describe the experience of older Hispanic women and the factors that affect their quality of life and (b) to obtain the perspective of older Hispanic women as to the competency of the care they are receiving. The findings from this dissertation may help healthcare providers design plans that may contribute to improving the care and reducing the disparity related to arthritis care among this population and also contribute to a broader understanding of culturally related care needs of this population.

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I. INTRODUCTION

A. Statement of the Problem.

Arthritis is the most prevalent chronic health problem and the most common cause of disability among American adults over the age of 65 (Lawrence et al., 2008). Arthritis affects approximately 52 million adults in the United States, with a significantly higher age-adjusted prevalence for women at 24.7% versus 19.1% in men (Cheng, Hootman, Murphy, Langmaid, & Helmick, 2010). As the population ages, the number of persons affected with arthritis is projected to increase to 40% over the next 25 years (Hootman & Helmick, 2006).

Americans aged 65 and over, who identify themselves as Hispanic or Latino, constitute 5.5% of all older Americans. By 2020, it is anticipated that the Hispanic population 65 years and older will increase to 9%. By the year 2050, the increases are projected to be 17.5%. The baby boomers (those born between January 1, 1946 and December 31, 1964) are largely responsible for the rise in the older population, with three of five in this group being women (U.S. Census Bureau, 2010). The baby boomers are now between the ages of 51 and 69 and are either retired or approaching retirement. Baby boomers are generally described as well-educated and well established while holding positions of power and authority as compared to other generations (Frey, 2010). While these characteristics may be applicable to the baby boom population as a whole, the same characteristics are not as likely characteristic of the Hispanic baby boom population (Villa, Wallace, & Aranda, 2012). The older Hispanic population is generally poorly educated and

working in low-income jobs and occupations that could be considered contributing factors for early mortality outcomes compared to the general population (Villa et al., 2012).

Currently, the economic burden of arthritis for the U.S. population is an enormous \$128 billion annually: \$80.8 billion in direct costs that include medical expenditure and \$47.0 in lost earnings; 44 million outpatient visits, 992,100 hospitalizations, and 9,367 deaths annually (Cheng et al., 2010). As life expectancy of the Hispanic population increases, the number of adults with arthritis rises along with the associated costs.

Approximately 3.1 million Hispanic adults report arthritis diagnosed by a healthcare provider with a prevalence rate of 28.3% among Hispanic women (Murphy et al., 2011). Arthritis affects the older Hispanic population more than it does any other racial group (Guzman, 2001; Dunlop, Manheim, Song, & Chang, 2001). Data from the Asset and Health Dynamic Survey among the Oldest of Old (Dunlop et al., 2001) reported that the adjusted prevalence rate of arthritis among older Hispanics was 52%, among older-non-Hispanic Blacks 47%, and among older non-Hispanic Whites 32%.

Hispanics report a greater percentage of disability and activity limitation due to arthritis (Escalante & del Rincon, 2001) than other populations suffering from arthritis. This view is supported by Bolen et al. (2010) who concurred that activity limitation related to arthritis is higher in the Hispanic population. This likely reflects the lower socioeconomic conditions and lack of health insurance among Hispanic populations, which in turn may limit their access to rheumatologic care (Escalante & del Rincon, 2001). Other attributions are related to infrequent use of healthcare services, language barriers, prevalence of risk factors for arthritis such as physically demanding jobs and obesity. Other reasons are related to

cultural differences in understanding survey questions and variations in the willingness to report pain and activity limitations (Bolen et al., 2010).

The continuing increase in the Hispanic population creates a sense of urgency in understanding the burden of arthritis and osteoarthritis (OA) in this population as well as the potential future impact on the healthcare and public health systems. In the state of Texas, where there is a high concentration of Hispanics, the 2010 U.S. Census data reported Hispanics account for 38% of the population with persons 65 years of age and older accounting for 10.5%. Twenty-two percent of adults in Texas suffer from arthritis; 27% of these are women. In addition, more than half (56%) of the population over the age of 75 is afflicted with arthritis. The focus of this study was older Hispanic women with OA diagnosed by a healthcare provider and are addressed as Hispanic women with OA throughout the study. Healthcare providers included doctors and nurse practitioners.

The Institute of Medicine (IOM, 2003) identified the existence of racial and ethnic disparities in healthcare and the contributing factors to that inequity in care, specifically in the area of types and quality of healthcare received by both racial ethnic minorities and non-minorities. The report identified significant racial and ethnic disparities regarding accessing healthcare services, as well as relatively poor health status and poor outcomes among racial and ethnic minorities when compared to those of the general population in the United States (IOM, 2003). Contributing variables to the disparity in care identified by the IOM included the quality of patient-provider relationships, provider biases, and patient mistrust of the system (IOM, 2003). These variables have contributed to the vulnerability of the Hispanic population.

Caring for a diverse, vulnerable population with its own culture, traditions, language, and beliefs poses challenges to the healthcare system as well as to the providers. Diverse populations consist of ethnic minorities who historically experience a disproportionate burden of many diseases; thus, it is important for providers to understand and to appreciate the importance and meaning that populations place on the illness experience (Helman, 2000).

B. Study Purpose.

The purpose of this study was to (a) describe the experience of older Hispanic women with OA and the factors that influence their quality of life and ability to function and (b) describe the perspective of older Hispanic women relative to the cultural competency of the healthcare they are receiving.

C. Research Questions.

The research questions for this study are:

1. Research Question 1.

What are the experiences of older Hispanic women with OA and the factors that affect their quality of life and ability to function?

2. Research Question 2.

What are the perceptions of older Hispanic women with OA as to the cultural competency of the healthcare they are receiving, specifically in the areas of patient-provider communication, respect for patient preferences/shared decision-making, experiences leading to trust or distrust, experiences of discrimination, and linguistic competency?

D. Conceptual Framework.

A modification of the patient-centered cultural competency model (Figure 1) developed by Ngo-Metzger and colleagues (2006) served as a framework for this study and

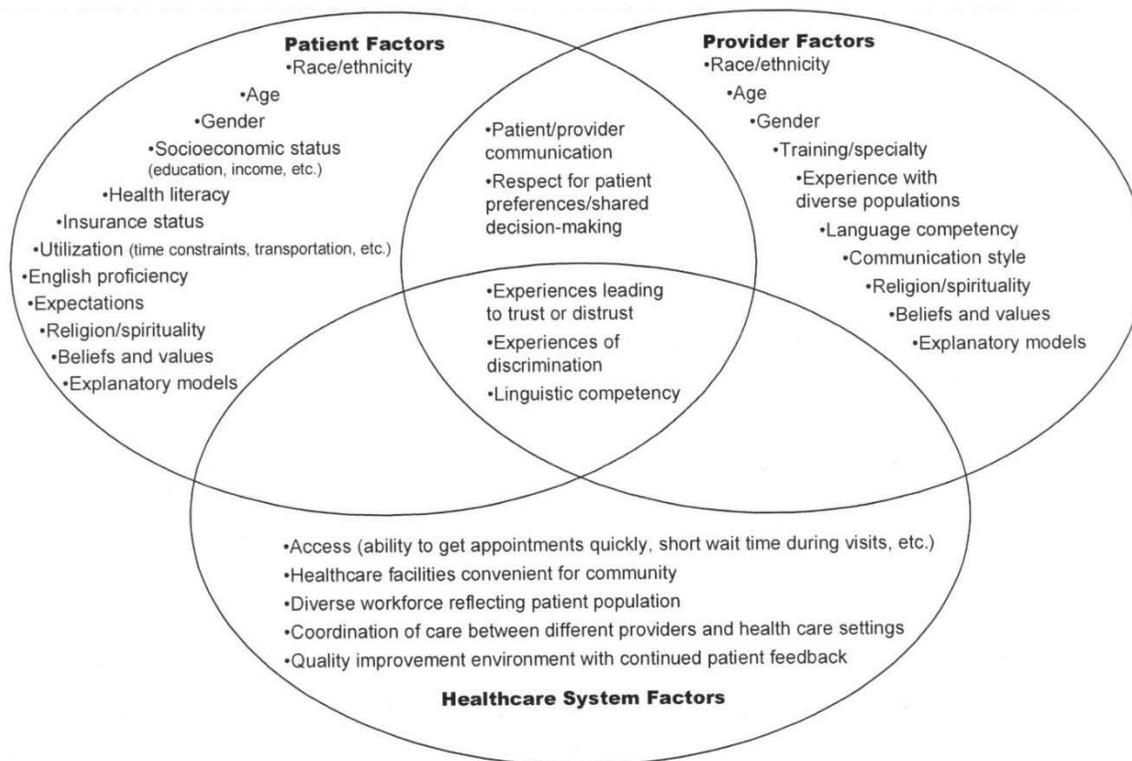


Figure 1. Cultural Competency and Quality of Care: Obtaining the Patient’s Perspective.

From *Cultural Competency and Quality of Care: Obtaining the Patient's Perspective*, by Q. Ngo-Metzger et al., 2006, New York, NY: The Commonwealth Fund. Copyright 2006 by the Commonwealth. Reprinted with permission.

as a guide to explore and describe the patient's perspective. The model features three major domains: (a) patient factors, (b) provider factors, and (c) healthcare system factors.

The overlapping domains include overall interactions between the patient and provider, as well as interactions with other staff and the healthcare system (Ngo-Metzger et al., 2006). These interactions served as the central focus of this study because it intersected between the patient and provider as well as the interactions with the staff and that particular healthcare system and may be the best to provide the perspective of the older Hispanic woman with OA (Ngo-Metzger et al., 2006).

Cultural competence is defined by Cross, Bazron, Dennis, and Isaacs (1989) as the integration of knowledge, information, and data about individuals and groups of people into clinical standards, skills, approaches, policies, and measures that align with the group's culture and increases the quality, appropriateness, and acceptability of healthcare and outcome. Cultural competence is associated with quality of care. By providing culturally competent care, it becomes a key strategy that is believed to aid in reducing and eliminating ethnic and racial disparities in health. This study will elicit the perspective of older Hispanic women.

E. Significance of the Study.

Hispanic baby boomers represent the fastest growing population among those aged 65 and older. The health of the older Mexican American, the largest subgroup within the Hispanic population is compromised (Angel & Angel, 2006), as reflected in higher prevalence of chronic conditions such as diabetes, lower than average levels of income (Williams, 2005), and ongoing challenges with occupation and educational achievement (Camarillo & Bonilla, 2001). This suggests that the health status of older Hispanics will be

worse than the average minority group in the near future. However, research on the experiences and perceptions of Hispanics is limited.

Research on cultural competence focuses on the patient, the provider, and healthcare system in terms of access to care and the quality of services provided. However, the focus is generally on the characteristics of the provider and focus on aspects of the healthcare as an institution, while the perspective of the patients are generally absent (Pope-Davis et al., 2002). This study will focus on the patient's perspective. Cultural competence can be validated by obtaining the patient's perspective (Ngo-Metzger et al., 2006).

F. Summary.

The focus of this study was the older Hispanic women because of the burden of OA in this population coupled with a higher prevalence of activity limitations, lower than average level of income, and ongoing challenges with educational and occupation achievement. There is a gap of knowledge about the experiences of this population. Cultural competence is associated with improvement and quality of healthcare and an important element in reducing health disparity among minority populations. Little is known about the perspective of older Hispanic women in relation to the cultural competency of the care received. The conceptual framework of culturally competent care developed by Ngo-Metzger et al. (2006) identified domains that serve to elicit the patient's perspective on the cultural competence of the healthcare they are receiving.

II. LITERATURE REVIEW

A. Introduction.

The review of the literature provides the state of the science related to the cultural and socioeconomic factors associated with life experiences among older Hispanic women with OA and examines aspects of cultural competence from the perspective of the Hispanic woman with OA. The review points out existing gaps in knowledge about older Hispanic women with OA.

For epidemiological studies on OA, the CDC recommended the use of a diagnosis confirmed by a healthcare provider because it provides more reliable data than arthritis that is self-reported. The rationale for this recommendation is that persons with arthritis are generally incorrect when identifying the specific type of arthritis that they have (Murphy & Helmick, 2012). Using provider diagnosed OA in other types of studies is a method that is reliable and indicates that healthcare has been sought, which are important factors to this study.

Throughout the literature, there is the association with socioeconomic factors and the impact on the health outcomes among the Hispanic population with OA. However, few studies have examined the specific experiences of Hispanic women with OA. Hispanic women are more often victims of health disparities as well, partly because they are more likely to focus on their families' needs than their own and their healthcare is usually directed by family members. Thus, it is crucial to examine the interaction of multiple micro and macro variables, such as personal, social, financial, and health system effects in creating health disparities within the experience of diagnosed OA in the older Hispanic. The review of

the literature focuses on the disparity factors that are known to influence arthritis care among Hispanic women and on studies that have examined the specific experiences of Hispanic women with OA. Arthritis as a diagnosis associated with disparity has not been examined in older Hispanic women (McIlvane, Baker, Chivon, & Haley, 2008).

B. The Aging U.S. Population.

Among the aging population, it is estimated that more than 50% of older Americans have at least one chronic condition and 11 million live with five or more chronic conditions (Federal Interagency Forum on Aging-Related Statistics, 2012). Longer life expectancy increases the likelihood of persons developing chronic conditions while improvement in healthcare and disease management allows people to live longer, thereby increasing the opportunity for chronic diseases (Federal Interagency Forum on Aging-Related Statistics, 2012).

Approximately 53 million Hispanics live in the United States and they represent 17% of the population (U.S. Census Bureau, 2010). Hispanics over 65 years of age are expected to live longer and will be the largest and most diverse older adult population in the United States. By 2019, the number of Hispanics age 65 and older is projected to be 19.8%, making them the largest ethnic minority group in the United States (U.S. Administration on Aging, 2010).

C. Arthritis.

The term arthritis derives from Greek (arthro-, joint + -itis, inflammation), and is used primarily to describe more than 100 different rheumatic diseases and conditions that affect joints, tissue that surrounds the joints, and other connective tissue (Theis, Helmick & Hootman, 2007). The physical damage resulting from arthritis contributes to substantial

activity and functional limitations contributing to work disability, increased healthcare costs, and a reduced quality of life (Chen et al., 2010)

An estimated 52 million (approximately 1 in 5) adults in the United States suffer from arthritis diagnosed by a healthcare provider (Cheng et al., 2010). It is expected to increase to 67 million by the year 2030 (Bitton, 2009). The prevalence of arthritis is significantly higher in women, and approximately 21 million Americans suffer with activity limitation that worsens progressively and interferes with work and activities of daily living (Cheng et al., 2010). As the population ages, the prevalence rate and activity and physical limitations of arthritis are expected to rise. The prevalence rate of arthritis differs across racial and ethnic groups in the United States. Among White Americans, it is greater, with 24% (36 million) affected, followed by African Americans with 19% (4.5 million) affected, and Hispanics with 11% (2.9 million) affected (Bolen et al., 2010).

The burden and impact of arthritis was demonstrated in a cross-sectional population-based survey by the Hispanic Established Population for the Epidemiologic Study of the Elderly (HEPESE) in Arizona, California, Colorado, New Mexico, and Texas (Markides et al., 1999). The participants were 839 non-institutionalized Mexican American adults over the age of 75. The objective for this study was to investigate the relationship between self-reported arthritis diagnosed by a healthcare provider and the health-related quality of life among Mexican American adults over 75 years of age. Sixty-two percent with arthritis reported significantly lower scores on both the physical and mental composite scales compared to persons with no symptoms of arthritis. The results demonstrated that Hispanics are more affected than any other racial/ethnic group. The researchers in this study concluded

that deficits in both mental and physical function were attributed to arthritis and were a negative factor in the quality of life of this group of participants (Bindawas et al., 2011).

Another study (Bolen et al., 2010) reported that while the prevalence of arthritis is lower among minorities when compared to Whites, the impact is greater and the pain is reported to be worse among minority groups (Figure 2). The objective of the study by Bolen and colleagues was to examine the impact of arthritis on daily activity and work in six racial/ethnic groups that included Hispanics, non-Hispanic Whites, non-Hispanic Blacks, American Indians/Alaskan Natives, Asians and Pacific Islanders, and other multiracial respondents. Data collected were from adults 18 years of age and older through the National Health Interview Surveys for the years 2002, 2003, and 2006. The findings substantiated that while differences existed in racial/ethnic groups and may be attributed to the access to care, use of healthcare services and language barriers, the reason for this racial/ethnic difference is unknown and requires further investigation (Escalante & del Rincon, 2001).

A recent CDC (2013) study examined physical limitations and the prevalence of social participation restriction (SPR) among adults over the age of 18 and afflicted with arthritis (Theis, Murphy, Hootman, & Wilkie, 2013). Social participation restriction (SPR) is defined as restriction in social life among adults with arthritis. The study sample was obtained from respondents to a National Health Interview Survey. Participants ($n= 6,696$) were selected based on self-reported arthritis diagnosed by a healthcare provider. The framework for this study was based on the International Classification of Functioning, Disability, and Health (ICF) developed by the World Health Organization (WHO, 2001) to provide a standard language to describe health and health-related states.

Arthritis Impact Worse Among Racial and Ethnic Minority Groups

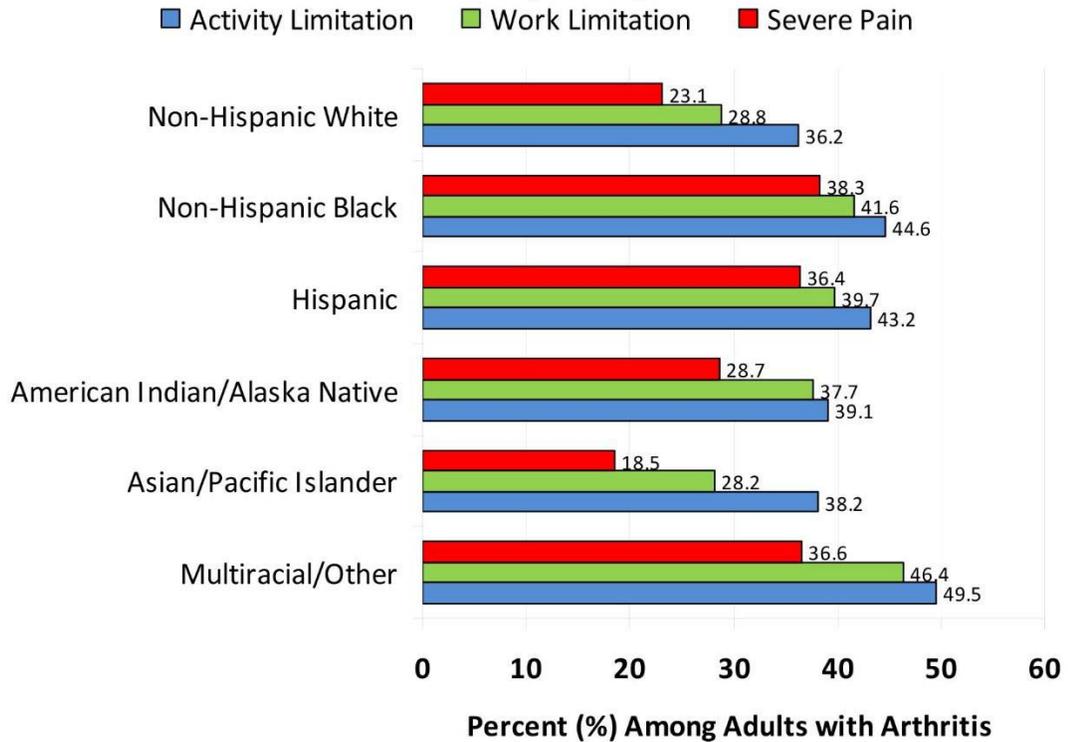


Figure 2. Differences in the Prevalence and Impact of Arthritis among Racial/Ethnic Groups in the United States.

From “Differences in the prevalence and impact of arthritis among racial/ethnic groups in the United States, National Health Interview Survey, 2002, 2003, and 2006” by J. Bolen et al., 2010, *Preventing Chronic Disease*, 7(3), A64.

The ICF framework considers the health condition in terms of the anatomical/physiological, individual, and societal consequences in the context of personal and environmental factors (Theis et al., 2013). The use of the ICF framework in this instance was the first attempt in using a population-based sample of adults in the United States with arthritis. The findings indicated that there is a strong association between social life due to physical limitations, the presence of severe joint pain, more frequent morbidities, and low level of physical activity. The report found that 11% (5.7 million) of adults with arthritis reported social participation restriction as a result of the physical limitations imposed by arthritis. In addition to the strong association between social life and physical limitations, the authors reported that the health status of those with SPR was poor, while the participants had lower education attainment and experienced delays in healthcare due to costs.

A CDC (2011c) study examining arthritis among Hispanic subgroups provided important information on the burden of arthritis. The prevalence rate was reported to be highest among Puerto Ricans (22%), other multiple Hispanic/Latino (19%), Mexican Americans (18%), Mexican (14%), Dominicans (16%), Central/South Americans (13%), and lowest (12%) among Cubans/Cuban-Americans. Among Hispanics with arthritis, activity limitation attributed to arthritis is most prevalent among Puerto Ricans (49%), other/multiple Hispanic subgroups (44%), Mexican-American (44%), Mexicans (42%), Central/South Americans (32%), Dominicans (22%), and least prevalent among Cubans/Cuban Americans (21%) (Murphy et al., 2011).

Further complicating the heterogeneity factor were existing and significant cultural and biological differences within Hispanics from the same country of origin (Collins, Villagran, & Sparks, 2008; Cooper & Ballard, 2011). Variations in the Hispanic subgroup

data suggest that heterogeneity should be strongly considered when conducting research with Hispanic populations. The study further estimated that at least 1.4 million (1 in 5) Hispanics with arthritis diagnosed by a healthcare provider experience an adverse effect associated with the disease such as activity limitations and pain, making it the most disabling disability across Hispanic populations (Murphy et al., 2011). Thus, analysis among the various Hispanic subgroups is needed in light of the heterogeneity discussed earlier to identify the impact of arthritis on each subgroup affected within the population.

D. Osteoarthritis.

Osteoarthritis (OA) is the most common type of arthritis or joint disease and places severe limitations on daily activity and quality of life for over 27 million Americans (AF, 2010). This serious, painful, and potentially life-altering illness has relatively higher rates of prevalence among Hispanics and non-Hispanic Blacks in the United States (Osteoarthritis Action Alliance, 2011). This number is projected to increase as both OA and the obesity epidemic increase substantially (Hootman & Helmick, 2006). While the etiology of OA is unclear, it is known that a mismatch occurs between the formation and degradation of articular cartilage (Struyf, van Heugten, Hitters, & Smeets, 2009) and a “slow degenerative process of the cartilage, bone, and soft tissues that are integral to joints” followed by low-grade inflammation in the articular cartilage (McDonough & Jette, 2010; Sulsky et al., 2012, p. 388).

OA is identified by three methods: (a) radiographic, (b) clinical, and (c) symptomatic. Radiographic OA is the most common method for definition based on information acquired from X-ray, where it is classified on the Kellgren-Lawrence scale as 0-4 (Kellgren & Lawrence, 1963). The grade represents the degree of joint space narrowing or number of

osteophytes present in the joint. For example, grade 2 represents the presence of mild OA, grade 3 represents moderate, and grade 4 is described as large, where there is marked narrowing of the space in the joint with severe sclerosis. Clinical OA is based on correlation of the history provided by the patient along with the clinical examination. Symptomatic OA is defined by the combination of symptoms manifested as pain, joint stiffness, and aches in addition to the radiographic OA (Murphy & Helmick, 2012). The prevalence of OA varies according to the definitions and additional variables such as the population characteristic and the specific joints under study (Zhang & Jordan, 2010).

The onset of OA typically occurs in mid-life and primarily affects adults of middle age and older (AF, 2010; CDC, 2013a). OA is characterized by joint pain, joint inflammation, stiffness, and functional disability (Le, Montejano, Cao, Zhao, & Ang, 2012). While OA mainly affects the weight-bearing joints (knees, hips, and spine), it also affects hands, feet, and the small joints of the fingers, the big toe, and the base of the thumb (National Institute of Arthritis Musculoskeletal and Skin Diseases, 2010). The difficulties in defining and diagnosing OA and determining its onset have resulted in a dearth of data on its incidence (Woolf & Pfleger, 2003). Further clouding the picture, many research studies use the term “arthritis” as a proxy for OA status, thus limiting the generalizability of their results.

E. Risks Associated with OA.

The act of engaging in repetitive manual labor or high-intensity sports activities, age, gender (being born as female), obesity, ethnicity or race, genetic predisposition, inadequate physical activity, socio-economic status, joint misalignment, and lifting heavy weights are risks associated with OA (Allen et., 2010; Bolen et al., 2010; Lin, Li, Kang, & Li, 2010; Kullie et al., 2011; McDonough & Jette, 2010; Sulsky et al., 2012; Swift, 2012).

Risk factors associated with the development of OA differ across ethnic groups (Wluka, 2009). For example, some data suggest that Hispanic women are at a higher risk for knee OA (Osterweil, 2011; Science Daily, 2012) due to obesity (Goodman, 2012; Losina et al., 2011; Osterweil, 2011) when compared to White women. Another study found that differences in OA pain and function among African-American and White patients with hip and/or knee osteoarthritis (Allen et al., 2010) were related to psychological factors, arthritis self-efficacy, and use of emotion-focused coping. Allen and colleagues (2010) validated what was known from previous studies that among patients with knee and or hip OA, African Americans reported worse pain and poorer function when compared to Whites. The study reported that racial differences in pain could be attributed to psychological interventions and self-management that may ultimately reduce the disparity in pain and function among the African-American population (Allen et al., 2010). However, no Hispanic participants were included in this research; thus, little is known about psychological factors, adaptation processes, or self-efficacy among Hispanic women with OA (Abraido-Lanza, 2004).

Other studies have focused on the risk factors at the individual level relative to age, gender, and body-mass index (Luong, Cleveland, Nyrop, & Callahan, 2012). Additional factors that increase the risk for OA development in Hispanic women include behavioral risk factors such as cigarette smoking and physical inactivity (Morales, Lara, Kington, Valdez, & Escarce, 2002). Thus, the incidence and prevalence of OA is still not fully understood (Luong et al., 2012).

F. Major Contributing Factors to Osteoarthritis.

1. Age.

The primary risk factor for OA is age (Felson et al., 2000; Felson & Zhang, 1998; Lawrence et al., 2008; Yelin, 2007). The correlation between age and OA is so strong that the risk for OA increases markedly with each decade after age 45 (Moskowitz, 2009). This increase in incidence and prevalence is attributed to risk factors stated earlier coupled with biologic and physiologic changes as well as cumulative exposure as a result of aging (Zhang & Jordan, 2010).

2. Genetics.

There has been evidence since the 1950s that suggest that a strong component exists in certain forms of OA despite the multifactorial nature of this disease (Fernandez-Moreno, Rego, Carreira-Garcia, & Blanco, 2008). Results from several studies have indicated that OA is inherited with variations noted in the affected joints (Zhang & Jordan, 2010). Studies within family members and twins provided an estimate of 50% to 65 % of the component inherited, with the larger influence noted in hand and hip OA (Spector, Cicuttini, Baker, Loughlin, & Hart, 1996).

3. Obesity and Overweight.

Overweight and obesity specifically refers to an excess amount of fat or adipose tissue (National Heart Lung & Blood Institute [NHLBI], 2012b). Overweight is defined as an excess amount of body weight that may come from muscle, bone, fat, and water (NHLBI, 2012a). According to the National Health and Nutrition Examination Survey (NHANES) conducted in 2009 and 2010 (Ogden, Carroll, Ki, & Flegal, 2012), almost 70% of Americans are obese or overweight. A survey conducted in 2009-2010 found that non-Hispanic African

American women were more obese or overweight (82%) when compared with Hispanic women (76%) and non-Hispanic White women (64%). Hispanic men (82%) were more likely to be obese and overweight when compared with non-Hispanic White men (74%) and for non-Hispanic African American men (70%).

Obesity and overweight are recognized as strong risk factors for knee OA (Zhang & Jordan, 2010) and its contribution to high incidence and prevalence of knee OA is well documented in older Americans (Abbate et al., 2006). For example, obese adults are likely to develop knee OA up to four times more than adults who were at normal weight (Felson & Zhang, 1998). The investigators also found that 35% of adults with OA diagnosed by a healthcare provider were obese when compared to 21% without OA, concluding that a decrease in body weight may result in an improved quality of life in people. The relationship between overweight and the prevalence of OA increases from 16.9% among adults with normal weight to 29.6% among obese adults (Cheng et al., 2010). Overweight also contributes to activity limitations. Normal weight adults with OA report 34.7% activity limitations attributed to OA compared to 44.8% in obese adults with OA. The authors concluded that weight reduction of approximately 11 pounds would improve OA pain, function, and quality of life in the presence of OA. In the absence of OA, the risk of getting this disease is reduced (Cheng et al., 2010).

4. Obesity in Hispanics.

The rate of obesity has skyrocketed among Hispanics (Escarce, Morales, & Rumbaut, 2006). In 2010, Hispanic Americans were 1.2 times more likely to be obese than non-Hispanic Whites. Seventy-eight percent of Mexican-American women are overweight or obese, as compared to only 60.3 % of non-Hispanic White women. Indeed, in the period

2007 to 2010, Mexican-American women were 44% more likely to be overweight than non-Hispanic Whites (CDC, 2013b). In the state of Texas, a more troubling issue with obesity is observed with Hispanics living along the Texas-Mexico border, where the majority of the Texas Hispanic population reside (Guzman, 2001). There is evidence of disproportionality in chronic conditions such as diabetes and obesity (BMI > 30), hypertension, and central adiposity (CDC, 2012a) with Hispanics being disproportionately affected. The 2006 Texas Behavioral Risk Factor Surveillance System (BRFSS, 2008) reported that approximately 72% of this population had a BMI > 25. A comparison of national statistics to four counties in the Rio Grande Valley found a disproportionately higher rate of diabetes (12.8%) and obesity (30.8%) compared to the national rate of 8.0% for diabetes and 26.3% for obesity.

5. Physical Activity.

The U.S. Department of Health and Human Services (DHHS, 2013) recommended that adults 65 years and older with no limiting health conditions need at least 2 hours and 30 minutes of moderate-intensity aerobic activity each week or 1 hour and 15 minutes of vigorous-intensity aerobic activity each week. These recommendations in addition to muscle-strengthening activities on two or more days each week, or an equivalent combination of both would be optimal.

In addressing overweight and obese women with OA, a variety of studies recommended that engaging in regular exercise, eating a balanced diet, and following a weight-loss program will minimize the risks and suffering from painful knee OA (Goodman, 2012; Uthman et al., 2013). Further recommendations were made for women diagnosed with painful knee OA to engage in regular exercise that would improve physical functioning and reduce the severity and intensity of the pain (Uthman et al., 2013).

For patients with OA, the benefits of physical activity and exercise include not only weight loss and weight maintenance but also reduction in the symptoms of OA, improved functional performance, improved muscle strength, and range of motion (Bennel et al., 2005; Hunter & Eckstein, 2009). However, the rationale for encouraging patients to perform more low-impact aerobic exercises is to gain benefits from the exercise without causing damage to the knee joints and the articular cartilage (Hunter & Eckstein, 2009). In line with this, Hunter and Eckstein (2009) strongly recommended the need to engage in strengthening exercises because this type of exercise can help people improve not only the overall physical functioning but also reduce the levels of pain.

To determine whether exercise accelerates the development of OA, Bosomworth (2009) conducted a literature review and reported that the absence of physical injury from exercise will not accelerate the development of OA. In fact, engaging in regular exercise such as aerobic, aquatic, physiotherapy, or muscle strengthening can help prevent permanent disability and help reduce the intensity of pain among the patients with OA (Bosomworth, 2009). Similar to these findings, Uthman et al. (2013) found that participating in regular exercise could help improve the physical functioning of the OA patients because exercise helps to reduce the severity and intensity of their pain. Most importantly, physical activity ultimately provides health benefits to adults, including persons with OA (Song et al., 2007). Regardless of the severity of hip and knee OA, several studies highly recommended the need to participate in exercises such as aerobic, aquatic, strengthening exercises, and Tai chi in order to solve problems related to pain and functioning limitations (Bennell & Hinman, 2011; Uthman et al., 2013; Zoeller, 2007).

Strenuous physical activity or exercise such as running or step aerobics can lead to the development of joint injury that could hasten the progress of developing OA (Hunter & Eckstein, 2009). Hence, it is recommended that healthcare professionals encourage persons who have been diagnosed with OA to engage in low-impact aerobic exercise programs that include biking, swimming, and walking (Roddy, Zhang, & Doherty, 2005).

The role of physical activity and exercise is critical in delaying or preventing disability (Penninx et al., 2001) and reducing the risk of complications related to cardiovascular or respiratory diseases, cerebrovascular disease, osteoarthritis, or diabetes mellitus (WHO, 2012). These diseases increase debilitation and can be medically challenging while having the potential to increase the economic burden for medical treatment and care. Although the importance of physical activity and exercise has been proven to be beneficial to people with OA by improving pain and function, approximately 44% of adults with OA diagnosed by a healthcare provider report that they do not participate in physical activity or exercise due to lack of leisure time, as compared to approximately 36% of adults without OA (Shih, Hootman, Kruger, & Helmick, 2006).

6. Physical Inactivity in Hispanics.

In 2008, The National Health Interview Survey (NHIS) reported lower levels of leisure time physical activity in all Hispanic subgroups when compared to non-Hispanic Whites (Neighbors, Marquez, & Marcus, 2008). In a report by the Behavioral Risk Factor Surveillance System (BRFSS, 2008), Hispanics do not meet the recommendations for physical activity, compared to non-Hispanics. The lack of physical activity among this group coupled with chronic conditions creates a public health concern and the need to address these through public health initiatives (DHHS, 2000; Reininger et al., 2009; Bautista et al., 2011).

The SES factor contributes to the limited engagement in physical activity within the Hispanic community. The low educational levels of the Hispanic population (Schneider, Martinez, & Owens, 2006; Torres, 2012; U.S. Department of Labor, 2013;) contributes to low-paying jobs that result in longer working hours when compared to other ethnic groups' employment (Danzger & Ratner, 2010). Hispanic families have less leisure time. Thus, low SES of the Hispanic population may serve as a contributing factor and a barrier to participation in physical activities. Other potential barriers that could explain why many Hispanic women have inadequate time for physical activities include (a) absence of self-discipline, (b) absence of child-care options, (c) no available safe and convenient place to exercise, (d) absence of exercise equipment, (e) lack of knowledge on how to exercise, (f) negative perception about exercising, and (g) no available time for exercising (Bautista, Reininger, Gay, Barroso, & McCormick, 2011).

G. OA and Quality of Life.

Health-related quality of life (HRQoL) is understood to be a multidimensional concept that includes domains related to physical health, mental, emotional, and social functioning (DHHS, 2011). Research on HRQoL among U.S. adults with OA has found that adults with OA had worse HRQoL as compared to adults without OA (Furner, Hootman, Helmick, Bolen, & Zack, 2011). OA affects one's independence, relationships, and social life, as well as emotional well-being (Brown, Kirkpatrick, Swanson & McKenzie, 2011). Numerous studies evaluating the quality of life (QoL) among older adults with OA reported that pain and functional limitations are commonly associated with decreased QoL (Dominick, Ahern, Gold, & Heller, 2004; Groessel, Kaplan, & Cronan, 2003; Jakobson & Hallberg, 2006).

Constant pain and difficulty in carrying out activities of daily living detract from the QoL of the individuals living with OA (Melanson & Downe-Wamboldt, 2003).

Albrecht and Devlieger (1999) stated that “Quality of life is broader than the notion of health-related quality of life” (Albrecht & Devlieger, 1999, p. 979). The authors make this distinction because in their view quality of life refers to the “holistic notion of well-being” (Albrecht & Devlieger, 1999, p. 979) and extends beyond disease categories and activities of daily living. Among older adults, individuals are the best source of information regarding their quality of life, a notion related to the “disability paradox” (Albrecht & Devlieger, 1999). The disability paradox is exemplified by a study that found over 50% of patients ($N = 153$) with moderate-to-severe disability reported their QoL as good to excellent despite their disability. These findings indicate that QoL is best studied from the perspective of the individual and not by the definition imposed by researchers, clinicians, or societal standards.

Gabriel and Bowling (2004) concluded that QoL research involving older adults should focus on personal characteristics, circumstances, and the individual’s dynamic interactions with society. In an effort to define the indicators of QoL in older adults and to refine a multidimensional model of QoL based on the perceptions of older adults, Bowling, Banister, Sutton, Evans, and Windsor (2002) found that social relationships and good health were among the top criteria of QoL in adults aged 65 and older.

The symptoms of OA include difficulty in body movements, stiffness, and loss of muscle tone, strength, and stamina, poor sleep, fatigue, anxiety, social isolation, depression, financial difficulty, and loss of work (Axford et al., 2010; Axford, Heron, Ross, & Victor, 2008; Hawker et al., 2011; Swift, 2012). Thus, older adults who are diagnosed with OA can be restricted in their day-to-day living activities and experience a significant reduction in

their QoL (Axford et al., 2008). Little is known about the relationship between Hispanics with OA and HRQoL. In one study (Bindawas et al., 2011), the authors suggested that the physical deficits of arthritis contributed to a decrease in QoL in Mexican American adults.

H. Depression Related to OA.

Emerging literature suggests that OA pain is the root cause of both disability and depressive symptoms (Parmalee, Harralson, McPherron, DeCoster, & Schumacher, 2012). Failure to treat and manage OA and its symptoms can cause a person to suffer from disability (Bosomworth, 2009; Luong et al., 2012; McDonough & Bette, 2010) that can result in a progressive reduction in mental health status (Axford et al., 2008). The literature paints a complex picture of the psychiatric/mental health issues related to OA, in that OA is known to place older adults at heightened risk of depression (Adams et al., 2008; Axford et al., 2008). Physical disability is strongly related to the OA patients' pain and loss of ability to cope, severe pain, and increased depression (Axford et al., 2008). Other possible causes of depression among the patients with OA include limited restriction of movement also due to high levels of pain (Axford et al., 2008; Hawker et al., 2011).

Pain intensity, pain sensitivity, and ability to complete tasks vary across OA patients (Tonelli, Rakel, Cooper, Angstrom, & Sluka, 2011). In examining gender differences in pain intensity and pain sensitivity among patients with knee OA, Tonelli et al. (2011) found that older women are at higher risks of experiencing severe pain, pain sensitivity, and impairment in functioning as compared to men. Further studies are needed to explore the effects of pain in older women considering the interactions of ethnicity, gender, and its relationship to depression.

In summarizing, the risk factors associated with OA presented earlier include normal aging, gender, physical inactivity, depression, obesity, and overweight. These are factors that could negatively affect both mental and physical functioning in an older population. The limitations in physiological functioning associated with the older population include physical, mental, and cognitive changes (Freedman et al., 2002). Minorities, women, and persons in lower socioeconomic status are especially vulnerable to negative consequences as a result of the physiological changes (Freedman et al., 2002) and factors discussed earlier. After all, 72% of people age 80 and older have a disability, the highest of any age group; 20% of women have a disability, higher than males who have a reported 17% disability (U.S. Census Bureau, 2012). Disability is defined as difficulty in accomplishing activities of daily living and the existence of a gap between personal capability and environmental demands (Verbrugge & Jette, 1994). A socio-medical model (Verbrugge & Jette, 1994) was used to describe how the functioning of specific body systems are affected by acute or chronic conditions in addition to personal or environmental factors that may hasten the disability process. The model is the Disablement Process.

The Disablement Process model (Verbrugge & Jette, 1994) identifies a pathway that describes the transition from health to disability. The pathways identified in the disablement process (Verbrugge & Jette, 1994) are *Pathologies*—refers to the presence of disease or injury. *Impairments*—refers to structural abnormalities or dysfunction. *Functional limitations*—refers to restrictions in basic physical or mental actions. *Disabilities*—refers to difficulties in carrying out ADL.

The transition from health to disability in older adults is viewed as a process that is complex (Peek et al., 2003). Previous research had overlooked the social factors that could

influence this transition in addition to the transition among the older ethnic population (Peek et al., 2003). Therefore, a study was conducted by Peek et al. (2003) to investigate the Disablement Process in older Mexican American adults ($N = 2439$) and to address the influence of cognitive impairment and perceived emotional support. A significant finding indicated that there was an association between increased functional limitation in the lower body by being older and female. Another relevant finding demonstrated risk factors, pathology, impairment, and its direct effects on limitations on the lower body function. The authors concluded that there may be racial and ethnic differences and a faster rate during the transition from health to disability with the presence of pathology in minority older adults.

I. The Hispanic Population.

Immigration to the United States is central to the dramatic increase in the Hispanic population (Passel, Cohn, & Lopez, 2011). Hispanics in the United States include persons from Puerto Rico, Mexico, Central America, South America, and other countries of Spanish cultural origin. Among these Hispanic subgroups, Mexicans rank as the largest group, accounting for 31.8 million of the 50.5 million Hispanics living in the United States. The constant influx of Hispanic immigrants from various countries and subgroups adds to the diversity of the population while creating a continuous variation in the levels of acculturation and assimilation of those Hispanics presently in the United States. Each subgroup, depending on the country of origin, method, or reason for migrating (Perez-Avila, Sobalske, & Katz, 2011) brings resurgences of the customs, traditions, language, and culture (Brodie, Steffenson, Valdez, Levin, & Suro, 2002) regarding health issues and treatment of ailments, including OA and associated symptoms.

During the health encounter with Hispanic patients, several trends may emerge as Hispanic families tend to espouse a “family-centered value system” (Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002, p. 42) that may have implications on how healthcare services are accessed and utilized. Some of these cultural themes are *familismo* (familism), *respeto* (respect), *Marianismo* (Marianism), *machismo* and *personalismo* (personalism) (Santiago-Rivera et al., 2002).

Familismo is integral to the Hispanic family structure. This value places the family at the heart of Hispanic personal identity and sees the former as the source of protection against adversity (Ruiz & Ransford, 2012). For Hispanics, family comes first, and daily life revolves around it. Important medical decisions are often decided upon communally, and all family members may feel the need to be included.

In the Hispanic culture, *respeto* is displayed through mutual respect, not only to parents or elders, but also to people in general. Qualities such as deference, submissiveness, and obedience are ways of showing respect in the Hispanic culture (Castellanos, 2000). Respect is demonstrated through language (e.g., use of formal words), gender-based behavior, and social position.

Marianismo represents the characterization of the “ideal woman with a sense of purity in mind, body, and spirit with the added qualities of generosity and willing to sacrifice for her family” (Castellanos, 2000, p. 2). *Marianismo* is derived from the elevation of the role of the Virgin Mary. For Hispanics, admiration of motherhood is a positive characteristic attributed to the Hispanic woman while taking on maternal roles and household responsibilities. *Marianismo* places a higher value on maternal love than spousal love (Kemp, 2005).

The value of *machismo* devolves upon Hispanic males characteristics such as courage and virility and roles such as protector of the family and provider. It also provides a sense of self-identity and manhood (Kemp, 2005). On the other hand, the term *machismo* also represents negative characteristics attributed to males that include sexual promiscuity, aggressiveness, dominance, and excessive male pride (Castellanos, 2000; Kemp, 2005).

Personalismo refers to the strong orientation that Hispanics have toward close interpersonal relationships and friendships (Castellanos, 2000). This value encompasses a sense of mutual trust and the willingness to be of service to others (Castellano, 2000). Hispanics expect that their healthcare providers will be warm and friendly and will take an active role in their life. Medical advice will be followed only if there is a belief that the provider has their best interests in mind (Castellanos, 2000).

J. Culture.

Culture is defined as a system of beliefs, values, lifestyle practices that are learned and shared and guide decisions and actions in a patterned manner (Kagawa-Singer, Dadia, Yu, & Surbone, 2010). Cultural norms play an important role in the lives of the Hispanic population, and they help its members find meaning and purpose in life (Kagawa-Singer, et.,al, 2010). Taras, Rowney, and Steel (2009) used the image of an onion to illustrate cultural norms: basic assumptions at the core with outer layers representing practices, symbols, and artifacts. Culture is related to health status in that it can influence how people interpret health and develop healthcare attitudes and beliefs (Triandis, 1994). In addition, cultural background influences responses to pain and to healthcare treatments for that pain (Carteret, 2011; Narayan, 2010).

Escalante and del Rincon (2001) reminded us that “ each of the Hispanic groups in the United States has its own set of racial and cultural characteristics, Spanish vernacular, dietary preferences, music, and so forth” (p. 105). Carteret (2011) noted that individuals in every culture show a wide range of behaviors and beliefs. Thus, healthcare professionals are strongly advised to avoid making assumptions about people based on specific cultural backgrounds (Carteret, 2011).

According to Askim-Lovseth and Aldana (2010), the Hispanic culture affects not only the “nature of Hispanic patient-doctor relationship” but also the “quality of healthcare service” (p. 354) Thus, a better understanding of Hispanic cultural values may provide healthcare professionals with clues on how this group of patients would behave and react in given situations, and how Hispanics perceive certain diseases (Arrieta, n.d.).

Acculturation is an important variable in health disparities research among ethnic minorities (Hunt, Schneider, & Comer, 2004). Acculturation is defined as a multidimensional process of the adoption of cultural norms, values, and lifestyles (Alegria, 2009). However, there is not much agreement in the literature about the use of acculturation as a measure. It has been documented as a limitation in a number of studies. Acculturation of Hispanics as a measure poses challenges to the assumption that Hispanics share a common culture or pan-ethnic identity (Carter-Pokras, & Bethune, 2009). Indeed, while Hispanics share many beliefs, they constitute a heterogeneous population with distinct subgroups that may experience the acculturation process differently (Carter-Pokras & Bethune, 2009). For the purpose of this study, the acculturation process is discussed as it pertains to findings in specific studies.

Another cultural practice within the Hispanic population that significantly influences outcomes is social support. Social support has been demonstrated to be a major protective factor in a wide range of illnesses, while serving as a mediator in the process of recovery from varying degrees of illness (Shen, Myers, & McCreary, 2006). Among Mexican American immigrant women, well-being and health are closely associated with the availability of social support (Pillemer, Moen, Wethington, & Glasgow, 2000).

K. Cultural Competence.

Cultural competence is defined as “the integration of knowledge, information, and data about individuals and groups of people into clinical standards, skills, approaches, policies and measures that align with the group’s culture and increases the quality, appropriateness and acceptability of healthcare and outcomes” (Cross et al., 1989). Cultural competence has been associated with improvement and quality of healthcare and is an important element in decreasing the health disparity among minority populations (Betancourt, Green, Carillo & Park, 2005; Burchum, 2002). The need for a culturally competent healthcare workforce is more evident as the population becomes more diversified and as racial and ethnic minorities who are impacted with higher rates of disease, disability, and death are increasing in numbers due to the continuous surge in immigration to the United States. Cultural competence has been acknowledged by the Institute of Medicine (IOM) as an important element in eliminating health disparities among ethnic minorities. Providing culturally competent services is seen as an essential ingredient to obtain quality care, with the added potential for improving health outcomes and reducing communication barriers that will result in patient satisfaction (Anderson et al., 2003).

The Office of Minority Health (OMH, 2005) has adopted Cross and colleagues' (1999) definition of cultural and linguistic competence as a set of behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations. The OMH published the National Cultural and Linguistically Appropriate Services (CLAS) Standards designed to advance healthcare equity and to serve as a guide to healthcare providers in becoming more culturally competent (Campinha-Bacote, 2006). The CLAS standards (as cited in Campinha-Bacote, 2006) are organized as follows: Standard 1 is the principal Standard; Standards 2 through 4 address governance, leadership, and workforce issues; Standards 5 through 8 address communication and language access services; and Standards 9 through 15 address the policies and processes for continuous engagement and accountability that supports the implementation of standards 1 through 8 (Appendix A).

Cultural competence is described as a process used in the delivery of healthcare services (Campinha-Bacote, 2006) with constructs that define the process of becoming culturally competent, beginning with cultural desire and cultural awareness, followed by cultural knowledge, cultural understanding, cultural sensitivity, cultural encounters, and cultural skills (Burchum, 2002; Campinha-Bacote, 2006).

Cultural desire is defined as the motivation exhibited by the health professional in learning about other cultures and engaging in the process of becoming culturally aware, culturally knowledgeable, and culturally skillful while providing healthcare services. (Campinha-Bacote, 2006). Cultural awareness is the process in which an individual performs self-examination of personal prejudices and biases toward other cultures, explores his or her own professional and cultural background, and most importantly, becomes aware of racism

that has been documented in the delivery of healthcare services (Campinha-Bacote, 2006). Cultural knowledge is the process during which information concerning known cultural practices about diverse groups is sought, obtained, and integrated (Campinha-Bacote, 2006). Cultural understanding is practiced when an individual considers the meaning of culture as it relates to personal values, beliefs, and practices (Burchum, 2002; Campinha-Bacote, 2006). Cultural sensitivity occurs when there is an appreciation of the differences in persons from other cultures (Burchum, 2002). Cultural encounters occur when there is purposeful face-to-face interaction with persons from diverse cultures (Burchum, 2002; Campinha-Bacote, 2006). Cultural skill is the ability to conduct cultural assessment in order to collect relevant cultural data in a culturally sensitive manner when engaging with persons from other cultures (Burchum, 2002; Campinha-Bacote, 2006).

The initial guide to the conceptualization of cultural competence was recognized by Leininger in 1978 when she identified a lack of care and cultural knowledge as missing in nurses' understanding of the many variations required in patient care to support compliance, healing, and wellness (George, 2002). By 1991, Leininger developed two concepts, the Culture Care Diversity and Universality Concept. Culture care diversity indicates the differences in meanings, patterns, values, lifeway, or symbols of care within or between collectives that are related to assistive, supportive, or enabling human care expressions. Culture care universality indicates the common or dominant uniform care meanings, pattern, values, or symbols that manifest among many cultures and reflect assistive, supportive, facilitative, or enabling ways to help people (Leininger, 2002).

The transcultural nursing movement in education research and practice served to address the cultural dynamics that influence the nurse-patient relationship. Transcultural

nursing is defined as a branch of nursing that focuses upon the comparative study and analysis of cultures with respect to nursing and health-illness caring practices, beliefs, and values with the goal to provide meaningful and efficacious nursing care services to people according to their cultural values and health-illness context (Leininger, 2002).

Culturally competent nursing care is provided by way of a combination of nursing knowledge and cultural knowledge that results in the capability to care for culturally diverse patients (Derosa & Kochurka, 2006). Recent studies have shown that cultural competence on the part of all healthcare providers reduces the risk of non-compliance, low client satisfaction, and poor client outcomes (Castro & Ruiz, 2009; Taylor, 2005). Specifically, cultural competence has been associated with increases in patient satisfaction, compliance, and effectiveness of service provided to patients (Campinha-Bacote, 2002).

L. Health Disparities.

Health disparities are defined as the “differences in the quality of healthcare not due to access related factors or clinical needs, preferences, or appropriateness of intervention” (Kosoko-Lasaki, Cook, & O’Brien, 2009, p. 2). Another definition of health disparities is differences in experiences by socially disadvantaged populations in the burden of disease, injury, violence, or opportunities to achieve optimal health (CDC, 2008). The differences may be reflected in the frequency of the disease and how it affects the particular group, or how often the disease causes death. The federal government provides yet another perspective on health disparities from the Health Resources and Services Administration (HRSA) as “population-specific differences in the presence of disease, health outcomes, or access to health care” (Kosoko-Lasaki et al., 2009, p. 2).

Health disparities have been typically measured via comparisons between groups that are advantaged and disadvantaged (Braverman, 2006), such as minority population versus majority populations based on specific health indicators. The differences most likely result from poverty, limited access to healthcare, and education inequities. Other common factors contributing to health disparities include “lack of health care insurance, legal status, and racial or minority status” (Askim-Lovseth & Aldana, 2010, p. 254). When compared to non-minority groups, Egede (2006) reported that “racial and ethnic minorities tend to receive a much lower quality of care” (p. 667).

Continuous efforts are being made at the federal, state, and community levels through public and private partnerships in order to address health disparities in the United States. Initiatives such as *Healthy People 2000*, subsequently *Healthy People 2010*, and currently *Healthy People 2020*, were put in place to address and reduce health disparities among minorities through specific goals for reducing disparities in disease, disability, and death among minority populations (U.S. Department of Health & Human Services, 2013).

Included in the overall goal of *Healthy People 2010* was the need for healthcare professionals to acknowledge the importance of understanding the diversity of the clients in the healthcare system. The relevance of this objective is the absence of ethnic minority individuals serving as healthcare professionals in a healthcare system that does not reflect the diversity of the population. The absence of minority healthcare providers from diverse backgrounds limits the number of providers that can be matched with clients of the same ethnicity. For example, while the Hispanic population represents 16% of the population in the United States, and as an emerging majority, there are 4% of U.S. Hispanic physicians (American Medical Association [AMA], 2014). The AMA (2014), by way of the Hispanic

Physician Outreach Initiative, is in the process of recruiting Hispanic physicians for a role in shaping health policy and advocacy that may ultimately affect both patients and the profession. Previous research has documented that minority workers tend to provide healthcare services that are congruent with the needs of the minority population (Brach & Fraser, 2000). For example, with Hispanic clients, having a provider who speaks their language, will provide some degree of comfort and trust in that provider in addition to ease of understanding and complying with related health information provided.

Healthy People 2010 listed a number of achieved goals. Specifically, with arthritis, achievements were made in the area of racial disparity in total knee replacements. The transition from *Healthy People 2010* to *Healthy People 2020* includes an expansion of the focus on chronic diseases, arthritis, and related conditions, to include the impact of disability, pain, activity limitations, and health outcomes related to rheumatoid conditions (DHHS, 2013). However, despite the efforts and initiatives to improve the overall quality and access to care within the healthcare system, the inequalities and access to care conditions for minorities continue to exist. For example, the ratings by race and ethnicity population and the percent of objectives in which specific population groups had the “best rate,” listed the Hispanic/Latino group at 17% when compared to the non-Hispanic White (51%) and non-Hispanic Black (20%) (DHHS, 2013).

The Agency for Health Research and Quality (AHRQ, 2004) also reported continuing disparities within the Hispanic population with contributing factors such as poverty level, language, and financial barriers. The Hispanic population fits within the description of disparities. Vulnerable populations are people of all ages, from newborn to the elderly, the uninsured, and generally speaking, those at risk for poor physical, social, and psychological

health (Aday, 2003). Vulnerable populations include racial and ethnic minorities, the elderly, especially in the presence of chronic health conditions, and more importantly, when health and healthcare intersects with social factors, poverty, and inadequate education (Robert Wood Johnson Foundation, 2001) as they encounter barriers to healthcare services (AHRQ, 2004).

Health disparity is defined by U.S. Public Law 106-525 (2000) that authorized the creation of the National Center for Minority Health and Health Disparities. The law provided the legal definition of health disparities as population specific and where there is a significant disparity in the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates in the population when compared to the health status of the general population. Within the U.S. federal agencies that fund research, the definition of health disparities often incorporates the mission of that particular agency. Health disparity can be understood in a number of ways, and adding to the confusion are similar terms such as *health inequality* and *health inequity*.

The term *health disparity* in the United States is preferred to health inequality (Carter-Pokras & Baquet, 2002), while other countries such as Great Britain and Europe favor the terms *health inequity* or *health inequality*. Because of the increasing nature of health disparities, the Department of Health and Human Services (DHHS) and its operating divisions, including the Centers for Disease Control and Prevention (CDC), the Office of Minority Health (OMH), the Agency for Health Care Research and Quality (AHRQ), and the National Institute for Health (NIH), have been charged with addressing health disparities across the nation. Each agency approaches the health disparities based on the goals and objectives of their organization relative to their overall mission.

Evidence of disparities in healthcare where minorities bear the burden is consistent and occurs in a range of diseases such as cancer, diabetes, heart disease, AIDS, stroke, and OA (IOM, 2003). Research on disparities among racial/ethnic minorities has overwhelmingly found that these groups have limited access to both healthcare and disease and symptom management (Shavers, Bakos, & Sheppard, 2010). Shavers and colleagues (2010) also noted that racial/ethnic minority groups constituted about one-third of the U.S. population in 2005; by 2050, it is projected that racial/ethnic minority populations will constitute approximately 50% of the total U.S. population. Shavers and colleagues (2010) further suggested that this number highlights the current and future significance of addressing racial and ethnic disparities in health.

Several initiatives have been implemented to address and improve health disparities in the United States. However, differences in the quality of healthcare among racial and ethnic minority groups persist (AHRQ, 2011). In order to better understand these disparities, it is important to investigate the root causes of the disparities and address them appropriately.

Health disparities among minority groups with arthritis are increasingly being recognized as a major problem, and addressing these needs in this population has become an urgent public health issue (McIlvane et al., 2008). For example, while African Americans report a greater incidence of severe pain and activity/work limitations, they are less likely than their White counterparts to have ever participated in arthritis self-management programs (McIlvane et al., 2008).

M. Health Disparities and Hispanics.

The projected increase in the population of Americans aged 65 years and older in addition to the rapid growth of the Hispanic population will further pose a challenge in the

efforts to ameliorate health disparities (CDC & Merck Company Foundation, 2007). For Mexican American women, the largest Hispanic subgroup in the United States, a disparity in gender and ethnicity was noted in the treatment of OA (National Institutes of Health [NIH] Consensus Panel, 2003). The American Academy of Orthopedic Surgeons (n.d.) reported that the results after total joint replacement (TJR) is a dramatic improvement in function and reduction in pain caused from damage to the cartilage found in people with OA. However, fewer Mexican Americans receive TJR for OA when compared to non-Hispanic Whites (Dunlop et al., 2008; Skinner, Weinstein, Sporer, & Wennberg, 2003; Steel, Clark, Lang, Wallace, & Melzer, 2008). In a qualitative study, the lower rates of total joint replacement (TJR) among Hispanics were found to be associated with the process of decision making by the Hispanic participants. The findings indicated that because the TJR was not life threatening, Hispanic patients when compared with non-Hispanic Whites were more likely to be influenced by word of mouth and experiences of friends and families and were disinclined to choose the treatment. They also relied on positive outlook, faith, and religion as mechanisms for coping (Katz et al., 2011).

While there are reports of improvement in the overall health of the elderly population, minority elders continue to struggle disproportionately with receiving preventive care, routine medical care, and access to care (Baldwin, 2003). Additionally, research shows that, as a group, minority elders receive markedly lower quality care than their White counterparts (NIH, 2006). Additionally, Hispanic elders are subject to risk factors that contribute to greater morbidity and mortality. Such factors include higher rates of smoking, inadequate housing, and relatively low use of healthcare services and/or access to care.

N. Healthcare Utilization.

Of all populations in the United States, Hispanics have the lowest level of healthcare utilization and are less likely to receive preventive services when compared to non-Hispanics (Guendelman et al., 2000). Additionally, previous investigations have shown that two to three times more Hispanics lack a regular healthcare provider when compared to non-Hispanic Blacks and non-Hispanic Whites (Pleis et al., 2006). Factors contributing to the low utilization rate include lack of insurance, linguistic competency, health literacy, and socioeconomic status. Hispanics tend to use home remedies in lieu of utilizing healthcare services (Frazier, Garces, Scarinci, & Marsh-Tootle, 2009; Harari, Davis, & Heisler, 2008). Access to medications across the Mexican border may complicate treatment in the United States (Escalante & del Rincon, 2001). This border-crossing type of treatment where the need for consultation or prescription is negated is supplemented by the belief that medications from Mexico are cheaper and work better (Bergmark, Barr, & Garcia, 2010). Additionally, the use of home remedies or the consultation of a folk healer, known as a *curandero*, or lay healers may be preferred among this population (Collins et al., 2011; Padilla & Villalobos, 2007).

O. Access to Healthcare.

While Hispanic elders are more likely to have health insurance than their younger family members because of Medicare and Medicaid programs, the percentage of non-institutionalized Hispanics aged 65 to 84 with no insurance is higher (3%) than among similar non-Hispanic Whites or non-Hispanic Blacks (Kramerow, Lentzner, Rook, Weeks, & Saydah, 1999). Although older Hispanics have the highest percentage of Medicare/Medicaid insurance, almost half in the 85 and over population, access to healthcare

services remains low, with less use of available preventive services. A comparison was made in access to care and use of health services over the last two decades between Hispanics and non-Hispanic Whites of all ages (Weinick & Krauss, 2000). In this study, data from the *Morbidity & Mortality Weekly Report (MMWR)* (CDC, 2004) indicated that disparities in access to healthcare and preventive services within the Hispanic population remain significant and could be attributed to cultural factors. Though barriers to accessing healthcare are primarily related to SES, acculturation exerts an effect through its association with language skills, education, and employment (Escarce & Kapur, 2006). The authors recommended continued implementation of strategies to reduce barriers to healthcare and preventive services (Escarce & Kapur, 2006).

P. Socioeconomic Status (SES).

In order to advance the understanding of the impact of OA, it is important to focus on the relationship between social context and health outcomes, especially among older adults who may experience a number of chronic conditions (Luong et al., 2012). SES is determined through measures of income, occupation, and educational attainment (Callahan et al., 2010; Cheriell et al., 2009; Cleveland et al., 2013; Golightly & Dominick, 2005; Jergensen et al., 2011; Klubmann et al., 2008; Luong et al., 2012; Palmer, 2012; Richmond et al., 2013; Rytter, Egund, Jensen, & Bonde, 2009). This view is supported by the definition provided by the American Psychological Association (APA Task Force on Socioeconomic Status [APA], 2012) to the effect that SES is often measured as a combination of education, income, and occupation. The APA (2012) further asserted that SES is relevant to all realms of behavioral and social science, including research, practice, education, and advocacy.

The potential impact of educational background, income, and occupation on pain and disability caused by OA was examined by Luong et al. (2012). They found that low educational attainment and non-professional occupations are strongly associated with poor arthritis outcomes. The findings of Cleveland and colleagues (2013), Callahan and colleagues (2010), and Cheriell and colleagues (2009) were in line with those of Luong and colleagues (2012), whose findings indicated that severe pain caused by OA is common among older women with poor educational backgrounds.

1. Education.

Despite the overall increase in educational attainment among older Americans, substantial educational differences among racial and ethnic groups remain (U.S. Administration on Aging, 2010). For example, in 2008, 46% of the Hispanic population had completed high school as compared with 77% of the total older population. In the same year, 9% had received a bachelor's degree or higher as compared to 21% of all older adults.

The SES of individuals with low levels of educational attainment has been associated with poor health situations (Callahan et al., 2010). Several studies have shown that there is a strong association between low educational background and increased risk of developing OA (Callahan et al., 2010; Cheriell et al., 2009; Cleveland et al., 2013; Luong et al., 2012).

Hispanics as a group rank low on various measures of SES. Many older Hispanics in the United States are immigrants with limited language skills; they have worked in low-paying jobs and may not have been entitled to retirement benefits. The 19.3% poverty rate for Hispanic older adults may be related to these low wages and to the educational level of the population. This percentage was more than twice that of non-Hispanic Whites that accounted for only 7.6% (U.S. Administration on Aging, 2010).

Among Hispanics, low SES is associated with unhealthy behaviors (Morales, Kington, Valdez, & Escarce, 2002). Many studies have linked SES and poor physical and functional outcomes. A study among Mexican-American elders reported that chronic conditions other than OA such as stroke or hip fractures may increase the risk for disability in the lower extremities. In another study of the Hispanic population, the Established Population for Epidemiologic Studies (EPESE), a significant relationship between diabetes and arthritis was identified (Black, Goodwin, & Markides, 1998). Some researchers found an inverse relationship between education and disability among Hispanic elders (Haan & Weldon, 1996). A conclusion can be drawn that multiple conditions interact differently while presenting poor functional outcomes (Bryant, Grigsby, Swenson, Scarbro, & Baxter, 2007).

SES, race, and ethnicity are differentially associated with arthritis. Beyond these determinants of health, greater attention is given to understanding the influence of the neighborhood or community on health status and individual health behaviors (Martin, Shreffler, Schoster, & Callahan, 2010). Current research is focused on a better understanding of which neighborhood attributes influence health (Martin et al., 2010). For members of the Hispanic population with arthritis, cultural factors such as individual versus family orientation, social support, attitude toward work and illness, and health belief may influence their health-related quality of life (Escalante & del Rincon, 2002).

2. Occupation.

Hispanics are disproportionately represented in the high-risk/low social position occupations, which include service occupations, craft, repair occupations, farming, and forestry (U.S. Administration on Aging, 2010). Several studies have examined the relevance of occupation on the OA progression (Klubmann et al., 2008; Palmer, 2012; Richmond et al.,

2013; Ryetter et al., 2009). While Cleveland and colleagues (2013) suggested that there is no significant relationship between hip OA outcomes and occupation, several other studies have found a strong association between work-related activities such as lifting, squatting, kneeling, and climbing to the development of knee OA or joint diseases (Klubmann et al., 2008; Palmer, 2012).

3. Income.

Income is a social determinant of OA outcomes (Golightly & Dominick, 2005; Jergensen et al., 2011; Luong et al., 2012). After examining the potential effects of educational attainment, marital status, household income, and parenting patterns on the risk of OA development, Jergensen and colleagues (2011) concluded that married people with low-educational attainment and low income are at increased risks of developing OA of the knee, back, hand, and hip.

Q. Communication among Hispanics.

Most Hispanics living in the United States speak Spanish and/or English (Arrieta, n.d.; Peterson-Iyer, 2008). The total population of the United States has reached 316,668,567 as of a July 2013 estimate (Central Intelligence Agency, 2013). Only 10.7% of the entire U.S. population can speak Spanish (Central Intelligence Agency, 2013). Since not all Hispanics read or speak English fluently, a communication gap caused by a language barrier is common between Hispanic people and the rest of the U.S. population (Jorge & McDonald, 2011). In healthcare settings, language barriers coupled with hesitancy to report pain, often results in suboptimal treatment of pain among older adults in the United States (Hanks-Bell, Halvey, & Paice, 2004; Narayan, 2010; Peterson-Iyer, 2008). Hanks-Bell and colleagues (2004) noted that as a result, many older adults suffer quietly from unrelieved pain. In worst-case

scenarios, language barriers that deprive an OA patient of proper healthcare treatment might create a negative spiral of anxiety and depression, increased levels of pain, low levels of self-confidence, and social isolation (Jack, McLean, Moffett, & Gardiner, 2010). Thus, use of an interpreter is fundamental to increase the likelihood that Hispanic patients will receive proper care and treatment (Rodriguez et al., 2013).

A survey of a segment of the Hispanic population by the National Assessment of Adult Literacy (NAAL) (2003) revealed that 41% of Hispanic adults had below basic health literacy skills as compared to the rest of the population. The NAAL found that 31% of the population had intermediate health literacy skills, 24% had proficient health literacy skills, and 4% had basic health literacy skills (DHHS, 2013). Low level of literacy skill is strongly associated with poor mental and physical health (Wolf, Gazmararian, & Baker, 2005) and low levels of health literacy can adversely affect the health condition of each individual (Shieh & Halstead, 2009).

Furthermore, people with low levels of health literacy skills have “less health knowledge, worse, self-management skills, lower use of preventive services, and higher hospitalization rates” (Wolf et al., 2005, p. 1,946). Strong health literacy skills are necessary to ensure that each and every person will become healthy (DHHS, 2013). Therefore, in the absence of strong health literacy skills, patients are at a high risk for “medication errors, missed appointments, and adverse medical outcomes” (Weiss, 2007, p. 6).

While health literacy and OA health outcomes have not yet been explored in the context of health literacy, an association has been found between poor health outcomes in other chronic diseases and functional health status of older adults (Luong et al., 2012). Hispanic adults have lower levels of health literacy skills as compared to adults from other

racial or ethnic groups (American Speech-Language-Hearing Association, 2013; Weiss, 2007). In fact, Hispanics are one of the most vulnerable race groups in the United States particularly in the area of health literacy (American Speech-Language-Hearing Association, 2013; DHHS, 2013).

In order to increase the health literacy of the Hispanic population in the United States, Singleton and Krause (2009) strongly suggested that healthcare professionals make a vigorous effort to learn about the cultural background of their patients. In their study on Mexican immigrants who return to Mexico for healthcare, Bergmark and colleagues (2010) found a language barrier to be a pivotal point in a patient's decision-making.

R. Summary.

The review of the literature provided a summary of the socio-cultural factors affecting Hispanic women with OA. A gap exists in the literature on the impact of the environment on mental and physical functioning in older adults with OA (Glass, 2003; Luong et al., 2012). This issue has particular relevance in light of this group's vulnerability to barriers in their social and physical environments (Robert & Li, 2001). On a final note, in the Hispanic culture, religion is used as one method for coping with stressors (Dunn & O'Brien, 2009). Variables that contribute to the healthy psychological functioning among Hispanic women are virtually ignored in the psychological literature (Ruiz, 2002). The review of the literature points to relationships between sociocultural factors and severity of the disease processes.

Further research is needed to understand better the interaction of the sociocultural factors from the perspective of older Hispanic women with OA. The next chapter provides an overview of the research methods used in this study.

III. METHODOLOGY

A. Introduction.

The purpose of this study was twofold. The first purpose was to describe the experience of older Hispanic women with OA and the factors that affect their quality of life and ability to function. The second purpose was to describe their perspective relative to the cultural competency of the care they were receiving.

The research questions for this study are:

1. Research Question 1.

What are the experiences of older Hispanic women with OA and the factors that affect their quality of life and ability to function?

2. Research Question 2.

What are the perceptions of older Hispanic women with OA as to the cultural competency of the healthcare they are receiving, specifically in the areas of Patient-provider communication, respect for patient preferences/shared decision-making, experiences leading to trust or distrust, experiences of discrimination, and linguistic competency?

This chapter describes the proposed design and research methodology for the study. The chapter also describes ethical consideration and human subject protections, the characteristics and size of the sample, selection strategies, data collection, and data management.

B. Research Design.

Qualitative research is the approach used to explore issues and understand phenomena particularly when the focus of the study involves the collection of data in the

natural setting (Creswell, 2007). The qualitative design was the best approach for this study because qualitative research is particularly effective in areas of study where a naturalistic approach is needed to understand a particular phenomenon (Patton, 2001). An advantage of the qualitative approach is that it relies on real-life experiences and the voices of the persons experiencing the phenomena. Qualitative research was thus an appropriate vehicle for older Hispanic women to express their experiences and for the researcher to elicit their perspectives about having OA, seeking healthcare, interactions with healthcare providers, and changes they have experienced in quality of life and functioning since developing OA. Individual interviews were conducted to draw out the stories associated with the experience of OA and perceptions related to the cultural competence of care received. The goal, after eliciting these stories, was to analyze how these events coupled with the socio-cultural meanings influenced their lives.

C. Qualitative Descriptive Design.

Qualitative descriptive design as a form of qualitative inquiry offers a comprehensive summary of an event in the everyday terms of those living the events and tends to draw from the general tenets of naturalistic inquiry (Sandelowski, 2000). Naturalistic inquiry implies a commitment to conduct the study in its natural state (Lincoln & Guba, 1985) with no commitment to a particular theoretical view or specific phenomena or manipulation of the variables (Sandelowski, 2000). Consistent with that view, qualitative researchers generally study things in their natural setting and without manipulation in order to attempt to interpret the phenomena in terms of the meanings that the participants bring to them (Denzin & Lincoln, 2005). Techniques employed allow a natural presentation of the phenomena, as if it were not under study (Sandelowski, 2000). Qualitative descriptive designs provide rich

descriptive details about people, places, and phenomena (Sandelowski, 2000; Verhonick, 1971). These study methods elicited the perception from participants and subjective evidence was generated. By making use of the data derived from the perspectives obtained, a detailed depiction of the OA experience in older Hispanic women was created.

D. Methods.

1. Participant Selection Strategies.

Participants for this study were recruited from various primary care settings via (a) printed study announcements in English (Appendix B) and Spanish (Appendix C), (b) emails to arthritis specific web-based groups, and (c) site visits to local rheumatologists' or primary care providers' offices. The announcement included the purpose of the study, inclusion criteria, and information concerning the risks and benefits of the study. An invitation to participate was provided to potential participants as needed in English (Appendix D) or Spanish (Appendix E).

The investigator's contact information was listed on all printed materials and media contacts. Potential participants who responded by phone or direct contact were given a general explanation of the study and the requirements for participation along with an assurance of confidentiality and that participation was voluntary. If the participant was still interested, a time and place for the interview was determined and contact information obtained for the participant. If the participant responded to a personal solicitation, as in visits to exercise groups, the same information was conveyed as to the purpose of study and requirements for participating and voluntary nature of participation. At that point, contact information was obtained and the interview appointment was set. Prior to the interview, each participant was asked to complete a demographic data questionnaire in English (Appendix F)

or Spanish (Appendix G). The interview guide in English (Appendix H) and Spanish (Appendix I) served as a guide for the interview.

2. Sample Selection.

Inclusion criteria for participation in this study were (a) self-identification as a Hispanic woman, (b) monolingual or bilingual (c) aged 65 years or older, and (d) having a history of OA diagnosed by a healthcare provider. The exclusion criteria for participation in this study were Hispanic women 65 years and older who were not able to communicate, had been diagnosed with a mental disorder, or other disability that rendered them unable to respond verbally to questions.

Sample size in qualitative studies is generally small and nonrandom (Polit & Beck, 2008). Sample size is a function of the purpose of the inquiry, the quality of the informants, and the type of strategy used (Polit & Beck, 2008). Data saturation serves as a guiding principle in sampling for qualitative studies (Polit & Beck, 2008). It is the point where the data become redundant and repetitive (Polit & Beck, 2008). If participants are good informants, data saturation can be achieved with a small number of participants. For this study, sampling continued until data saturation was reached.

For this study, purposive, convenience, and snowball sampling were used to recruit participants. Purposive sampling is based on the belief that participants would be experiencing the central focus under study (Polit & Beck, 2008). This sampling method is ideal in naturalistic inquiry. Convenience sampling involves using the most conveniently available study participants. Snowball sampling is selection by referral from other participants. In qualitative research, the objective is not to generalize (Creswell & Clark,

2011). Therefore, a small number of participants were selected who provided in-depth information about their experience with OA. A final sample size of 16 was obtained.

E. Ethical Consideration and Human Subject Protection.

A necessary consideration in planning a research study is the protection of human subjects. The study was submitted to the University of Texas Health Science Center's Institutional Review Board (IRB) prior to data collection. IRB approval was obtained prior to data collection and a Request to Continue was obtained later (Appendix J). Participants were not enrolled in the study prior to approval of the IRB. A letter of support (Appendix K) providing support and access to participants was submitted with the IRB request.

Privacy and confidentiality were guaranteed as well as measures to minimize risk for the participants. Because the participants were providing protected health and personal information, confidentiality of participant information was assured by using non-identifying names or pseudonyms. The list of actual names and pseudonyms were kept in a locked file drawer in the researcher's office. The pseudonyms were used on all written records and access to the actual names was available only to the researcher and the supervising professor.

The principle of voluntary participation through informed consent was observed. Verbal informed consent was obtained from participants prior to the time of interview, with an explanation of the reason for the study, the importance of the need to consent to participate in the study, and permission to audiotape the interview. Completed interviews were sealed in unmarked envelopes and stored in a locked cabinet, with access only by the researcher and the supervising professor.

All effort was made to minimize inconveniences to participants. There were no major risks for participation in this study. Cognitive consent for the study was required from all

participants. Participants were informed of the right to select the time and place of interview, reschedule, or terminate the interview at any time. In addition, voluntary participation could end during any time of the study without explanation.

The benefit for participation in the study was contributing to the limited existing knowledge of experiences from this population. The findings obtained during the research process were not misused in any manner that would affect the participants in any way.

F. Data Management Strategies.

This section includes the plan for data collection and data analysis. Data collection includes gathering of demographic data, conducting individual interviews, and field notes. Data analysis includes the description of how data will be managed and analyzed. Study methods to assure rigor are discussed.

1. Data Collection.

The principal method for data collection in a qualitative descriptive study is open-ended semi-structured interviews. In qualitative descriptive studies, data collection is directed toward collecting “who,” “what,” “when,” and “where” type questions regarding events or experiences having taken place in their natural context (Sandelowski, 2000).

2. Individual Interviewing.

Individual interviews were selected as the mode of data collection. During qualitative interviews, the participants’ experiences were obtained while central themes were described from the participant’s life experiences (Kvale, 1996). Interviewing may also be useful as follow-up to respondents’ questionnaires to further investigate responses (McNamara, 2009), in addition to adding detail or filling in gaps while broadening the depth of the study (Munhall, 2007).

Face-to-face interviews were conducted at the home of each participant ($N = 16$) and recorded using a digital voice recorder. A demographic questionnaire was completed prior to the beginning of the interview. Participants were interviewed for approximately one hour, with a plan for future contact for additional follow-up if additional information was needed to clarify data provided at an earlier interview. Participation was voluntary and participants were reminded of the right to stop the interview at any time. An interview guide (Appendix G) with open-ended semi-structured questions was used to assure that every interview was similar. Open-ended questions allowed participants to respond in their own words (Polit & Beck, 2008). Probes were used to elicit or clarify the participants' responses and to gain a better understanding of their experiences. Participants were thanked for providing their experiences and perceptions about OA and the healthcare they were receiving and for their participation and contribution to the study.

3. Field Notes.

Field notes were used as a representation of the researcher's efforts to record information and also to synthesize and understand the data (Polit & Beck, 2008). They are designed to enhance the quality of data obtained (Emmerson, Fretz, & Shaw, 1995; Khan, 2000). Field notes are broad, analytic, and extend beyond a listing of occurrences. Information such as body language, environmental details, dress, assistive devices, as well as self-evaluation of the interviews was included. Additionally, the field notes were used to gain understanding of the participants' beliefs as part of their culture and to describe their natural settings (Lincoln & Guba, 1985). The description of all events that transpired during the encounters were used with sufficient information that identified the date, start, and end time of each interview, place of interview, and participant descriptions. Continued evaluations

documented in the field notes helped the researcher to know when data saturation had occurred (Emmerson, Fretz, & Shaw, 1995).

G. Data Analysis.

One choice for data analysis in qualitative descriptive studies is content analysis (Sandelowski, 2000), as was done in this study. Content analysis is a dynamic and systematic technique for compressing words of texts into categories based on coding guidelines (Krippendorf, 2004). It allowed the researcher to review large volumes of information in a systematic manner. This method of analysis is characterized by the simultaneous collection and analysis of data that mutually shape each other (Sandelowski, 2000). As the data were collected, there was a continuous modification of data, such as adding new questions to the interview guide, based on new information and insights about these data. The goal was to summarize the content of the data.

Field notes were organized and interviews transcribed as soon as possible after the interviews. Data were organized into files labeled with the participants' identification information. This method involved breaking down the data into smaller units, followed by coding and naming the units according to the content they represented, as well as grouping the coded material based on shared concepts across participants (Polit & Beck, 2008). Krippendorf (2004) suggested clustering as a way to represent the qualitative content analyses. This is based on similarities among units of analysis and levels of abstraction. It is the method for subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns (Hsieh & Shannon, 2005).

Verbatim transcription of the tapes was a critical step in preparing for data analysis (Polit & Beck, 2008). Therefore, the transcription was done by a professional transcription

service. Following the transcription process, the accuracy of the transcription was evaluated by listening to the audiotape while simultaneously reading the transcription. This step assured that the transcription was valid. During this phase, the data were read and re-read in order to develop clear familiarity with the database. The data included memos, field notes, and transcripts from the interviews. This step was important because it was the beginning of establishing a qualitative codebook that incorporated codes and analysis decisions as they emerged during the analysis. The use of a qualitative codebook assisted in organizing the data and facilitating coding agreement between individuals (Creswell & Clark, 2011).

Coding is the process of grouping evidence and labeling ideas so that they reflected increasingly broader perspectives (Creswell & Clark, 2011). Open coding is a method where the data are broken into parts, compared for differences and similarities, and placed in categories. As codes were grouped, themes emerged, and these were placed in the codebook. During the coding process, agreement was sought with an advisor as a means of adding credibility to data analysis. Themes and categories were identified prior to representing the data in order to validate the information and provide evidence by way of specific quotes from multiple sources or participants. Data were represented in the form of a discussion of themes.

H. Validating the Data and Results.

Lincoln and Guba (1985) described validity in qualitative studies as an important aspect because a determination has to be made as to the accuracy and trust that can be placed in the account provided by the researcher. The data have to be trustworthy, credible, and reliable. Validity in qualitative research is required in the analysis of the process in which the researcher and external reviewers are engaged. Reliability, while necessary in qualitative

research, plays a relatively minor role because in part it requires agreement on codes for inclusion of quotes in the text.

In qualitative research, there is more focus on validity than reliability in determining whether the account provided by the researcher and the participants is accurate and credible (Lincoln & Guba, 1985). Validity of the results ensures trustworthiness of the results (Creswell, 2011). One approach to validating the data interpretation is by way of member checking. Member checking allows the opportunity to assess the adequacy of preliminary data, summarize preliminary findings, followed by a confirmation of the data. In this study, member checking was used with two participants toward the end of the study to be sure the analysis reflected the participants' views accurately. Other steps that ensured validity and reliability in this study are described in the rigor section.

I. Rigor in Qualitative Research.

The terms *trustworthiness* and *authenticity* have been used in place of *reliability* and *validity* for qualitative research (Lincoln & Guba, 1985). For the purpose of this study, the perspective provided by Lincoln and Guba (1985) was used as it applies to and adheres to a naturalist equivalent for internal and external validation of qualitative research and to establish trustworthiness of the study. To operationalize these terms, Lincoln and Guba (1985) proposed four operational techniques, namely, credibility, transferability, dependability, and confirmability. This study was able to achieve trustworthiness through credibility, transferability, dependability, and confirmability.

1. Credibility.

Credibility is the main goal of qualitative inquiry (Lincoln & Guba, 1985). It refers to confidence in the data and their interpretations (Polit & Beck, 2008). Credibility was

achieved by *peer debriefing* that allows for a third-party review in order to explore other possible explanation of findings. External validation of the interpretation of the data was accomplished with the assistance of the supervising professor in order to discuss and corroborate interpretations and seek patterns of convergence from information provided by participants. To ensure credibility of the data, the data were checked and re-checked during the data collection process followed by utilization of the member-checking approach with key participants in the study validating the accuracy of the findings. *Member checking* is considered the most important technique to establish credibility of the data (Lincoln & Guba, 1985). Feedback was provided to the participants in reference to the emergence and interpretation of the data. They were asked to provide validation of the findings by confirming that the research accurately interpreted their views. Participants were able to validate the findings in this study.

2. Transferability.

Transferability replaces generalizability and is the ability to apply the data and findings to other contexts or groups (Lincoln & Guba, 1985). For example, it is possible that this study generated information about the experience of OA in Hispanic women that has applicability to other chronic illnesses among similar women. It is the role of the investigator to provide sufficient descriptive data in the report, such as a thick description of the sample, the setting of the study, and the condition under which older Hispanic women manage OA.

3. Dependability.

Dependability is needed to establish credibility (Lincoln & Guba, 1985). Dependability is the process by which the researcher ensures that all phases of the research are documented and are accessible to other researchers in order to ensure proper procedures

have been followed (Bryman, 2001). This criterion is analogous to reliability in quantitative research and necessary for the evaluation of the integrity in qualitative studies (Polit & Beck, 2008). This was achieved by establishing a comprehensive audit trail. This was accomplished by organized field notes and the interview transcripts. Additionally, the supervising professor, in the role of auditor, reviewed collection methods, findings, and interpretation of the data.

4. Confirmability.

To achieve confirmability and quality of the data, an audit trail was developed and monitored by the supervising professor. Examples of materials that were used for the audit trail included demographic data, field notes, codebook, audio tapes, interviews, and transcripts. Additional characteristics that emphasize rigor in a study focus on the researcher (Creswell, 2007) and include: (a) rigorous collection of data, data analysis and reports by the researcher; (b) framing of the study by the researcher within the assumptions and the characteristics of the qualitative approaches to the research; and (c) inclusion of detailed methods and analysis of multiple levels of abstraction.

J. Summary.

This chapter summarized the research design and methodology most appropriate to document the experience of older Hispanic women with OA and their perceptions of the culturally competency of the care received. This section provided an overview of the procedure for IRB approval, sampling, inclusion and exclusion criteria, the procedure for data collection, data analysis, rigor, and procedures for validating the data.

IV. RESULTS

Osteoarthritis is the most common form of arthritis that places severe limitations on daily activity and quality of life for over 27 million Americans (Arthritis Foundation, 2010). The focus of this study was older Hispanic women because of the burden of OA in this population coupled with a higher prevalence of activity limitations (Bolen et al., 2010), lower than average level of income, and ongoing challenges with educational and occupational achievement. Therefore, the purpose of this study was to (a) describe the experience and perspective of older Hispanic women with OA and the factors that impact and influence their quality of life and ability to function and (b) describe the perspective of older Hispanic women relative to the cultural competency of the healthcare they are receiving, focusing on five components: (a) patient-provider communication, (b) respect for patient preferences/ shared decision-making, (c) experiences leading to trust or distrust, (d) experiences of discrimination and (e) linguistic competency. The Cultural Competency model (Ngo-Metzger et al., 2006) served as a guide to explore and elicit the patients' perspectives of their experience with OA and culturally competent care. However, there was not sufficient narrative to elicit data in the areas of discrimination and linguistic competency.

A. Sample.

The target population for the study included women who (a) were monolingual or bilingual and were self-identified as Hispanic, (b) were 65 years of age or older, (c) had a history of OA, and (d) had been diagnosed by a healthcare provider. Exclusion criteria included Hispanic women 65 years and older who were not able to communicate or were

diagnosed with a mental disorder or any other disability that rendered them unable to respond verbally to questions. The setting for this study was a large city in Texas.

Purposive sampling was selected as the strategy to recruit participants, as they were each required to meet the inclusion criteria. Purposive sampling is based on the belief that participants would be experiencing the central focus under study (Polit & Beck, 2008). Purposive sampling also allows participants to serve in the identification and selection of other participants by way of recommendations, which leads to new participants (Polit & Beck, 2008). This is known as snowball sampling. Sampling continues until data saturation is achieved. Data saturation is the point at which the data become redundant and repetitive and serves as a guiding principle in qualitative studies (Polit & Beck, 2008).

Recruitment of participants was performed using various primary care settings by way of printed study announcements and site visits to arthritis-specific exercise groups. The announcements included the purpose of the study, inclusion criteria, and information concerning the risks and benefits of the study, in addition to contact information for the Principal Investigator. There was no contact with potential participants prior to the approval of the study by the University of Texas Health Science Center San Antonio Institutional Review Board (IRB). Approximately 20 participants were recruited and 16 actually participated.

B. Characteristics of the Sample.

All participants were Hispanic females diagnosed with OA by a healthcare provider. Of the 16 participants, 15 were self-reported as Mexican-American, born in the United States, while one reported to be born in Mexico but had lived in the United States for approximately 34 years. The demographic data of the participants are listed in Table 1.

Table 1

Summary of Demographic Data

Demographic Characteristics	N ^a	% of Total
Marital Status		
Single	6	36
Married	6	36
Divorced	2	13
Widowed	2	13
Place of Birth		
United States	15	94
Mexico	1 ^b	6
Primary Language		
English	6	36
Spanish/English	8	50
English/Spanish	2	13
Education		
<High school	4	19
High school	3	25
Technical/vocational school	2	13
Some college	3	19
Bachelor's degree	2	13
Graduate degree	2	13
Employment		
Employed	4	25
Unemployed	2	13
Retired	7	44
Never worked	0	0
Disabled	6	36
Annual Income		
<\$10K	5	31
\$10K to \$19K	5	31
\$20k to \$29k	2	13
>\$60k	4	25

Note. Participants ranged in age from 65 to 80 years. All participants were female and were diagnosed with OA by a healthcare provider.

^aN=16.

^bOne participant was not born in the United States but has lived here for approximately 34 years.

The mean age of all participants was 66 years of age, with a range from 65 years to 80 years of age. Marital status was reported as six single (36%), six married (36%), two divorced (13%), and two widowed (13%). Fifty percent reported their primary language as English, while 13% reported their primary language as English followed by Spanish.

There was a considerable variation in the education of the participants. Of the 16 participants, two had graduate degrees, two had completed a bachelor's degree, three had some college, two had vocational training, three had achieved a high school education, and four reported less than a high school education. Four of those interviewed were actively employed, seven actually retired – six indicated that they were disabled and two reported that they were unemployed. The occupation of the participants included healthcare professionals, retired military veterans, an environmental engineer, clerical duties, and various factory workers. The annual income ranged from less than \$10,000 to \$60,000 annually. Fifty percent of the participants who lived alone had the support of providers to assist with activities of daily living and household chores. Other participants had spouses or other family members for help and support.

C. Description of Participants.

A description of each study participant is presented. In order to maintain confidentiality and protect the identity of each participant, the names have been changed.

1. Lita.

Lita is 66 years of age and has been diagnosed with OA by a healthcare provider for the past 10 years. The primary areas affected by OA are her spine and both knees. She is married and lives with her spouse. She has two daughters who are college educated. She is a veteran with a graduate degree and is currently employed as a Nurse Clinician. She retired

after 20 years of active military service. She reports Spanish as her primary language, then English as a secondary, and fully understands the disease process and treatment goals.

2. Dulcelina.

Dulcelina is 71 years of age and was first diagnosed 20 years ago with OA by a healthcare provider. The primary area affected by OA is her spine. She is married and lives with her spouse. She has one adult daughter living outside of her home. She has worked as a healthcare worker for approximately 40 years and is looking forward to retirement in approximately six months. She reports her primary language as English and then Spanish. She has had vocational training and some college education. She fully understands her treatment plans and articulates specific ways in which she manages pain associated with osteoarthritis.

3. Alicia.

Alicia is 66 years of age and has been diagnosed with OA by a healthcare provider for the past eight years. The primary areas affected by OA are the spine and both knees. She is divorced and has two adult daughters and three grandchildren. She does not wish to have a provider at this time. Her brother is her main source of support for assistance several days a week. She is disabled and requires the use of a cane or walker in the home and assistance with activities of daily living. She reports her primary language as Spanish and then English. She achieved less than a high school education. Past occupations included work in hospitals and hotel housekeeping.

4. Josefa.

Josefa is 68 years of age and has been diagnosed with OA by a healthcare provider for the past four years. The primary area affected by OA is her spine. She is single and lives alone in a senior housing complex. She reports her primary language as English. Her education includes some college education. Her past occupations include elevator operator, bartender, and limited construction worker. She is currently retired. She has a homecare provider who assists with all activities of daily living, in addition to transportation to medical appointments. She has no other family members in this area. She uses a walker to assist with ambulation.

5. Dina.

Dina is 66 years of age and has been diagnosed with OA by a healthcare provider for the past 10 years. The primary areas affected are both knees. She is married and lives with her spouse. She has no children. She has a master's degree and is currently employed as a Nurse Manager after 14 years of active military service. She reports her primary language as Spanish and then English. She is knowledgeable about the OA disease process and is aware of limitations imposed by OA and is able to adjust her workload and schedule to pain related to OA.

6. Sylvina.

Sylvina is 69 years of age and has been diagnosed with OA by a healthcare provider for the past 19 years. The primary area affected is her spine. She is single and lives in a senior housing complex. She has a daughter and three grandchildren, all living in another state. She has a provider who assists with activities of daily living, shopping, and meals. She is disabled and uses a motorized chair to facilitate moving around her apartment and the

complex when walking her dog. She reports her primary language as English and did not complete high school. Past occupations included housekeeping in various hotels and as a line server at a local restaurant. She has peritoneal dialysis five days a week in her home.

7. Juana.

Juana is 65 years of age and has been diagnosed with OA by a healthcare provider for the past nine years. The primary areas affected are knees and spine. She is widowed and lives alone in a senior housing complex. She reports her primary language as Spanish and then English. Her support system is a home provider who assists with activities of daily living, laundry, and house chores. While she does not use any assistive devices, she does require frequent rest periods because of the pain. She completed high school. Past occupations included work in hotel housekeeping departments.

8. Andrea.

Andrea is 68 years of age and has been diagnosed with OA by a healthcare provider for the past two years. The primary areas affected are knees, spine, wrists, and fingers. She is single and lives alone in a senior housing complex. Her current weight is 320 pounds, and she uses a wheelchair at times. She is retired, and her past occupations included hotel and hospital housekeeping services and cabinet making. She has one daughter and three grandchildren and acknowledges that she is not able to cook and bake for them as she used to do. However, she enjoys their visits. She completed high school and reports her primary language as English, but also converses in Spanish with friends. She has a provider five days a week and plans and organizes the activities that require the assistance of the provider. Her role is the informal “coordinator” of the women’s group in the senior living complex. She

coordinates and participates in most of the activities of the complex, in addition to hosting the card-playing group in her apartment.

9. Erlinda.

Erlinda is 70 years of age and has been diagnosed with OA by a healthcare provider for the past six years. The primary areas affected are both knees. She is divorced and lives alone in a senior housing complex. She completed high school and reports her primary language as Spanish and then English. Her support system includes a provider five days a week. She previously moved to another state with her daughter, but returned to this city recently because she wanted to receive care at the University Hospital and prefers to continue to receive care at that facility. Her past occupation included working in a local hospital, and she is now retired.

10. Elena.

Elena is 80 years of age and has been diagnosed with OA by a healthcare provider for the past four years. The primary areas affected are both knees. She has been married for over 60 years and lives with her spouse. Her daughter lives in an attached house to be close to her. She attended vocational training and is now retired. Past occupations included sewing and cosmetology in addition to employment in a factory. She was born in Mexico and reports her primary language as Spanish. She has a provider who assists with activities of daily living.

11. Victoria.

Victoria is 69 years of age and has been diagnosed with OA by a healthcare provider for the past 21 years. The primary areas affected are knees, hips, and neck. She is single and lives alone in a senior housing complex. She reports her primary language as Spanish and then English. She completed vocational training, and she is now retired. Past occupations

included work as a school aide and in a factory for airplane parts. Her support system is her friends in the housing complex. She wants to work but feels that no one would hire her at her present age.

12. Eulalia.

Eulalia is 65 years of age and has been diagnosed with OA by a healthcare provider for the past five years. The primary areas affected are both knees. She is widowed and lives alone. She reports English as her primary language. She has had some college education and is recently retired. Her past occupation included clerical/administrative duties. She has a daughter and son who are very attentive to her needs and communicate with her on a daily basis. She enjoys working in the yard, but moist weather has a significant effect on her level of discomfort and pain.

13. Elvia.

Elvia is age 65 and has been diagnosed with OA by a healthcare provider for the past 21 years. She has an extensive history of OA that includes bilateral knee replacement, and she is currently recuperating from ankle surgery. She has been married for 40 years and lives with her spouse. Other household members include two daughters and a grandson. She completed four years of college and works primarily from home as an Environmental Engineer. She reports English as her primary language.

14. Amalia.

Amalia is 67 years of age and has been diagnosed with OA by a healthcare provider for the past four years. The primary areas affected are knees and right hip. She is single and lives alone. She completed high school and reports her primary language as English and then Spanish. She is disabled and uses a walker as an assistive device. She has no family support

in the state. She relies on a provider five days a week for assistance with activities of daily living. She is retired, and her previous occupation included working in housekeeping departments in local hotels.

15. Rebecca.

Rebecca is 68 years of age and has been diagnosed with OA by a healthcare provider for the past six years. The primary areas affected are both knees. She reports her primary language as Spanish and then English. She completed high school and is currently retired. Her past occupation included working in hospital housekeeping. She is single and lives alone. She has a provider several days a week. Her other support is a son who lives out of state but has frequent telephone contact.

16. Delfina.

Delfina is 67 years of age and has been diagnosed with OA by a healthcare provider for the past nine years. The primary areas affected are both knees. She had a right knee replacement surgery two years ago, and the left knee is pending for surgical intervention. She is currently employed as a clerical supervisor. She is married and lives with her spouse. She has two daughters and two grandchildren. She reports English as her primary language. She has had prior military service in addition to a bachelor's degree.

D. Individual Interview Procedure.

Participants were personally contacted by phone to confirm their voluntary participation in the study. An appointment date and time were set, and they provided them with information pertaining to the purpose of the study. Any questions or concerns were addressed at that time. Verbal consent to participate in the study was also obtained at that

time. Interview and data collection occurred in each participant's residence so as to provide a sense of privacy and a level of comfort to share their experiences with OA.

Upon arrival at the residence, the researcher greeted each participant and reviewed the purpose of the study and clarified any concerns that they had. As the individual interviews were conducted in the privacy of each participant's home, each participant identified the specific location in their home for the interview. Prior to the recorded interview, each participant was asked to complete the information on the demographic data questionnaire (see Appendix F).

Data collection included the use of digitally recorded semi-structured interviews as participants were encouraged to freely provide as much detail about their experiences as they wished to in their own words. Probes were used to elicit or clarify participants' responses in order to gain a better understanding of each participant's experience. All interviews were conducted in English, recorded, and translated. Data were transcribed verbatim after each interview. At the end of the interviews, the participants were thanked for their participation in the research study. Some participants in turn expressed appreciation and thanked the researcher for taking the time and interest in their illness and its impact on them as individuals.

E. Data Analysis Procedure.

Content analysis was the technique used to analyze the transcripts of the interviews for each participant. Coding was used to group the data and label the ideas that emerged from the interviews. Open coding was used to break the data into smaller units, compared for differences and similarities, and then placed into the thematic categories. This method

involved naming the units according to the content they represented, as well as grouping the coded material based on shared concepts across participants.

Thematic categories were developed to represent broad units of meaning relevant to providing answers to the research questions. During this phase, data were read and re-read in order to develop a clear familiarity with the data. After all the data were coded, the elements were subsumed to the appropriate thematic categories that were developed. For each thematic category, the elements that appeared in the most number of participants became the themes. The presentation of results included data that represented the breakdown of the coding results for each of the thematic categories developed. Direct quotes from the participants were also included in the presentation of the results to strengthen the findings.

F. Findings.

The presentation of the findings is organized based on the two research questions of the study. The thematic categories and the corresponding codes are presented for each research question in order to understand the experiences of older Hispanic women with OA and their perceptions about the cultural competency of the care they were receiving.

1. Research Question 1.

What are the perceptions of older Hispanic women with OA and the factors that affect their quality of life and ability to function?

To provide answers to the first research question, four thematic categories were developed from the data. These thematic categories are: (a) perceived cause of OA, (b) effects of OA, identified as physical and psychological, (c) treatment, and (d) concerns for the future with OA. The presentation of results includes tables and graphs to show the breakdown of the coding results for each of the thematic categories developed.

a. **Thematic category 1: Perceived cause of OA.** The first thematic category that was developed relating to the first research question was labeled *perceived cause of OA*. Most of the participants perceived that OA was caused by getting older, whereas some believed that OA was caused by the constant wear and tear of the body. Others stated that it was a combination of both getting older and the results of repetitive body movements related to their jobs. For example *Lita* stated, “I guess I’m getting older. I started having problems about 10 years ago, and I went to the doctor and got an X-ray. It showed that some of my joints were breaking down.” Similarly, *Dina*’s perception about OA was influenced by what her doctor told her, that OA is a degenerative disease that worsens as people get older,

The doctor told me that it’s degenerative, so I guess the fact that I’m getting old and that’s how they diagnose it. Your big joints tend to degenerate and so I think it’s a matter of aging. I am getting older by the day and I really feel it in my bones.

Table 2 and Figure 3 provide a visual representation of the breakdown of the perceptions and experiences of the participants regarding the cause of illness. Thirty-three percent (33%) of the participants believed that OA was caused by the constant wear and tear of the body. The wear and tear is particularly influenced by how their bodies were constantly used as a result of, and the nature of, their occupation. For example, *Andrea* stated:

He told me that it could have been from the type of work that I did. I did hospital work and I worked as a central supply technician, and we have to handle these big sterilizers. They had a big, big wheel that we have to turn to open and close them.

Similarly, *Juana* also spoke about how the nature of her occupation might have caused her to develop OA,

Table 2

Breakdown of Themes: Perceived Cause of OA

Themes	Number of Occurrences
Getting older	6
Wear and tear of the body	5
Getting Hurt	2
Hereditary	1
Illness during childhood	1
Did not know	1

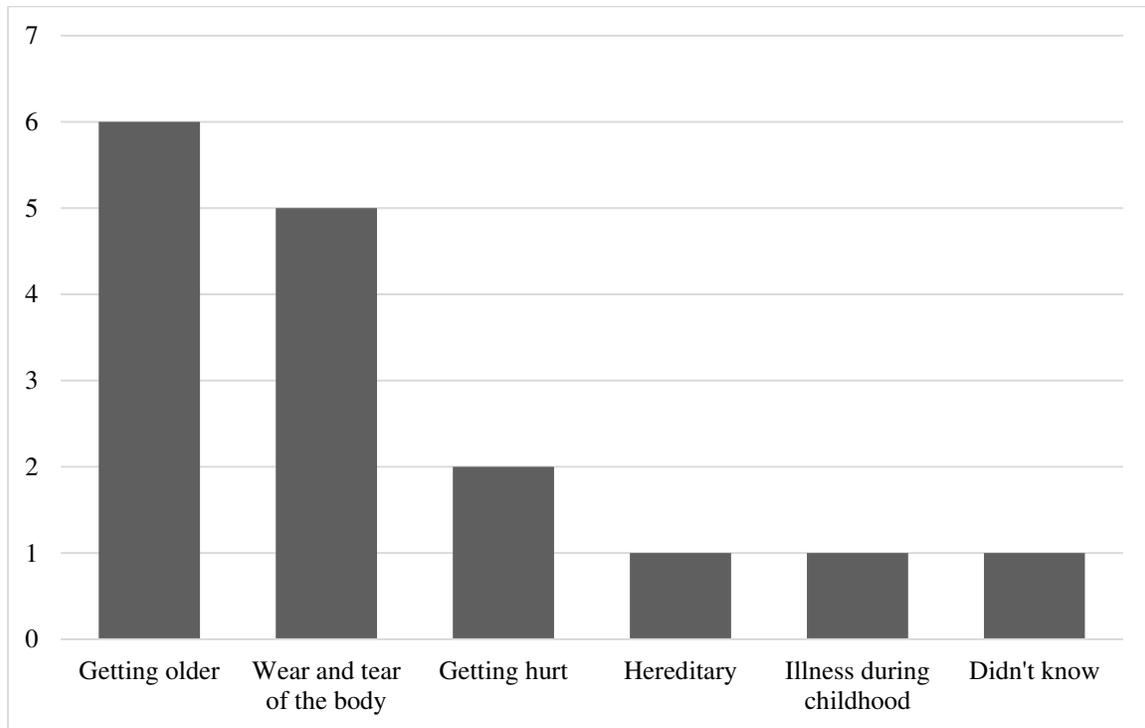


Figure 3. Coding Results for the Thematic Category: Perceived Cause of OA.

Note. Number of participants' responses to questions relating to their perceptions of the cause of osteoarthritis.

I don't know. Thinking about it, I worked at a cabinet shop with, how do you call it, sanding. Then I worked at a phone factory and I used to use my hands a lot with the glue; there was a glue gun. Yeah, I don't know what it was, I had some swelling in my hand and all over, they sent me to therapy, and it went away. I don't know if that caused or helped, I don't know. I was not told at that time what it was because the swelling went away?

Dulcelina also spoke about how the constant use of her body over the years as a healthcare worker might have influenced how she acquired OA:

I guess just the moving around and doing through the years and things that you have to do on a daily basis. I have been in the healthcare field for many years. You know, you use your hands, your elbows, you walk, your feet, your whole body is in motion. I lifted patients, moved, positioned, and all that work over these years. And I don't know why arthritis or osteoarthritis has to be, but I would say it's just the wear and tear of the body at the joints. At least that is my understanding.

Dina also spoke about a combination of aging and overusing her joints from her job, possibly resulting in her OA,

I think one of the things that I think about is I guess you think of overuse, so your joints waste because you're getting older, but I think too having been on active duty required a lot of exercise and running. It is a fact that as a nurse I do lift patients and we do heavy lifting. That maybe it put extra stress in my joints and so I ended up with the osteoarthritis.

Similarly, *Delfina* expressed, "The day-to-day walking on hard pavement My job involves constant movement on a hard pavement, up and down, then sitting. The older I got, it seems like it made a huge impact on me."

Other participants reported having limited movements, decreased effectiveness in their jobs as a result of OA. *Andrea* reported having difficulties walking and going from one place to another, "I had trouble walking and it was such a horrible feeling not to be able to get around like I used to. I use a cane and I still do sometimes if my pain gets too hard to handle." *Lita* also spoke about how the disease made the movements she can do limited,

I can't bend over a lot because I hurt or if, I'm on feet a lot and my knees hurt or my ankles hurt, I really do limit myself and I'm thankful that I have a job that is somewhat sedentary.

One participant hinted that she may have inherited OA from her mother. She stated, "My mother had her fingers crooked and they used to hurt her hands. I don't know, maybe I got it from her." Additional causes attributed to OA by participants included previous injury, diet, or illness during childhood. One respondent stated that she did not know because there were other personal issues occurring in her life at that time.

b. Thematic category 2: Effects of OA. The second thematic category that was developed relating to the first research question was labeled *effects of OA*, pertaining to the experiences of the participants regarding how OA affected their lives. The effects of OA will be described in terms of physiological and psychological effects.

The physiological effects described by participants include limited activities, debilitation, difficulty standing, sensitivity to temperature, and prone to accident and falls (see Table 3 and Figure 4). However, the major physiological effect of the OA experience described by all participants was pain. Each participant expressed the manner in which they coped with the pain on a daily basis and the mechanisms and activities employed to deal with the challenge of pain. *Dulcelina* stated,

Lately, I am beginning to have pain in my hands where I cannot squeeze a lot, I cannot pull, my fingers hurt, and I wake up in the morning hurting, and I cannot make a fist in the morning. But after running some hot water and limbering up, then I may be able to go and move. I am able to shower and take care of my personal needs, and once I pass the limbering up stage, I am OK. I have to allow time to do that and that is why I work in the evening.

Table 3

Breakdown of Themes: Physical Effects of OA

Themes	Number of Occurrences
Limited activities	6
Debilitation	4
Difficulty standing	2
Sensitivity to temperature	2
Prone to accidents/falls	2

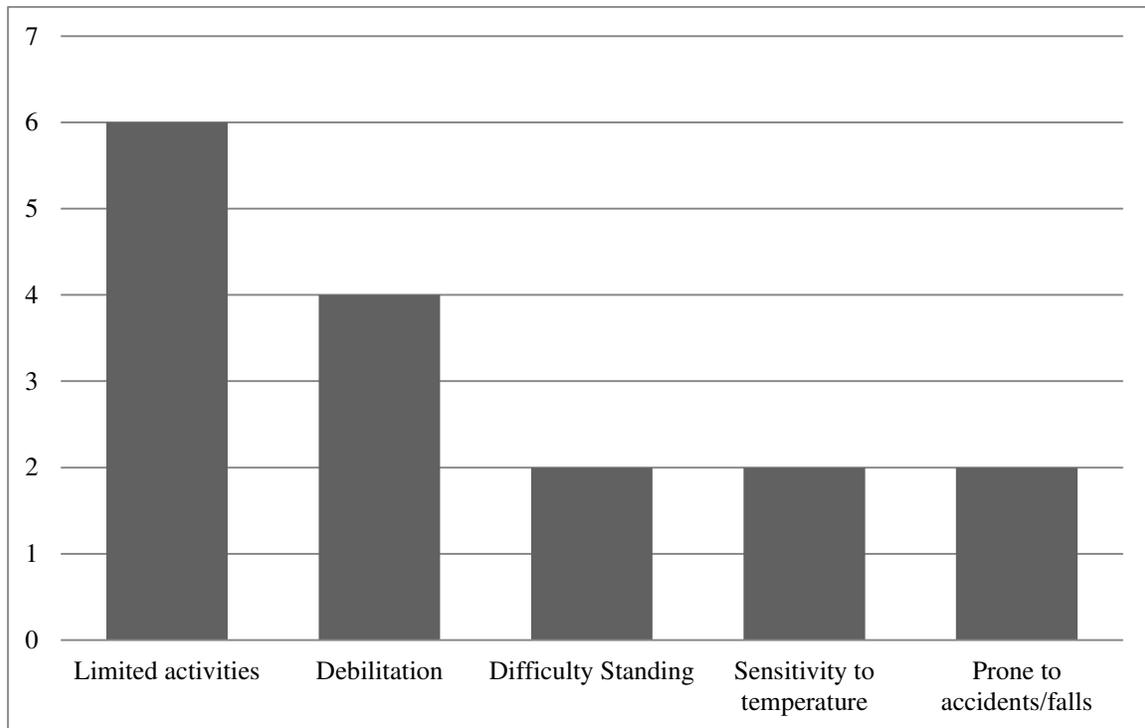


Figure 4. Coding Results for the Thematic Category: Physical Effects of OA.

Note. Number of participants' responses to the question pertaining to limitations imposed by osteoarthritis and manifested as physical limitations.

In describing her pain experience, *Alicia* stated,

I don't wish this on anyone. It affected my job, yeah. There was a lot of bending and kneeling and scrubbing. I worked in many hotels and they are hard work. Cleaning and scrubbing floors, and all that stuff. I think after I left my ex, that's when it all started. It started years down the road. I would get a pain here, and a pain there. And all of a sudden, one day in the morning, I couldn't get up. But I had to get to work and take care of my children, then come home and do work. She continued to say "It is sad for me because I can't do all the things that I want to do."

On the other hand, *Victoria* expressed frustration with not getting relief from pain or achieving a level of comfort. She stated,

The pain gets under my neck, my back, and if I do dishes, oh my God, I get a lot of hurting right in here (pointing to hands and fingers). Right now, it is about eight. I am not doing much now, but it is always there. I feel a difference when I have housework to do. The way I stand, like if I am leaning the wrong way or on a specific side, I'll feel the pain. If I stand for a long time, I get tired but can't sit too long either. When I play cards with my friends, I have to move around because I get stiff. I cannot stand too long, because I feel like my knees can't support me too long . . . everywhere hurts. I have to sit down for a little bit, but it goes with age too, that's what they tell me.

Other participants reported having limited movements that required the use of assistive devices. *Andrea* reported having difficulties walking and going from one place to another: "I had trouble walking and it was such a horrible feeling not to be able to get around like I used to. I use a cane and I still do sometimes if my pain gets too hard to handle."

Eulalia also spoke about how the disease limited the movements she was able to do: "If I stand for a long time, I get tired but I can't sit too long either. When I play cards with my friends, I have to move around because I get stiff."

Dina spoke about how the disease affected her job, specifically her ability to perform her job effectively,

It does affect my work. Also, since my job sometimes involves sitting for long periods of time, I do have stiffness in my joints. I do notice that I do walk slower sometimes because I feel very stiff when the humidity is high or it's about to rain.

Elena could not get a job because she could no longer perform the kind of movements needed to be effective and productive,

They couldn't hire me because they said, "No, you can't because you can drop a can or something, and then you hurt your feet so you can't do that." When I moved here, I worked at the Salvation Army; I just volunteered. Not heavy work because now I'm going to be 70 and it's going to hurt my chest bone or something, and my back, and my feet . . . was getting too much pain.

Similarly, *Dina* stated

It does affect me at work, like I said, I have called in when I am hurting. And at home, too, I have had bad days where I have to take something for pain and take it easy. One of the things that, one of the places, or one of the ways that it does affect me, which I wished that it didn't was when I was active duty, I used to go running and go. The pain has affected all the activities of my life.

Lita shared:

When I get up in the morning and I am hurting and really feel stiff; I actually make an effort of going into the shower and I stay there about 15 to 20 minutes and just let the hot water as hot – as hot as I can stand it and let it run into my spine or the joint that I am hurting. And in the evening when I do get home, I used to have a heating pad – plug in and that is what I would use or I'll use like leg warmers to keep my joints warm like the knees and ankles. Sometimes the elbows and sometimes the shoulder.

The psychological effects of OA as expressed by the participants include anxiety, frustration, depression, and a feeling of uselessness that in turn decreased effectiveness in their jobs because of limited movements. Table 4 and Figure 5 show a visual representation of the psychological effects of OA. These limitations are related to the inability to complete their daily tasks as a result of pain and limited mobility related to joint function. Many of the participants reported that being dependent on other people was the most significant effect of

Table 4

Breakdown of Themes: Psychological Effects of OA

Themes	Number of Occurrences
Anxiety	4
Frustration	3
Feelings of nostalgia	3
Desperation	2
Depression	2
Feeling of uselessness	2

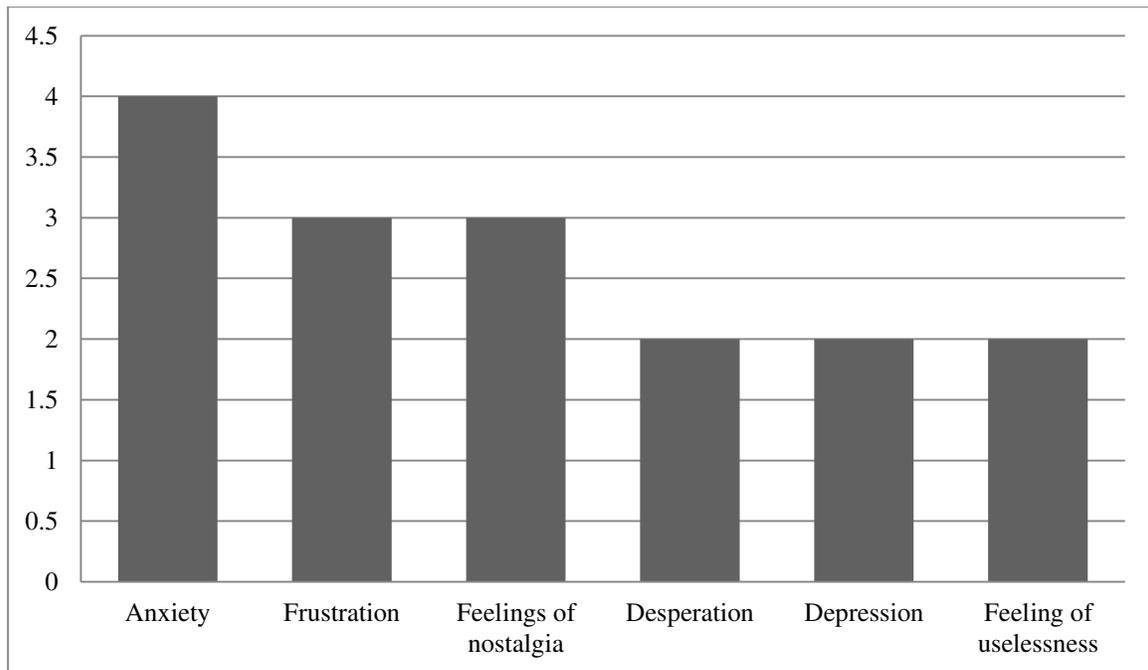


Figure 5. Coding Results for the Thematic Category: Psychological Effects of OA.

Note. Number of participants' responses to their perception of the effects of osteoarthritis and described in terms of a psychological effect.

their illness. The participants in the study had different feelings about OA. Some participants felt anxiety and frustration about having OA. Other participants reported feeling depressed, desperate, or useless. However, for the most part, the participants who were engaged in group activities demonstrated a sense of encouragement from their friends, and they looked forward to their planned activities. The participants who were employed, demonstrated a sense of dedication to work and went to work at times later than the normal reporting time. Others looked forward to the arrival of the providers in order to engage in their activities of daily living and plans with the providers.

As stated earlier, being dependent on other people was the most troubling aspect of their illness. *Andrea* shared: “It has because I can’t do a lot of the things that I used to be able to do. That’s why I have to have a helper.” *Juana* spoke in great detail about how her disease had made her dependent on her provider, who helps her from cooking to showering,

I have a provider; she cooks for me. Sometimes I can do some things, but most of the times she does everything. For showering, I have a shower chair and that helps a lot. But sometimes my hands hurt so much that my provider helps me wash my hair. She helps me with my hair; she puts the rollers on me and helps me dry when my hands are hurting real bad. She is here on Tuesdays and Thursdays, from 1 p.m. to 5 p.m. So, I plan to have her help with the things that I can’t do for myself, such as my hair.

Other participants reported feeling depressed, desperate, or useless. *Elena* felt depressed because OA prevented her from getting hired for any job,

I got depressed because I didn’t know what to do, I couldn’t get hired nowhere. I could not get hired because of my age, but I did not want to just sit around here. I feel better when I am involved in a job; it keeps me busy.

In addition to feelings of depression, *Dina* experienced a sense of nostalgia and stated that

I look at people that jog now longingly because I can't see myself running. I really wish that I would be able to exercise more. I suppose I could maybe join a gym and do some water aerobics; that's what I would like to do. If you are sitting around and then you watch yourself gain weight. And it is kind of depressing to see people out there jogging and you think, "I used to be able to do that and I can't do it anymore."

Most of the participants reported that the OA had progressed to a point where they could no longer perform many activities. *Dina* shared: "I used to at least walk. I just feel like if I'm actually more mobile than I normally am. I do hurt, so now I know my limits as to what activity I can do." Another participant spoke about how OA prevented her from doing many activities that she used to do. *Alicia* shared:

I can't do all the things that I want to do. Where I can get the mop and mop and the way I sweep. Because I'm a very clean person, and right now with my physical fitness, I can't do that cleaning.

Sylvina expressed frustration about how the disease had progressed to not being able to do many things as a result of OA, "The slightest things that I do, oh, I feel real bad. I can't even sweep. I can't vacuum. I can't wash dishes. I can't do anything because everything hurts me." Similarly, *Juana* also reported that the disease has already progressed to the point where she is unable to do many activities, including walking, cooking, and playing with her grandchildren,

I used to walk a lot. I used to walk all the time, now I can't do that. I used to bake and cook. My grandkids and great grandkids used to say, "We're going to go to my grandma because my grandma she has a feast. She doesn't have a meal, she has a feast for Thanksgiving, for Christmas, pastry and all that, baking," and I can't do all that anymore.

Several participants indicated that the limited activity was attributed to the pain caused by OA, resulting in limited mobility. Another component associated with limited mobility was stiffness as part of the degenerative changes of OA.

In the present study, strong relationships and clear social support networks were evident in participants living in senior housing. These individuals were generally aware of one another's locations, conditions, feelings, and activities. For example, when one participant experienced a death in the family, others knew detailed information about how the individual was coping with the loss and when she was returning to the routine activities of the complex. This finding suggests that individuals suffering increased dependency from OA may support one another emotionally and psychologically, even though they are unable to do so physically.

c. **Thematic category 3: Treatment.** The third thematic category, *treatment*, pertains to the experiences of the participants regarding the treatment they receive for OA. Most of the participants reported receiving medication or injections to treat OA. Table 5 and Figure 6 show a visual representation of the breakdown of the perceptions and experiences of the participants regarding the treatments they received for treating OA.

Most of the participants reported receiving medication or injections to treat OA, particularly to address pain and inflammation. *Dulcelina* shared her medication treatment that addresses her body pain:

I am taking some Tylenol for pain, and I am taking some, uh, ointments that you can apply. I have tried the patches in the past, but they don't do anything. So, at the moment, I'm pretty satisfied with Tylenol, in conjunction with the Motrin, 800 milligrams.

Dina also reported taking medication to alleviate her pain,

For the most part if I am hurting a lot, I actually have had, especially when it's been raining, I've actually have had to take medication two or three times a day, where I don't normally take any, or maybe take it once a day.

Table 5

Breakdown of the Perceptions and Experiences Regarding the Treatments for OA

Themes	Number of Occurrences
Medication	6
Injections	4
Physical therapy	2
Knee surgery	2
No treatment	2

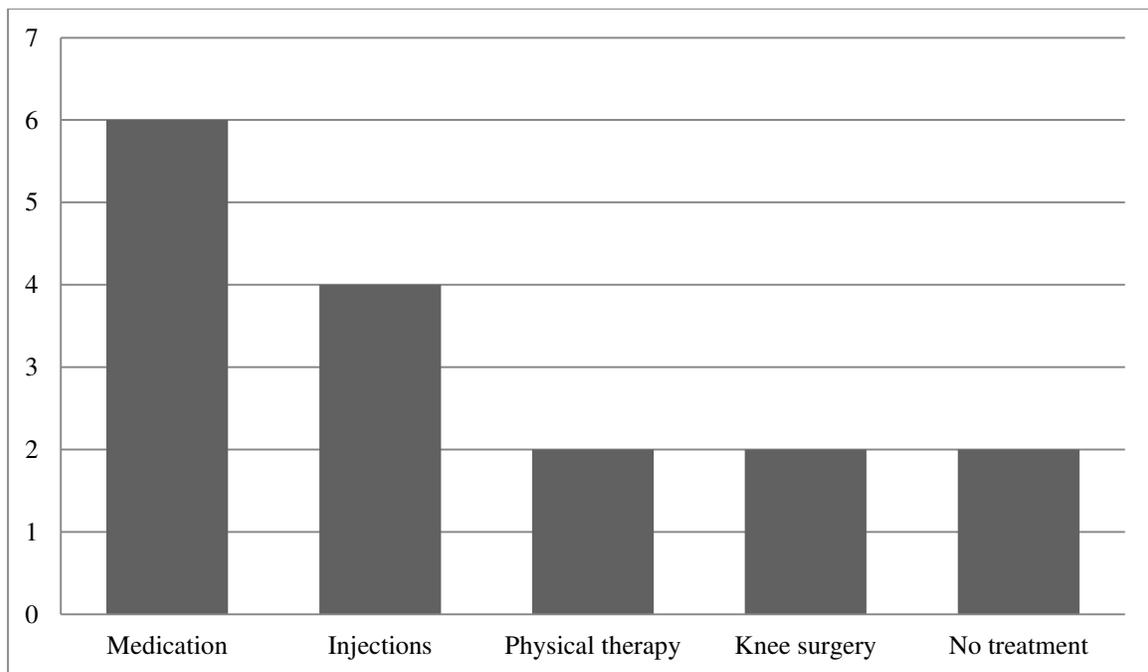


Figure 6. Coding Results for the Thematic Category: Treatments for OA.
Note. Number of participants' responses to what they perceive as effective treatment for osteoarthritis

Other participants received injections, noting its effectiveness in controlling their pain, *Erlinda* said:

She gives me an injection for osteoporosis, too, every six months. That shot helps to take the pain away from my hips; the shots was put in my hip and the right knee. This is the knee that really used to bother me. I am fine now because of the injections.

Two participants stated that they were not receiving any specific treatment for OA. In their view, an occasional Tylenol or warm shower was not equivalent to a treatment.

Two of the 16 participants had total knee replacements (TKR). Other participants did not mention knee surgery as a treatment option for OA. After diagnosis, *Delfina* received various treatment modalities and stated

I can tell you the types of treatments I received as I was diagnosed with the OA. In the beginning, I did receive physical therapy. I received heat, warm water, prescription-strength Ibuprofen, Motrin, and Aleve. I was told to take Aleve, Tylenol, do my own exercises, stretch exercises.

She further stated,

Toward the end, when the pain was really unbearable, I was bone-on-bone and could not bear the pain and the pressure on my knees, I ended up having total knee replacement. Since the surgery, I feel wonderful. I am so glad that I did it.

On the other hand, *Elvia* stated that having had the knee replacement and then having to go through therapy, “I still cannot kneel after all these years. I cannot bend my knees very well. I feel limited in what I can do now, compared to before the knee surgery.”

d. **Thematic category 4: Concerns for the future with OA.** The fourth thematic category was labeled *concerns for the future*, pertaining to the concerns for the future experienced by the participants regarding having OA. Most of the participants feared reaching the point of immobility where they can no longer perform any activity on their own.

Other participants feared being dependent on other people and not being able to play with their grandchildren. Table 6 and Figure 7 show a visual representation of the breakdown of the perceptions and experiences of the participants regarding their concerns for the future with OA.

Most of the participants were concerned about reaching the point of immobility where they can no longer perform any activity on their own. *Alicia* shared: “That I won’t be able to walk. That I will use a stroller, you know, a cart, you know one of those electrical things.” *Juana* also expressed fear about getting to the point where she can no longer move and do the activities that she usually does,

That I won’t be able to move and go about as I please Right now, I have friends in the apartment and I keep busy, but I am still moving around and attending all of the activities that I want to and still play cards and lots of things with my friends.

Erlinda also spoke about her concerns about being disabled eventually, causing her to be immobile,

I worry that I may become disabled. That I won’t be able to get up and move around or do much for myself and will need more help than I get now because in the beginning I needed a lot of help.

Other participants feared being dependent on other people and not being able to play with their grandchildren. Even though *Dina* has a supportive husband, she fears that she might become completely dependent on her family,

You worry about getting to a point where you do become dependent on your family. I’m happy that I have a husband that’s there, but he’s not there all the time if he’s working. I do have my husband to help me, but you do worry, especially in times when I do hurt when it’s raining or if it’s really humid that I have to depend on somebody to get me something for pain or to get me the heating pad.

Table 6

Breakdown of Themes: Concerns for the Future with OA

Themes	Number of Occurrences
Immobility	6
Dependency	2
Unable to play with grandkids	2
Concern over progress	2
Gaining weight	1
Losing fine motor skills	1
Heart attack	1
Death	1

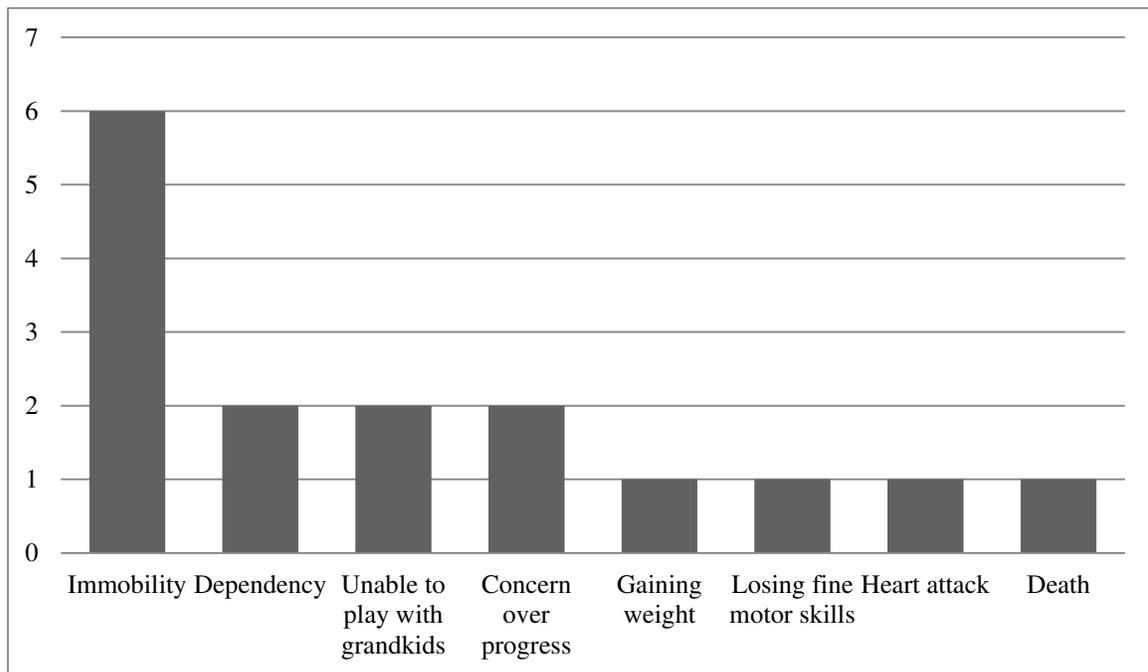


Figure 7. Coding Results for the Thematic Category: Concerns for the Future with OA.
Note. Number of participants and their responses related to future concerns and limitations of living with osteoarthritis.

Andrea spoke about worrying that she might not be able to play with her grandchildren when her disease continues to progress,

I also think about I hope and pray that it never slows me down so much that I can't play with my grandchildren or do things with them because I have nine grandchildren I need to take care of. I want to enjoy them whenever they visit.

2. **Research Question 2.**

For the second research question, three thematic categories were developed because sufficient narrative data were not elicited from participants. They are: (a) patient-provider communication, (b) decision-making, and (c) trust in providers. Direct quotes from the participants were included to strengthen the findings.

a. **Thematic category 1: Patient-provider communication.** The first thematic category that was developed relating to the second research question was labeled *patient-provider communication*, pertaining to the perception and experiences of the participants regarding the nature of their communication with their providers. The participants in the study characterized the nature of their communication with their providers as involving the provision of useful information and engaging in active discussion. Table 7 and Figure 8 show a visual representation of the perceptions and experiences of the participants.

The participants in the study characterized the nature of their communication with their providers as involving the provision of useful information and engaging in active discussion. *Josefa* characterized her communication with her doctor as primarily the doctor providing useful information to her about OA and the treatment available,

Table 7

Breakdown of Themes: Perceptions on Patient-Provider Communication

Themes	Number of Occurrences
Provides useful information	6
Active discussion	3
Limited communication	3
Shares concern	2
Provides effective follow up	2

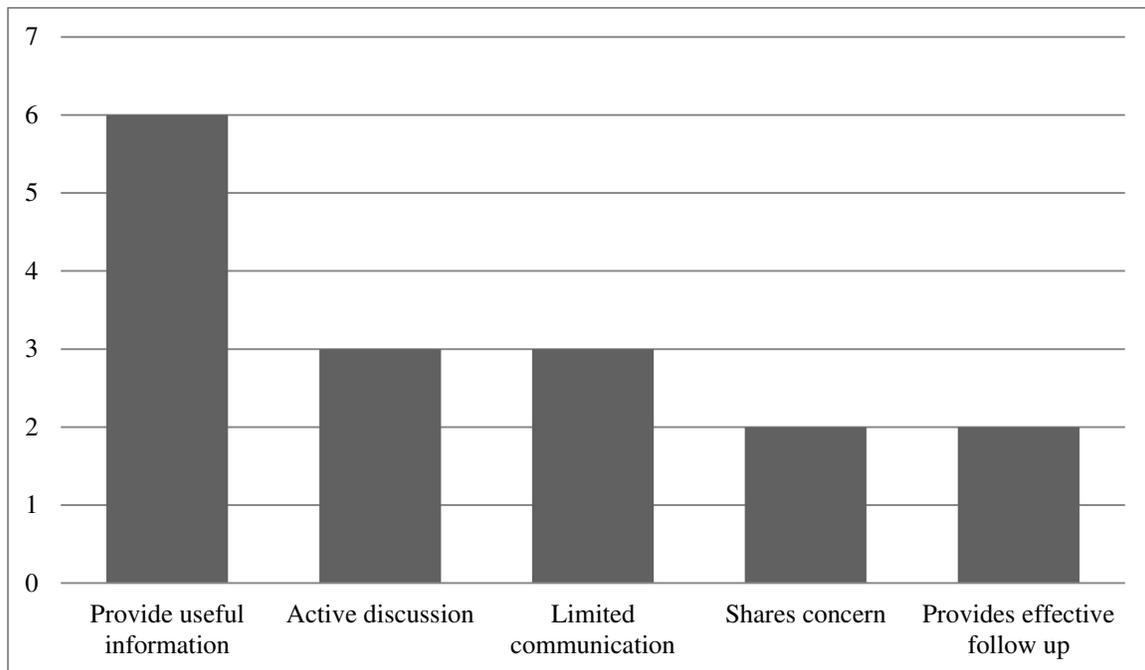


Figure 8. Coding Results for the Thematic Category: Perceptions on Patient-Provider Communication.

Note. Number of participants and their responses of the experiences with the communication with their providers.

He tells me the results of what they found in the test. While I am there, he tells me what he is doing and too, why he is doing it. When the visit is ending, he will give me the information that he wants me to have and makes sure that I get it.

Dina characterized the communication as more active discussion wherein she shares her concerns about OA and the doctor provides support and relevant information to her,

It's kind of a give and take. I did share my concern with her about using the anti-inflammatories, the non-steroidal, because I do have diabetes, I do worry about the kidneys. I had seen the ads about the strokes. She said you can take some Tylenol if that helps you and then if I needed anything else I could let her know. Then again, I also use, I actually have gone and bought *Aspercreme* over the counter and I rub that on my joints. I use the heating pad or I'll get in the shower and just let the hot water run over my joints.

Andrea also spoke about how her communication with her doctor is more active and discursive,

He will first ask me how I'm doing, have I had any more pain than usual? He checks my joints, my hands especially my wrist, and my knees sometimes. Then, if I say to him this and this has been hurting an extra—I don't know percentage—of what it hurt the last time then we'll talk about that. I guess I would say during and after the examination.

Other participants reported poor communication with their providers because of a limited amount time as a result of having too many patients. *Dina* shared: "With the doctor, the male doctor, I think the communication was impaired because we had limited time." *Lita* shared that because of limited time, her doctor often fails to provide clear information that can be easily understood, "They tend to talk in terms that you don't really understand. And so, you have limited time, you have wordage that they use that is hard to understand and you don't have the time to answer."

b. **Thematic category 2: Decision-making.** The second thematic category relating to the second research question was labeled *decision-making*, pertaining to

the perception and experiences of the participants regarding the nature of the partnership with their providers regarding the respect for their preferences and the decision-making process of their providers. Table 8 and Figure 9 provide a visual representation of the breakdown of the perceptions and experiences of the participants regarding the respect for their preferences and the decision-making process of their providers.

The participants in the study described the decision-making process of their providers as having the option to choose their treatment and discussion and rationale behind those decisions. For example, *Andrea* spoke about how her doctor gave her the option that she thought was appropriate for her, “He’ll ask me do you think that you would be willing to do this or that and I tell him, I am or if I’m not I tell him I’m not.” Similarly, *Dina* reported that her doctor gives her enough freedom to do what she thinks is best for her after all the information is provided to her,

I like her because it’s a give and take. If something doesn’t work, then she’ll ask me what works and then I’ll share my concerns with her. She basically gave me the prescriptions for other medication, but also the option that I could go ahead and just take Tylenol or use whatever means to help me. She has given me permission to do what I need to do to help the pain.

Sylvina described the decision-making process of her provider as giving good explanations for the rationale of her decisions, “She always has a real good explanation before she does anything, every time. She’ll say, ‘Well, look, we’re going to do this, and this, and this is what’s going to happen.’ She also explains why it is happening.”

Other participants felt the doctor simply told them what to do without any attempt to involve them in the decision-making process, *Juana* shared: “He would just come out and say it. It would be a long time before I was able to see him again so he could give me results

Table 8

Breakdown of Themes: Perceptions on the Decision-Making Process

Themes	Number of Occurrences
Provided with options	5
Discusses decisions	4
Encourages feedback	2
Provider makes the decision	2
Always informs	2
Mutual decision	1

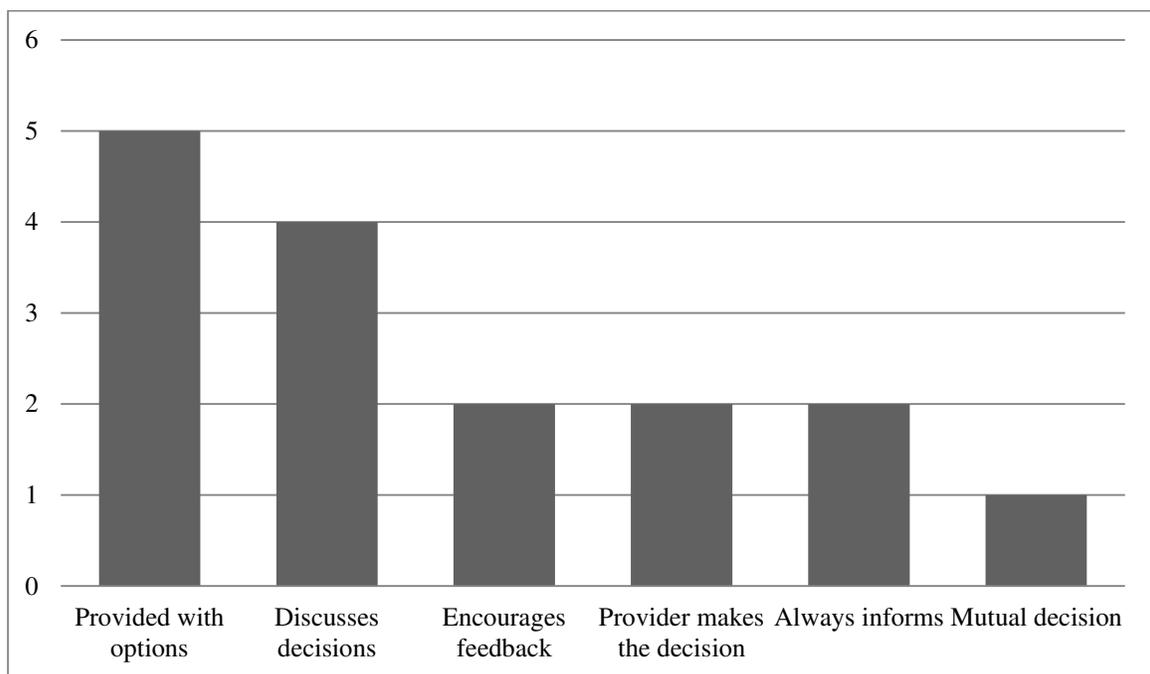


Figure 9. Coding Results for the Thematic Category: Perceptions on the Decision-Making Process.

Note. Number of participants and their responses related to their experiences about how decisions are made with their providers.

or anything; my appointments are every three months, and I would have to wait until that time.”

c. **Thematic category 3: Trust in providers.** The third thematic category relating to the second research question was labeled *trust in providers*, pertaining to the perception and experiences of the participants regarding the trust that they have in their providers. Table 9 and Figure 10 show a visual representation of the breakdown of the perceptions and experiences of the participants regarding the trust of the participants in their providers.

Most of the participants had confidence in their providers, believing their doctors had the knowledge and competence to address their health needs. *Dulcelina* had confidence with her doctor because she believes that the doctor is not only concerned, but also knowledgeable, “I’m pretty confident with my doctors at, at the place that I go to, and they keep me informed, and they seem very concerned, and so I’ve been going there for a couple of years now.”

Erlinda was confident because her provider provides clear explanations, “I feel good because I know that it’s going to be good for me. The doctor explains everything to me.”

Sylvina trusts her provider because her questions are answered and explained sufficiently, “She’ll explain everything to me. She’s real good though, able to explain things to me.” The trust that *Sylvina* felt appeared to be dependent on the quality of care that she received in that she would more likely be trusting of doctors who showed concern and competence,

I think I actually feel confident because I’ve gone, there’s a specialist there . . . I’ve gone to two rheumatologists from the outside and I saw the second one. The first rheumatologist wanted to give me all kinds of medications it’s

Table 9

Breakdown of Themes: Perceptions on the Trust in Providers

Themes	Number of Occurrences
Confident	8
Knows what is best	4
Depends on quality of care	3
No choice but to trust	1

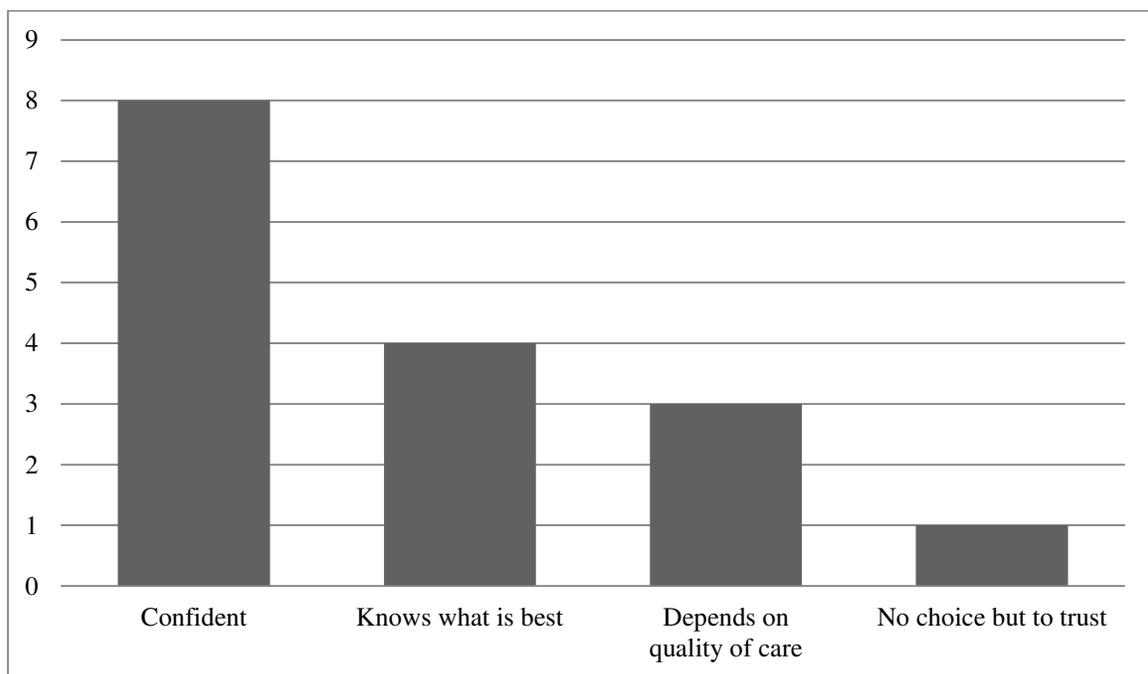


Figure 10. Coding Results for the Thematic Category: Perceptions on the Trust in Providers.
Note. Number of participants and their responses and perceptions about trust in the care provided by their providers.

like, “I don’t need all these medicines.” And then I went to the second one who only was willing to spend 10 minutes with me, so I quit going to him and then I went . . . I just go with the Veterans hospital, and I feel very comfortable with her.

G. Linkage of Findings to the Literature and Framework.

The findings from the qualitative analysis of the study showed that Hispanic women with OA experienced various factors that affect their quality of life as well as their ability to function. From the analysis, it emerged that participants had (a) expressed their perceptions of the causes of OA, (b) described the effects of OA both in terms of the physiological and psychological factors, (c) discussed perceptions of the effects of treatments received, and (d) expressed their concerns for the future. The participants also discussed their perceptions and experiences with aspects of cultural competence, specifically on patient-provider communication, respect for decision-making, and trust.

Based on the literature review of the study, the major contributing factors to the causes of OA include age, genetics, obesity and overweight, and physical inactivity. These factors also emerged in the current study where participants believed that the major cause of their diagnosis of OA was that they were already “getting older,” and this was shared by six of the participants. As Yelin (2007) reported, the primary risk factor for OA is age. Moskowitz (2009) then added that the possibility for this risk factor is substantially higher for every decade after age 45. This factor was substantiated by Rubin and Reisner (2009) who highlighted in their study that “after the age of 55, OA becomes more common for women” (p. 561). Five participants then explained that the “wear and tear of the body” also contributed to their diagnosis of the OA and can be related to the repetitious joint movements during their work and physical inactivity during their lifetime. Hunter and Eckstein (2009)

explained that OA patients can benefit from an active body through exercising that can also reduce the symptoms of the OA. However, in the majority of the participants, physical activity was not a part of their lifestyle, except for the participants with military experience, who verbalized a decrease in physical activity after retirement from military service.

Additionally, two of the participants with a previous history of injury shared that they were diagnosed with OA. This is a consideration supported by Prieto-Alhambra, Arden, and Hunter (2014) who found that a history of injury to joints increases the risk factor for developing osteoarthritis in the later years. Another participant reported that her mother experienced the symptoms of OA. Genetics is discussed in the literature review as a contributing factor of OA. Rubin and Reisner (2009) indicated that many cases of OA “exhibit a familial clustering” that suggests a “hereditary predisposition” (p. 561). Causes attributed to OA by the participants of the study were supported and coincided with the major contributing factors of the OA, as discussed in several studies to include the review of the literature.

The second thematic category that emerged from the first research question was the physiological effects of OA. The participants of the current study included limited activities, debilitation, difficulty standing, sensitivity to temperature, and being prone to accidents and falls as the physical effects of OA. All these effects can be summarized to the overall impact of pain. Chang and Johnson (2008) reported from their case study that people diagnosed with OA experience their challenges in “maintaining mobility and managing the activities” connected to their daily living (p. 378). They emphasized how the most precarious issue of the development of OA as a disease is “pain” that “limits mobility and contributes to fatigue,” influencing all activities of the individual (p. 378).

As for the psychological impact reported by the participants in this study, the majority reported feeling anxious while others felt frustrated by the limitations imposed by OA. A few of the participants also reported a sense of “despair, depression, and the feeling of uselessness.” De Lisa et al. (2005) agreed to these feelings and reported them as “lifestyle restrictions including depression, anxiety, helplessness, limitations, and the overall loss of everyday family joys and responsibilities” (p. 766). De Lisa et al. (2005) also implied that because of these impacts on the individuals, OA-related disabilities are reported to have significant and vital “costs for individuals, their families, and the nation” (p. 766).

The third thematic category involved the treatment received for OA. In the current study, a majority or eight of the participants relied on medications that included “injections.” Fewer of the participants also reported physical therapy as a treatment modality, and two participants had total knee replacement surgery, while one did not have any treatment. De Lisa et al. (2005) explained different kinds of treatment, depending on the affected joint in the body of the patient. The authors further stated that in order to improve function, proper management and compliance to treatment regimen are needed from the patients. The authors highlighted that physical therapy plays a substantial role in the treatment of OA.

The fourth thematic category was related to the concern for the future expressed by the participants. The participants were primarily concerned about immobility and increased dependency on others as the OA progressed. Healey and Evans (2014) explained that, indeed, the disabilities caused by OA will continue to be a significant problem for the patients as well as the medical care industry in the coming years, and they stated that the disabilities stemming from OA may affect the basic activities of daily living of the patients and will even increase and or significantly increase after the age of 75. This report supported the concern of

the participants as they undergo treatments with the feeling that their progress may not be sufficiently improved and that the immobility and increased dependency may continue in the coming years and worsen.

For the second research question, three thematic categories emerged: (a) communication, (b) decision-making, and (c) trust. There was not sufficient narrative data to elicit the experiences of the participants in the areas of discrimination and linguistic competency.

Six participants in the study indicated that their providers were conveying useful information through active discussion, sharing of concern, and effective follow-up. According to Ngo-Metzger et al. (2006), there is a shared responsibility for effective patient-provider communication that includes the “respect for patient preferences and a shared decision-making” (p. 20). These factors were also pointed out by the participants wherein they described their communication and relationship with their providers to be effective with sharing useful information and engaging in active discussion in matters relating to their healthcare. By having an open and active communication as well as a relationship with their providers, it can be assumed that the level of cultural competence is high as the older Hispanic women are cared for, heard, and valued by their care providers, notwithstanding their race, age, and gender, but focusing on their health needs. Meanwhile, three participants reported to have poor communication due to the limited time of consultation with their doctors and not because of any race, gender, or ethnic incompetency.

For the thematic category of decision-making, a majority of the participants shared that they were provided with options and that their doctors discussed their decisions with them, encouraged feedback, were well informed, and provided a mutual decision was

followed. Only one of the themes or two of the participants shared that their opinion was not consulted since their provider already made the decision for them. A majority of the participants in this study happily shared that they felt confident about the decisions made as their providers were concerned about their welfare, and all decisions were formed through proper communication by both parties. Two of the participants were not happy with the decision-making process since the doctor simply instructed them without any attempt to consult them for their opinions and feelings about the course of action regarding their disease. By doing so, participants were disregarded and cultural competency as well as quality of care of these providers may be put on the line. The lack of communication from the providers may lead to the experiences of “distrust and discrimination” as suggested in the model of Ngo-Metzger et al. (2006).

The final thematic category was trust in the providers. Eight participants shared that they felt confident with the quality of care they were receiving, and another four believed their provider “knows what is best for them.” While three participants stated that their trust is dependent on the quality of care they receive, one participant admitted that she has no choice but to trust her provider. Again, a majority of the participants shared that they were confident in trusting their providers with their medical conditions and decisions as these providers have proven their concern and care over a period of time.

From the responses of the older Hispanic women patients as participants, cultural competence seemed to be at a high level as they felt confident as well as satisfied with the care they were receiving. However, to ensure that the kind of service is at a high level and culturally aware, Campinha-Bacote’s (2005) model should be considered in constantly examining and reviewing the level of care and cultural awareness of their health providers.

Through Campinha-Bacotes's (as cited in Sagar, 2012) "ASKED model" or "awareness, skill, knowledge, encounters, and desire" process, providers can take a closer look and examine their cultural competence to improve the quality of care that they are providing their patients (p. 42).

H. Summary

The purpose of this study was to (a) describe the experience of older Hispanic women with OA and the factors that impact and influence their quality of life and ability to function, and (b) describe the perspective of older Hispanic women relative to the cultural competency of the healthcare they are receiving. Data were analyzed by content analysis in order to develop thematic categories and themes. The presentation of results was organized based on the two research questions of the study.

The first research question focused on the experiences of older Hispanic women having OA. Most of the participants perceived that OA was caused by getting older, whereas some believed that OA was caused by constant wear and tear of the body, particularly as a result of the activities they performed in their jobs. Most of the participants reported that being dependent on other people was the most significant effect of their illness, but others experienced having limited movements, decreased effectiveness in their jobs, and depression. Most of the participants reported that the disease has progressed to a point where they could no longer perform many activities. The participants in the study had different feelings about their illness. Some participants felt anxiety and frustration about having OA, whereas others reported feeling depressed, desperate, or useless. In spite of these expressed feelings, the participants demonstrated a strong sense of coping in light of the pain and limitation in activities, as evidenced by the resilience. Some of the participants continued to be engaged in

their occupation while others planned their daily activities and interaction with their children and grandchildren in a positive way.

In terms of treatment, most of the participants reported receiving medication or injections to treat OA. Most of the participants feared reaching the point of immobility where they could no longer perform any activity without the help from other people. Other participants feared being dependent on other people and not being able to play with their grandchildren.

The second research question focused on the cultural competency of the healthcare that older Hispanic women with OA received. The participants in the study characterized the nature of their communication with their providers as involving the provision of useful information and engaging in active discussion. However, three participants reported a limited time with their provider as a result of their provider having too many patients. In terms of decision-making, the participants in the study described the decision-making process of their providers as having the option to choose their treatment and discuss decisions. Most of the participants had confidence in their providers, believing their doctors had the knowledge and competence to address their health needs. There was not sufficient narrative data to address the elements within the conceptual framework addressing discrimination and linguistic competency.

The major findings from this study, discussion, and implications for nursing practice and research are discussed in Chapter V.

V. SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

A. Introduction.

The purpose of this study was to explore the experiences of older Hispanic women with OA and the factors that influenced their Quality of Life (QoL) and abilities to function. In addition, this study was designed to gather qualitative information on the perceptions of older Hispanic women with OA in relation to the cultural competency of the healthcare they are receiving focusing on five specific areas. The areas included were patient-provider communication, respect for patient preferences/shared decision-making, experiences leading to either trust or distrust, experiences of discrimination, and linguistic competency. However, there was insufficient narrative to elicit data in the areas of discrimination and linguistic competency.

Arthritis is the leading cause of disability in the United States in adults over the age of 65, with OA being the most common form of arthritis (CDC, 2011c). OA has an incidence rate that increases with age, with the highest rates diagnosed among women (CDC, 2011c). Hispanic women are more affected than any other racial or ethnic group, with a prevalence rate of 28.3% (Murphy et al., 2011). The activity limitation due to OA will contribute to physical limitations that in turn can contribute to chronic conditions as age increases (Murphy et al., 2011). However, little is known about how Hispanic women experience OA or how OA affects their QoL and abilities to function. Consequently, this study was designed to help fill the gap in research concerning the experiences of Hispanic women 65 years of age and older with OA.

It is estimated that 50% of older Americans have at least one chronic condition and 11 million live with five or more chronic conditions (Federal Interagency Forum on Aging-Related Statistics, 2012). Studies investigating the effect of comorbidities among persons with OA are few (Murphy et al., 2012). However, they indicate that these persons are likely to have more complications related to mobility, such as difficulty with walking and transferring, when compared to persons with no symptoms or diagnosis of OA. The lack of mobility and difficulty with ambulation may increase the likelihood of obesity. Recent data among persons with arthritis show that heart disease was the most common comorbidity (24%) followed by chronic respiratory conditions (19%) and diabetes (16%). While stroke is another comorbidity occurring in persons with arthritis, it is the least common comorbidity found in this group (Murphy et al., 2009). The medical costs related to treating arthritic conditions has been discussed in previous chapters and the comorbidities will add to the costs of medical care. With this knowledge, little is known about how Hispanic women experience OA or how OA affects their quality of life and the ability to function. Consequently, a recommendation can be made for studies investigating the experiences of Hispanic women 65 years of age and older with OA and comorbidities.

Culturally competent healthcare involves providing care that addresses and aligns with individuals' cultural beliefs and traditions in order to increase the quality and appropriateness of all patients' healthcare (Cross et al., 1989). Cultural competence has been associated with decreasing health disparities among minority populations (Betancourt et al., 2005; Burchum, 2002). However, few researchers have examined the specific experiences and perceptions of older Hispanic women in relation to OA and the cultural competencies of the healthcare they receive.

Consequently, it is crucial to understand how older Hispanic women experience and manage OA, as well as their perceptions of the cultural competence of the treatment and related healthcare for OA. This chapter proceeds with a brief summary of the findings and an interpretation and discussion of findings that reflect the experiences and perceptions of study participants, which included 16 Hispanic women ages 65 to 80 years of age with OA. Additionally, the chapter presents implications for nursing practice and research, as well as recommendations for future research. The chapter ends with the conclusion of the study.

B. Summary of Findings.

1. Research Question 1.

What are the perceptions of older Hispanic women with OA and the factors that affect their quality of life and ability to function?

For Question 1, the data centered on four thematic categories: (a) perceived cause of illness (OA); (b) effects of illness (OA): physical and psychological; (c) treatment; and (d) concerns for the future.

2. Research Question 2.

What are the perceptions of older Hispanic women with OA as to the cultural competency of the healthcare they are receiving, specifically in the areas of patient-provider communication, respect for patient preferences/shared decision making, and experiences leading to either trust or distrust?

For Question 2, the data centered on three thematic categories: (a) patient-provider communication, (b) decision-making, and (c) trust.

C. Interpretation and Discussion of Findings for Research Question 1.

1. Perceived Cause of OA.

Many of the participants perceived that OA was caused by aging. This perception aligns with current research that indicates that age is considered a primary risk factor for OA (Felson et al., 2000; Felson & Zhang, 1998; Lawrence et al., 2008; Yelin, 2007). Research has shown that the correlation between age and OA is strong and that risk factors increase markedly with each decade after age 45 (Moskowitz, 2009). Because the ages of the participants in this study were between 65 and 80, such a finding is not surprising. The ages of participants are consistent with the age group that is primarily affected by OA and consistent with factors that increase the risks for this condition, including the cumulative exposure to OA as a result of aging (Zhang & Jordan, 2010).

This finding, however, does not indicate why participants attributed aging as the major cause of OA, as only one participant reported that her doctor told her that aging was the cause of OA. According to the cultural competency model of Ngo-Metzger et al. (2006), age is a patient factor and a factor that providers must consider when providing culturally competent healthcare. While participants' perception of the cause of OA was consistent with the literature, this finding suggests that it is unclear just how patients receive knowledge about the causes of their OA. Such information may be an important component of culturally competent healthcare delivery since many of the participants had no clear and substantial medical knowledge about how and why they were diagnosed with OA. This finding suggests that it is unclear how much educational information patients were receiving about OA. The knowledge and understanding of the disease process may be related to the effectiveness of

the patient-provider communication, in addition to patient education and may require further investigation.

Some participants believed that OA was caused by constant wear and tear on the body, and others stated that it was a combination of getting older and the results of repetitive body movements related to their jobs. This finding is also consistent with the literature that found that older Hispanic individuals are generally poorly educated and work in low-income occupations that involve manual labor that could be considered contributing factors for early mortality outcomes compared to the general population (Villa, Wallace, & Aranda, 2012). The cartilage that serves as a cushion inside the joints and facilitates movements of the joints degenerates with age and through wear and tear caused by repetitive actions (Felson & Shang, 1998). The occupations of the participants included factory work, housekeeping in various hotels and facilities, the healthcare profession, and administrative functions. Occupational level is related to socioeconomic status and is another important patient factor that healthcare providers should consider, according to the cultural competency model of Ngo-Metzger et al. (2006).

According to the 2010 U.S. Census report, among Hispanic individuals ages 65 and older, 47% had completed high school compared to 80% of the total population. In the same year, 10% of the older Hispanic population held a bachelor's degree or higher, compared to 23% of the total population of older individuals in the United States (Administration on Aging, 2011). The highest level of educational attainment among 25% of participants in the current study was high school, while another 25% held a bachelor's degree or higher. Additionally, 13% completed technical or vocational training, and 19% had some college education. However, there is some consistency with reports in the literature of the existence

of differences in educational attainment among racial and ethnic groups, which is lower in this population.

In 2010, Hispanic persons 65 years and older reported a median household income of \$32,930 as compared to \$47,800 for non-Hispanic Whites (Administration on Aging, 2011). Among the same Hispanic households, 15% had reported income of less than \$15,000 when compared to 4% of non-Hispanic households. In the study participants, 31% had incomes below \$10,000 and a combined 62% had annual incomes of under \$20,000. The low income of the participants correlates with the low education achievement of the participants and the reported income for older Hispanic persons 65 years and older.

Obesity and overweight are associated with OA, primarily of the knee (Zhang & Jordan, 2012). Approximately 50% of the study participants were overweight. One participant mentioned that her weight was 320 pounds and that she was aware of the influence on her OA and that she needed to lose weight. Other participants were informed about the relationship between OA and obesity but did not mention it as a factor influencing their OA.

2. Effects of OA.

The second theme developed from participants' perceptions of how OA affected their QoL and ability to function involved issues of dependency and limited movement. The effects of OA from the participant's perspective will be summarized in terms of physical and psychological effects.

Among the physiological effects of OA, pain was the major theme reported by 100% of participants, with varying degrees and different coping mechanisms and activities in order to carry out their daily routines and functions. The severity of pain was described in response

to the effect of OA and its interference with their activities and routines. Further investigation is recommended to evaluate the severity of pain related to OA in older Hispanic women.

One of the most troubling aspects of OA reported by participants was dependence on other people. Research shows that OA greatly affects one's independence (Brown et al., 2011), and concerns of limited movement and physical function related to pain align with previous research indicating that limited physical function is a factor that diminishes social life (Theis et al., 2013) and QoL (Bindawas et al., 2011) in other populations.

Dependence and limited movement were also concerns of many of the participants, both employed and unemployed, and issues related to dependency and limited movement often overlapped. For example, for those who were unemployed, their focus was on effectively and independently performing the activities of daily living (ADL), while the participants who were employed were concerned about carrying out their responsibilities at work in a satisfactory manner, and *then* completing their chores at home. One participant reported not being able to get a job because she could no longer perform the kind of movements needed to be effective and productive in the position for which she applied.

Fifty percent of the study participants had providers who offered assistance with ADLs from three to five days per week. Such assistance included preparing meals, bathing, doing laundry, and cleaning. Support and assistance could also extend to grocery shopping and driving participants to medical appointments; the scope and duties of each provider varied and was dependent on the needs of individual clients. Yet, despite having assistance, participants reported that there was a fear of dependency, even though the need for a provider indicated some degree of dependency.

Because of dependency and limited movement associated with OA, the living arrangements for Hispanic women 65 years of age and older with OA is important to consider. For example, the living arrangements for older Hispanic women 65 years of age and older was reported to be 41% who lived with their spouses, while 32% lived with other relatives. One percent lived with non-relatives, and 27% lived alone (DHHS, 2011). Of the participants in this study, 36% were married and lived with their spouses, 36% were single, 13% were divorced, and 13% widowed. Sixty-two percent of this group lived alone, and of this group, 36% lived in a senior housing complex.

A typical feature of the Hispanic culture includes strong family ties that center on economic and social support to extended family members, especially at the time of aging and in the face of illness (Abraido-Lanza, 2004). Such social support systems consist of a variety of networks that may include relatives, friends, and organizations that provide the needed support. Social support is beneficial to the elderly and has been associated with improved physical functioning that may also reduce the risk of mortality (Quadagno, 2010).

Participants had different feelings about OA; their feelings mostly involved a sense of anxiety and frustration. Previous research has found that anxiety is connected with OA in other populations (Swift, 2012) and that anxiety is related to a diminished QoL (Axford et al., 2008). In addition, Jack et al. (2010) found that language barriers, an important component of culturally competent healthcare, can actually increase Hispanic patients' anxiety, making cultural competency all the more important in not increasing the anxiety level related to OA for older Hispanic women. Fortunately, in this study most of the participants verbalized a general satisfaction with the care treatment and quality of care they were receiving. All of the participants spoke and understood English.

Feelings of frustration are largely centered on participants' pain and inability to perform desired activities. Concerns related to the inability to perform desired activities have already been discussed and align with previous research indicating that limited physical function is a factor that diminishes one's social life (Theis et al., 2013) and QoL (Bindawas et al., 2011) in other populations. Pain is a major complaint among patients with OA, it is associated with reduced joint function, and it is ranked among the top three causes of disability in the elderly (DiBonaventura, Shaloo, McDonald, & Sadosky, 2011). Pain associated with OA is commonly associated with decreased QoL (Dominick et al., 2004; Jakobson & Hallberg, 2006; Groessel et al., 2003).

Frustration associated with pain and varying degrees of pain were identified by all participants. Most participants described specific mechanisms and routines that they employed to get through the day with pain. The degree of pain dictated what activities or actions were required to deal with the related stiffness. Joint stiffness in patients with OA is a common symptom associated with prolonged periods of immobility that occurs, for example, during sleep and is often resolved by approximately 30 minutes of joint use (Hinton et al., 2002), and knowledge of this was apparent with participants who were employed and had a scheduled time to get to work. For example, one participant worked the evening shift, because of the difficulties that she encountered in the morning. There was a need for her to wait until the stiffness subsided, followed by a warm shower prior to engaging in any activities.

Many of the participants reported that their OA had progressed to a point where they could no longer perform many of the activities that they were able to perform previously. These activities included walking, playing with grandchildren, and household chores, such as

cleaning and cooking. This finding aligns with research that shows that OA is progressive and that risk factors increase markedly each decade after age 45, because of the cumulative exposure to OA as a result of aging (Moskowitz, 2009; Zhang & Jordan, 2010). Because progression of OA leads to the inability to perform activities, progression suggests diminished QoL through its influence on limiting individuals' movements and increasing their dependency.

The findings on the effects of OA align with the Disability Process Model (Verbrugge & Jette, 1994) that holds that disablement is better understood as a process that identifies pathways through which healthy individuals move or progress into disability. *Disability* refers to difficulty in accomplishing ADLs and the gap individuals experience between personal capability and environmental demands (Verbrugge & Jette, 1994).

The Disability Process Model is a socio-medical model used to describe how the functioning of specific body systems are affected by acute or chronic conditions in relation to personal or environmental factors that may hasten the disability process (Verbrugge & Jette, 1994). The transition from health to disability in older adults is viewed as a complex process, and previous research has overlooked social factors that could influence the process of disability in older ethnic populations (Peek et al., 2003). Peek et al. (2003) found that there was an association between increased functional limitation in the lower bodies of older women, and they concluded that there were racial and ethnic differences in the disability process and that older Mexican American adults moved into disability more quickly than their Caucasian counterparts did. The findings of the current study align with Peek et al.'s findings that older Hispanic women with OA progress rapidly into disability, which may be related to the large percentage of older Hispanic women working in positions that require

repetitive movements associated with manual labor and may have caused their bodies to be more affected than those of other ethnicities.

3. Treatment of OA.

The third theme developed from participants' perceptions of how OA affected their QoL and ability to function involved the treatment of OA. Many of the participants reported receiving medication or injections as treatment for OA, particularly to address pain and inflammation. It is well-documented in the literature that pain among older adults with OA, along with functional limitations, are commonly associated with decreased QoL (Dominick et al., 2004; Groessel et al., 2003; Jakobson & Hallberg, 2006). More recently, in a systematic review of the literature, Stubbs et al. (2011) looked at studies that compared the levels of the physical activity of older adults with chronic musculoskeletal pain to older adults with asymptomatic control. The researchers found that the level of physical activity was statistically lower in the older adults with chronic pain compared with the asymptomatic group and concluded that the older adults with chronic pain appeared to be more inactive than the group with asymptomatic control. The importance of this finding provided further evidence of the influence of pain on reduced QoL through the limiting of physical activity.

Medications that many participants reported using to help alleviate pain and treat inflammation included over-the-counter medications, such as Tylenol, Motrin, ointments, and patches. Other participants indicated that injections were effective for controlling pain. Only two participants indicated that they had undergone total knee replacement surgery as treatment for their OA and had experienced mixed results. One participant indicated that replacement surgery reduced pain, while the other indicated that her physical activity was still limited.

Healthy People 2010 listed a number of achieved goals to help alleviate racial disparity in the area of arthritis treatment, including total knee replacements. The transition from *Healthy People 2010* to *Healthy People 2020* includes an expansion of the focus on chronic diseases, arthritis, and related conditions, to include the impact of disability, pain, activity limitations, and health outcomes related to rheumatoid conditions (DHHS, 2013). However, the findings of the present study concerning costly treatments, such as total knee replacement, help support that inequalities and access to care conditions for Hispanics may continue to exist (DHHS, 2013).

4. Concerns for the Future.

The final theme to emerge from participants' perceptions of how OA affected their QoL and ability to function involved the concerns expressed by the participants regarding having OA. Overwhelmingly, participants' greatest concerns were reaching the point of immobility or the point to where they could no longer perform any activity on their own, a concern closely related to both dependency and limited physical function. Previous researchers found that OA affects one's independence (Brown et al., 2011), and limited physical function has been shown to diminish social life (Theis et al., 2013) and QoL (Bindawas et al., 2011).

Concerns expressed by participants included the limited movements imposed by OA that could eventually result in decreased independence and job performance at work. In addition, participants expressed nostalgia for activities that were possible in the past, including interaction and play with grandchildren. These concerns are realistic given the trajectory and progression of OA. There is stiffness, pain, and debilitation due to loss of function resulting in limited mobility. The desire to be functional and independent was

important to participants, and diminishment in these areas presented their greatest concerns. For example, one participant expressed regret for not continuing with jogging as she had before and recognized that the maintenance of joint function is one of the goals of treatment for OA.

D. Interpretation and Discussion of Findings for Research Question 2.

In order to address the second research question, this study employed a modification of the Cultural Competence and Quality of Care Model (Ngo-Metzger et al., 2006) focusing specifically on five domains. The first two domains that examined the participant's perspective include (a) patient-provider communication and (b) shared decision-making/respect for patient preferences. They relate to the interactions between the patient and provider and the goal is to elicit the participant's perspective on the interaction with their provider. The following three domains relate to the interactions between the patient and provider and include (c) experiences leading to trust or distrust, (d) experiences of discrimination, and (e) linguistic competency. The goal was to elicit the participant's perspective of the healthcare they are receiving. Both patient-provider communication and interaction are critical components due to the relevance of decisions that are made concerning subsequent interventions that may influence patient compliance and satisfaction with care, which in turn can influence health outcomes (Ngo-Metzger et al., 2006). However, after data collection in this study, there was not sufficient narrative to elicit data in the areas of discrimination and linguistic competency.

1. Patient-Provider Communication.

The first theme concerning the cultural competence of the healthcare participants are receiving pertains to the perception and experiences of the participants regarding the nature

of their communication with their providers. The nature of patient provider communication was clearly documented by the IOM (Smedley, 2003) that inferred the following: when compared to non-minorities and individuals in a higher SES, racial/ethnic minorities, and individuals with lower SES tend to receive less information related to their health. Most participants characterized the nature of their communication with their providers as involving the provision of useful information and engaging in active discussion. In the cultural competency model of Ngo-Metzger et al. (2006), patient-provider communication represents an important combination of patient factors and provider factors. While language barriers associated with English proficiency were identified in the literature as a potentially important issue affecting patient-provider communication (Bergmark et al., 2010; Jack et al., 2010), findings of this study showed that this was not the case for this sample. However, this finding in the present study is not surprising considering that 49% of participants reported English as their primary language or as being bilingual with English being their primary language. In addition, others may have held jobs requiring at least some proficiency in English. According to Ngo-Metzger et al.'s (2006) model of cultural competency, findings of this study suggested that elderly Hispanic women with OA received culturally competent healthcare in the area of patient-provider communication.

According to Campinha-Bacote (2006), a major component of cultural competency is cultural awareness, which involves healthcare providers being aware of their prejudices and biases toward other cultures, as well as how their own cultural backgrounds may inform interactions with individuals from other cultures and traditions. In Ngo-Metzger et al.'s (2006) cultural competency model, experiences of discrimination and trust represent important connections between patient, provider, and healthcare systems' factors. However,

in terms of experiencing racial or ethnic discrimination from healthcare providers, most of the participants reported they did not feel race was a factor in terms of how providers interacted with them. One participant even indicated that she initially chose a Hispanic doctor over a non-Hispanic one, but then changed her mind when she discovered that ethnicity was not a factor. This finding suggests that this older Hispanic woman received culturally competent healthcare and had no concerns related to her ethnicity.

2. **Decision-making.**

The second theme that was developed concerning the cultural competence of healthcare participants received pertained to decision-making with healthcare providers about choosing treatment options. According the conceptual model of Ngo-Metzger et al. (2006), respect for patient preferences and shared decision-making processes are components that represent an important combination of patient and provider factors for culturally competent healthcare. Many of the participants in the study described the decision-making processes with their providers as being provided with options and the ability to choose treatments, followed by discussions with providers supporting those decisions. One participant characterized this decision-making process with her provider as a “give and take” one. Respect for patient preferences and a shared decision-making process are important components for providing culturally competent healthcare (CLAS, 2013; Ngo-Metzger et al., 2006). Respect includes not only consideration on the part of providers of patients’ opinions and decisions, but also of respect for patients’ cultural values in relation to health and illness as well (Leininger, 1991). However, in this study, one participant did express dissatisfaction because her doctor simply told her what to do without any attempt to involve her in the

decision-making process. On the other hand, most participants were generally satisfied with the decision-making process and their role in the process.

3. Trust.

Another important finding pertained to the perceptions and experiences of participants regarding trust in their providers. According to Ngo-Metzger et al.'s (2006) cultural competency model, experiences of trust or distrust represent a crucial nexus of patient, provider, and healthcare systems factors. The IOM (2002) identified the existence of racial and ethnic disparities in healthcare, trust in the healthcare system, as well as trust in individual providers, it is important for ethnic minorities (Smedley et al., 2003). Most of the participants reported confidence that their providers had the knowledge and competence to address their healthcare needs.

The literature shows that experiences of provider trust and distrust are important components of culturally competent healthcare (Castellanos, 2000; Smedley et al., 2003). For example, the IOM (2002) reported that significant racial and ethnic disparities regarding access to healthcare services involved distrust in healthcare providers. In addition, Castellanos (2000) found that Hispanics expect their healthcare providers to be warm and friendly and that medical advice will be followed if they trust that their providers have their best interests in mind (Castellanos, 2000). Issues of trust for participants also went hand-in-hand with confidence in doctors' levels of knowledge and abilities to provide clear explanations of conditions and treatments with the participants in this study.

Language barriers have been shown to be associated with infrequent use of healthcare services by Hispanic populations (Escalante & del Rincon, 2001). In addition, communication and language access services are principal standards of CLAS (2013), and

linguistic competence is crucial for effective healthcare provisions in cross-cultural situations (OMH, 2005). Linguistic competency represents another overlapping domain that includes patient, provider, and healthcare systems factors (Ngo-Metzger et al., 2006). Surprisingly, however, most of the participants had positive experiences about their providers' ability to communicate with them, exemplified by reports of receiving clear explanations. This finding did not align with the literature. This could be because almost half of the participants reported English was their primary language. However, one participant reported that her doctor used language that was too complex for her to understand clearly, but she obtained clarification as she needed.

E. Strengths and Limitations of the Study.

This study had several strengths. First, there were no constraints with the amount of time the researcher spent with participants in the privacy of their homes. This provided the researcher with ample time to ask follow-up questions and gather in-depth information. Secondly, the intimacy of face-to-face individual interviews and the privacy that allowed participants to express their feelings, perceptions, and experiences with OA freely and in relation to their healthcare experiences were important strengths of this study. This freedom of expression and depth of contact would not have otherwise been achievable in large group or focus group settings. The face-to-face interview was also useful for exploring responses and gathering more in-depth responses. In combination with open-ended questions, the face-to-face interview approach provided an opportunity for the researcher to probe topics more thoroughly while observing participants' behaviors and reactions to questions or situations.

Trustworthiness was supported in this study by taking pains to ensure credibility, dependability, and confirmability. Ensuring credibility is crucial to the trustworthiness of the

findings of qualitative inquiry. For this study, member checking and participant feedback were used to confirm the emergence of themes and interpretation of the data. Participants provided validation of the findings by confirming that the research accurately interpreted their views. Dependability and confirmability were achieved by following rigorous and proper methodological procedures and creating an audit trail that consisted of demographic data, field notes, a codebook, audio tapes, interviews, and transcripts.

Another aspect that proved to add strength to the study was the bicultural nature of the researcher, who was born and raised in Latin America. This provided a level of comfort for the participants because of cultural similarities. Participants had the flexibility to speak in Spanish or English, or in a mixture of both. However, language was not an issue because the participants were able to express themselves appropriately and comfortably in the English language without having any feelings that they would be misunderstood. There was immediate professional yet familiar rapport established, and most participants expressed their appreciation for the researcher's interest in a study they felt was personally beneficial to them.

The limitations of the study include lack of sufficient narrative data to describe the experiences with discrimination and linguistic competency. This study is limited to findings pertaining to older Hispanic women of Mexican descent, 15 out of 16 of whom were born in the United States, therefore, the sample is limited to a specific geographical area and population. An additional significant characteristic of this sample is the level of acculturation. Acculturation is a multidimensional process of the adoption of cultural norms, values, and lifestyle (Alegria, 2009) and an important variable in health disparities research among ethnic minorities (Hunt, Schneider, & Comer, 2004). These participants, while

retaining the values and beliefs from their parents, neighborhood, and original Mexican culture, may have already adopted the values, beliefs, and traditions of the U.S. mainstream. For example, all participants were under the care of a healthcare provider for a period of time. Four of the 16 participants worked in healthcare, and 2 served in the military as nurses with graduate degrees.

Another important limitation of this study was that participants had a wide range of times since being diagnosed with OA. The range was from 2 to 10 years. In my view, this affected the results in that the participants were exhibiting early signs of the activity limitations seen in Hispanics with OA. Consequently, future researchers may focus on the length of time from the diagnosis as a possibly significant variable in a participant's quality of life and ability to function.

Another limitation of the study was that all the participants were Mexican in origin. Future research should recruit and select more diversity among the participants. For example, future research should include samples that represent participants from other Hispanic subgroups, because of cultural and biological differences. Variations in the Hispanic subgroup data suggest that heterogeneity should be strongly considered when conducting research with Hispanic populations (Collins et al., 2008; Cooper & Ballard, 2011). On the aspects of culturally competent care, an objective measure such as a self-report instrument to evaluate the effectiveness of culturally competent care from the patient's perspective would be beneficial in obtaining the perspective of the women from their own experiences.

F. Implications for Nursing Practice and Education.

The findings from this study may have both theoretical and practical implications. Research specifically on the experiences of older Hispanic women with OA and the factors

that affect their QoL and ability to function will help to better understand how these women perceive and live with their pain, as well as whether they are receiving culturally competent healthcare. Research on cultural competence related to the experiences and perspectives of older Hispanic women with OA is limited. Since little information exists on this underrepresented population, information from this study will extend the current body of knowledge on the pain experience and culturally competent healthcare among older Hispanic women with OA. Information and comparison of the cultural competence of the healthcare providers, staff, and the organizations will provide additional understanding of the cultural factors that influence the healthcare, pain management, treatment, and improvement of the QoL of older Hispanic women living with OA, including the continuing importance of clear patient-provider communication, shared decision-making, and trust in healthcare professionals.

Information collected from this study may have practical implications for nursing as well. This information may assist healthcare professionals in the development of strategies for assessment of each patient and their individual management of OA in relation to day-to-day functioning and limitations. This information may also assist healthcare professionals in the development of strategies for assessment of OA in relation to pain management and assessment of QoL informed by approaches of cultural competence. For example, findings from this study confirmed that patient-provider communication, shared decision-making, and trust in healthcare professionals were all critical to providing culturally competent healthcare. These factors were all important for older Hispanic women to feel confident in the quality of care they are receiving. Consequently, these areas require healthcare professionals' continued attention to ensure and to provide culturally competent healthcare to older Hispanic women

with OA. In addition, nurses should be aware of the primary concerns of older patients with OA: limited mobility and dependency. Limited mobility can result from limited joint function coupled with degenerative changes in the joints.

For nurses and other healthcare professionals to provide quality care, Campinha-Bacote's (2005) "ASKED" model (cultural Awareness, Skills, Knowledge, Encounters, and Desires) can be employed by healthcare organizations as well as providers of care. By periodically examining their cultural awareness, skill, knowledge, encounters, and desires, as care is provided to all ethnicities, all patients would benefit in obtaining quality of care, as well as those in the minority. Through the "ASKED" model, healthcare providers can examine current systems, maintain what is good and working, and eliminate those that are hindering them from fully functioning in a culturally competent manner. In particular, hospitals and organizations with diverse clientele should consider including the "ASKED" model as part of their evaluation of care.

Faculty in nursing have a responsibility to be culturally competent and be aware of their own biases, in addition to providing awareness of cultural competence in their instructions to students. Awareness of cultural differences and similarities within different population groups will improve the quality of care in the older Hispanic patient, again highlighting the significance of the "ASKED" model. For example, awareness and education about mobility and its effect on joint health and patient independence are central concerns nurses should be made aware of in order to provide informed, quality healthcare. In addition, nurses should understand that patients with OA in all groups, and specifically in the Hispanic groups, may resist physical activity or exercise, fearing that it will worsen their conditions. On the other hand, physical activity or exercise can promote joint function and should be a

major part of the patient education and treatment regimen. Understanding the benefits of exercise for health maintenance may be an incentive for patients to change behaviors and important knowledge for nurses serving older patients with OA. Through the findings of the current study, healthcare systems, especially those focused on the care of older Hispanic women with OA, can fully benefit from the shared perceptions and experiences of their disease.

G. Recommendations for Further Research.

Recommendations for further research include studies on other and diverse Hispanic populations, on samples representing participants from other Hispanic subgroups and different socioeconomic statuses in order to gain a broader and better understanding of cultural competence and healthcare in relation to Hispanic populations. Future studies of other Hispanic subgroups might focus on the crucial factor of linguistic competency in cultural competence. Although findings from this study indicate that linguistic competency was not an issue among participants receiving culturally competent healthcare, this finding does not align with findings from previous research. This could be because 49% of the participants reported English as their primary language. However, future studies on cultural competence and other Hispanic subgroups might retain focus on linguistic competency and patient-provider communication since language barriers have been found to increase Hispanic patients' anxiety regarding the healthcare they receive.

Another avenue for future research might include a focus on how patients receive information about the causes of OA. Although many participants perceived that OA was caused by age, the source of this knowledge for patients was unclear; only one participant reported that her doctor told her that aging was the cause of OA. Accurate data on the sources

from which patients receive information about OA is important, and knowing that patients are receiving clear information from doctors and nurses regarding the cause of OA may be a component of patient-provider communication that warrants additional study. Future studies may also include an information-drive for the older Hispanic women with OA, to increase their awareness of the symptoms, causes, effects, and treatments of their disease with accuracy. The information-drive can be supervised by the healthcare professionals or organizations that have a proven record in successfully providing culturally competent care for older Hispanic women with OA. By doing so, patients and providers will be able to work harmoniously with a specific plan of care.

Issues of dependency and limited movement of patients with OA in relation to assistance and living situations represent others areas for future research. The influences of dependency and limited movement in diminishing social life and QoL for older Hispanic women aligned with research on other populations. However, despite employing professional assistance or living with family and spouses or in assisted living facilities, participants reported that dependency and limited movement still contributed to feelings of uselessness. Although older individuals with OA may be adequately cared for, this care may not affect their QoL, as care may do nothing to alleviate feelings of dependency and uselessness. Future avenues for research might include study on ways for individuals suffering from OA to cope with and counter increased dependency and feelings of uselessness. Additional study might also include examination of the ways that peer support systems, such as those found among residents of assisted living facilities, might contribute to emotional and psychological factors improving QoL, even though such support systems do not serve to reduce dependency.

Further studies are also needed to investigate, measure, and document the effectiveness of culturally competent interventions from patients' perspectives. Investigations from patients' perspectives are limited because the focus has been on staff, providers, and organizations. Focusing on patients' perspectives about the care and the satisfaction of care received in the healthcare settings may result in information about organizations and providers that would serve to improve the quality of care to patients and ultimately reduce the health disparities in the minority populations.

For a future study, and in keeping with the framework of Ngo-Metzger et al. (2006), the inclusion of the perspective of the providers and organizations as stakeholders, will provide additional information that will strengthen the effort to provide culturally competent care and subsequently improve the quality of care for all patients, in particular for the older Hispanic women with OA. When both patient perspectives and provider and system perspectives are studied together, a more holistic understanding of culturally appropriate care may arise.

In addition, more research is needed on how limited movement, a major effect of OA, and the effects and progression of OA influences the ability of older Hispanic women with OA to perform effectively at work activities. This line of study might include how limited movement influences the anxiety of older Hispanic women with OA in relation to their not being able to perform required work-related activities or even find employment.

H. Conclusion.

There is ample documentation of the potential benefits and significance of the delivery of culturally competent healthcare in reducing ethnic-based health disparities. Particular areas for concern for providing culturally competent healthcare include patient-

provider communication, shared decision-making, linguistic competency, discrimination, and trust in healthcare professionals. Fortunately, the present showed that older Hispanic women were receiving culturally competent healthcare in the areas of communication, decision-making/respect for patient preferences and trust. Still, concerns for this population remain. OA has an incidence rate that increases with age, with the highest rates diagnosed among women (CDC, 2011), and Hispanic women are more affected than any other racial or ethnic group, with a prevalence rate of 28.3% (Murphy et al., 2011).

Although older Hispanic women received culturally competent healthcare, the findings of the present study indicated that this population experienced the same continuing issues concerning OA and QoL as other populations, including issues of dependency and limited movement, as well as fears and frustration related to OA that influence QoL. However, the socioeconomic status of older Hispanic women contributed to their particular concerns about how OA affected their job performance and might influence their treatment options as well. For healthcare providers to continue to deliver culturally competent healthcare, further studies are needed on the connections between how ethnic groups, including older Hispanic women, experience OA and how OA relates to dependency, occupational performance, and socioeconomic status for different ethnic groups.

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APPENDICES

APPENDIX A. National Cultural and Linguistically Appropriate
Services (CLAS) Standards

Principal Standard

1) Provide effective, equitable, understandable and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy and other communication needs.

Governance, Leadership and Workforce

2) Advance and sustain organizational governance and leadership that promotes CLAS and health equity through policy, practices and allocated resources.

3) Recruit, promote and support a culturally and linguistically diverse governance, leadership and workforce that are responsive to the population in the service area.

4) Educate and train governance, leadership and workforce in culturally and linguistically appropriate policies and practices on an ongoing basis.

Communication and Language Assistance

5) Offer language assistance to individuals who have limited English proficiency and/or other communication needs, at no cost to them, to facilitate timely access to all health care and services.

6) Inform all individuals of the availability of language assistance services clearly and in their preferred language, verbally and in writing.

7) Ensure the competence of individuals providing language assistance, recognizing that the use of untrained individuals and/or minors as interpreters should be avoided.

8) Provide easy-to-understand print and multimedia materials and signage in the languages commonly used by the populations in the service area.

Engagement, Continuous Improvement and Accountability

9) Establish culturally and linguistically appropriate goals, policies and management accountability, and infuse them throughout the organizations' planning and operations.

- 10)** Conduct ongoing assessments of the organization's CLAS-related activities and integrate CLAS-related measures into assessment measurement and continuous quality improvement activities.
- 11)** Collect and maintain accurate and reliable demographic data to monitor and evaluate the impact of CLAS on health equity and outcomes and to inform service delivery.
- 12)** Conduct regular assessments of community health assets and needs and use the results to plan and implement services that respond to the cultural and linguistic diversity of populations in the service area.
- 13)** Partner with the community to design, implement and evaluate policies, practices and services to ensure cultural and linguistic appropriateness.
- 14)** Create conflict- and grievance-resolution processes that are culturally and linguistically appropriate to identify, prevent and resolve conflicts or complaints.
- 15)** Communicate the organization's progress in implementing and sustaining CLAS to all stakeholders, constituents and the general public.

APPENDIX B. Information about a Study

Study Title: Older Hispanic Women with Osteoarthritis Diagnosed by a Healthcare Provider: Experiences and Perceptions of Cultural Competence Care

The University of Texas Health Science Center San Antonio

You are invited to take part in a research study of older Hispanic Women's Experience with Osteoarthritis. My name is Claudia Oglivie RN, MSN. I am a doctoral Student at the University of Texas Health Science Center at San Antonio School of Nursing. I would like to learn about your experiences with Osteoarthritis and your perception of the competence in the care you are receiving. I am asking you to take part in this study because you have been diagnosed with Osteoarthritis by a healthcare provider. Your participation is voluntary and there will be no costs associated with this study to you.

If you decide to take part of this study you can contact me directly at (210) 912-0039. The interview would take approximately 50 minutes to complete and it would be in person. Some of the question may be difficult to answer. If any question makes you uncomfortable, you may share your concerns with me and you don't have to answer.

Any information that is obtained in connection with this study will remain confidential. Audio tapes and transcripts will remain confidential and kept in a locked file cabinet and destroyed after completion of the study.

If you have any further questions I may be reached at the number provided below.

Cell:

Email: oglivie@livemail.uthscsa.edu

APPENDIX C. Información De Un Estudio

Título del estudio: Estudio de las mujeres Latinas con artritis diagnosticado por un Proveedor de Salud: Percepciones de la Competencia Cultural del cuidado recibido.

La Universidad de Texas Health Science Center de San Antonio.

Usted está invitado a participar en un estudio de investigación de la experiencia de las mujeres Latinas con osteoartritis. Mi nombre es Claudia Oglivie, RN, MSN. Soy una estudiante del doctorado de la escuela de enfermería de la Universidad de Texas Health Science Center de San Antonio. Me gustaría saber de su experiencia con la osteoartritis y su percepción de la competencia cultural de la atención que está recibiendo. Se le solicita participar en este estudio porque usted ha sido diagnosticado por un proveedor de salud con osteoarthritis. Su participación es voluntaria y no habrá ningún costo asociado con este estudio para Usted.

Si decide tomar parte de este estudio puedes hacer contacto conmigo directamente al (210) 912-0039. La entrevista tomaría aproximadamente 50 minutos para completar y sería en persona. Algunas de la pregunta podran ser difícil de responder. Si alguna pregunta te hace sentir incómoda, usted puede compartir sus preocupaciones conmigo y no tienes que responder a esa pregunta. Cualquiera información obtenida en relación con este estudio permanecerá confidencial. Cintas de audio y transcripciones permanecerán confidenciales y guardado en un archivador cerrado y destruido después de la terminación del estudio. Si usted tiene alguna pregunta puede llamarme al número :

. Email: oglivie@livemail.uthscsa.edu

APPENDIX D. Invitation to Participate

My name is Claudia Oglivie RN, MSN, and I am a doctoral student at the University of Texas Health Science Center School of Nursing. I am currently working on a dissertation titled “Older Hispanic Women with Osteoarthritis Diagnosed by a

Healthcare Provider: Perceptions of Cultural Competence Care,” and would like to hear about your experience with osteoarthritis.

If you have any experience, or know of someone that might be interested in participating in a face to face interview please e-mail me or call me and I can send you additional information about the study.

You may contact me directly at _____ .

Thank you,

Claudia Oglivie RN, MSN.

Email: oglivie@livemail.uthscsa.edu

APPENDIX E. Invitación A Participar

Mi nombre es Claudia Oglivie RN, MSN, y soy una estudiante del doctorado de la escuela de enfermería de la Universidad de Texas Health Science Center de San Antonio. Actualmente estoy trabajando en una disertación titulada " Estudio de las mujeres Latinas con osteoartritis diagnosticado por un Proveedor de Salud Médica: Percepciones de la Competencia Cultural de Servicios " y me gustaría oír de su experiencia con la osteoarthritis y de las percepciones de su experiencia.

Si usted tiene alguna experiencia, o sabes de alguien que podría estar interesado en participar en una entrevista cara a cara , favor de hacer contacto por correo electrónico para poder enviarle información acerca del estudio.

Favor de hacer contacto conmigo directamente al (210) 912-0039.

Muchas Gracias

Claudia Oglivie RN, MSN.

Email: oglivie@livemail.uthscsa.edu

APPENDIX F. Demographic Questionnaire—English

Demographic Information

Name _____ Age: _____

Phone number: _____ Home _____ Cell _____ Work _____

Osteoarthritis diagnosed by a health care provider? _____ Yes _____ No

How long? _____

Marital Status

___ Single (never married)

___ Married _____ years

___ Divorced _____ years

___ Widowed _____ years

Place of birth: _____ **Length of time in the U.S.** _____

Primary Language: _____

Education

Highest level of education:

___ Less than high school

___ High school

___ Technical/Vocational school

___ Some college

___ Bachelor's degree

___ Graduate degree

___ Other

Employment

___ Employed ___ Unemployed ___ Retired ___ Never worked

Past or present Occupation: _____

Annual Income

___ Less than \$10,000

___ Between \$10,000 and \$19,999

___ Between \$20,000 and \$29,999

___ Between \$30,000 and \$39,999

___ Between \$40,000 and \$49,000

___ Between \$50,000 and \$59,000

___ More than \$60,000

Support System

Main source of family/social support: _____

Frequency of contact: _____

Type of assistance: _____

APPENDIX G. Demographic Questionnaire—Spanish

Información Demográfica

Nombre: _____ Edad: _____

Número de teléfono: _____ Casa _____ Celular _____ Trabajo _____

Diagnóstico de Osteoartritis por su Proveedor de Salud? ____ Si ____ No

¿Cuánto tiempo? _____

Estado civil

____ Soltera (nunca se casó)

____ Casada _____ años

____ Divorciada _____ años

____ Viuda _____ años

Lugar de nacimiento: _____ Tiempo de estar en los Estados Unidos:

Idioma principal: _____

Educación

Nivel más alto de educación:

____ Menos que la escuela secundaria

____ Escuela secundaria

____ Escuela vocacional o técnica

____ Varios años de la Universidad

____ Bachillerato

____ Pos-grado Universitaria

____ Otro

Empleo

____ Empleado ____ Desempleado ____ Jubilado ____ Nunca ha trabajado

Ocupación actual o pasado: _____

Ingreso Anual

- ____ Menos de \$10,000
- ____ Entre \$10,000 y \$19,999
- ____ Entre \$20,000 y \$29,999
- ____ Entre \$30,000 y \$39,999
- ____ Entre \$40,000 y \$49,000
- ____ Entre \$50,000 y \$59,000
- ____ Más de \$ 60,000

Apoyo Familiar

Persona principal de apoyo o ayuda familiar y social: _____

Frecuencia de contacto: _____

Tipo de asistencia: _____

APPENDIX H. Interview Guide—English

Experience with Osteoarthritis

Tell me about your experience with OA.

Probe

Patient/Provider communication

Tell me your thoughts about the disease

Probe

Respect for patient preference/Shared decision-making

Tell me about any recent decision made by your doctor about starting or stopping a medication.

Probe

Tell me about any other decision that was made about the need for a procedure.

Probe

Experiences leading to trust or distrust

Tell me about how you feel when your provider gives you information about a new procedure, a new medication or results from a test.

Probe

Tell me about your level of confidence when you receive a new treatment or new results

Experiences of discrimination

Tell me about any experience you may have had where you felt that your ethnicity was a factor.

Probe

Linguistic competence

Tell me about the communication with your provider and your understanding of the information given to you

Probe

Tell me about your understanding of the information given to you and your understanding of it

Probe

Is there anything that you want to share with me that I did not ask?

APPENDIX I. Interview Guide—Spanish Version

Guía de Entrevista

Experiencia con la osteoarthritis

Dígame sobre su experiencia con la Osteoartritis

Sonda:

Dígame sobre sus pensamientos de la enfermedad

Sonda:

Comunicación entre el Paciente y el Proveedor de Salud

Dígame cómo el proveedor le da información antes, durante y después de la consulta

Respeto a la preferencia del paciente/Decisiones compartidas

Dígame sobre cualquiera decisión adoptada recientemente por el proveedor de salud medica sobre cómo iniciar o parar un medicamento o tratamiento

Sonda:

Dígame sobre cualquiera otra decisión que se hizo sobre la necesidad de un procedimiento

Sonda:

Experiencias que conducen a confiar o a desconfiar

Cuéntame cómo te sientes cuando su proveedor le proporciona información sobre un nuevo procedimiento, un nuevo medicamento o algunos resultados.

Sonda

Háblame de tu nivel de confianza en recibir tratamiento o resultados nuevos.

Sonda:

Experiencias de discriminación

Dígame acerca de cualquiera experiencia que ha tenido en el que sentía que su origen étnico era un factor en cuenta

Sonda:

Competencia Lingüística

Cuéntame sobre la comunicación con su proveedor sobre su comprensión de la información que se le proporciona

Sonda

Hábleme de su comprensión de la información proporcionada a usted y su comprensión del mismo.

Sonda:

¿Hay algo más que quieras compartir conmigo que no le pregunté?

APPENDIX J. IRB Approval



Date: November 11, 2014
To: Claudia Oglivie, RN, BSN, MSN (Oglivie@livemail.UTHSCSA.edu)
UTHSCSA
From: Institutional Review Board
Subject: **Expedited Approval of a New Human Research Protocol (Initial Review)**

Protocol Number: HSC20150054H
Title: Perceptions of Culturally Competent Care and Experience of Older Hispanic Women with Osteoarthritis Diagnosed by a Healthcare Provider

Dear Principal Investigator,

Your request to conduct this minimal risk research was approved by Expedited Review on November 7, 2014, under the following regulation(s):

Collection of data using recordings (refer to Form B-1, Category 6 for details).
Collection of data using surveys, interviews, focus groups, etc. (refer to Form B-1, Category 7 for details).

The request for a waiver of the HIPAA authorization was approved as detailed in Form J of the protocol.

A waiver of the requirement to obtain the subjects' signature on the consent form was approved as detailed in Form F of the protocol.

The IRB expiration date: November 7, 2015. Your progress report must be submitted to the IRB Office 34 days before the IRB meeting that will occur before the study's expiration date.

The IRB application and the following documents were reviewed: Signature Assurance Sheet; Form D - HSC Consent, -IS; Form F - Consent or Documentation Waiver; Form J - HIPAA Waiver; Form M - Data Collection Instrument(s), **Other:** Form BC - Protocol Template Form; Abstract; Letter of Support dated Oct 13, 2014 - Be Well 365; Step 1; Step 2-Inst; Step 2-IRB

The information sheet document(s) digitally stamped with **IRB APPROVED November 7, 2014** must be used.

Affiliated institutions which are engaged in this research: UTHSCSA.

Sincerely,

Debbie Etter
I am the author of this
document
2014.11.11 12:44:49-06'00'

Research Compliance Coordinator – Senior
Research Regulatory Programs

Please retain this document in your IRB correspondence file

Institutional Review Board Office | Mail Code 7830 | 7703 Floyd Curl Drive | San Antonio, Texas 78229-3900
210.567.8250 | Fax 210.567.8242 | <http://research.uthscsa.edu/irb> | FWA00005928 | IORG0000312

0IRB-50



November 3, 2015

To: Claudia Oglivie, RN, BSN, MSN (Oglivie@livemail.UTHSCSA.edu)
UTHSCSA

From: Institutional Review Board

Subject: **Expedited Approval of a Request to Continue Research (Reapproval)**

Protocol Number: HSC20150054H
Title: Perceptions of Culturally Competent Care and Experience of Older Hispanic Women with Osteoarthritis Diagnosed by a Healthcare Provider

Dear Principal Investigator,

Your progress report, dated October 6, 2015, was reviewed and approved by the Institutional Review Board on October 29, 2015. Your study has been approved to continue.

The new IRB expiration date: November 7, 2016. Your progress report must be submitted to the IRB Office 34 days before the IRB meeting that will occur before the study's expiration date.

In addition to the progress report, the following documents were reviewed: Signature Assurance Sheet; **Other:** Step 2 Institutional; Personnel Form (Inst M).

Your progress report included the following minor modifications that were also approved: None.

Affiliated institutions which are engaged in this research: UTHSCSA

Sincerely,

Juanita Ching
I am the author of this document.
2015.11.03 15:15:22 -06'00'

Research Compliance Coordinator
Research Protection Programs

Please retain this document in your IRB correspondence file

Institutional Review Board Office | Mail Code 7830 | 7703 Floyd Curl Drive | San Antonio, Texas 78229-3900
210.567.8250 | <http://research.uthscsa.edu/irb> | FWA00005928 | IORG0000312

OIRB-40

APPENDIX K. Letter of Support



Eva J. Lopez, MD, Owner/CEO
3603 Paesanos Parkway, Suite 202
San Antonio, TX 78231
Phone: 210-690-5515

Oct 13, 2014

Subject: Letter of support for proposed research

I fully support the proposed research project "Perceptions of Culturally Competent Care and Experiences of Older Hispanic Women with Osteoarthritis" to be conducted by Claudia Oglivie RN, MSN – a doctoral candidate at the University of Texas Health Science Center San Antonio. This is an important project especially with the current statics related to Osteoarthritis and the resulting activity limitations in addition to the longevity of our aging population, I believe that the data regarding the prevalence of this condition will offer valuable information to both the individual and the research community.

I am pleased to provide the opportunity for accessing of patients for the purpose of identifying subjects, recruiting and enrolling subjects at my clinics located at 3603 Paesanos Parkway Ste 202 San Antonio, Texas 78231 and 9222 N Main Street, San Antonio, TX 78212.

As a graduate of the UT Health Science Center San Antonio School of Medicine, I have been active as a preceptor and it is my pleasure to be able to help Ms Oglivie. I think we have a good demographic mix to assist in her research.

I may be reached at 210-690-5515 for additional information.

Sincerely,

Eva Lopez MD *EJL*

VITA

Claudia A. Oglivie was born in Colon, Republic of Panama, to Benjamin Ramirez Oglivie and Linneth Palmer Oglivie, in 1945. Claudia graduated from the *Colegio Abel Bravo* with a *Bachillerato en Ciencias* in 1963 and migrated to the U.S. in 1964. In 1969, she received an AAS in Nursing from Bronx Community College, New York; she received her BSN in 1972, and her MSN in 1975 from Hunter College in New York. Claudia began her career as a staff nurse in the Lincoln Medical Center Emergency Department and Level I Trauma Hospital in the Bronx, New York, and culminated her tenure as Associate Director of the Emergency Department. Claudia was commissioned in the U.S. Army and served in the United States and overseas in Honduras, Central America, fulfilling numerous duties that included Quality Management; Commandant of a military school; and serving in the Middle East during the Gulf War. Claudia's exemplary performance in clinical and supervisory roles in Medical and Surgical Intensive Care Units, Trauma and Emergency Departments in multiple U.S. Army Medical Centers resulted in her assignment as Special Assistant to the Commanding General at the U.S. Army Medical Research Command; and leadership and management positions in Congressionally Directed Medical Research Programs including Breast Cancer, Department of Defense Women's Health, Telemedicine, and Advanced Technology Research Programs. During her service, she was the recipient of numerous awards that included the Meritorious Service Medal (4), the Army Commendation Medal (2) and the Army Achievement Medal (3). Her distinguished military career culminated in 2001 with retirement as a Lieutenant Colonel and award of the Legion of Merit after 26 years of service with distinction and valor. Claudia's military education includes Basic and Advanced

Officer Leadership Training, Health Care Administration Course, and Command and Staff College. After retirement, Claudia continued her professional healthcare career at the University of Maryland, School of Medicine in collaboration with the Department of Defense where she headed and successfully implemented a Telemedicine and Advanced Technology Program that served to coordinate medical care between patients and providers in rural Maryland to the Medical Center in Baltimore, Maryland, and as Program Manager in the National Study Center for Trauma Research Program. In 2006, she joined San Antonio College faculty, and in 2009, she was admitted to the doctoral program at the University of Texas Health Science Center San Antonio. She is a member of Sigma Theta Tau, the Honor Society of Nursing.