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Perceived Barriers to Cervical Cancer Screening among Hispanic Women

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Abstract

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by

Damaris Pérez

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Health Education and Promotion

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Abstract

Hispanic women are among the ethnic groups with higher cervical cancer rates in the

United States. This mixed-method study was conducted to explore perceived barriers and

self-efficacy-related factors to cervical cancer screening in foreign-born Hispanic women

in Florida. The theory of planned behavior was applied to determine if behavioral

intentions influence access to cervical cancer screening. The inclusion criteria included

Hispanic women 18 years old and older without a hysterectomy history. Quantitative data

were collected through a self-administered survey. A total of 84 individuals completed

the survey. A binary logistic regression analysis was performed to determine if

sociodemographic factors are related to access to cervical cancer screening. The results

showed no significant association between socioeconomic factors and doctor visits ($p >$

.05). A chi-square was performed to determine if there was a relation between time living

in the United States and access to cervical cancer screening, which revealed a non-

significant association between the time living in the United States and the visits to

healthcare practitioners ($p >$ .05). Qualitative data were collected through individual

interviews. A total of 10 individuals participated in the individual interviews. Most

participants concurred about having a "good" experience with health insurance and

screening. Participants also agreed about the importance of cervical cancer screening to

prevent cancer. In conclusion, participants showed self-efficacy and adherence to cervical

cancer screening. Further studies using focus groups will help explore and compare

Hispanic women's experiences and barriers in urban and rural areas.

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Dedication

To my parents for their support and love.

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Chapter 1: Introduction to the Study

This mixed study explores factors that influence access to cervical cancer screening in Hispanic women in Florida. Cervical cancer in Hispanic women has increased in recent years due to diverse factors described in previous research. Hispanic women are the ethnic group with the highest rates of reported new cervical cancer cases, with 9.60% between 2012-2016 (Centers for Disease and Control Prevention, 2019). Cervical cancer incidence rates are about 64% higher in Hispanic women than non-Latina White women and have a 50% higher cervical cancer mortality rate (Shelton et al., 2016). Sociocultural factors, such as health insurance status, low income, low literacy, and acculturation, contribute to cancer disparities in Hispanic women (Moreno et al., 2019). Cultural factors influencing access to cervical cancer screening include a lack of trust in health care providers, perceived discrimination, and fear of a potential positive diagnosis. Previous research suggests that perceived discrimination is a barrier to accessing cancer screening tests in minority ethnic groups (Valdovinos et al., 2015). Hispanic women with limited knowledge, lack of trust, and difficulty understanding health care providers are less likely to be screened (Kindratt et al., 2020). Another factor that influences cancer screening is the cost of services, which has been associated with adherence to having a Pap test, contributing to inequalities experienced in Hispanic women (Shelton et al., 2016). Additional findings suggest that psychological barriers, including fear of pain, influence access to cervical cancer screening tests adversely compared to other ethnic groups (Gauss et al., 2013).

Background

Prevalence of cervical cancer The World Health Organization estimated a total of 569,847 (3.2%) new cases of cervical cancer around the world in 2018. According to the Pan American Health Organization (2019), approximately 72,000 were diagnosed with cervical cancer in the Region of the Americas in 2018. In North America, the World Health Organization (2018) estimated a rate of 6.5% of new cases and 2.2% of deaths approximately. The American Cancer Society (2020) estimated that cervical cancer represents a rate of 0.7% of all new cancer cases, a total of 13,800 individuals among the total population in the United States. An estimated 4,290 deaths will be caused by cervical cancer in the 35-44 year old age group, which is the most frequently diagnosed age group (American Cancer Society, 2020). Hispanic women are an ethnic group that represents a high risk of cervical cancer diagnoses. Cervical cancer is increasing among Hispanic women in the United States. According to the National Cancer Institute (2016), between 2012 and 2016, new cervical cancer cases represented 9.3% among Hispanic women, with 2.3% of these cases resulting in deaths.

Low screening among Hispanic women may face health disparities due to social, cultural, and structural factors, including language barriers, low access to screening, health care, and lack of financial resources. Poor cervical cancer outcomes among Hispanic women have been attributed to low screening rates, low adherence to cervical screening recommendations, and a lack of follow-up after an abnormal or inconclusive screening (Mann et al., 2014). Due to low cancer screening rates, Hispanics are diagnosed in later stages (Valdovinos et al., 2015). Treatment disparities include

structural factors, low socioeconomic status, language barriers, and lower access to healthcare services among Hispanic women (Shelton et al., 2016).

Factors affecting screening includes multiple individual and system-level determinants, including education, acculturation, household income, health insurance access, health literacy, and mistrust in the healthcare system with access to cancer screening (Valdovinos et al., 2015). Another factor that may influence cancer screening is perceived discrimination. Recent studies suggest that perceived discrimination is a barrier to accessing preventive health care, triggering a stress response and decreasing an individual's self-control, leading to not engaging in healthy behaviors (Valdovinos et al., 2015). Low cervical cancer screening rates among Hispanic women are also associated with a lack of health insurance, services costs, transportation, low acculturation, and sociodemographic factors (Martinez et al., 2015). Sociodemographic factors such as education level, income, and marital status can be associated with a lack of access to cervical cancer screening and low adherence after abnormal Pap test results. Previous research suggests that personal and cultural barriers, including fear and embarrassment, are related to a lack of access to cervical cancer screening, low adherence, and misconceptions regarding cervical cancer screening (Martinez et al., 2015). Other studies identified concerns about deportation as having a negative impact on cervical cancer screening, distrust of the healthcare system and providers, and low levels of acculturation may contribute to the access to cervical cancer screening (Mann et al., 2014).

Problem Statement

The Hispanic ethnic group represents a higher risk of low access to cervical cancer screening due to a lack of awareness and misunderstanding about the importance of cervical cancer screening, making this population vulnerable due to individual and system-level factors (Luque et al., 2015). Barriers to cervical cancer screening among Hispanic women include individual, sociocultural, and system-level factors. Individual-level factors influence screening behaviors among Hispanic women, including a lack of understanding of cervical cancer etiology and prevention and low awareness of health screening services and treatment options. System-level factors comprise a lack of health insurance, lack of trust in health care providers, fear of disclosure of immigration status, and transportation to health care services, which influence access to cervical cancer screening services (Luque et al., 2015). Hispanic women may have low levels of self-efficacy related to communication with health care providers and sexual partners, which may affect adherence to screening recommendations (Luque et al., 2015).

In Florida, cervical cancer rates are one of the highest in the United States (Division of Cancer Prevention, 2016; Guari et al., 2018). From 2013-2017, Florida reported a rate of 8.9 new cervical cancer cases yearly. Meanwhile, Polk County reported a rate of 11.0 new cases (Florida Cancer Data System, 2020). By racial/ethnic groups, Hispanic women's incidence rates were estimated at 6.8% from 2013-2017 (Florida Cancer Data System, 2020). Prevention practices have played a vital role in reducing cervical cancer rates in the past years. However, socioeconomic status and lack of access to health care remain the main disparities in minority ethnic groups reducing access to

Pap smear screening and increasing the risk of cervical cancer (Guari et al., 2018). Racial and ethnic disparities are emphasized by research studies that have indicated that minority ethnic groups have reduced the use of prevention services and programs (Guari et al., 2018; Saghari et al., 2015). Therefore, this study included Hispanic women from Polk County, Florida to determine what factors influence the access to cervical cancer screening.

Purpose

The purpose of this mixed-method study was to explore perceived barriers and self-efficacy related factors to cervical cancer screening in foreign-born Hispanic women. Research findings indicate that Hispanic women have the highest incidence rates of cervical cancer in the United States (National Cancer Institute, 2016). Demographic and sociocultural factors impact screening, increasing health risks among this population (Rojas et al., 2017). According to the American Cancer Society (2017), foreign-born Hispanic women residing in the United States for less than 10 years are less likely to access cervical cancer screening than those living in the United States for more than 10 years. This study may be useful to inform health education and promotion programs due to the lack of specific information on cervical cancer trends for foreign-born Hispanic women. Surveys and individual interviews were developed to provide insight into Hispanic women's perceptions, beliefs, and attitudes to cervical cancer screening among Hispanic women in Polk County, Florida. Participants' previous experiences help understand this phenomenon and determine how it could be addressed, developing strategies and health education programs that contribute to increasing awareness about

the importance of accessing cervical cancer screening tests to minimize health risks in this population.

Framework

A theoretical framework that helps understand participants' attitudes and behaviors is the theory of planned behavior (TPB). This theory was developed in the 1980s by Icek Azjen. The TPB is an extension of the theory of reasoned action developed by Martin Fishbein and Icek Azjen (Glanz et al., 2015). The TPB underlines the premise that behavioral intention is the most important determinant of behavior, which is linked to individuals' attitudes and beliefs (Glanz et al., 2015). The TPB has been used to predict and explain various health behaviors and intentions. The TPB theory was applied to this research to determine if the lack of access to cervical cancer screening is due to behavioral intentions linked to psychological and sociodemographic factors.

Research Questions

The research questions are divided into two parts. The first set includes quantitative research questions to determine factors influencing cervical cancer screening in foreign-born Hispanic women. The second set contains qualitative research questions to explore perceived barriers to accessing cervical cancer screening in foreign-born Hispanic women.

Quantitative Questions

Research Question 1: What sociodemographic actors are associated with cervical cancer screening in foreign-born Hispanic women?

Research Question 2: Is there an association between time living in the United States and cervical cancer screening in foreign-born Hispanic women?

Qualitative Questions

Research Question 1: What are the perceived barriers to cervical cancer screening in foreign-born Hispanic women?

Research Question 2: What self-efficacy factors are associated with cervical cancer screening in foreign-born Hispanic women?

Research Question 3: What behaviors are associated with cervical cancer screening in foreign-born Hispanic women?

Nature of the Study

This study followed a mixed-method approach to determine perceived barriers and self-efficacy related to access to cervical cancer screening among the participants. A mixed method combines qualitative and quantitative elements that may contribute to answering the research questions. The combination of qualitative might provide a contextual understanding of variables uncovered through a survey (Schoonenboom & Johnson, 2017). Mixed methods can allow the participants to share their experiences across the research process, facilitating different paths of exploration that enrich the evidence and allow questions to be answered in-depth (Shorten & Smith, 2017).

Definition of Terms

Access to health care: The opportunity to obtain physically and financially affordable accessible health care services (World Health Organization, 2014).

Cervical cancer: Usually a slow-growing lesion that may not have symptoms but can be found with regular Pap tests (National Cancer Institute, n.d.).

Foreign born: The foreign-born population is composed of anyone who is not a U.S. citizen at birth and includes persons who have become U.S. citizens through naturalization. Everyone else is counted among the native-born population (U.S. Census Bureau, 2020).

Health literacy: The degree to which an individual has the capacity to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions (Centers for Diseases Control and Prevention, 2019).

Hysterectomy: The uterus is surgically removed with or without other organs or tissues (National Cancer Institute, n.d.).

Language barrier: a difficulty for people to communicate because they speak different languages (Merriam-Webster Dictionary, n.d.).

Literacy level: Refers to the understanding, evaluating, using, and engaging with written text to participate in society, to achieve one's goals, and to develop one's knowledge and potential (Centers for Diseases Control and Prevention, 2019).

Pap test: A procedure in which cells are scraped from the cervix and looked at under a microscope (National Cancer Institute, n.d.).

Socioeconomic status: The social standing or class of an individual or group. It is measured as a combination of education, income, and occupation (American Psychological Association, n.d.).

Assumptions

I assumed that individual interviews would provide a depth of insight into foreign-born Hispanic women's experiences accessing cervical cancer screening tests. This study's methodology combines quantitative and qualitative designs, which may contribute rich data on identifying factors influencing access to cervical cancer screening among foreign-born Hispanic women. Using TPB as a framework contributes to distinguishing participants' intentions and barriers that influence cervical cancer screening. Another assumption was that participants' responses may be varied according to individuals' backgrounds, experiences, and knowledge. Finally, I assumed participants would provide honest and complete answers based on previous cervical cancer screening experiences and beliefs.

Scope and Delimitations

Based on previous research and data, the scope was limited to foreign-born Hispanic women in the United States. According to the National Cancer Institute (2016), Hispanic women show the highest rate of new cervical cancer cases. Previous research findings suggest that foreign-born Hispanic women face more health determinants than those born in the United States, including low acculturation, language barriers, lack of health insurance, low health literacy, and low literacy (Moore de Peralta et al., 2015).

Limitations

Purposeful sampling is a common strategy used by qualitative researchers to collect data allowing them to describe in-depth phenomena (Palinkas et al., 2013). However, this can represent a limitation in the data found, resulting in a generalization of

participants' responses due to the sample size (Saunders et al., 2017). Another limitation is that participants may provide answers they perceive as more socially acceptable, which may raise the difficulty of determining the validity of the barriers discussed. A challenge this study may have faced is the reluctance to participate due to immigration status or fear of answering questions about previous experiences accessing cervical cancer screening.

Significance

The average of cervical cancer new cases from 2013-2017 represented 8.9% in Florida (Florida Cancer Data System, 2020). In Polk County, the cervical cancer rates comprised 11% (Florida Cancer Data System, 2020). Among Hispanic women, cervical cancer rates have increased from 177 new cases in 2015 to 238 new cases in 2017 (Florida Cancer Data System, 2020). Cervical cancer caused 66 fatalities in 2017 in Polk County, 21 more than in 2015 (Florida Cancer Data System, 2020). The results of this study can provide a depth of insight into foreign-born Hispanic women's beliefs, experiences, and perceptions, contributing to the creation of health education programs to increase awareness among the target population and close the gaps in health needs. Previous research concluded the importance of gathering Hispanic women's perspectives on cervical cancer screening to create preventive strategies that promote cervical cancer screening among this population (Miles-Richardson et al., 2016).

The study results can also contribute to opening a discussion among health care professionals, health organizations, and health care entities regarding the participants' perspectives and experiences accessing cervical cancer screening. Women's health education programs are needed to address Hispanic women's needs. Women without

health insurance may travel to other cities or counties for free pap screening and related health services, including health education. This research may help inform health education programs or other health initiatives to address Hispanic woman's health care needs increasing reproductive health awareness and promoting cervical cancer prevention resulting in a positive social change. Findings can also promote further research on this topic, considering barriers to cervical cancer screening that Hispanic women face.

Summary

Despite multisectoral efforts, cervical cancer continues to increase among Hispanic women due to multiple factors. Socioeconomic, language barriers, low health literacy, cultural beliefs, and lack of health insurance are the most common health determinants in this population that impact access to cervical cancer screening (National Cancer Institute, 2016). Low cervical cancer screening rates remain among Hispanic women, increasing the need to address this health issue. Cervical cancer morbidity and mortality rates are higher in Hispanic women than other ethnic groups (Valdovinos et al., 2018). The literature review in Chapter 2 discusses diverse findings based on previous research that indicates how health determinants influence access to cervical cancer screening tests and how this can adversely impact Hispanic women's health.

Chapter 2: Literature Review

This chapter summarizes articles about cervical cancer barriers in Hispanic women. The purpose of this mixed method study is to explore factors that influence access to cervical cancer screening in Hispanic women. Articles found included quantitative and qualitative methodology to identify specific factors that impact cervical cancer screening access.

Literature Search Strategy

The literature was obtained from the Walden University library database, including SAGE Journals, Academic Search Premier, CINAHL, ERIC, ProQuest, Science Direct, and PubMed. The database review included articles from medical and nursing journals focused on cervical cancer screening in Hispanic women. The articles are arranged by topic based on barriers identified by researchers to access cervical cancer screening.

Theoretical Framework

Theory of Planned Behavior

The TPB has been implemented in previous research to understand Hispanic women's cervical cancer screening intentions and behaviors (Roncancio et al., 2013; Tullos, 2020). Authors have combined elements from the TPB to determine individuals' attitudes (medical embarrassment), and subjective norms (acculturation). They perceived behavioral control (self-efficacy and health literacy) on cervical cancer screening intentions in Hispanic women living in the United States. Perceived behavioral control was predictive among the English-speaking participants, but cervical cancer screening

self-efficacy fell below the threshold for significance in the final model for Spanish-speaking participants (Tullos, 2020). Moreover, findings suggest that perceived behavioral control was the strongest predictor of intention (Roncancio et al., 2013). Women with higher perceived behavioral control expressed greater intentions to be screened for cervical cancer screening.

Literature Review Related to Key Concepts and Variables

Cultural, Sociodemographic, and Psychological Barriers

Cervical cancer is a health issue that continues to increase in Hispanic women. Researchers expect approximately 19.3 million new cases by 2025 (Cadet et al., 2017; Centers for Disease Control, 2012). Previous research sought to explain how the combination of cultural, emotional, and sociodemographic factors influence Hispanic women's participation in cervical cancer screening (Cadet et al., 2017; Johnson et al., 2020; Ravindranath, 2019). Socioeconomic disparities may reduce cervical cancer screening among underserved women (Zeno et al., 2022). Among sociodemographic factors, the lack of health insurance was the most common that influenced access to cervical cancer screening in Hispanic women (Cadet et al., 2017; Ravindranath, 2019; Szalacha et al., 2017; Zeno et al., 2022). Other sociodemographic factors identified in previous studies that influenced access to cervical cancer screening include low educational level, language proficiency, low-income status, and screening costs (Iluono, 2015; Johnson et al., 2020; Ravindranath, 2019; Szalacha et al., 2017; Zeno et al., 2022). Other barriers to accessing cervical cancer screening include lack of transportation,

taking time off, lack of childcare, no recommendation of health care provider, lack of health insurance, and immigration status (Zeno et al., 2022).

Cultural determinants also influence access to cervical cancer screening in Hispanic women (Cadet et al., 2017; Szalacha et al., 2017). In previous studies, other barriers to accessing cervical cancer screening include poor communication with health care practitioners, which has been identified as a barrier to accessing Pap smear tests in Hispanic women (Szalacha et al., 2017). Psychological barriers found in previous studies to cervical cancer screening were fear due to immigration status, anxiety about finding a positive cancer diagnosis, and past negative experiences with health care providers (Szalacha et al., 2017).

Behaviors to Cervical Cancer Screening

Hispanic women have higher cervical cancer incidence and mortality rates than African American women (Rojas et al., 2017). Those who are sexually active have reported a higher cervical screening than those who were not sexually active, but women who perceived themselves as not having a risk of cervical cancer need particular attention (Rojas et al., 2017). Previous research has also suggested lower validity measuring Pap test among non-White racial-ethnic and non-English speaker groups (Rausher et al., 2008; Higashi et al., 2023). In a sample of Hispanic women and non-Hispanic Black women, participants were confused between "cervical cancer screening" and "test to check for cervical cancer" (Higashi et al., 2023). Most participants preferred to visit a health professional to access cervical cancer screening instead of using a self-sample kit at home.

Adherence to Pap Test Screening

Non-native Hispanics face difficulty accessing healthcare services due to a lack of knowledge of the healthcare system in the United States. Non-native Hispanic women are more likely to be diagnosed with cervical cancer than Hispanic women born in the United States (Gomez et al., 2016; Lai et al., 2017). Barriers reported include costs of screening tests, lack of prioritizing cervical cancer screening, and younger participants were more likely to be overdue for cervical cancer screening due to demographic factors such as marital status, acculturation, and socioeconomic status (Bonhomme, 2020; Hirth et al., 2016; Lai et al., 2017).

Results suggest that participants who perceive cervical cancer is not a threat are more likely to be overdue on Pap testing or postponed cervical cancer screening (Lai et al., 2017; Tung et al., 2016). Another finding is that women with chronic health diseases have lower cervical cancer screening rates due to financial expenditures (Lai et al., 2017). On the other hand, findings indicate that marital status was significantly associated with cervical cancer screening (Hirth et al., 2016 & Flores et al., 2019). Participants who reported being married or living with a partner were more likely to have a Pap test than single women (Hirth et al., 2016).

Additional findings suggest that place of birth, years living in the United States, and place for preventive care were associated with access to Pap smear testing (Bonhomme, 2020). Other factors that influence access to cervical cancer screening were embarrassment reported by the participants, preference for female care providers, and language barriers (Flores et al., 2019).

Lower cervical cancer screening rates occur among older racial and ethnic minority groups with lower socioeconomic status (Galvin et al., 2021). Among social determinants, low health literacy is associated with poorer screening outcomes. Health literacy models include dimensions that may be improved with interventions. The four dimensions mentioned in the literature include: access and obtain, understand, process, and appraise, and apply and use relevant information (Sørensen et al., 2012; Galvin et al., 2021).

Galvin et al. (2021) conducted a study to identify the associations of three health literacy domains (accessing, understanding, and appraising) with cervical cancer guideline adherence, representing applying in the health literacy domain. The authors classified participants who found difficulty in understanding and following cervical cancer screening as non-adherence and those who reported understanding, appraising, and applying as adherence (Galvin et al., 2021). Despite that, the majority of the sample, 71%, reported adherence to the cervical cancer screening guidelines; older participants (50-59 years old group) or without health insurance were more likely to be non-adherent (Galvin et al., 2021). Socioeconomic and demographic covariates included difficulty understanding health information, lower cervical cancer knowledge, and less worry about cervical cancer, which uniquely contributed to non-adherence. Based on the study's results, there was a significant association between understanding cervical cancer knowledge and ease of understanding cervical cancer screening information with screening adherence (Galvin et al., 2021).

Health Literacy

Individuals with low health literacy are less likely to access healthcare services (Flores et al., 2019). Hispanic women are an ethnic group that reflects high rates of low health literacy compared to other ethnic groups having an increased risk of cervical cancer has, as a consequence, poorer screening outcomes (Flores et al., 2019). A study observed in Texas revealed that 20% of Hispanic women with stage IV cervical cancer diagnosis had never had Pap cytology testing, compared to 3% of women giving at a similar disease stage (Carmack et al., 2022).

Social determinants of health (SDH) are related to cervical cancer morbidity and mortality. Social determinants of health include age, ethnic group and race, education level, geographic area, health inequity, and socially disadvantaged groups (Carmack et al., 2022). African American and Hispanic women show a higher incidence of a late-stage cancer diagnosis than non-Hispanic White women (Texas Cancer Registry, 2021; Carmack et al., 2022).

Previous studies suggested that health literacy may influence cervical cancer screening among underserved women (Carmack et al., 2022). Disparities in accessing cervical cancer screening can be due to a lack of knowledge among minority groups. The authors identified three cases related to cervical cancer prevention: up-to-date Pap smear testing, HPV vaccination status, and ethnicity. The results revealed that adherence to cervical cancer screening and HPV vaccination constituted the smallest sample of the participants. Those who reported that they did not adhere to cervical cancer screening

prevention constituted one-third of the participants which was a cause of concern (Carmack et al., 2022).

On the other hand, Flores et al. (2019) explored older Mexican American women's health literacy-related cervical cancer screening. Individuals with low health literacy are less likely to access health care services. (Flores et al., 2019). The authors collected the qualitative data through focus groups. According to the participants' responses, marital status was a barrier to accessing cervical cancer screening; women reported that caring for family members put them first, and husbands might not approve of Pap smear procedures. Other factors influencing access to cervical cancer screening were participants' reported embarrassment, preference for female care providers, and language barriers (Flores et al., 2019). The authors concluded that further research is needed to address the specific needs of Mexican American women, generational gaps, and the inclusion of men (Flores et al., 2019).

Family Role in Cervical Cancer Screening

Family can play a vital role in accessing cervical cancer screening in Hispanic women. Previous studies indicated that Hispanic women prioritized their family's needs over their health concerns (Madhivanan et al., 2015, Read et al., 2020). Male partners may influence women's healthcare decisions, affecting their adherence to cancer screening (Read et al., 2020). Previous research findings reported fear of openly discussing cancer and diminished family support as a barrier to accessing cervical cancer screening (Madhivanan et al., 2015; Read et al., 2020). However, younger women reported an independent perception of healthcare decision-making. The findings showed

that most participants had heard about the Pap Smear test; however, there were

misconceptions about cervical cancer screening, and they did not know its origin. Also,

misconceptions about cervical cancer and the timing of cervical cancer screening were

found (Read et al., 2020).

Structural Barriers to Access Cervical Cancer Test

Structural barriers can include the lack of transportation, health insurance,

childcare, time, and financial resources for health treatment (Adunlin et al., 2019;

Akinlotan et al., 2017; Chen et al., 2018; Mojica et al., 2017). Previous studies' findings

suggested that respondents who reported structural barriers such as socioeconomic status

and lack of health insurance were less likely to be compliant with cervical cancer

screening. Another structural barrier identified by previous studies was the lack of

healthcare center facilities (Adunlin et al., 2019; Akinlotan et al., 2017; Chen et al.,

2018).

Previous research reported that Hispanic women facing sociodemographic

disparities, low acculturation, and lack of health insurance represent a high-risk

population being less likely to access healthcare services (Adunlin et al., 2019; Akinlotan

et al., 2017; Chen et al., 2018). Immigrants also expressed a lack of trust in healthcare

systems and institutions. Lack of community healthcare centers and inability to travel

were the most common barriers identified among immigrants who reside in remote places

(Adunlin et al., 2019).

Mojica et al. (2017) study found that more insured women faced out-of-pocket

costs compared with uninsured women, including co-pays causing a barrier to seeking

healthcare services. Many of the participants referred to the healthcare clinics did not attend more visits because they could not afford to make more payments on an existing balance (Mojica et al., 2017). Also, findings revealed that having one healthcare source did not predict cancer screening among the participants (Mojica et al., 2017).

Documentation Status to Access Cervical Cancer

Undocumented Hispanic women are likely to underuse cancer screening tests (Guerrero et al., 2016). Undocumented Mexican migrants have a higher risk of cancer late diagnosis than documented migrants (Guerrero et al., 2016). Approximately one-third of Mexican migrants participate in circulating migration, which can hinder access to a cancer screening test in Hispanic women (Guerrero et al., 2016). According to Guerrero et al. (2016), there is a higher percentage of Pap test receipts among documented migrants than among undocumented migrants. Factors influencing migrant women to access cancer screening tests may rely on pregnancy status, prenatal care, the difference in services cost, perception of discomfort, and invasiveness of the procedures (Guerrero et al., 2016). The level of acculturation and healthcare insurance was not significant in receiving cervical cancer or breast cancer screening due to a small sample (Guerrero et al., 2016).

Despite resources invested through federal funded programs to provide health care to uninsured women, there still exists a knowledge gap in cervical cancer guidelines in documented Hispanic women (Mehta et al., 2021). Cervical cancer screening access is less likely in uninsured undocumented Hispanic women than in other residents in the United States (Nikolaides, 2016; Mehta et al., 2021). Mehta et al. (2021) conducted a

study to determine the knowledge about cervical cancer screening and identify barriers to accessing cervical cancer screening in documented and undocumented Hispanic women.

Mehta et al. (2021) studied uninsured and undocumented Hispanic women seeking health care services in a free clinic in Rhode Island. The study variables included knowledge, demographics, barriers, and health practices (Mehta et al., 2021). Most respondents were Spanish speakers, and undocumented women were significantly younger than documented women. Also, over half reported practicing Catholicism, and 33% reported having an elementary school education only (Mehta et al., 2021). According to the authors, 62% of the undocumented felt that documentation status was a barrier to accessing cervical cancer screening. A total of 64% of the undocumented women reported not having health insurance, another barrier identified by the researchers (Mehta et al., 2021). On the other side, 71% of the documented women reported that cervical cancer screening was unnecessary if they had never had sexual intercourse (Mehta et al., 2021).

Perceived Barriers to Access Cervical Cancer Screening

Immigrant women identified costs and difficulties of transportation, childcare, and income loss due to taking time off from work to attend medical appointments (Ferdous et al., 2018). Previous research findings suggested that immigrants reported long waiting times in healthcare facilities and a lack of communication with physicians to explain the procedure and address their concerns regarding cervical cancer prevention (Ferdous et al., 2018). Other barriers reported are lack of time, limited office time, and being too busy to attend appointments (Marlow, et al., 2015).

The study findings by Ferdous et al. (2018) suggested that low socioeconomic status was considered a significant barrier by immigrant women despite public healthcare services. Meanwhile, healthcare providers identified low-income and residing in low-income areas as major barriers to accessing cervical cancer screening among immigrants in Canada (Ferdous et al., 2018). Healthcare providers reported that changing addresses and telephone numbers makes contacting patients to attend screening appointments difficult. Stakeholders identified costs, loss of time, wages, and the lack of incentives for primary healthcare practitioners to provide cervical cancer screening as barriers to accessing cervical cancer screening in immigrants (Ferdous et al., 2018).

Disruption to access healthcare due to the COVID-19 pandemic led to decreased cervical cancer screening by 84% in 2020 (DeGroff et al., 2020; Parker et al., 2022). Before the pandemic ethnic minority groups were less likely to be screened compared to non-Hispanic white ethnical groups (Parker et al., 2022). These populations are experiencing higher rates of cervical cancer and other chronic illnesses than before the pandemic and now face widening health disparities due to COVID-19. Barriers to cervical cancer screening identified include limited knowledge, costs, time, and lack of childcare. Lastly, COVID-19 has been introduced as an additional barrier, including fear of contracting the virus and lack of medical appointments in healthcare centers (Parker et al., 2022).

Parker et al. (2022) evaluated a trial of self-testing cervical cancer from participants in the trial program. The trial was developed in a safety net health system, Harris Health System, that was constituted of 54.1% Hispanic/Latino, 25.9%

Black/African American, 11.3% non-Hispanic White, and 8.7% Asian or other (Harris Health System, 2021; Parker et al., 2022). The barriers to accessing cervical cancer screening reported by the participants included: being uncomfortable with a male practitioner (67.8%), getting a Pap smear is embarrassing (52.4%), and getting a Pap smear is uncomfortable (67.8%) when comparing answers between ethnic groups the Spanish-speakers reported significantly higher than other ethnic groups (Parker et al., 2022). Most participants (59.2%) who returned the HPV sample kit reported that the reason for participating in the trial was the COVID-19 pandemic (Parker et al., 2022). The other reasons to participate in the trial were fear of getting COVID-19 (41.3%), difficulty in getting an appointment (21.7%), and having an easier time completing the sample at home (12%). Finally, most participants found the self-sample kit more convenient and less stressful than visiting a healthcare clinic (Parker et al., 2021).

Summary

The literature review identified diverse barriers to cervical cancer screening in Hispanic women. Cultural, psychological, socioeconomic, structural, documentation status, and behavioral barriers have been identified as determinants influencing Hispanic women's access to cervical cancer screening. Most researchers concluded that further research is needed to identify an in-depth insight or other factors that may influence cervical cancer screening in the target population. Every study presents a different approach, including theoretical frameworks or models used to explore this phenomenon and explain perspectives from the participants.

Chapter 3: Research Method

This mixed-method study was conducted to explore barriers perceived among Hispanic foreign-born women to access cervical cancer screening. This chapter will discuss the research design, methodology, rationale of the study, population, sampling, procedures to recruit the participants, description of instruments used to collect the data, and how the data were analyzed, as well as issues of trustworthiness to address the validity of the study.

Research Design and Rationale

This study is a mixed-method design. The mixed-method methodology integrates qualitative and quantitative data in a research study (Cresswell & Cresswell, 2018). Purposeful data integration permits researchers to view phenomena from different perspectives and through diverse research lenses (Shorten & Smith, 2017). The mixed-method methodology's premise is that integrating both methods allow complete and synergistic data utilization (Wisdom & Cresswell, 2013). The mixed methods design also gives a voice to study participants and guarantees that findings are based on participants' experiences (Wisdom & Cresswell, 2013). Mixed method methodology may enrich the experiences of researchers as different perspectives illuminate the issues being studied (Shorten & Smith, 2017). This approach provided a comprehensive knowledge of the participants' point of view regarding cervical cancer screening and how this can influence their testing participation.

An explanatory sequential mixed method design was used for the study's purpose. Exploratory sequential mixed-method has a two-phase research design where quantitative

data are initially collected and used to identify the qualitative data to be collected

(DeCuir-Gunby & Schutz, 2017). The rationale of this approach is that quantitative data

results can contribute to identifying an association of the study's variables. Qualitative

data collection is needed to refine, extend, and explain a specific phenomenon (Subedi,

2016). Mixed methods are used to converge, clarify, and illustrate the results from

quantitative and qualitative methods (Schoonenboom & Johnson, 2017).

Role of the Researcher

An exploratory, sequential, mixed method may lead the researcher to identify

practical guidelines to make the right and prompt decisions during the research process

(Subedi, 2016). Reflexibility and rigor are essential to conducting ethical and valid data

analysis processes (Ravitch & Carl, 2016). The researcher's role entails engaging in the

context of the complexity of the individuals' lives and ambiance (Ravitch & Carl, 2016).

It is essential to consider an interview location free from distractions, making the

participants feel physically and emotionally comfortable (Ravitch & Carl, 2016). A

reflexive journal documents the research process, including information to recruit

participants. Reflexive journaling is a process where the researcher reflects on the study's

development and outcome, helping to create self-awareness and maintain credibility

(Kross & Giust, 2019).

Procedures and guidelines established by the IRB were followed to guarantee the

participants' confidentiality. After IRB approval (approval no. 11-15-21-0667000), I

recruited individuals to complete the surveys and participate in the individual interview.

Once the data were collected, the data analysis were performed.

Methodology

Sampling and Sampling Procedures

A priori power analysis was conducted using G*Power version 3.1.9.2. The power size used was .50, with a significance criterion of α = 0.05 and power = .80 the sample minimum needed with the effect size is *N* = 39 for a chi-square test to determine the association between the dependent variable number of visits to healthcare and the independent variable time living in the United States. To calculate the sample needed for a binary logistic test to determine if there is an association between the number of visits to their doctor and time living in the United States, a priori power analysis was performed using G*Power version 3.1.9.2. The power size used was Power (1-β err prob) = 0.80, α err prob = 0.05 with the effect size *N* = 52.

The recruitment process was through community groups on a social media website, churches, hair salons, health fairs, and participant referrals. Flyers with the study's information, requirements, and contact were posted on a social media website in community places and community groups. The announcements and flyers included the topic of the study, participation requirements, and contact information to ask questions.

Purposeful sampling was conducted to recruit the participants who met the criteria. There are no clear guidelines for conducting purposeful sampling in mixed-method research, but selecting individuals who experienced the phenomenon of interest can provide rich data to gain an in-depth understanding of the topic of the study (Palinkas et al., 2013). After the recruitment process, 88 participants completed the survey to collect quantitative data, and 10 individuals participated in individual interviews to gather

the qualitative component of this study. A stipend was provided for participating in this study.

Data Collection Method

The data collection was conducted in two steps. The first step was quantitative data collection through self-administered surveys. A consent form was provided explaining the purpose of the study, the confidentiality of the data provided, and the benefits and risks of participating in this study. After collecting the quantitative data, I used community groups on social media to recruit participants to participate in individual interviews. Additionally, some participants were referred by other individuals to complete the surveys. Informed consent was provided, explaining the study's criteria and confidentiality. The surveys were conducted anonymously. A number was provided for each participant as identification for data analysis purposes.

The second phase of this study was qualitative data collection. Announcements and flyers were posted in community groups on social media, local markets, and churches. Some participants were also referred from other participants. Interviews were conducted in their spoken language Spanish. Informed consent was provided, explaining the study's purpose, the participation criteria, and confidentiality. Before beginning the interviews, the interviewees were reminded that the interviews would be recorded and transcribed for analysis purposes. The interviews included seven open questions that led the participants to share their experiences accessing cervical cancer screening. The interviewees who participated signed their consent and agreed to record the interviews.

Instrumentation

The instruments were validated by a research expert and two experts from the field for validity purposes. A self-administered survey was used to collect the quantitative data. The survey included 19 closed-ended questions developed by me, allowing the participants to include sociodemographic data for analysis purposes. The survey was written in English and Spanish for the participants' convenience. Seven open questions were written for qualitative data collection to gain in-depth knowledge of the participants' experience accessing cervical cancer screening. The interviews were conducted using the participants' preferred language.

Data Analysis

IBM SPSS (Version 28) statistical software was used to analyze the quantitative data. A total of 88 participants completed the survey, and 84 surveys were used for data analysis. The survey consisted of 18 closed questions. A descriptive analysis was performed to analyze demographic data such as age, marital status, number of children, time living in the United States, language spoken, health insurance status, and number of visits to their primary doctor.

Previous research used visits to health care providers to determine access to cervical cancer screening among the participants (Rojas et al., 2017). For analysis purposes, a binomial logistical regression was performed using the number of visits to healthcare practitioners as a dependent variable, and independent variables were how often they get tested, the language spoken, the last time cervical screening (was tested), and missing medical appointments. The last time receiving cervical cancer screening was

used to determine predictors between the dependent and independent variables. The dependent variable included the different values taking into consideration participants who visit healthcare facilities often during the year due to existing health issues. The following categories were used to consider if the participants had access or minimal access to health care facilities: 1-3 times per year, 4-6 times per year, 7-9 times per year, 10 or more times per year, and I never visit my primary doctor or clinic. For analysis purposes, the number of visits was narrowed to 1-3 times per year and 4 or more. The category "I never visit my primary doctor or clinic" was excluded from the analysis. Only four participants answered that they "never visited" their primary doctor, which was not statistically significant.

I listened to the interview recordings and created the transcripts. Then interview transcripts were reviewed and emailed to the interviewees for revision. Once the participants reviewed the transcripts and agreed with the content, I continued translating the interviews from Spanish to English to precoding and coding to classify the qualitative data for analysis. NVivo (Version 12) software was used for qualitative analysis purposes.

Threats to Validity

Validity means how researchers can sustain study findings by precisely relying on participants' experiences (Ravitch & Carl, 2016). The validity can contribute to data accuracy by providing precise results that portray participants' reality (Noble & Smith, 2015). The survey and interview questions were reviewed by two experts in the field and

one in the research field. Interview transcripts were sent to the interviewees for validation purposes. Participants agreed with the transcripts.

Issues of Trustworthiness

Trustworthiness in qualitative research pursues to address credibility, transferability, dependability, and confirmability (Shenton, 2004). The purpose of a mixed-methods design is to combine methodological strategies that ensure the trustworthiness of the study results (Noble & Smith, 2015). The participants reviewed and agreed to the interview transcripts to avoid confidentiality concerns.

Ethical Considerations

This study was approved by Walden University IRB following their recommendations and guidelines. The surveys and interviews were conducted respectfully, using appropriate language that participants may understand and feel comfortable with. The interview transcripts and recordings are locked cabinet to maintain participants' confidentiality. Collected data has been stored in password-protected electronic files to ensure confidentiality. I will keep the files following Walden University IRB guidelines for 5 years.

Summary

The methodology chapter included steps that will be taken to proceed with the study. As a researcher, it is essential to specify how the data were collected. The description of the researcher's role, instrumentation, and validation can guide how the research was conducted.

Chapter 4: Results

This mixed-method study focused on perceived barriers and self-efficacy-related factors to cervical cancer screening in foreign-born Hispanic women. A validated instrument used to collect the data was a self-administered survey. The survey included 19 closed-ended questions, including demographic data for analysis. IBM SPSS (Version 28) was the software used to perform the statistical tests. The survey questions were recategorized for analysis purposes. A total of 88 individuals participated in this study, and 84 were included for statistical analysis. A descriptive statistical test was performed to analyze demographic factors in the participants. This chapter will discuss the analysis of the data and the results.

Descriptive Analysis

Age groups were labeled 25-44 and 45 or more (see Table 1). Most were 45 or more (53.6%). Marital status was labeled as "currently married," "formerly married," and "not married." A total of 29 participants were currently married (34.5%), and 33 (39.3%) participants were formerly married. Most participants 62 (73.8%) have children. A total of 40 (47.6%) participants are from Puerto Rico, 16 (9.0%) are from the Dominican Republic, and 28 (33.3%) are from other countries, which included Mexico, Cuba, Central, and South America. Most participants had spent between 0–5 years in the United States 31 (36.9%) and 6–10 years 28 (33.3%). Language spoken at home was a mix of Spanish and both Spanish and English. Most 69 (82.1%) participants reported working, and 53 (63.1%) participants reported that their employer-provided health insurance.

Table 1

Demographic Characteristics

		N	%
Age	25-44	39	46.4%
	45 or more	45	53.6%
Marital status	Currently Married	29	34.5%
	Formerly Married	33	39.3%
	Not Married	22	26.2%
Children	No Children	22	26.2%
	1 child or more children	62	73.8%
County of origin	Puerto Rico	40	47.6%
	Dominican Republic	16	19.0%
	Other	28	33.3%
Time in United States	0-5 years	31	36.9%
	6-10 years	28	33.3%
	11 years or more	25	29.8%
Language spoken at home	Spanish	47	56.0%
	English	3	3.6%
	Both	34	40.5%
Working status	Yes	69	82.1%
	No	15	17.9%
Employer provides health insurance	Yes	53	63.1%
	No	31	36.9%
Public health insurance	Yes	14	16.7%
	No	70	83.3%
Language spoken in doctor visits	Spanish	52	61.9%
	English	2	2.4%
	Does not matter	30	35.7%

Data Collection and Analysis

Qualitative data were collected through individual interviews. Participants were recruited through social media and referrals from other participants. Interviews were scheduled at the participants' convenience. Interviews average between 25-35 minutes. Interviewees agreed to be recorded, and transcripts were emailed for validity purposes. A total of 10 individuals participated in the individual interviews. Ten open questions were asked to examine the participants' experiences regarding cervical cancer screening.

Participants' responses varied. Probe questions were asked to clarify the meaning of

answers provided by the interviewees.

A priori codes were identified after reviewing the interview transcripts. Codes

were refined. When reviewing codes, category labels were created that captured the data

provided by the interviewees. Excerpts were used to identify relevant concepts or

information provided by the participants (see Saldaña & Saldaña, 2012). Excerpts were

quoted using textual data provided based on previous experiences and thoughts. Themes

are summary statements, causal explanations, or conclusions (Saldaña & Saldaña, 2012).

The themes were built from collective meaning from codes and categories that

summarized interviewees' data (see Saldaña & Saldaña, 2012). Themes aligned to

Research Question 1 showed discrepancies. Some participants indicated having a good

experience with health insurance, whereas others emphasized the costs and referral

system. Meanwhile, one of the participants shared having a "horrible" experience due to

a lack of communication.

Results

A binary logistic regression analysis was conducted to investigate if the language

spoken, time living in the United States, missing medical appointments, frequency of

cervical cancer screening, and last time screened minimize the access to cervical cancer

screening. The outcome of interest was the number of visits per year to the health care

provider. Variable values were narrowed due to the sample amount and participants'

responses. The possible predictor variables were language spoken during doctor visits,

how often they get tested (Pap smear), the last time received cervical cancer screening, missing appointments, and the time living in the United States.

A total of 84 respondents were included in this analysis. The dependent variable encoding shows the coding for the coding criteria variable. For this analysis, the dependent variable is the number of visits to the health care provider per year. The value 0 was used for those cases who visit their healthcare provider one to three times per year, and the value 1 represents those who visit four times or more per year.

The Hosmer-Lemeshow goodness of fit was not significant ($p > .05$), indicating the model is correctly specified. In addition, (-2 log Likelihood =109.878 and the Nagelkerke R squared .75). The model resulted in the independent variables (language spoken, time living in the United States, missing medical appointments, frequency of cervical cancer screening, and last time screened being factors that predict access to cervical cancer screening), not significant ($p > .05$).

Table 2

Classification Table

			Predicted		
				Visits	
	Observed		1-3 times per year	4 times or more per year	Percentage Correct
Step 1	Visits	1-3 times per year	34	14	70.8
		4 times or more per year	20	16	44.4
	Overall Percentage				59.5

Table 3

Variables in the Equation

| | B | SE | Wald | Df | Sig. | Exp(B) | 95% CI for EXP(B) | |
							Lower	Upper
Language spoken doctor visits	.038	.242	.025	1	.875	1.039	.646	1.670
Last time cervical cancer screening	-.432	.414	1.085	1	.297	.649	.288	1.463
How often get tested (Pap smear)	-.219	.358	.373	1	.542	.804	.398	1.621
Missing medical appointments	.455	.255	3.187	1	.074	1.577	.956	2.600
Constant	-.045	.861	.003	1	.958	.956		

A chi-square was performed to assess if there was a relationship between time living in the United States and access to cervical cancer screening. The IBM SPSS (Version 28) statistical program produced a crosstabulation table to show the distribution of time living in the United States and visits to health care practitioners. The results showed no significant relationship between the time living in the United States and the visits to health care practitioners $\chi2(2, N = 84) = 5.54, p = 0.063$. Participants who have been living 6-10 years in the United States were more likely to visit the health care practitioners than those living 0-5 years and those living 11 years or more.

Table 4

Time Living in United States Crosstabulation

| | | Time living in USA | | | | | | Total | |
| | | 0-5 years | | 6-10 years | | 11 years or more | | | |
		N	%	N	%	N	%	N	%
Visits	1-3 times per year	20	64.5%	11	39.3%	17	68.0%	48	57.1%

4 times or more per year	11	35.5%	17	60.7%	8	32.0%	36	42.9%
Total	31	100.0%	28	100.0%	25	100.0%	84	100.0%

Table 5

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.537	2	.063
Likelihood Ratio	5.540	2	.063
Linear-by-Linear Association	.013	1	.908
N of Valid Cases	84		

Regarding experience receiving gynecological services, the participants shared their experiences as "good" or "pleasant." Participants described their gynecological services as good. A participant indicated, "I had a doctor who spoke Spanish because my English is not very good." Another participant stated that due to past negative experiences with male doctors, "I feel more comfortable with women doctors." Interviewees stated that they had not experienced difficulties accessing gynecological services. Participants shared their thoughts about cervical cancer screening as "good" or "necessary" to prevent cancer. One participant stated, "it is very good at catching cancer early, but it is a little stressful and sometimes painful," and "I have met people who have not been to the gynecologist in years because they are terrified of him." One participant stated that they accessed the cancer screening test last summer after seven years. "The

only thing I could say is that the first time I had this test was in 2015, and they told me that I had to wait five years to perform the next test; that seemed to me that maybe five years was a long time."

Overall, interviewees indicated they always ask questions about treatment and procedures when visiting healthcare practitioners, as shown in Table 7. The code identified was "ask questions," and the labeled category was self-efficacy. An interview question asked if they contacted healthcare providers for Pap test results. As shown in Table 8, most participants indicated they were waiting for health care providers to contact them, others used an online application to see the test results, and one participant stated that she contacted her healthcare provider to discuss the results.

Table 6

Alignment of Codes, Categories, Excerpts, and Themes to Research Question 1

Research Question	Code	Category	Participants Identifier	Excerpts	Themes
RQ 1	Health Insurance	Experience	P.9	"I don't have any bad experiences."	Theme 1: Experience with health insurance.
			P. 1	"My experience with my health insurance, in general, has been good, sometimes the cost of services."	
			P.7	"Horrible. They never understand what I want to tell them."	Theme 2: Communication
RQ 1		Subcategory Cost of services	P.5	"I haven't had a bad experience. When you have a problem or some surgery, they ask you for a separate deposit, and then the hospital	Theme 3: Coverage of health services

				"asks you for another deposit."	
			P. 8	"As my health insurance, I have not had any experience such that it does not cover something, the only thing I cannot select the doctor I like."	Theme 4: Preferred healthcare providers selection
RQ 1	Gynecological Services	Experience	P.1	"My experience has been good."	Theme 5: Screening experience
			P.3	"I could say the last experience I had a few months ago was possibly the best experience I have ever had."	
			P.6	"At least I have done well; my experiences have been pleasant."	
			P.5	"I almost always look for women. I feel more comfortable with female doctors."	Theme 6: Female Gynecologist Doctors Preference

Table 7

Alignment of Codes, Categories, Excerpts, and Themes to Research Questions 2

Research Questions	Code	Category	Participants Identifier	Excerpts	Theme
RQ 2	Ask Questions	Self-efficacy	P.3	"I always ask."	Theme 7: Ask about treatment
			P.4	"Well, yes. I ask what they are going to do to me."	
			P.5	"Yes, I always ask him."	

Table 8

Alignment of Codes, Categories, Excerpts, and Themes to Research Question 3

Research Question	Codes	Category	Participants Identifier	Excerpts	Themes
RQ3	Results	Contact	P.2	"I contact him."	Theme 8: Follow up
			P.5	"They usually contact me."	
			P.8	"I do not call them; they call me."	
			P.7	"They will call me and read the results for me."	
			P.10	"I wait for them to call me."	
RQ 3	Cervical Cancer Screening	Thoughts	P. 1	"I think it is necessary for all women."	Theme 9: Screening is necessary
			P.4	"I find it a very necessary test to do."	
			P.6	"That should be done annually. It is a process for prevention."	
			P.3	"I went the second time a few months ago after seven years, and I thought that in 7 years, many things could change."	
			P.5	"Women should know how important it is to get a Pap test."	

Evidence of Trustworthiness

The data collection instruments were sent to three field experts for validation

purposes. The data collection instruments were modified based on the experts'

recommendations. After following the experts' recommendations, I proceeded with the

participants' recruitment. Recruitment was made through social media community pages

uploading a flyer in English and Spanish with the study's information to contact me. I

continued the recruitment process through community stores, places, churches, and a health fair. Some participants were recruited by other participants' referrals.

I answered questions related to the study and explained the confidentiality procedures to guarantee participants' confidentiality. Informed consent and surveys were provided in English and Spanish. Surveys were administered with confidentiality, there was no space provided to write any information that could identify the participants. I assigned a number per survey to enter their responses into the IBM SPSS Version 28 software program to analyze the data collected. The survey consisted of 18 closed questions to gather sociodemographic data and identify whether participants had access to cervical cancer screening.

Individual interviewees signed an informed consent explaining that the interview would be recorded for research purposes. I created a questions guide using the qualitative research questions. The purpose of these questions was to explore participants' experiences with accessing cervical cancer screening services. Individual interviews were recorded, and a transcript was created identifying the participants by number. After completing the interview transcripts, these were sent to the participants by email, and confirmed their agreement by replying to the email. Transcripts and recordings were used to collect qualitative data that led to answering research questions. I worked with precoding first and continued to identify codes, categories, subcategories, and themes based on the participants' responses. Codes were classified by research questions using the answers provided.

Summary

The results suggest that the participants visit their medical providers yearly. However, they do not necessarily receive cervical cancer during these visits. Most of the participants in the survey are Spanish speakers who have 5 years or less of living in the United States and prefer receiving medical services in their native language. The binary logistic regression indicates that the independent variables were not significant. The chi-square test revealed a non-significant relation between living in the United States and visiting healthcare practitioners.

After reviewing interview recordings, transcripts were created to identify codes, categories, and themes based on interviewees' responses. Interviewees concurred that cervical cancer screening is important to prevent cervical cancer. They also stated "not having difficulties accessing cervical cancer screening services." Some participants shared thoughts about healthcare services emphasizing the costs of services, problems with the referral system, preferred female physicians, and lack of communication with healthcare providers. Codes included health insurance; the category identified was "experience" and a subcategory "cost of services." Most participants shared having a good experience with health insurance; however, some emphasized extra costs or copays to access healthcare services.

Another code found was "ask questions," and the category identified as "self-efficacy" Participants shared that they ask questions about medical procedures and treatment when visiting healthcare practitioners. The interviews included questions about interviewees' experiences accessing gynecological services. The code identified as

"gynecological services," In the category "experience," participants shared having a good experience receiving cervical cancer screening. Regarding receiving the Pap smear results, the code identified was "results" and category "contact"; most of the participants indicated that they waited to be called or received results through an online application. Finally, participants shared their thoughts about cervical cancer screening, a code identified as "cervical cancer screening," and category "thoughts." All participants shared that a Pap smear test is necessary to prevent cervical cancer.

Chapter 5: Discussion, Conclusions, and Recommendations

This mixed-method study was conducted to determine perceived barriers to accessing cervical cancer screening in foreign-born Hispanic women in Polk County, Florida. This chapter will discuss the findings related to the literature on cervical cancer screening in Hispanic women. The results consist of two parts based on research questions. Research questions were divided into quantitative and qualitative for data analysis purposes. This chapter includes limitations of the study, recommendations, and a conclusion.

Interpretation of the Findings

The study data collection and analysis were divided into two parts. Research questions consisted of quantitative questions to determine factors that influence access to healthcare practitioner visits. The research questions were divided into quantitative and qualitative for data analysis purposes. For quantitative data collection, 84 participants completed a self-administered survey. A different group of 10 individuals participated in the individual interviews. Interviewees were recorded for data analysis purposes.

Quantitative Questions

Research Question 1: What Socioeconomic Factors are Associated with Cervical Cancer Screening in Foreign-Born Hispanic Women?

Previous studies found that sociodemographic factors such as age, marital status, health care provider, and health insurance influence access to cervical cancer screening in Hispanic women (Rivandranath, 2019). This study survey asked about sociodemographic factors for data analysis purposes, including age, marital status, number of children,

working status, health insurance status, and spoken language. A binomial logistical regression was performed using a dependent variable number of visits per year to a healthcare practitioner. The number of visits was 1-3 times per year, 4-6 times per year, 7-9 times per year, 10 or more times per year, and "I never visit my primary doctor or clinic." For analysis purposes, the number of visits was narrowed to 1-3 times per year and 4 or more. A total of 88 individuals completed the survey; however, only 84 were used for analysis purposes. Four surveys that were not included, individuals reported, "I never visit my primary doctor or clinic," which was not representative compared with the rest of the responses. The independent variables studied for analysis were language spoken, how often they get tested (Pap smear), time living in the United States, last time receiving cervical cancer screening, and missing medical appointments. The results suggest that there is no significant relation between the dependent variable and the independent variables.

Research Question 2: Is There an Association Between Time Living in the United States and Cervical Cancer Screening in Foreign-Born Hispanic Women?

The data analyzed indicated that 36.9% of the participants who participated in the survey lived 5 years or less in the United States. Previous research identified that acculturation over time increases the likelihood of immigrant women accessing breast and cervical cancer screening services (Adunlin et al., 2019). A chi-square test was performed to answer Research Question 2. The chi-square analysis suggested a non-significant association between the time living in the United States and the visits to the

health care practitioner. The results reflected those participants living 6–10 years in the United States were more likely to access health care visits.

Qualitative Questions

Research Question 1 What are the Perceived Barrier to Cervical Cancer Screening in Foreign-Born Hispanic Women?

Previous research findings suggested that participants expressed negative feelings about cancer screening tests complaining about pain, fear, poor communication with healthcare providers, and discomfort associated with Pap Smear (Szalacha et al., 2017). Another study indicated that Hispanic women reported language barriers at 37% and male physicians at 26% (Akilontan et al., 2017). In this study, the participants' responses were diverse. Most interviewees concurred that copayments and medical costs were expensive. Interviewees indicated that experiences accessing cervical cancer screening were overall "good." A participant emphasized the lack of communication with the healthcare provider as "horrible" and that this test can be "uncomfortable and stressful for many women."

On the other hand, a participant indicated that she prefers a female gynecologist due to negative experiences with male providers due to a lack of communication or empathy. The referral system was difficult for a participant stating, "I can select the doctor that I like." Having a gynecologist who speaks Spanish was a factor in accessing the cervical cancer screening because she stated that she "does not speak English very well."

The themes aligned with Research Question 1 are diverse. Although most participants shared having a "good experience," others shared other factors, such as the costs of the health services and communication issues that make it difficult to access health services. Regarding experience receiving gynecological services, most of the participants indicated they had a "good" experience. However, one participant stated that female doctors prefer male doctors due to previous negative experiences.

Research Question 3: What Behaviors are Associated with Cervical Cancer Screening in Foreign-Born Hispanic Women?

The participants agreed about the importance of accessing cervical cancer screening to prevent cancer or a late diagnosis. Behaviors can be related to educational background, income, culture, age, and ethnicity (Ferdous et al., 2018). Participants did not show risk behaviors overall. They shared the importance of accessing cervical cancer screening for prevention. Themes aligned with Research Question 3 include follow up and screening is necessary for cervical cancer screening. The interviewees shared that cervical cancer screening is necessary to prevent a cancer diagnosis.

Implications for Theory and Research

The TPB has been applied to this study to determine factors influencing access to cervical cancer screening in Hispanic women. The TPB was developed to explain individuals' behaviors. This theory posits that behavior is directly determined by an individual's intentions and perceived behavioral control (Worthington, 2021). Perceived behavioral control includes self-efficacy, which intends to explain an individual's beliefs about performing a specific behavior and intentions that attempts to predict an

individual's attitude, subjective norms, and perceived behavioral control (Worthington, 2021).

Based on the data analyzed, the results suggest that participants show behavioral intentions in accessing cervical cancer screening and attitudes toward accessing cervical cancer screening tests regularly. When indicating that cervical cancer screening is "necessary," the participants show subjective norm and perceived behavioral control identifying health care providers that can provide cervical cancer screening or requesting a referral from primary care providers to perform a Pap smear test.

Limitations

Limitations encountered in this study were varied. The first limitation was the sample size. The sample size for quantitative analysis was 84 individuals showing homogeneity of participants' responses. Another limitation of this study was the homogeneity of survey and interview responses. Homogeneity in responses can be related to social desirability bias. Social desirability bias can occur in quantitative and qualitative research. Social desirability bias can be defined as the tendency of a study participant to present themselves or their social context in a socially acceptable way but not necessarily corresponding to the participants' reality (Bispo, 2022). The survey did not include the level of education, income, and immigration status questions, which can influence cervical cancer screening. Immigration status was included in a previous study having a moderate self-response which was found as a limitation (Guerrero et al., 2016). Lastly, a limitation was data collected from a specific area.

Recommendations

Recommendations for further research include comparing areas that show more diversity and trends in the Hispanic population. Perhaps using a larger sample from different cities and rural regions can reveal other tendencies about Hispanic women's perceptions and factors that influence access to cervical cancer screening. Another sampling method and data collection, such as focus groups, may generate different insights from Hispanic women allowing them to express the participants' point of view in an open discussion about cervical cancer screening (Rubin & Rubin, 2012). Also including health care practitioners in further research can be beneficial in exploring their experiences working with Hispanic women. Self-efficacy interventions with professionals in their native language will be beneficial to Hispanic women to continue increasing awareness of the importance of accessing cervical cancer screening.

Conclusions

The purpose of this study was to provide in-depth insight into Hispanic women's experiences and barriers to accessing cervical cancer screening in Polk County. The mixed methodology helped to integrate the quantitative and qualitative methods to provide participants' insights based on previous experiences (Shorten & Smith, 2017). Previous studies identified different barriers to accessing cervical cancer screening might continue due to diverse factors mentioned in this study that must be addressed. Barriers to accessing cervical cancer screening identified in previous studies include health care access, health literacy, health services costs, and socioeconomic status (Iluono, 2015; Johnson et al., 2020; Ravindranath, 2019; Szalacha et al., 2017).

The qualitative analysis provided in-depth insight regarding some barriers Hispanic women may encounter accessing cervical cancer screening, such as costs of healthcare services, referral system, and lack of communication. Another issue mentioned is the preference of female physicians to provide cervical cancer screening, which can be seen as a barrier in Hispanic women. Although participants shared similar thoughts about the importance of cervical cancer screening, their previous experiences accessing the services were diverse.

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Appendix A: Survey

Directions: Please complete each question by putting an "x" in the space provided in the appropriate response. All your responses are confidential and will only be used for the purposes of this research. Thank you in advance for taking the time to complete this survey.

1. What is your age?

25-29_____

30-34_____

35-39_____

40-44_____

45-49_____

50-54_____

55-59_____

60-64_____

65 or older_____

2. What is your marital status?

Single_____

Married_____

Separated_____

Divorced_____

Widow_____

 Living with a partner but not married_____

3. Do you have children? Yes_____ No _____ , If yes, how many?_____

4. What is your country of origin?

   Puerto Rico_____

   Cuba_____

   Dominican Republic_____

   Mexico_____

   Central America_____

   South America_____

   Other_____

5. How long have you been living in the United States?

0-5 years_____

 6-10 years_____

11-15 years_____

16 years or more_____

6. What language do you speak at home?

 English only_____ Spanish only_____ Both English and Spanish_____

7. Are you currently working? Yes____   No_____

8. Do you have health insurance? Yes_____   No_____

9. Does your employer provide your health insurance? Yes_____ No_____

10. Is your health insurance through the Affordable Care Act Insurance Program?

Yes_____   No_____

11. How often do you visit your primary doctor or clinic?

1-3 times per year_____

4-6 times per year_____

7-9 times per year_____

10 or more times per year_____

I never visit my primary doctor o clinic_____

12. When you visit healthcare facilities, do you use your own transportation or

 public transportation? Public_____   Private_____

13. When you visit a healthcare facility, in what language do you prefer to receive

 healthcare services?

 English_____   Spanish_____ Does not matter_____

14. When was the last time you had a cervical cancer screening test?

Six months or less_____

1-2 years_____

More than three years_____

Do not know/Can't remember_____

15. How often do you attend the cervical cancer screening test (Pap Smear

    Test)?

    Never_____

    Every year_____

    Every two years _____

    Every three years_____

    Do not know_____

16. Do you have a family history of cervical cancer?

Yes_____ No_____ Do not know _____

17. If you miss a doctor's appointment, do you call your healthcare provider to

reschedule it?

Yes_____   No_____ Sometimes_____

18. Do you track your doctor's appointments? Yes_____ No_____ if yes, do you

add your doctor's appointments in your agenda? Yes_____ No_____

Thank you for your participation in this survey.

Appendix B: Survey (Spanish)

Instrucciones: Favor de colocar una "x" en el espacio provisto en la alternativa

correspondiente. Todas las respuestas son confidenciales y solo serán utilizadas para

propósitos de este estudio. Agradezco su tiempo para completar este cuestionario.

1. ¿Cuál es su edad?

25-29_____

30-34_____

35-39_____

40-44_____

45-49_____

50-54_____

55-59_____

60-64_____

65 en adelante_____

2. ¿Cuál es su estatus marital?

Soltera_____

Casada_____

Separada_____

Divorciada_____

Viuda_____

Viviendo con una pareja, pero no casada_____

3. ¿Tiene hijos? Si_____ No_____, Si tiene hijos, ¿Cuántos?_____

4. ¿Cuál es su país de origen?

Puerto Rico_____

Cuba_____

República Dominicana_____

México_____

América Central_____

América del Sur_____

Otro_____

5. ¿Podría indicar cuánto tiempo lleva viviendo en los Estados Unidos?

0-5 años _____

6-10 años_____

11-15 años_____

16 años o más_____

7. ¿Qué idioma habla en su hogar?

Español_____

Inglés_____

Ambos inglés y español_____

8. ¿Está trabajando actualmente? Sí____ No_____

9. ¿Usted tiene seguro médico? Sí_____ No_____

10. ¿Su empleador le provee Seguro de salud? Sí_____ No_____

11. ¿Es su seguro de salud a través del Programa de Seguro de la Ley de Cuidado

de Salud a Bajo Precio? Si_____ No_____

12. ¿Cuán frecuente visita su proveedor de cuidado de salud?

1-3 veces por año _____

4-6 veces por año _____

7-9 veces por año_____

10 veces o más por año_____

Nunca visito mi medico primario o clínica _____

13. ¿Cuándo visita una facilidad de salud, usa su propia transportación o usa

transportación pública? Pública_____   Privada_____

14. ¿Cuándo visita una facilidad de servicio de salud, en qué idioma prefiere

recibir los servicios de salud?

Español_____   Inglés_____ No importa_____

15. ¿Cuándo fue la última vez que se hizo una revisión del cáncer cervical?

Seis meses o menos_____ 1-2 años _____ Más de tres años_____ No sé_____

16. ¿Cuán frecuente usted se realiza la prueba de Papanicolaou?

Una vez al año_____

Cada dos años _____

Cada tres años_____

No sé_____

17 ¿Usted tiene historial de cáncer cervical en su familia?

Sí_____   No_____ No sé_____

18. ¿Si usted pierde una cita médica, usted se comunica con su proveedor de salud

 para re-programar su cita? Si_____   No_____   A veces_____

19. ¿Usted dá seguimiento a las citas médicas?,

Sí____ No___

las anota en su agenda? Sí_____ No_____

Gracias por su participación en esta encuesta.

Appendix C: Interview Guide Questions

1. Can you please tell me about your experience with health insurance?

2. When you visit the health clinics, do you ask questions to the health

 practitioners about your treatment or procedure? What questions do you ask?

3. Can you describe your experience receiving gynecological services?

   Can you provide an example?

4. Can you tell me if you had difficulties accessing cervical screening test?

    Can you provide examples?

5. What are your thoughts about the cervical screening test?

6. Once you attend cervical screening test services, do you contact your healthcare

provider to schedule a follow-up appointment to check the results? Or do you wait

 to be contacted by your healthcare provider to receive your Pap test results?

7. Is there anything else that you would like to share regarding cervical cancer

 screening?

Appendix D: Interview Guide (Spanish)

Guía de preguntas

1. ¿Podría indicar cuál ha sido su experiencia con su seguro médico?

2. ¿Cuándo visita las facilidades de cuidado de salud, pregunta a los proveedores

   de cuidado de salud sobre su tratamiento o procedimiento?

3. ¿Puede describir su experiencia recibiendo servicios ginecológicos?

   ¿Puede proveer un ejemplo?

4. ¿Puede indicar si ha tenido dificultades accediendo la prueba de Papanicolaou?

   ¿Puede proveer ejemplos?

5. ¿Cuáles son sus pensamientos acerca de la prueba de Papanicolaou?

6. Una vez usted recibe la prueba del Papanicolaou, ¿usted contacta su proveedor

   de cuidado de salud para conocer los resultados?, O espera que su proveedor de

   cuidado de salud lo contacte para saber los resultados de la prueba?

7. ¿Hay algo adicional que le gustaría compartir sobre las pruebas de detección de

   cáncer cervical?