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Perceptions of Immunizations as Health Prevention among Female Mexican Immigrants in Oklahoma

Jennifer Doyle
Walden University

Walden University

College of Social and Behavioral Sciences

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Jennifer Doyle

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Review Committee
Dr. Grant Rich, Committee Chairperson, Psychology Faculty
Dr. Debra Wilson, Committee Member, Psychology Faculty
Dr. Valerie Worthington, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

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Abstract

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MSW, University of Oklahoma, 2010

BSW, Northeastern State University, 2006

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Psychology

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Abstract

Research on health prevention behaviors of Mexican immigrant mothers regarding immunizations has been limited. As of 2014, Hispanics or Latinos comprised 9.6% of the population of the state of Oklahoma and were the largest minority group within Oklahoma. This minority population has continued to grow at a rapid rate in Oklahoma. The purpose of this study was to explore the perceptions of immunizations held by Mexican immigrants who are mothers residing in Oklahoma. The aim of this study was to identify their perceived risk of contracting a vaccine-preventable disease if not immunized and knowledge of immunizations as a health prevention behavior. The health belief model and the sociocultural theory provided the theoretical underpinnings for this qualitative study. Semistructured interviews were conducted with a purposeful sample of 12 immigrants living in a rural area of Oklahoma. Data were triangulated and analyzed to identify themes and patterns. Findings indicated participants perceived susceptibility of contracting a vaccine-preventable disease if not immunized, with the severity of the disease having the potential to cause death. Identified barriers in immunization uptake were language barrier, lack of immunization information in Spanish, and fear of deportation. Recommendations include public health outreach providing culturally, linguistic appropriate immunization information to immigrants within communities. Findings provide health psychologists and other health care professionals the ability to formulate interventions targeting immunizations in female Mexican immigrants. These interventions could promote positive social change by decreasing immigrants' and their children's risk of morbidity and mortality related to lack of immunization uptake.

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Dedication

My dissertation is dedicated to my parents, Steve and Rebekah. Both of you have been very supportive of me during my dissertation journey. I love and appreciate you both in so many ways. Thank you for being you and for supporting me throughout the dissertation process and in life. Momma, thank you for always being my cheerleader. You are an amazing woman and I am so very blessed to have such a wonderful mother. Dad, thank you for your strong work ethic and sense of humor. Thank you for being such an inspiration to me.

I would also like to dedicate my dissertation to my brother, Kent. Bubba, I love you and I miss you. I hope my dissertation completion honors your memory and makes you proud. I will always be proud to be your sister. Grandma, I love you and I miss you. Thank you for always prioritizing learning and encouraging me to pursue my education. Your love of learning continues to be a significant source of inspiration to me.

Mrs. Hall, thank you for all of your love and support. You've been such a wonderful friend to me and are the best "extra grandma" ever! I love you!

Chubby, my "touchstone," and Pixie, my jungle cat, I love you both!

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I would also like to thank Leticia Aguado for serving as the interpreter for my research study. Your level of dedication and professionalism is greatly admired, Letty. This study wouldn't have been possible without you!

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Chapter 1: Introduction to the Study

Introduction

Health psychologists are committed to improving physical health by understanding how an individual's behaviors influence his or her physical health. They seek to understand how a person's mental health processes affect health behaviors (American Psychological Association [APA], 2015). Health psychologists work in a variety of settings including public health and private practice. They serve as change agents for both health prevention and promotion through client education. Working collaboratively through research is one way to better understand health-related behaviors such as immunization uptake (APA, 2015). With this study, I sought to assess the perceptions of immunizations that Mexican immigrants who are mothers residing in Oklahoma hold.

Background of the Problem

Adorador, McNulty, Fitzpatrick, and Fitzpatrick (2011) indicated that it is necessary to increase understanding of the perceptions of Hispanics related to health as they represent an increasing percentage of the U.S. population. Few data exist regarding the perceptions of female Mexican immigrants with regards to immunizations, both of themselves and of their children. The number of Hispanics who reside in Oklahoma continues to increase. Therefore, this research study explored the perceptions of immunizations as health prevention in an underserved minority population that is becoming a more significant percentage of the U.S. population.

The longer that an individual lives in the United States, he or she may be more apt to pick up health behaviors that may negatively affect health in a process known as acculturation. Acculturation influences and can have a direct influence on increased prevalence of health disparities in minority population. Carter-Pokras et al. (2008) discussed the role of acculturation as it relates to health disparities. The researchers provided an understanding of the effect of different factors on health disparities including nativity (being born in the United States or Mexico), higher poverty rates, and lower use of preventative services. These factors may in some way shape the perceptions that female Mexican immigrants hold of immunizations.

Immunizations have been identified as a valuable health behavior and means of prevention of communicable diseases. They have been shown to increase the ability of the immune system to fight off illness, especially in populations that are at risk for developing illness. These populations include children, older adults, and those with compromised immune systems as a result of chronic health conditions (Reid, Grizzard, & Poland, 1999). The World Health Organization (WHO, 2012) also identified immunizations as an important health behavior that should be promoted. According to the WHO, immunizations prevent both illness and death in individuals around the globe. They are cost effective and provide an optimal means for reducing the number of fatalities from communicable illnesses each year by 2 to 3 million (WHO, 2012).

Congilio, Platania, Privitera, Ciammanco, and Pignato (2011) explored the attitudes and behaviors of parents of small children in Italy regarding immunizations. The authors discussed the requirements for immunizations within Italy, the process by which

parents might immunize their children, and where parents received information regarding immunizations. This study's findings were particularly beneficial because they considered how geographic region may influence perceptions of immunizations as a health prevention behavior (Congilio et al., 2011).

Hale and Rivero-Fuentes (2011) noted that a person's country of origin influences variables related to health. The results of this particular study suggested that Mexican Americans born in the United States are more likely to engage in high-risk behaviors such as smoking when compared to foreign-born counterparts. According to the authors, this at-risk population also sleeps for shorter periods of time, which can be linked to an increase in the development of certain health conditions including but not limited to coronary heart disease and diabetes (Hale & Rivero-Fuentes, 2011). The current study adds to the knowledge base regarding how country of origin may influence health related behaviors, such as immunization uptake.

Huh, Prause, and Dooley (2008) considered the influence of nativity on chronic health conditions such as asthma and diabetes as well as comorbidity and perceptions of health in Hispanic and Asian populations. The authors emphasized the idea that there are instances where being U.S. born or foreign born may influence prevalence of a condition. For example, foreign-born Hispanics were less likely to have asthma than their Hispanic counterparts who were born in the United States (Huh et al., 2008). These data inform the current study insofar as they indicated that nativity does indeed influence the health status of immigrant Hispanics. Furthermore, Huh et al. demonstrated that perceptions of health

and being healthy may vary when comparing Hispanics who immigrated to the United States to Hispanics who were born there.

It is imperative that members of minority populations understand the status of their health and behaviors that can promote optimal health. Without a realistic view of their own health status, minority populations, including Hispanics, can experience depreciating quality of life. This can be especially concerning because studies have shown that some view themselves as healthier than they actually are. Kepka, Ayla, and Cherrington (2007) noted the importance of addressing self-rating of health behaviors and perceptions of self-health, along with practical data collection including body mass index. They discovered a disconnect amongst subjects whereby study participants rated their activity levels high and health good, despite having unhealthy body mass indices. These findings demonstrated a need to understand the perceptions that exist as these perceptions could misalign and prevent integration of interventions that could positively influence health status and quality of life.

Lindberg and Stevens (2011) discussed the need to consider cultural aspects of creating interventions that relate to health prevention and health promotion. The researchers conducted focus groups that allowed them to identify major themes related to weight in the female Hispanic population. The themes they identified included lack of nutritional information and hardships of making health food choices when shopping for and feeding a family, as well as weight related stereotypes (Lindberg & Stevens, 2011).

Rojas-Guyler, King, and Montieth (2008) discussed the health disparities that Hispanic women experience within the United States. Their findings demonstrated the

need to assess barriers to accessing health care services among this minority population. The researchers reported a number of barriers including communication issues, cost of health care services, and lack of insurance among others (Rojas-Guyler et al., 2008). These barriers might apply to female Mexican immigrants who immigrate to the United States as they seek to obtain immunizations for themselves and their family members, including their children. Similarly, Leng, Changrani, and Gany (2009) noted that immunization rates among their study population of mostly patients speaking limited English was extremely low.

Ethnic minorities experience an increased rate of health disparities that immunizations could help decrease. Taylor, Seng, Acorda, Sawn, and Li (2009) noted that one particular illness that was prevalent within a minority population, specifically within the Cambodian population in the United States, is Hepatitis B. Strong, Lee, Tanaka, and Juon (2012) noted that immunizations are the most effective intervention strategy for both prevention and transmission of Hepatitis B, but Taylor et al. suggested there is little information currently available regarding the disease prevention behaviors of Cambodians.

Statement of the Problem

After Mexico, the United States has the largest population of Hispanics in the world (U.S. Department of Commerce, 2013). The Hispanic population has been growing at a steady pace, and researchers have predicted it will continue to do so. As of 2012, Hispanics were the largest minority in the United States (U.S. Department of Commerce, 2013). According to the U.S, Census Bureau (USCB; 2014), Hispanics or Latinos

comprised 9.6% of the population of the state of Oklahoma. Therefore, they are a significant percentage of the population and are the largest minority group within Oklahoma.

The USCB (2011) clarified in the 2010 census that the terms *Hispanic* and *Latino* in the 2010 census can refer to individuals with origins in places such as Mexico, Cuba, and Puerto Rico. Therefore, these terms are generalized and it is necessary to specify exactly what population participated in this study. This study focused specifically on Mexican immigrants to the state of Oklahoma. The term *Mexican* was used to refer to the participants in this study as they had immigrated to the United States from Mexico. As individuals participating in this study were immigrants, I assumed that English was not their primary language. Therefore, inclusion criteria for this study included immigrating to the United States from Mexico and speaking Spanish.

This study focused on adults, and I sought to explore their perceptions of immunizations as a whole, rather than immunization for one disease in particular. For the remainder of this study, I have referred to participants in this study as Mexican. However, because the literature did not always break down study participants by their place of origin (such as Mexican, Cuban, or Puerto Rican), I used the umbrella term *Hispanic* to ensure accurate representation of findings. Despite the increase of the Hispanic population throughout the United States and within the state of Oklahoma, little is known regarding the health prevention behaviors of Hispanics, including Mexicans, especially regarding immunizations.

Purpose of the Study

The purpose of this descriptive phenomenological study was to identify the perceptions, thoughts, and experiences of Mexican immigrants who are mothers residing in Oklahoma regarding the value of immunizations to prevent disease in both themselves and their children. This study addressed the perceptions that female Mexican immigrants in Oklahoma hold of immunizations. I used a qualitative approach to collect data from study participants and conducted interviews with female Mexican immigrants residing in Oklahoma to develop an understanding of the perceptions they have of immunizations.

Research Questions

The research questions for the study included the following:

Central Research Question-Qualitative: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding immunizations?

This study addressed the following research subquestions and corresponding interview questions (all questions appear in Appendix A):

RQ1: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding immunizations? *IQ1*: What do you know about the role of immunizations in maintaining health?

RQ2: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding their risk of acquiring a disease without being immunized? *IQ2*: Do you think there are any possible risks related to not being immunized? If so, what are they?

RQ3: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding barriers to immunization uptake. *IQ3*: What are the conditions or situations that may influence your willingness to be immunized?

RQ4: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding the ability of immunizations to prevent disease. *IQ4*: How important would immunizations be to helping prevent diseases you may be exposed to?

Theoretical Foundation and Conceptual Framework

The health belief model (HBM) is a theory scholars have used to consider the interplay between a person, his or her understanding of an illness, and his or her beliefs. It was initially developed in the 1950s by social psychologists who wanted to examine the underlying reasons people did not want to participate in programs that were aimed at disease screening and prevention (Glanz, Rimer, & Viswanath, 2008). A number of constructs comprise the HBM including perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Glanz et al., 2008). In application of the various constructs, it is possible to identify the specific beliefs of study participants regarding a particular disease. For instance, with the current study, it was possible to relate the constructs of perceived susceptibility and in particular perceived benefits to immunizations and perceptions of immunizations in female Mexican immigrants in Oklahoma. Perceived susceptibility would speak to the vulnerability that study participants did or did not feel regarding immunizations now that they had immigrated to the United States. Furthermore, perceived susceptibility may have

spoken to immigrants' belief that they would be at risk for contracting a particular communicable disease. Perceived benefits are the advantageous gains that would result from immunization uptake. These benefits could be inextricably linked to cultural beliefs, family norms regarding immunizations, and perceived barriers (another construct of HBM).

Sociocultural theory (SCT), as developed by Lev Vygotsky, also informed this study. Vygotsky (as cited in McLeod, 2007) noted the importance of social interaction on the development of cognitive functions. Thus, culture also influences learning in that it serves as a unique filter by which individuals give meaning to their experiences and engage in the decision-making process (McLeod, 2007). SCT was applicable to the current study because it identified the relevance of social interaction to the development of cognitive functioning including perceptions in general. As this study's population consisted of immigrants who had lived the majority of their lives outside of the United States, the cultural component of SCT highlighted the importance of understanding how culture may serve as a filter through which the perceptions of study participants regarding immunizations are formed and maintained. SCT was selected to inform this research study because it focuses on the role of social interactions and culture in regards to cognitive functions including personal choices. Utilizing the SCT as a framework for considering immunizations along with the HBM helped further understand the interplay between a person, his or her understanding of an illness, and his or her beliefs.

Nature of the Study

The research study was qualitative in nature. It maintained a social constructivist worldview whereby individuals attach subjective meanings to their experiences and that allows them to understand their world (Creswell, 2008). However, this particular study topic could lend itself to the advocacy worldview whereby it is possible the study could have political underpinnings or relate to a particular political agenda. This study aligned with the advocacy worldview because I sought to explore the perceptions of immunizations when there has always been a question of individual choice and personal liberty at the heart of the immunization conversation. Furthermore, this study may also have political underpinnings because the population being studied are immigrant. In these instances, this study provided insight that could lead to reform intended to influence the participants' lives or change community organizations to which they are connected (Creswell, 2008).

The study design and approach that I used for the research study was descriptive phenomenology (Giorgi, 2009). Creswell (2013) noted that phenomenological studies allow consideration for the shared experiences of several people. Phenomenology allows the researcher to take one concept (phenomenon) and consider it more closely by analyzing the experiences of participants (Moustakas, 1994). The result is that the researcher is afforded a very realistic view of the phenomenon being studied that can provide great insight into the phenomenon itself (Creswell, 2013). Hearing from study participants themselves about how their own lived experiences related to a specific phenomenon provided the most accurate view on a phenomenon.

Phenomenology was selected as the design for this study because the research questions focused on understanding the experiences of study participants with immunizations. Grounded theory was not selected for this particular study because the aim was not to develop or discover a particular theory regarding immunizations as they relate to female Hispanic immigrants. The narrative approach was not selected as it could have been especially difficult to ask participants to think back to their first immunization and describe it as they might have been unable to do so because they were too young, did not otherwise remember the experience, or had not had any experiences with immunizations.

Ethnography would have been another approach that I could have used within the study as it focuses on the culture of a group and how their worldview may be influenced by culture (Creswell, 2013). While this would have been especially beneficial to better understanding the role of how Hispanic culture influences participants' perceptions regarding immunizations, this study's aim was to explore the lived experiences of study participants. This may be essential in leading the way for future studies that may be better suited for applying the other approaches as there were prior data collected to lend to the knowledge base.

Data collection was conducted via semistructured personal interviews with the study participants. Some researchers in the past have used surveys to collect data specifically related to immunizations. Baker, Dang, Ly, and Diaz (2010) used the Search for Hardship and Obstacles to Shots (SHOTS) survey to collect their data. This particular instrument was designed to collect data responses through means of Likert scaling. While

this data collection instrument may be targeted at children, this instrument was translated into Hmong. Before its use, Baker et al. tested this survey for validity with members of the Hmong community. Therefore, I considered the survey method for this research study as well. However, it would not have allowed for the acquisition of rich, thick data from the study participants.

The recruitment sampling strategy for this study consisted of identifying a purposeful sample of female Mexican immigrants in rural Oklahoma that met the criteria for inclusion into this research study. Inclusion criteria for this research study was as follows:

- They identified themselves as Hispanic.
- They resided in a rural area within the state of Oklahoma.
- They were female.
- They were able to speak English, Spanish, or both English and Spanish.
- They were18 years of age or older.
- They had emigrated from Mexico to the United States.
- They were mothers.

The informed consent protocol for the research study included a written informed consent paper providing information regarding the study and the way in which the study data would be used. While study participants received a written copy of the informed consent and had the opportunity to ask any specific questions they may have had regarding the study, all study participants were afforded the ability to refuse to participate in the study or discontinue at any time. The provided written informed consent contained

my contact information in the event that a study participant would have had any questions regarding the study, their participation in the study, or any concerns that they would have liked to discuss.

This study will make a number of practical contributions. First and foremost, it will contribute to the literature and provide useful data regarding a minority group that composes an increasing percentage of the U.S. population. Data collected in this study will help health psychologists formulate interventions targeting immunizations in female Mexican immigrants. The results of this study could also positively influence medical care professionals including doctors, nurses, epidemiologists, and others within the public health community who are concerned with health promotion and reducing the prevalence of communicable diseases with immunizations.

This study contributes significantly to positive social change in several areas. Individually, female Mexican immigrants were positively influenced by the data collected because it facilitated them thinking about immunizations as they shared their own experiences. Because this study was the first focusing on issues related to immunizations within this particular population, participation allowed study participants to play a significant role in enhancing the health and well-being of other Mexican women. Furthermore, positive social change may be effected by potential policy changes to promote the health of this population and, in turn, reduce lack of proper immunizations and transmission of communicable diseases to others in the family, communities, and society at large.

Definitions

The Centers for Disease Control and Prevention (CDC, 2015) defined *immunization* as the process by which an individual becomes protected against contracting a disease. Furthermore, is the CDC also stated that the term *immunization* is commonly utilized interchangeably with both *inoculation* and *vaccination* (CDC, 2015).

The CDC (2015) defined a *vaccination* as an injection of a killed or weakened infectious organism in order to prevent an individual from developing a specific disease. For the purpose of this research study, following the CDC's precedent, I have used the terms *immunization* and *vaccination* interchangeably. Bennett (2008) identified *variolation* as the practice of smallpox inoculation. *Uptake*, as in immunization uptake, refers to the initial onset at which an individual agrees to receive an immunization (Vlahov, Bond, Jones, & Ompad, 2012). Hinman (1999) referred to *eradication* as the permanent reduction to zero of the global incidence of infection caused by a specific agent as a result of deliberate efforts. When an infection has been successfully eradicated, no further interventions are needed to prevent it from occurring (Hinman, 1999). *Communicable/infectious illnesses* are illnesses that are capable of being spread from one individual to another (CDC, 2015).

Glanz et al. (2008) identified *health prevention behaviors* as activities that an individual who believes himself or herself to be healthy undertakes to prevent the onset of illness or to allow for detection of an illness when no symptoms of said illness are currently present. According to the USCB (2011), the terms *Hispanic* and *Latino* were interchangeable when conducting the 2010 census for the U.S. population. Individuals

with origins in places such as Mexico, Puerto Rico, and Cuba among others were classified as Hispanic or Latino despite their race (USCB, 2011). Inclusion criteria for this study included originating from (being born in) Mexico. Therefore, study participants are identified as Mexicans to describe them as accurately and as specifically as possible.

Assumptions

I identified a purposeful sample that resided in a rural area to participate in this study. It was assumed that because the participants in this study came from Mexico, it was necessary to conduct some of the interviews in Spanish. A final assumption was that the translator that assisted in this study was knowledgeable and skilled in Spanish-language communication.

Scope and Delimitations

There was a need to understand female Mexican immigrants' perceptions of immunizations as there was scant literature available in this research area. This study focused exclusively on female Mexican immigrants who were at least 18 years of age. They lived in a rural community in the state of Oklahoma. Two theories were utilized to ground and guide this research study: the HBM and SCT.

Limitations of the Study

Two limitations had been identified in regards to this research study. The first was the need to use a translator to conduct the personal interviews. Using a translator to assist with data collection added another layer to the data collection process. A translator may or may not have translated all statements verbatim or with correct emphasis. This limitation was minimized when working with the translator whom I selected to assist

with this study's data collection process. A previous resident of Mexico, Ms. Aguado was fluent in Spanish and was personally familiar with the language and linguistic nuances. She also had many years of professional experience as a translator working with the target population. The second was that this was phenomenological research design meant to help understand the perceptions of female Mexican immigrants who lived in rural Oklahoma. Using a purposeful sample ultimately resulted in making this research study difficult for another researcher to replicate. However, this was in alignment with data collection using this sampling technique. Other researchers could conduct future studies by recruiting study participants with the same inclusion criteria and compare study results across this study's target population or contrast with Hispanics from other countries.

Significance of the Study

The purpose of this qualitative study was to explore and describe the experiences of female Hispanic immigrants that live in the state of Oklahoma regarding immunizations. This study specifically focused on the perceptions that study participants had of immunizations. While there are currently no studies focusing on perceptions of immunizations as health prevention in female Hispanic immigrants, one study by Coady et al. (2008) demonstrated that community-based interventions can increase interest in influenza vaccination uptake in hard-to-reach populations including immigrants and older adults. However, no data currently exist that explore the perceptions of the Mexican immigrant population, their cultural beliefs related to immunizations, or other factors that might influence immunization uptake. This study filled a gap in the current literature with regard to the topic. It increased knowledge regarding the perceptions of female Mexican

immigrants regarding immunizations; it may influence future interventions that could increase immunization uptake in this population and bring forth greater awareness of the overall importance of immunizations within this minority population.

The WHO (2008) identified numerous benefits of immunizations including elimination and eradication of diseases and reduction in severity of symptoms of a disease if an individual becomes ill. Viruses, such as seasonal influenza (flu), are very prevalent. Flu immunization uptake can decrease the negative consequences of onset including illness symptoms, disruption of life routine, transmission of the virus to others, and missed days at work (Music, 2011).

Implications for Social Change

This study will promote positive social change in numerous ways. First and foremost, this study has given female Hispanic immigrants from Mexico an outlet to discuss their perceptions of immunizations. This can be empowering for the participants in this study. Because immigrants from Mexico are an underrepresented minority population that is continuing to grow within the United States, it is essential that researchers and practitioners understand the perceptions of health prevention behaviors such as immunization uptake in female Mexican immigrants. A better understanding of the perceptions that female Mexican immigrants hold of immunizations can promote the health and well-being of this population. It could reduce health disparities and improve longevity. Reid et al. (1999) identified immunizations as one way of promoting general health and well-being as well as lowering mortality rates. As many as 500 children and 90,000 adults from the United States die each year from diseases that are entirely

immunization-preventable (Reid et al., 1999). Therefore, when practitioners and policymakers have a better understanding of what perceptions female Mexican immigrants residing in the United States hold of immunizations, they can target health prevention efforts to maximize their effectiveness.

In today's global society, it is important to consider the influence of changing demographics. It is especially important to consider the health care needs of immigrants coming to the United States. Immigrants who come to the United States do so from a variety of countries throughout the world, though the U.S. Department of Commerce (2013) indicated that individuals of Hispanic origin are relocating to the United States at staggering rates. Hispanics make up the largest racial and ethnic minority in the United States. As of 2010, the United States had the largest Hispanic population in the world outside of Mexico (U.S. Department of Commerce, 2013).

Health care practices, cultural norms, and barriers to health care are diverse throughout the world. Additionally, exposure to and prevalence of disease may vary throughout the globe. Thus, it should be expected that Mexican immigrants to the United States will naturally have diverse personal experiences with health care shaped by factors pertaining to their country of origin. For example, prevalence of a particular disease may increase awareness of the risks associated with that particular disease. However, other factors, such as access to health care including availability of immunizations, may act as a barrier to optimal health. Aside from these considerations, relatively little was known prior to this study of what perceptions female Mexican immigrants living in rural Oklahoma held of immunizations. Therefore, this study has enacted positive social

change by allowing this population to discuss their personal experiences with immunizations.

With this study, I sought to create positive social change by considering the perceptions of female Mexican immigrants who were born outside of the United States, yet have immigrated to make a home here. As immigrants to the United States, these individuals have a unique perspective of health shaped by their experience in their country of origin (Mexico). Furthermore, these individuals will face challenges due to their immigration status insofar as assimilating within communities throughout the United States. This study placed female Mexican immigrants' voices in the forefront of social change and may inform medical practitioners as well as professionals within the helping professions, such as health psychologists, of the issues that influence Mexican women with regards to their perceptions of immunizations.

A final implication for social change for this research study was the impact that speaking with immigrant Mexican women regarding their perceptions of immunizations had on children and their health. Ha, Rios, and Pannaraj (2013) found that children between the ages of 5 and 18 years old were more likely to contract and spread influenza than individuals of other ages. They were more likely to contract the virus and were able to pass it to others for a longer period of time than adults. Mexican women who come to the United States may relocate to the United States with children or they may have children once they are settled here. However, their perceptions may influence what immunizations their child(ren) may have had or any future children may have. In turn,

their child's immunization status may affect other children (and adults) in public settings such as daycare centers, schools, and parks/play centers.

Summary

This research study was qualitative in nature. It utilized a descriptive phenomenological approach that sought to understand the experiences, perceptions, and thoughts of female Mexican immigrants who reside in rural Oklahoma regarding immunizations. The study population was selected as it represented an ethnic minority population that has an increased risk of experiencing health disparities. In Chapter 1, the criteria for inclusion were stated: female Mexican immigrants between the ages of 18 and 64 years of age. Limitations of the study were discussed. I noted that replication of this research study would be difficult. HBM and the SCT were used to guide and ground this research study. Implications for social change for this research study include enhancing the study participants' knowledge of the health benefits from immunization uptake behaviors. In Chapter 2, I discuss in greater detail the theoretical foundation and conceptual framework that was utilized in this research study. The literature review will also be presented.

Chapter 2: Literature Review

Introduction

The purpose of this descriptive phenomenological research study was to explore the perceptions of immunizations in female Hispanic immigrants from Mexico. In Chapter 2, I discuss the HBM and SCT as they served as the theoretical underpinnings for this research study. Chapter 2 will end with an overview of this chapter as well as outline what will be presented in Chapter 3.

Reviewing the literature in qualitative research differs from reviewing the literature in quantitative research. According to Creswell (2009), literature reviews for qualitative research should underscore a gap in the literature, which I have explored in the current study. Therefore, the literature presented in this chapter will highlight the gap in the literature addressed by this study in greater detail. The qualitative literature review may be used to introduce the problem at the beginning of a study, set aside in its own section, or can be used at the end of the study to provide comparison and contrast during data analysis with the current study's data (Creswell, 2009).

Unlike in qualitative research, literature reviews in quantitative research can guide the research questions or hypotheses. The researcher may cluster resources at the beginning of the study in order to lay the groundwork for the impending research questions or hypotheses. Qualitative literature reviews can also serve to introduce a theory or validate use of the theory the researcher has selected for their study (Creswell, 2009). Therefore, the quantitative literature reviews may not address a gap in the literature. They may build upon and seek to expand current literature.

Literature Search Strategy

I procured the literature for the literature review from the following databases: Academic Search Complete, CINAHL Plus, EBSCO, Google Scholar, MEDLINE, PsycArticles, PsycInfo, Pubmed, and Science Direct. Key search terms that were used to search for and retrieve relevant literature included the following: *immunization, immigrant health care, Hispanic qualitative research, Latino, minority group, immigrant, south America, Mexican immigrants, English as a second language, Spanish speaking, Hispanics in research, Latinos in research, vulnerable populations, female Hispanic immigrants, female Hispanic immigrants and immunizations, Hispanics and immunizations, immigrants and immunizations, Hispanic culture, immunizations and culture, language barriers, qualitative research, phenomenology, phenomenological studies, health psychology, vaccine, vaccine-preventable diseases, health belief model, sociocultural theory, health disparities, health disparities in Hispanics,* and *health care in America*.

Theoretical Foundation and Conceptual Framework

The HBM was the conceptual framework that guided this research study. Researchers have used this model to consider the interplay between a person, his or her understanding of an illness, and his or her beliefs. Social psychologists developed initially the model in the 1950s because they wanted to examine the underlying reasons people did not want to participate in programs aimed at illness screening and prevention (Glanz et al., 2008). Gurung (2006) indicated that the HBM is one of the oldest theoretical frameworks to explore the motivations of individual behaviors. Kim and Zane

(2015) explored the HBM in detail, including how both the threat of illness and impact of treatment may influence an individual's decision to engage in specific behaviors that could influence health. A number of constructs are part of the HBM, including perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Glanz et al., 2008).

In application of the various constructs of the HBM, it is possible to identify the specific beliefs of study participants regarding a particular illness. For instance, in the current study, it was possible to relate the constructs of perceived susceptibility and in particular perceived benefits of immunizations and perceptions of immunizations in female Mexican immigrants in Oklahoma. Perceived susceptibility spoke to the vulnerability that study participants did or did not feel regarding immunizations now that they had immigrated to the United States. Furthermore, perceived susceptibility spoke to immigrants' belief that they were at risk for contracting a particular communicable illness.

In their exploration of the constructs of the HBM, Kim and Zane (2015) would classify susceptibility as threats. Perceived benefits are the advantageous gains that would result from immunization uptake. Kim and Zane would classify the benefits as the positive expectations that an individual holds of how the health-related behavior would improve the health status of the individual. These benefits could be inextricably linked to cultural beliefs, family norms regarding immunizations, and perceived barriers (another construct of HBM). Perceived barriers and perceived severity are constructs of the HBM that may influence whether or not an individual decides to act upon a health-related

behavior. Perceived barriers include possible stigma related to seeking assistance related to an illness, as it may be frowned upon in different cultures, as well as lack of access to behavioral interventions due to financial hardship or lack of transportation (Kim & Zane, 2015).

SCT, as developed by Lev Vygotsky, also informed this study. Vygotsky noted the importance of social interaction on the development of cognitive functions (McLeod, 2007). Thus, culture also influences learning in that it serves as a unique filter by which individuals give meaning to their experiences and engage in the decision-making process (McLeod, 2007). John-Steiner and Mahn (1996) identifed the major components of SCT including the influence of culture, through mediators such as language and family norms, on human activities within the historical context.

Mahn (1999) identified that at the core of Vygotsky's SCT is the investigation of how individuals attach meaning in the world to the world around them. This meaning making is a process that includes not only cognitive processes, but also symbolism insofar as the meaning people attach to objects or situations. It also includes implications at the individual and societal level that can include the meaning attached to social interactions and the meaning people attach to words based upon the meanings they assign to those social interactions and words (Mahn, 1999). This means that every interaction a person has in his or her world has meaning attributed to it based upon his or her culture. Even words have meaning based upon the meanings that individuals assign them through the filter of culture. Today, professionals use SCT in a variety of fields, including

psychologists who study human behavior and educators who seek to enhance the learning of children by understanding and maximizing developmental milestones (Mahn, 1999).

Vygotsky's development of SCT and its components may have been greatly influenced by his own upbringing in Soviet Russia in the early 1900s. According to Gielen and Jeshmaridian (2015), Vygotsky has continued to lend his voice to knowledge and understanding within the field of psychology today. Vygotsky was greatly influenced by Marxism as well as the teachings of the Torah and the Talmud. His educational background was diverse and included philosophy, medicine, and law in addition to psychology (Gielen & Jeshmaridian, 2015). This could explain why SCT is a fluid approach that, unlike other theories, appears more comprehensive in nature in exploration of the contributing factors to individual development. John-Steiner and Mahn (1996) noted the interdependent nature of SCT in that it considers both the individual and social context.

SCT was an appropriate theoretical framework for this study because of its dialectical nature. SCT identifies the relevance of social interaction on development of cognitive functioning including perceptions throughout the lifespan. As this study's population consisted of immigrants, who have lived a percentage of their lives outside of the United States, the cultural component of SCT highlighted the importance of understanding how culture served as a filter through which the perceptions of study participants regarding immunizations were formed and maintained. In addition, scholars may gain insight into how family and societal norms both before and after immigrating to the United States may influence perceptions of immunizations in female Mexican

immigrants. Finally, the historical component of SCT allowed for exploration of study participants' perceptions of immunizations through the lens of both citizens of Mexico and immigrants to the United States.

Literature Review Related to Key Variables and/or Concepts

In reviewing the literature, I gleaned few pertinent research articles in the databases related to the phenomenon explored in this qualitative research study. However, this study's literature review focused on literature related and relevant to the study population in general (Hispanics) and health and health disparities in this population. I have presented a history of immunizations and discussed literature related to other populations and immunizations.

Health Care in the United States

Health care within the United States has long been known for its complexity. A number of challenges have been identified in providing quality health care services to residents. According to Anderson and Newman (2005), a number of determinants affect the usage of health care services including individual, societal, and health service system determinants. Individual determinants are those that relate to the individual, such as, but not limited to, predisposition to illness and disease process. Organizational structure and resources comprise health service system determinants. These determinants are inextricably connected to the availability of resources and how they are dispensed to those in need of medical care. Societal determinants include such items as technological advancements within the medical field (Anderson & Newman, 2005). One example of a technological advancement could include immunizations. Societal norms are a final

determinant to be considered in regards to the usage of health care services. These norms can be seen on a macrolevel in the form of public policy and legislation or on a microlevel in perceptions held by individuals of programs such as Medicare and Medicaid (Anderson & Newman, 2005).

Members of minority groups have long been underserved and underrepresented within health care settings. De Jesus and Xiao (2013) identified the struggle in providing access to reasonable health care of good quality, particularly among Hispanics. While they comprise the largest minority in the United States, the majority of Hispanics born both in the United States and in other countries live at or below the poverty line and are uninsured. Despite the majority of Hispanics being employed, as many as 60% of adult Hispanics in the United States have incomes at below 200% of the poverty level with little or no access to health insurance or health care (De Jesus & Xiao, 2013). These findings suggest significant barriers that will persist as the number of Hispanic residents of the United States continues to rise.

Health Psychology

In years past, psychology professionals have focused on mental health in varying but limited ways. One way of focusing on mental health was to consider cognitive functioning to the exclusion of the body. Another way of focusing on mental health within the psychology field is at the most basic level—through basic biological functioning and neurological process (Cromby, 2011). Current holistic trends have encouraged psychologists to explore new horizons whereby they can consider both body and mind on mental and physical health (Cromby, 2011). This new way of considering

the individual as a whole, with both the mind and body influencing health and in turn illness, is known as health psychology. Gurung (2006) asserted that one strength of this subfield of psychology is its inclusive nature of building upon theories that span the gamut of psychology as well as incorporating research findings that do the same. Furthermore, Gurung indicated that health psychology can be broken down into three general subdivisions including health behaviors, stress and coping, and issues in health care. This study focused on the first subdivision, health behaviors, as it explored the perceptions of immunizations as health prevention among female Mexican immigrants in Oklahoma.

The pluralistic approach that health psychology affords has the potential to create positive social outcomes with regards to qualitative research. Gough and Deatrick (2015) argued that qualitative research within the field of health psychology has the ability to promote diversity and have a powerful influence. This is partly due to the nature of qualitative research insofar as it seeks to explore phenomena in great detail (Gough & Deatrick, 2015). One can also see the powerful influence of health psychology in that qualitative research findings in the field can be utilized to inform interventions focused on specific populations such as reducing health disparities throughout the lifespan. For instance, adolescence is a time when individuals may engage in high-risk behaviors such as alcohol and other substance abuse, risky sexual behavior, and suicide (Toumbourou, Olsson, Rowland, Renati, & Hallam, 2014).

Toumbourou et al.'s (2014) holistic examination of the challenges faced by adolescents yielded a number of recommendations for comprehensive interventions for

this population including school-based interventions as well as interventions that utilize a variety of mediums including face-to-face and online technology techniques. Similarly, a comprehensive examination of communications regarding influenza by MacDonald, Cairns, Angus, and DeAndrade (2013) demonstrated the need for a deep understanding of communications tailored to specific populations to ensure effective interventions. These authors specifically found that customized health communications and more efficient delivery of immunizations have the potential to increase immunization uptake, especially for older adults (MacDonald et al., 2013). The aforementioned study findings demonstrate how diverse the field of health psychology is, and many different populations can be positively influenced by interventions that take the pluralistic health psychology approach.

History of Immunizations

The development of immunizations began many years ago in approximately 1796 (Riedel, 2005). Edward Jenner, a physician and scientist known as the father of immunology, developed the first rudimentary immunization based upon his observations of milkmaids and the cowpox infection disease process (College of Physicians of Philadelphia, 2013). In May of 1796, Jenner utilized matter he obtained from Sarah Nelms's cowpox lesions to inoculate James Phipps, an 8-year-old boy, in an effort to protect him against smallpox infection. After the initial exposure, Phipps developed a number of negative symptoms including fever, loss of appetite, and pain in the armpit (Riedel, 2005). However, these symptoms subsided and a little more than one week later, the boy was inoculated again with matter from a smallpox lesion. Because he did not

develop any negative symptoms after the second inoculation, Jenner believed that Phipps had received immunity to smallpox (Riedel, 2005).

Despite our knowledge today of immunology and the breakthrough of Jenner's findings, his efforts to share his findings and promote cowpox inoculation as a means to smallpox immunity were largely met with resistance. His report of initial experiment findings was submitted to the Royal Society, but it was initially rejected. It wasn't until he expanded his report considerably that it was published. The process for experimental replication during Jenner's time was primitive at best due to the lower prevalence of cowpox along with lack of proper protocols to reduce the contamination of cowpox samples (Mhaske, 2010). These difficulties presented those who disagreed with Jenner's findings an opportunity to discredit them based upon their challenges in replicating his findings for themselves.

Even though the smallpox illness causes a number of negative symptoms including blindness and deformities and can be fatal, anti-immunization sentiment existed due to fear. Still, others opposed immunizations on religious grounds. The British government outlawed variolation and immunization utilizing cowpox was required in 1853. At that time, protests occurred and many individuals opposed immunizations on the grounds of freedom of choice (Mhaske, 2010).

Despite some findings that can be disproven today, Jenner's hypothesis regarding the development of immunity through exposure was largely proven to be accurate (Mhaske, 2010). It is understood that, despite men comprising most medical professionals during this time, women played a pivotal role in the history of immunizations. For

example, it is women who were largely in charge of caring for children on a daily basis including when they became ill. Women were also responsible for creating environments whereby children would be less likely to be exposed to and or contract illnesses such as smallpox. As smallpox was predominantly an illness that influenced children, mothers were in a unique position to prevent the illness and teach about the course of the illness (Bennett, 2008).

Women played a significant role both in the public and private adoption of variolation against smallpox. Promotion of variolation in the private arena was largely conducted by women who were mothers. These women include wives of scientists who used their children in their own experiments. One such scientist was Dr. William Turton, who immunized his daughter against cowpox and changed her name to Vaccinia (Bennett, 2008). Despite there being no public records of what Vaccinia's mother thought of her daughter's immunization against cowpox or her name change it was widely expected at the time that both fathers and mothers would be involved in the decision to have their child undergo variolation (Bennett, 2008). This can lead us to conclude that, while it is not possible to know the private discourse between parents making a decision regarding immunization of a child, mothers gave their permission to have their children undergo the procedure. Additionally, they provided aftercare and watched over the variolated child for signs of symptoms of illness.

Variolation was advocated for in the public arena by smallpox survivor and wife of a British ambassador, Lady Mary Wortley Montagu (Bennett, 2008). Both her son and her daughter were immunized following her decision to make the arrangements. Lady

Montagu also advocated for greater acceptance of immunization within society. This led to increased promotion of variolation despite perceived risks of infecting healthy children with smallpox (Bennett, 2008). However, risks of variolation still existed. King George III and Queen Charlotte's son died in 1783 after variolation against smallpox (Bennett, 2008). Therefore, it was ascertained that despite the general success of variolation to provide immunity, there were always risks involved and the decision to immunize was a very serious decision to make. So serious, in fact, that either way, it could be fatal to a child (Bennett, 2008).

Bennett (2008) indicates that women continued to play a significant role in the discussion of immunizations in social circles at the time. In turn, this discussion without a doubt influenced whether or not families immunized their child(ren). For example, in correspondence to her sister in the year 1800, Jane Austen mentioned that fellow attendees at a party she attended had read aloud to the group portions of an informational pamphlet from Edward Jenner (Bennett, 2008). Edward Jenner himself moved in social circles that perpetuated further discussion of obtaining immunizations as well as information regarding immunizations to dispel misinformation and fear. His social connections propelled his introduction to King George III and Queen Charlotte of the royal family, who had lost their son following immunization. This exchange of information between Dr. Jenner and the King and Queen promoted an informational dialogue in which these parents could ask questions about cowpox, the variolation procedure, and the risks and successes of immunizations.

In the years since Jenner's experiments, there have been many advancements with regards to immunizations. These advancements come in many forms such as the development of immunizations to combat specific illnesses. For example, the CDC (2015) identifies numerous illnesses that immunizations can prevent including measles, mumps, rubella, polio, influenza, and various strains of hepatitis. The newest frontiers of immunization development include advancements in the development of immunizations for illnesses such as Alzheimer's disease (Matsumoto, Niimi, & Kohyama, 2013) and breast cancer (Milani, Sangiolo, Aglietta, & Valabrega, 2014).

Other advancements with regards to immunizations can be seen when considering the prevalence of specific illnesses around the globe. According to the WHO (2015), immunizations have played a crucial role in reducing the number of cases of immunization-preventable illnesses. They have also reduced mortality rates linked to immunization-preventable illnesses with between 2 and 3 million deaths attributed to illnesses such as pertussis, measles, and polio being prevented (WHO, 2015).

Poliomyelitis, or polio, is an example of an illness that has been significantly diminished as a result of immunization uptake. Polio is an aggressive illness which can greatly reduce quality of life, resulting in paralysis of the body and even death in certain cases (CDC, 2015). In the 1940s and 1950s, the number of polio cases rose significantly with more than 35,000 individuals developing the illness and negative symptoms including physical disability (CDC, 2015). It was during this time that Dr. Jonas Salk, along with his colleagues, began to work towards the development of an immunization against polio.

In 1953, the immunization was developed and the next year, in 1954, as many as two million children participated in field trials for the illness-preventing immunization. By 1957, the prevalence of polio had dipped by as much as 90% (Smithsonian National Museum of American History, n.d.). This significant decrease in the number of cases of polio after the integration of a polio immunization demonstrates the effectiveness of immunizations in combating illnesses.

Additional efforts continued to be made in subsequent years to improve upon the effectiveness of the immunization and decrease prevalence of polio. Albert Sabin undertook trials in the late 1950s, and later his immunization replaced Dr. Salk's polio immunization because it was more economical and easier to administer (Smithsonian National Museum of American History, n.d.). As of 1979, the United States is polio free (CDC, 2015) with the WHO (2015b) reporting zero cases of the illness. The Polio Global Eradication Initiative (2015) identified 94 cases of polio worldwide for the year 2015. The majority of cases, 51, were found in Pakistan (wild poliovirus type 1 (WPV)) followed by 19 reported cases of WPV in Afghanistan. Circulating vaccine-derived poliovirus (cVDPV) cases were minimal and were largely clustered in Madagascar (Polio Global Eradication Initiative, 2015).

Despite there being no reported cases of polio in the United States since 1979, the illness persists in other parts of the world. The number of polio cases in 2010-2011 increased significantly in Afghanistan (220%), Nigeria (185%), and Pakistan (37%). Polio has become endemic to these geographic regions, were immunization rates are poor at best. This endemic is primarily due to low immunization rates that result from a variety

of factors that plague developing countries, including weak or ineffective health care systems, lack of infrastructure, and robust population (Imran, Nasir, & Zaidi, 2015). Furthermore, social determinants of health including living in poverty, lack of education or awareness of immunizations, and living in a rural area were found to be correlated with lack of immunization uptake. Another significant challenge to programs intended to promote immunizations is religious fundamentalism and the threat of violence in certain areas despite the effectiveness of polio immunizations to reduce the prevalence of illness (Imran et al., 2015).

In recent years, the debate about the benefits and risks of immunizations has continued. A study published in the British Journal of Medicine by Dr. Andrew Wakefield was found to have intentionally distorted and falsified data from study participants, including medical histories of study participants, with the intention of corroborating a link between the Measles, Mumps, and Rubella (MMR) immunization and autism (CNN News, 2011). After the study's publication, immunizations rates declined sharply in both the United Kingdom and the United States while incidence of immunization-preventable diseases increased (CNN News, 2011).

Despite Wakefield's study eventually being retracted, the perception of link between the MMR immunization and autism has persisted. For example, individuals within the entertainment industry who have the ability to reach vast numbers of citizens discussed their own personal experiences with regards to immunizations. One such individual was Jenny McCarthy, whose son was diagnosed at a young age with autism.

Having written three books on autism, Ms. McCarthy has been a leading voice expressing concern regarding a link between immunizations and autism (Frontline, 2015). She has been given platforms by Oprah Winfrey and Time Magazine on which to discuss what she believes to be on the dangers of immunizations and to promote misinformation in well-intentioned parents who are making decisions whether or not to immunize their children (Hiltzik, 2015).

These platforms have afforded Ms. McCarthy a stamp of credibility on the subject despite no professional medical background or training. Despite Ms. McCarthy identifying her stance as not being anti-immunization, but being pro-safe immunization, the misinformation she has supported via her role as a celebrity (and authority) has prevailed and continues to influence parental attitudes towards immunizations (Frontline, 2015).

An outbreak of measles occurred as recently as the winter of 2014/2015 in California. According to Xia (2015) more than 85 cases of measles have been confirmed in California. Those who were diagnosed came from a number of states around the United States including California, Utah, and Washington, as well as Mexico (Xia, 2015). It is believed that those who contracted measles did so from a centralized location, Disneyland, and that they spread the measles virus spread to others who were at the fun park.

As the majority of cases occurred in California, immunization status for 42 of those infected were known. 34 of those individuals were not immunized while three were partially immunized and five were up to date on their immunizations. Among those

diagnosed as having developed the measles were Disneyland officials and a high school coach. Despite efforts to curtail the possible spread to other individuals, it was impossible to completely eliminate the risks, which means individuals with symptoms presented at medical clinics, potentially exposing other patients and health care professionals alike (Xia, 2015).

On Friday January 8, 2016, Mark Zuckerberg, CEO of Facebook, waded into the debate on immunizations. He posted a picture of his baby daughter, Maxima, at a doctor's visit. The caption for the picture indicated that Maxima would be receiving immunizations during the visit (Riley, 2016). More than 77,000 comments were posted to Mr. Zuckerberg's picture; among them harsh comments such as "injecting newborns and infants with disease and neurotoxins is disgusting science that injures millions every year (Riley, 2016). Other comments were more positive in nature including "as someone with autism, with a son with autism, as someone who is constantly watching good people put their children at serious risk because of old, fraudulent fears of vaccines and autism…thank you for being sensible…thank you for doing what is right (Riley, 2016).

The diversity of the comments that Mr. Zuckerberg received in response to a simple picture of his daughter announcing that she was going to be immunized, as well as the emotional context of the comments on both sides of the fence, demonstrates how divided the public is on immunizations despite Dr. Wakefield's research being retracted. Therefore, we see misinformation continue to be deeply rooted and the health of the population suffer in turn.

Health Disparities and Hispanics

A number of factors have been identified as contributing to health disparities in the Hispanic population. Maffini, YoussefAgha, Jayawardene, Perez-Medina, and Torabi (2012) note that Hispanics of diverse origins will bring many diversity factors that can influence disparities with them from within themselves. These factors include country of origin, lifestyle habits, and dietary habits that may contribute to negative health outcomes. External factors can also influence health disparities such as lack of health insurance, inability to communicate with medical professionals, and immigration status (Maffini et al., 2012).

Dinwiddie, Zambrana, and Garza (2014) note that while cardiovascular disease (CVD) is a leading cause of death in the United States, Hispanics are less likely to develop CVD than Caucasians. Despite this paradox, Hispanics, Mexican Americans in particular, have many risk factors that can lead to CVD, including diabetes and obesity. Other factors that may increase the risk of CVD include being female and being from Mexico (Dinwiddie et al., 2014).

Hispanics have also been identified as being disproportionately adversely affected by the severe pains of arthritis and also limited functioning as a result of arthritis symptoms (McIlvane, 2009). Individuals who live at or below the poverty level, including Hispanics, are at a disproportionately high risk for engaging in risky health behaviors such as cigarette smoking as well (Baezconde-Garbanati, Beebe, & Perez-Stable, 2007). Guerrero, Marsh, Duan, Oh, Perron, and Lee (2013) find that disparities include substance abuse, length of substance use/abuse, and homelessness. These

disparities served to create barriers that hindered completion of substance abuse treatment among racial and ethnic minorities including Hispanics.

Hispanic women in particular may face numerous challenges with regards to receiving optimal health care, which can lead to health disparities. McGarvey et al. (2003) considered the attitudes of women from three different ethnic groups including Hispanic, Cambodian, and Vietnamese women with regards to cancer screenings. Participants in the study who identified themselves as Hispanic were predominantly from Mexico.

They identified several obstacles to engaging in cancer screening behaviors including obtaining a mammogram. These obstacles included lack of insurance coverage and the cost of the procedure. Hispanic and Vietnamese women were found to share similar attitudes with regards to the importance of cancer screenings as a prevention tool to maintain health. Despite these findings, the number of women from both ethnic groups who participated in this study who had had a mammogram was only between 36% and 54% between groups. The challenges faced by these women from minority groups were similar and included lack of insurance/poor access to health care and difficulty communicating in the English language (McGarvey et al., 2003).

Despite the importance of regular breast self-examination and mammogram prevention procedures for all women, rates of these prevention behaviors are even lower among women who belong to minority groups such as Hispanic women. A study by Sunil et al. (2014) focused on exploring the knowledge, attitudes, and screening behaviors of Hispanic women in south Texas. Hispanic women living in Maverick and Val Verde

counties, close to the border between the United States and Mexico, were found to have a higher incidence of mortality related to a breast cancer diagnosis. Several variables were found to be correlated with an increased likelihood that the study participants had had a clinical breast exam within the past year including accurate knowledge of breast cancer, perceived severity, perceived barriers, as well as from whom the study participant received her information regarding health (Sunil et al., 2014).

Similarly, variables including from whom study participants received their health information, barriers to screening, and having insurance were correlated with undergoing a mammogram. Questions on the questionnaire for respondents for both clinical breast exam as well as mammogram included ones that addressed embarrassment, fear of the unknown or a possible cancer diagnosis, pain factor, time, transportation, misinformation regarding the procedure or cancer itself, or lack of professional sensitivity to the patient undergoing the procedure (Sunil et al., 2014). These questions come together to paint a comprehensive picture of the many barriers, both physical and psychological, that Hispanic women could face with regards to their health care, especially prevention behaviors which could lead to optimal treatment if a potentially fatal diagnosis is made.

Davenport, Modeste, Marshak, and Neish (2010) reinforce the findings of Sunil et al. (2014) and elaborate on the barriers that exist for this study's target population. The health beliefs of financially disadvantaged Hispanic women, with 10 out of 12 study participants identifying as Mexican, were considered in particular regard to the disparity that exists with regards to undergoing the mammogram procedure. One barrier to mammogram use identified in the focus groups included both inadequate knowledge of

breast cancer in general and lack of knowledge of breast cancer specifically due to it being a taboo subject (Davenport et al., 2010).

Another barrier underscored the fear that this population may face including the fear of false positives after undergoing an exam as well as having seen a loved one experience health deterioration related to a cancer diagnosis. Other findings explore the barrier of time with regards to mammogram use with one 69-year-old participant noting that she needed a reminder to schedule her appointment while another participant mentioned relying on her children for support when she went for her mammogram (Davenport et al., 2010).

A final barrier that study participants noted included lack of ability to obtain a mammogram, even when lumps had been detected due to lack of funds to cover the expense of care. Further hardship was indicated when other family members also had limited means and, therefore, ability to assist with the financial cost of the procedure (Davenport et al., 2010).

Hispanic women who immigrate to the United States from Latin America or come from geographic regions inside the United States that were once a part of Latin America, such as some parts of Texas, may be more likely to opt against a more invasive mammogram procedure to screen for breast cancer in favor of a clinical breast exam (Flynn, Betancourt, & Ormseth, 2011). It is important to consider the potential reasons for this choice as Flynn et al. (2011) also note that Hispanic women are more likely to seek health care only once they reach more advanced stages of cancer—stages III and IV.

This could severely limit treatment options, outcomes, and decrease the chances of survival which only serves to place this population at a further disadvantage.

Immigrating to the United States has been identified as a factor that can influence health outcomes and, in turn, lead to health disparities. According to Marshall, Urrutia-Rojas, Mas, and Coggin (2005) Hispanic individuals who come to the United States as documented or undocumented immigrants may face numerous challenges to establishing a new life and assimilating into a society with which they are unfamiliar. They may also face additional hardships as a result of education and poverty level (Marshall et al., 2005).

For Hispanic individuals who immigrate to the United States as undocumented immigrants, more barriers to adequate health care exist and those barriers may lead both directly and indirectly to poor health outcomes (Marshall et al., 2005). Fear of legal reprisal related to legal citizenship status, lack of knowledge of available health care related public resources, as well as lack of ability to communicate can severely restrict health seeking behaviors of this population. Furthermore, undocumented status can limit job opportunities thus opportunities for a steady income and access to affordable health insurance coverage (Marshall et al., 2005).

Cultural barriers may also contribute to health disparities that negatively affect the Hispanic population. Galanti (2015) discusses in detail the importance of being culturally sensitive when working with patients of diverse cultural backgrounds. While a basic understanding of differing cultures can allow us to make basic generalizations about certain groups that can ensure we are respectful of some characteristics of those groups, it

is important that we, as professionals, do not stereotype those whom we are assisting in a professional capacity (Galanti, 2015). Generalizations can be used as a helpful guide when providing services to culturally diverse populations, but we as culturally sensitive professionals, should never assume that all members of a specific culture will be identical (engage in stereotyping). This could severely hinder the ability of health psychologists to establish rapport with their clients and contribute to lack of compliance with health recommendations.

Shattell, Hamilton, Starr, Jenkins, and Hinderliter (2008) described the difficulties the Hispanic population experiences regarding receipt of mental health services. Through community-based participatory research, members of the community including mental health professionals who work with this population as well as others who have exclusive insight into the experience of the Hispanic population, could shed light on these unique struggles. Fear and anxiety related to undocumented status was identified as a barrier to seeking health care as participants identified that their clients believed that their undocumented status would prevent them from receiving such services (Shattell et al., 2008). Furthermore, citizenship status was indicated to influence how Hispanic individuals saw themselves with many of them feeling as though they were on the outside of society looking in, susceptible to criminal persecution and legal consequences up to deportation (Shattell et al., 2008).

The aforementioned barriers to seeking mental health services could certainly negatively influence the possibility that a Hispanic individual in need of mental health treatment would seek out such treatment. This could be due to lack of accurate

knowledge of what mental health resources are available or to limited integration into the community and with those outside of those they know (Shattell et al., 2008). At the individual level, especially when regards to the client-professional relationship, there are barriers that can lead to health disparities including differing perceptions of mental illness. Symptoms that would otherwise be clinically called depression are not recognized by clients as depression because they do not associate the terminology with mental illness (Shattell et al., 2008). The fear that a Hispanic individual may have of seeking mental health treatment without knowing which, if any, mental health resources are available within their community could result in this population being disproportionately underserved. These barriers are further magnified by the difficulty in securing the trust of this population in the client-practitioner relationship or resistance to seek treatment at all (Shattell et al., 2008).

Other barriers that were identified that could potentially lead to health disparities in the study population include ones that are specific to women. They include gender role expectations of women's place within the family, such as being the homemaker and primary caretaker of children. While this could place Hispanic women in an optimal place to be involved in crucial health-related decisions, it can also lead to isolation and lack of treatment for mental health concerns. These barriers have also been known to contribute significantly to underreporting of domestic and sexual violence against Hispanic women (Shattell et al., 2008).

Therefore, when it is suspected that possible domestic or sexual violence has occurred, Galanti (2015) recommended maintaining awareness and respect for cultural

nuances while investigating further in a culturally sensitive manner. For example, it may be necessary to seek an opportunity to discuss injuries or bruises that are inconsistent with the patient's injury scenario alone. This could be done in such a way as to not raise concern on the part of the suspected perpetrator (who may be at the patient's side and, thus, prevent her from speaking freely about the actual cause of her injuries) by offering an opportunity to have a snack or respite in the waiting area (Galanti, 2015).

Immunizations and Health Disparities

Immunizations have been identified as the primary means of reducing or eliminating the spread of certain illnesses. The WHO (2015) has found that they avert as many as 3 million deaths every year. Furthermore, immunizations have also been shown to prevent the development of illness and disability due to the development of certain illnesses (WHO, 2015). Despite the benefits of immunizations on health there are many individuals who are not receiving immunizations to protect themselves from the most common preventable illnesses. The reasons for poor immunization coverage include complex environments with varying levels of health care infrastructure, lack of resources, and poor oversight of continuity of immunization uptake (WHO, 2015). Misinformation may also contribute to poor immunization coverage.

Hinman (1999) has identified that eradication of infectious illnesses should be the ultimate goal of those who are working towards a healthier society. However, this task in and of itself has presented many challenges as, aside from smallpox, no illness has ever been successfully eradicated (Hinman, 1999). Despite immunization uptake and illness monitoring being essential contributors to the eradication of smallpox, a number of

challenges remain with regards to eradicating other illnesses including illness prevalence and economic resources (Hinman, 1999).

Crouse-Quinn et al. (2011) discuss a number of factors that could contribute to the exposure, susceptibility, and access to health care to prevent immunization preventable illnesses such as H1N1 influenza. The authors found that disparities that could have influenced Hispanics included exposure to infected individuals, current poor health (such as being obese or diabetic), and lack of access to medical care treatment (Crouse-Quinn et al., 2011).

Immigrants and Immunizations

Immigrants come to the United States from all over the world. Data collected by the USCB (1999) provides some insight into the demographic characteristics of the immigrant population. More than 50 years ago, in 1960, most residents of the United States had been born in the United States with the foreign-born population comprising only 5.4% of the population (9,738,091 persons compared to 168,525,645 persons born in the United States). Data for race and Hispanic origin of the foreign-born population from 1850 to 1990 shows minimal data as this information was not available consistently for this population at that time. However, for the year of 1940 the percentage of the foreign-born population of the United States of Hispanic origin was 3.7% (428,360 persons compared to 11,166,536 persons of other races in the United States; USCB, 1999). Data trends demonstrate from 1970 onward an increase in the percentage of foreign-born Hispanics with this population comprising 18.7% of the total U.S. population in 1970 (1,802,332 persons compared to 7,816,970 persons in the foreign-born population

belonging to other races), 29.6% of the total percentage of the U.S. population in 1980 (4,172,851 persons compared to 9,907,055 persons in the foreign-born population belonging to other races or ethnicities), and 39.7% of the total U.S. population in 1990 (7,841,650 persons compared to 11,955,666 persons in the foreign-born population belonging to other races or ethnicities (USCB, 1999).

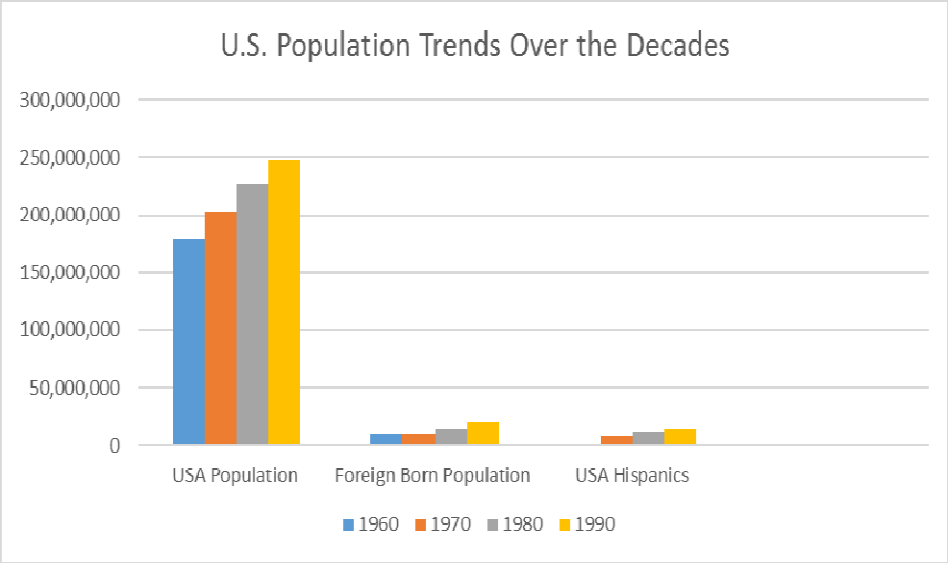

Figure 1. U.S. population trends over the decades. Data utilized to create this graph were retrieved from USCB (1999). No data were available for U.S. Hispanics in the year 1960.

More recent data from the USCB indicated that as of the 2010 census, there population of the United States was 308.7 million people. Of that, 50.5 million people (60%) were of Hispanic or Latino origin (USCB, 2011). The number of Hispanic individuals of Mexican origin has continued to rise in the United States since 2000 with Mexicans comprising the largest segment of the Hispanic population. In the year 2000 of 35,305,818 Hispanics or Latinos in the United States, Mexicans comprised 20,640,711 persons of 35,305, 818 Hispanic or Latinos in the United States. This is a breakdown of 58.5% of Hispanic or Latino persons in the United States for the time (USCB, 2011). In

2010, the Mexican population increased further with 31,798,258 Hispanics or Latinos in the United States identifying as Mexican (63%) of 50,477,594 Hispanics or Latinos in the United States. This is a steady increase of the Mexican population in the United States from 2000-2010 by 11,157,547 persons, which is a sharp rise of 54.1% over the 10-year span between 2000 and 2010 (USCB, 2011).

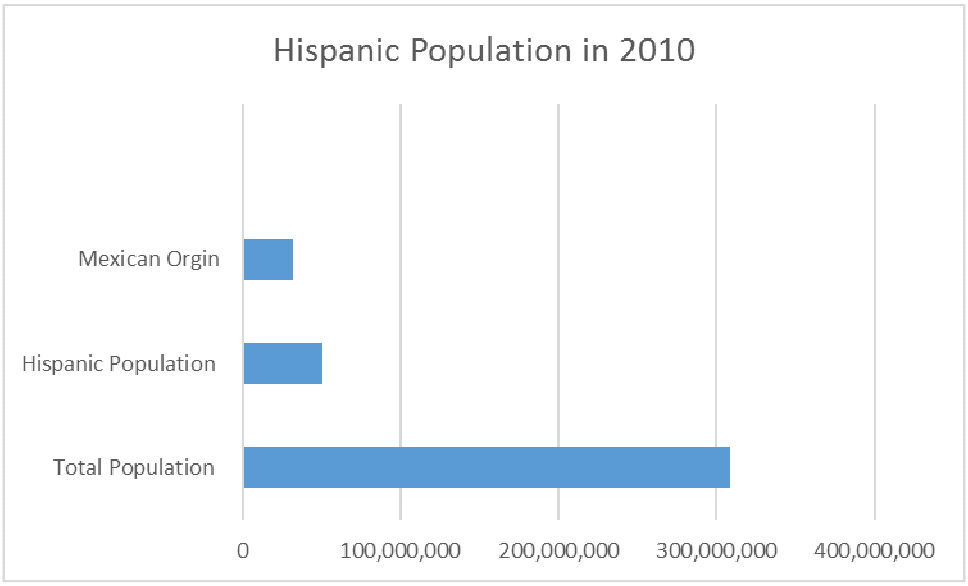

Figure 2. Hispanic population in 2010. Data utilized to create this graph were retrieved from the USCB (2011).

Data projections for the future compiled by the USCB (2015) indicate that the population of the United States will continue to grow. It will reach 400 million persons by the year 2051. Minority populations will continue to remain a significant percentage of the U.S. population with projections indicating that more than fifty percent of all Americans will belong to a minority population by the year 2044 (USCB, 2015). It is further projected that by 2060, one out of every five persons in the U.S. population will be foreign-born (USCB, 2015). Projections for the population by race and Hispanic origin

from 2014 to 2060 indicate that Hispanic persons will continue to comprise a significant percentage of the population (17.4% of the population). In 2060, it is expected that Hispanics will comprise 28.6% of the U.S. population. This is an increase of 63,635 persons over a 46-year period and a 114.8% increase in this population (USCB, 2015).

Depending upon where an individual migrates from, he or she may have had or be a carrier of a particular illness. Immigrants may have had a different schedule of immunizations or no immunizations at all. In addition, immigrants may have varying cultural beliefs regarding the efficacy of immunizations. Ooi, Gallagher, and Chen (2006) demonstrated the need to consider country of origin as well as age in immunization uptake. The authors found in comparison to other immigrant groups in their research that having emigrated from India or China and being older than 60 were immunity-creating factors in study participants. In other words, increased length of time living in the country of origin was correlated with more odds of having developed immunity (Ooi et al., 2006).

Immigrants in the US account for 12 times the cases of tuberculosis (TB) when compared to individuals born in the United States (Ballew & Becker, 1995). According to Waterman, Cortes-Alcala, and Spradling (2012), the border between the US and Mexico is a busy point of travel with many individuals crossing every year for reasons including tourism and commerce. Viral hepatitis and hepatitis A, B, and C are public health concerns relevant to the US and Mexico. These illnesses can produce many adverse health consequences for individuals including liver complications and carcinoma. Immunizations have been identified as a major contributor to the decline in the prevalence of hepatitis strains in this instance (Waterman et al., 2012).

Todorova (2014) explored the influence of cultural beliefs and attitudes regarding immunizations. The author found that despite the obvious benefits of immunizations on preventing illnesses, barriers exist that can shape perceptions regarding immunizations. These barriers vary across cultures and can include perceptions of immunizations' safety, morality, misinformation, and cultural and historical norms (Todorova, 2014). Furthermore, Todorova (2014) indicates that immunizations are not a behavioral health intervention that clients may feel entirely supportive of without questioning their benefits as health prevention.

That is to say, many clients may have their own ideas and feelings regarding immunizations before they enter a clinic or meet a health professional. These ideas and feelings may be negative in nature and result from a broad array of sources including distrust, conspiracy theories, or past instances of racism among certain cultures. The feelings of mistrust of immunizations that can manifest today have existed since immunizations were developed. Where variation exists is where cultures are diverse. For example, the cultural experiences of individuals in Romania and Bulgaria will differ from those of individuals in Nigeria or elsewhere around the world (Todorova, 2014).

The literature review yielded few research studies that specifically explored the attitudes of the Hispanic population in regards to immunizations thus little data exists on specific barriers Mexican immigrants identify in regards to immunization uptake. Those studies that I located focused on parental attitudes of immunizations as they related to their child(ren) or illnesses such as Human Papillomavirus (HPV) to the exclusion of other illnesses for which there are immunizations. This demonstrates a need for further

exploration of the study topic at hand to inform the literature. Furthermore, the literature review yielded few research studies specifically focused on exploring the influence of culture surrounding immunizations within the Hispanic population, specifically from the perspective of female Mexican immigrants.

Galanti (2015) identified barriers that could prevent immunization uptake in immigrants including the Hispanic immigrant population. These barriers can be internal in nature, which is to say that they are the result of the beliefs and ideals of the individual regarding immunizations (their perceptions), as opposed to disbelief in health professionals that may suggest immunizations or the information that they present regarding immunizations (Galanti, 2015). Therefore, different cultures can place different values on immunizations and these may be based solely on culture. One example of an internal barrier is observable in a study by Luque et al. (2010) considering the beliefs that female Hispanic immigrants and non-Hispanic Caucasian women in the southern United States had of an immunization for HPV. These barriers mentioned by study participants included lack of information about the immunization, side effects, the sensitivity surrounding immunizing young girls with an immunization of this nature, as well as the possible encouragement of sexual activity that this immunization might provide (Luque et al., 2010).

Difficulty neutralizing lines between educating daughters and encouraging them to engage in sexual behavior by discussion of the immunization was identified as an internal barrier for one respondent. She did not know how to balance educating her daughters about the immunization with discouraging sexual behavior (Luque et al.,

2010). This internal barrier could prevent a parent from obtaining an immunization for his or her child despite receiving accurate information regarding the safety and benefits of the immunization that could alleviate the parent's concerns.

Other barriers that could influence immunization uptake in Hispanic immigrant women included lack of information about the immunization itself (especially if a new immunization), cost of the immunization, fear of a new immunization (risks/side effects), and barriers that would restrict one's access to the immunization such as citizenship status, time, transportation, and location where immunization was being provided. Common barriers indicated by Mexican participants in the study included access barriers and cost of immunization (Luque et al., 2010).

The aforementioned cultural barriers were in several instances identical to barriers that could contribute to health disparities in Hispanic women. For example, citizenship status as well as cost and transportation to and from location were factors that would contribute to lack of optimal health care including immunization uptake in immigrants, especially female Mexican immigrants. Isolation could contribute to lack of information regarding available immunizations and health care resources within the community. Furthermore, fear could invariably affect whether a female Mexican immigrant would seek treatment for mental health services or feel adequately comfortable asking questions related to the risks of immunizations if she even knew that such services existed and were available to her as a member of her community.

Kowal, Jardine, and Bubela (2015) focused on immunization uptake in children of immigrant South Asian, Chinese, and Bhutanese mothers and indicated that they consider

a number of factors when deciding to immunize their children. Many mothers differentiated between immunizations for their children and themselves insofar as wanting to focus on ensuring their children received all immunizations that could improve their health. For example; they had had immunizations themselves as a child and wanted their children to also have them.

Yet, as adults, the immigrant mothers in this study had few if any immunizations unless they were recommended to them by a health care professional, such as a nurse (Kowal et al., 2015). The study participants relied on being informed of the necessity of immunizations by health care professionals. They trusted health care professionals not to suggest immunizations for their children if they would pose any risk. Other participants identified relying on the advice of extended family, including mothers and mothers-in-law exclusively, in making health care decisions for their children. However, these social supports evaporated due to immigration from their country-of-origin to Canada leaving these mothers to rely solely on health care providers for recommended health care options for their children (Kowal et al., 2015) Immunization uptake was primarily health care professional driven in decision-making related to immunizations for their children and themselves (Kowal et al., 2015).

Findings of a study on the effectiveness of a community coalition for improving child immunization rates in New York City by Findley et al. (2008) corroborate the findings of Kowal et al. (2015) insofar as the provision of information regarding immunizations to parents as well as reminders of when immunizations are due for their children. Children who were enrolled in the Right Start program (RSP) had 11.1% higher

immunization rates when compared to children who were not enrolled in the program. Those children enrolled in the RSP were found to complete their series of immunizations nearly two weeks before those not enrolled in the program (Findley et al, 2008).

These findings suggest that, when considering how immunization rates may be increased, it could be beneficial to maintain an outreach protocol with certain minority populations including Hispanics. This could lead parents to remain more engaged with maintaining their child's immunizations. It could also lead parents to be proactive about their child's immunizations and possibly be proactive in maintaining their own immunizations.

Summary

This chapter began with an orientation to the purpose of this study which is exploring the perceptions of immunizations in female Mexican immigrants. The literature search strategy was outlined and specific databases utilized to conduct the literature search were identified. The theoretical framework, consisting of the HBM and SCT, was presented and described in detail including in terms of how they were applicable to the study being undertaken. Health care in the United States was discussed in terms of its complexity and challenges individuals may face when seeking medical care were explored.

The provision of quality health care, including immunizations, presents many challenges for the Hispanic population. This is particularly true for immigrants, who may come to the United States with varying health histories, having had differing access to health care, and having engaged in varying health behaviors before they immigrated to

the United States. Furthermore, immigrants come from diverse cultures and may have varying perceptions of health care (including immunizations) based upon their individual culture. The Hispanic population, including immigrants, face health disparities that can contribute to poor health outcomes. Health disparities that influence the Hispanic population, including women, were explored in detail in this chapter.

Health psychology was discussed in terms of its holistic nature. A breakdown was provided of the subdivisions that exist within the field of health psychology including health behaviors, stress and coping, and issues in health care. A brief history of immunizations was provided including an in-depth consideration of Edward Jenner's contributions to immunization development as well as a discussion of the important role women played in encouraging immunization uptake since the early days of variolation/immunization. The benefits of immunizations were explored with an emphasis on polio, an illness that has been successfully eradicated in the United States as a result of immunization uptake.

Data were provided on the number of Hispanic immigrants to the United States currently as well as historical data from more than 50 years ago for comparison. Projection data were also provided for this population. The Hispanic population within the United States is continuing to grow. As a result, there is increased need for more representation of this population's lived experiences with regards to health care in the literature. The few findings that existed in the literature were presented on immigrants and immunizations, including how parents make decisions on immunization uptake for

their children as well as attitudes on HPV immunization in a sample of Hispanic and non-Hispanic Caucasian women from the southern United States are presented.

The current study filled a gap that existed in the literature insofar as it explored the perceptions of immunizations female Hispanic immigrants from Mexico hold. This study contributed to the field of health psychology because it allowed female Hispanic immigrants from Mexico to explore in great detail their experiences and perceptions of immunizations. In turn, the data collected will be utilized by health psychologists and other professionals to tailor culturally sensitive interventions to this population. Chapter 3 outlines the methodology used in conducting this study.

Chapter 3: Research Method

Introduction

The purpose of this study was to increase the understanding of the perceptions and beliefs of female Mexican immigrants in Oklahoma regarding immunizations by exploring their lived experiences with immunizations. A qualitative research design using a phenomenological approach was utilized to collect data from study participants. Personal interviews were conducted with female Mexican immigrants who resided within a rural geographical location in the state of Oklahoma.

In this chapter, the research design chosen for this study will be discussed as well as why other research study designs were considered but not chosen for this research study. The research questions are discussed here in Chapter 3 along with the role of the researcher during this study. Methodology of this study is discussed in-depth, such as identifying the study population, number of participants, criterion of inclusion and exclusion, data collection procedures, trustworthiness, and ethical concerns.

Research Design and Rationale

Research Study Questions

The research questions for the study included the following:

Central Research Question-Qualitative: How do female Mexican immigrants in Oklahoma view health prevention and immunizations?

This study addressed the following research subquestions:

RQ1: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding immunizations? *IQ1*: What do you know about the role of immunizations in maintaining health?

RQ2: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding their risk of acquiring a disease without being immunized? *IQ2*: Do you think there are any possible risks related to not being immunized? If so, what are they?

RQ3: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding barriers to immunization uptake? *IQ3*: What are the conditions or situations that may influence your willingness to be immunized?

RQ4: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding the ability of immunizations to prevent disease? *IQ4*: How important would immunizations be to helping prevent diseases you may be exposed to?

Phenomenon of Interest

The lived experiences of Mexicans who have immigrated to the United States in regards to immunizations are the phenomenon of interest in this qualitative research study, for which I used a descriptive phenomenological approach. This study specifically explored the lived experiences of female Mexicans who have immigrated to the United States, have been immunized, and have had their child or children immunized. This research study sought to increase the understanding of the perceptions and beliefs that

female Mexican immigrants in rural Oklahoma have of immunizations by exploring this phenomenon.

Chosen Research Tradition

The research study method used to conduct this study was a qualitative research design using a descriptive phenomenological approach. Giorgi (2009) sought to use a descriptive phenomenological method in order to conduct qualitative research that is applicable to the field of psychology. This study maintained a social constructivist worldview whereby individuals attach subjective meanings to their experiences, allowing them to understand their world (Creswell, 2013). Researchers have considered phenomenology to be the most appropriate choice when studying and exploring a human's experience with a specific phenomenon (Giorgi, 2009; Moustakas, 1994; Wimpenny & Gass, 2000). I sought to increase the understanding of the perceptions and beliefs that female Mexican immigrants in Oklahoma hold of immunizations by exploring their lived experiences with immunizations.

Rationale for Chosen Tradition

Phenomenology was selected as the design for this research study because the research questions were focused on exploring and understanding the lived experiences of the study participants regarding immunizations. Phenomenology allows the researcher to understand the essence of the lived experiences of the phenomenon being studied by viewing each person as unique and furthermore considering that each experience is unique to that person and his or her particular world-view (Giorgi, 2009; Moustakas, 1994; Nicholls, 2009). The method of a research study should relate back to the research

question, which will in turn illuminates the question, therefore providing a description of the explored phenomenon that is richly layered in textures and of meaning (Moustakas, 1994). This research study sought to explore the lived experiences of immigrant Hispanics in rural Oklahoma regarding immunizations so that their lived experiences were captured and described (Patton, 2002). This provided increased understanding of the perceptions and beliefs that female Mexican immigrants in rural Oklahoma have regarding immunizations.

Grounded theory was not selected for this research study because the desired outcome of this research study was not to develop or to discover a theory regarding immunizations as they related to female Hispanic immigrants. Grounded theory, when used as an approach in a qualitative research design, is focused on generating a theory (Patton, 2002). While it may have been that a theory could emerge from the results of this research study, that was not the primary goal. Therefore, grounded theory was not selected as the research method for this particular research study.

Ethnography was also considered as an approach with this qualitative research design. Consequently, this approach was not chosen because it was not appropriate based on the aim of this research study. Ethnography focuses on the culture of a group and of how their worldview may be influenced by culture (Creswell, 2013). This approach would have been appropriate if the research study aim had been to better understand how Hispanic culture influences the perceptions of the study participants regarding immunizations. However, this research study's aim was to explore the lived experiences of the study participants regarding immunizations.

Role of the Researcher

A qualitative researcher plays an important role in qualitative inquiry and is considered the key instrument (Cope, 2014; Creswell, 2013; Patton, 2002). The researcher collects the data for a qualitative research study him- or herself, collecting data in various forms such as interviews, audio and video recordings, field notes, and other forms of data such as transcripts from interviews. The role that I performed was that I recruited participants, conducted face-to-face interviews, collected data via digital audiotaping and field notes during the interview process, and then transcribed the digital audio recordings of the interviews into text. Furthermore, I analyzed and coded the data from the study so the results of the data analysis were obtained and reported.

I sought to minimize any biases such as knowledge and experiences with immunizations by bracketing my own presumptions and assumptions resulting from my own experiences. This decreased the subjectivity regarding the phenomenon being studied and supported sufficiently describing how the research study participants perceive the phenomenon (Creswell, 2013).

I declared that I do not have any personal or professional relationships with the participants. I am not Hispanic and do not speak Spanish. In addition, this research study was not conducted within my work environment, so there was no power relationship to be managed or mitigated. I care for this community and am concerned for this segment of the population as it is currently underrepresented in the literature with regards to immunizations.

Study participants each received a $20.00 Wal-Mart gift card; the gift card was given as a thank-you for participation in the research study. The thank-you was given as a gesture of gratitude to study participants for having participated in the research study or, at a minimum, for showing up for their scheduled interview regardless of whether or not they went on to participate in the research study or not. To receive the thank-you gift card for participating, the study participant came to the scheduled in-depth personal interview appointment scheduled for her.

Methodology

Sample Population

The participants for this research study were female immigrant Hispanics that had emigrated from Mexico to the United States. They were age 18 years and older, mothers, and spoke English, Spanish, or both English and Spanish. The sample study participants resided in a rural geographical area within the state of Oklahoma.

Identifying and Justifying Sampling Strategy

In this qualitative descriptive phenomenological study, study participants were recruited based on their meeting the criteria for inclusion in participating in this research study, including having experienced the phenomenon that was studied and explored. I used a purposeful sample to recruit study participants in this research study. That is, I recruited participants to the study by purposefully recruiting from the population that has experienced the phenomenon to be studied (Patton, 2002).

A volunteer recruitment flyer was used to recruit the participants for this study. However, should there had been too few participants recruited via the volunteer

recruitment flyer, I would have then used snowball sampling to obtain the sample for this study. Snowball sampling would have happened by obtaining contact information for a potential study participant who met inclusion criteria from a person who was interviewed who had also experienced the phenomena that was studied (Baltes, Zhdanova, & Clark, 2011; Creswell, 2013). Immigrant populations can be hard to reach, including Latino immigrants who face stigma, prejudice, and poverty upon immigrating to the United States (Shedlin, Decena, Mangadu, & Martinez, 2011). Consequently, this vulnerable, high-risk population is underrepresented in research, and as the Hispanic population continues to increase in size in the United States, snowball sampling would have been used as a recruitment tool had it been necessary to ensure that this population was reached and included in current research (Haack, Gerdes, & Lawton, 2014).

Criteria of Participant Selection

In regards to criteria of the selection of study participants, the selection was based on the research question and on the participants having experienced the phenomenon under study. Participant inclusion criteria were the following:

- They identified themselves as Hispanic.
- They resided in a rural area within the state of Oklahoma.
- They were female.
- They spoke English, Spanish, or both English and Spanish.
- They were 18 years of age and older.
- They emigrated from Mexico to the United States.
- They were mothers.

Rationale and Number of Participants

The sample size for this study was 12 study participants or as many as were needed to ensure no new information was revealed, as then saturation was determined to have occurred. Twelve study participants were selected for this study because this was a manageable number of study participants to include in a research study that was hand coded. Qualitative research sampling sizes are generally smaller than those used in quantitative research (Dworkin, 2012). Phenomenological research studies involve an in-depth exploration, a focused inquiry of a phenomenon conducted with people who have experience with the phenomenon (Patton, 2002). A qualitative researcher seeks to recruit a small purposive sampling that meets the specific criterion of having experienced the phenomena being studied as well as additional criteria that may be relevant to the study population.

Procedures for Identification, Contact, and Recruitment

When the Walden University Institutional Review Board (IRB) granted approval to conduct the research study (Approval No. 08-16-16-0385411), a recruitment flyer was posted at various local Latino market stores located within a rural county in Oklahoma. It was not necessary to obtain a written, formal "letter of cooperation" with a community partner because I was not working in partnership with any community partner. When a Latino supermarket granted permission for me to post a recruitment flyer at the market store, their agreement was implied by their posting of the flyer (as per Walden University IRB requirements and procedures).

The informed consent forms and recruitment flyer were available in both English and Spanish and stated the title of the research study, the purpose of the study, the IRB approval number, and the criteria potential study participants must have met to participate in the research study. It is customary to first create items such as recruitment flyers in English and then translate into Spanish (Hohl, Gonzalez, Carosso, Ibarra, & Thompson, 2014). The recruitment flyer also listed my contact information and my availability on different days and times of the week. The interpreter helped translate the flyer, prescreening questions (to screen for inclusion to participate in the study), interview questions, and informed consent form from English to Spanish. As per Walden University IRB requirements, the interpreter also translated the Spanish versions of the documents back into English to ensure consistency in words and meanings throughout the translations.

The interpreter was available at the stated days and times so that she could translate for me and a potential study participant should the potential study participant not have spoken English or not spoken it fluently and, as such need the assistance of an interpreter. When a potential study participant called to inquire about the research study, introductions were performed and the purpose of the study explained. Potential study participants were prescreened using the inclusion criterion for their ability to be part of the research study sampling of study participants. Sufficient time was given to potential study participants who called in the effort to ensure that all questions that the caller may have had was answered effectively. Their privacy and confidentiality were discussed as

well as their option to cease to participate in the study at any point if they so desired to without fear of reprisal.

I conducted the personal interviews in a location that was reserved for specific days and times identified to conduct the interviews with the study participants. The room provided privacy for the interviews and study participants, as well as facilitated optimal data collection. The study participants each received a $20.00 Wal-Mart gift card; the gift card was given as an incentive to participate in the research study. The incentive was also given as a thank-you for participating in the research study. Regardless of whether a potential study participant decided to participate in the study or declined to do so, or possibly decided to cease participating at some point during an interview, the study participant still received the incentive gift card.

When the study participant arrived for the interview, the consent form was reviewed with the study participant, and it reiterated that their participation was voluntary, private, and confidential. Furthermore, it was reiterated that if they decided at any time to cease participating in the research study, they were welcome to do so and need not to fear any reprisal. The potential study participant was given the Wal-Mart gift card and informed that she could use it at any Wal-Mart Super Center. The research study participants were encouraged to ask any questions so that I may have answered their questions or concerns. For the interviewing process to be successful, a researcher must be engaged and sensitive with the study participant (Donalek, 2004). This facilitated rapport to develop between the study participants and myself and allowed for ease of discussing their lived experiences with immunizations and the obtainment of rich, thick data.

Relationship Between Saturation and Sample Size

While there is not a predetermined number for deciding the sample size in qualitative research, there are general recommendations based on data saturation (Creswell, 2013; Shalansky, Ericksen, & Henderson, 1999). It is recommended for a researcher to recruit and to interview study participants until there is not any new information being collected. Data saturation occurs when there is not any new information being revealed during the interviewing process (Creswell, 2007). Saturation has become the recommended guideline in phenomenology (Walker, 2012). The sample size for this study was 12 or until saturation occurred. Twelve was the number of participants decided upon because this was the number of participants recommended by Walden and, with selecting 12 participants, I was assured that I would reach saturation with my study participants.

Data Collection Instrument and Source

The phenomenological approach in qualitative research utilizes interviewing as a main method of data collection along with other methods of data collection in phenomenology such as field notes, observations, and journals (Creswell, 2013; Tessier, 2012). Data collection for this research study consisted of semistructured, in-depth, face-to-face interviews utilizing open-ended questions with each of the study participants. Personal interviews were conducted face-to-face with study participants which facilitated the development of rapport between myself and the study participants. I was able to promote a sense of security and comfort for the study participant as the interview were conducted in an appropriate environment where the study participant felt that she could

disclose personal information for the sole purpose of being utilized confidentially in the research study. Furthermore, this facilitation of rapport optimized the collection of rich, thick data during the interview and data collection process (Draper & Swift, 2010). Interviews conducted with the study participants were digitally audio-recorded and transcribed by myself verbatim. Field notes from observations made during the face-to-face interviews were also obtained.

When a study participant arrived for the scheduled interview, I performed introductions and reviewed the informed consent form by reading it aloud to the study participant. When the study participant's main language was Spanish, the translator assisted me in translating the informed consent form to the study participant. The informed consent form was available in English and Spanish so that if a study participant was not fluent in speaking English, the study participant would have a copy of the form in their primary language. Study participants were each given a copy of the informed consent form to take home with them, with keeping a signed copy of the informed consent form for myself.

Unless a study participant had stated that she would have liked to cease participating in the research study early, all interviews were conducted for 60 to 90 minutes. This time frame provided adequate time to ask the four research questions and to ask follow-up questions as needed. This time frame also allowed me to ask study participants for clarification as needed in individual responses. Also, the 90 minutes allotted for the extra time that was needed with study participants who spoke only Spanish. It took more time for the interviews with these study participants because the

interpreter needed to translate the question to the study participant and then translate the answer from the study participant back to myself. Study participants were also informed at the beginning of each interview that they were welcome to take bathroom breaks, as well as to ask any questions, or voice any concerns they might have had at that time. This facilitated putting the study participant as ease, the development of trust, and establishment of rapport.

As per Walden University's guidelines and policies, the Spanish interpreter had taken training offered by the National Institute of Health on human subject's protection in research. The Spanish interpreter that was chosen as the interpreter for this research study was chosen because of her years of being employed within the public health field as a Spanish interpreter and her ability of ease in developing rapport with people. Public health is a field of professional practice that promotes health within communities, bringing together nurses, child development specialists, and others, to prevent disease and promote optimal health. The interpreter is of Hispanic ethnicity and has family that has immigrated to Oklahoma from Mexico. Consequently, she understands the culture and the health and racial disparities that affect this vulnerable, ethnic minority population as well as having the understanding of slang terms and difference in meaning of words in her native language.

The interpreter was educated and informed on qualitative research and the data collection process by myself. The interpreter was also educated on informed consent and confidentiality. Walden University has a confidentiality form that is specific for researchers to use with interpreters so that it ensures their understanding and

acknowledgement of confidentiality during the study. Their signatures on the confidentiality form serves as their agreement to keep the data and study participants personal information confidential.

Sufficiency of Data Collection to Answer Research Question

The sufficiency of data collection to answer the study's research questions was dependent upon an adequate sample as well as on the study sample being a purposive sample. The participants had experienced the phenomena that was studied and explored. When the sample was large enough size that saturation occurred, it resulted in the collection of rich, thick data that answered the study's research questions (Creswell, 2013; Draper & Swift, 2010; Patton, 2002).

Data Analysis Plan

Qualitative researchers have the option of using a couple of different types of software to assist in the data analysis for their research studies or they may choose to conduct the coding by hand (Creswell, 2013; Patton, 2002). While it is tempting for a researcher to use analysis programs because they can quickly identify themes, store and manage data, and retrieve data, the software does not have the capacity to understand and identify cultural meaning given to words nor of slang words spoken by the study participants for this research study. Therefore, I hand coded the data personally so as not to lose or miss any wording of meaning units or themes that could have possibly been lost or missed if using software. Even though an immigrant may speak English, her words could still espouse cultural meaning, intonation, and slang that could have been missed if I had used a qualitative data analysis program. This could have decreased the overall

trustworthiness of the data results and study. Hand coding is analytically rigorous, and time intensive, decreasing the likelihood of loss of data or misidentification of cultural meaning of words, including possible slang words used by the study participants. Furthermore, hand coding increased the trustworthiness of the data results and of the research study overall (Patton, 2002; Sousa, 2014).

When analyzing the data, I transcribed the digital audio tapes verbatim from the study participant interviews and then organized the transcribed data files (Bahl, Murphy, & Strachan, 2008). I then slowly read, and re-read through the transcript text, identifying significant statements that were grouped and labeled as "meaning units'. These meaning units were used to identify themes that facilitated the development of textural and structural descriptions, which further assisted in the development of the essence of the study participant's experience (Creswell, 2013; Patton, 2002).

Evidence of Trustworthiness

Addressing Credibility, Transferability, and Dependability

In psychology, the use of qualitative research methods is increasing (Roberts & Povee, 2014). Rigor is considered critical for establishing trustworthiness and credibility in qualitative research (Thomas & Magilvy, 2011). Rigor refers to the degree to which the qualitative researcher adheres to the chosen methodological design of the research study (Sousa, 2014). I maintained an audit trail to increase the credibility of this research study which was facilitated by transcripts provided from the digital audio recordings.

The digital audio recordings were transcribed by me only, which increased and enhanced the credibility, transferability, and dependability of the data. This occurred

because when I worked transcribing each interview, I remembered the intonation, nuances, and discussion with each of the study participants. This is true because in qualitative research utilizing a phenomenological approach, the number of study participants can range anywhere from fewer than ten to as many as 25. The sample size for this study was 12 or until saturation occurred (Creswell, 2013).

When someone other than the researcher transcribes audio recordings, there is an increase in the possibility that error will occur in transcription of wording and/or meaning units, which in turn increases the risk of losing the essence of the study participants' lived experience of the phenomena being studied (Tessier, 2012). Lack of familiarity with the phenomena being studied as well as lack of knowledge and understanding of Latino language and culture can cause unambiguous translation errors to occur. Consequently, then the credibility, transferability, and dependability of the data, data analysis, and results are decreased. Therefore, I established credibility by transcribing and reviewing each of the study participant's transcripts, looking for similarities between and across the study participants (Sousa, 2014). Credibility of a qualitative research study is achieved when the researcher presents such an accurate description of the lived, human experience that not only the study participants recognize it, but also others sharing the same experience would recognize it as well (Moustakas, 1994; Sousa, 2014).

Furthermore, I conducted specific techniques resulting in triangulation of the research data, triangulation being a process that increases the credibility, validity, and trustworthiness of the qualitative research study (Cope, 2014; Creswell, 2013; Patton,

2002). The process by which I achieved triangulation was by performing the following three-step process listed below:

1. Digital audio tape of each participant interview
2. Transcription of each transcribed audio tape recording.
3. Member checking with study participants.

I chose to conduct member checking because it served several purposes, one of which provided for prolonged engagement between myself and with the study participants, resulting in transferability and credibility. Guba and Lincoln (1989) posit that triangulating the research study's data works to establish trustworthiness in qualitative research by increasing dependability and credibility of the research study's results. Therefore, member checking technique used in qualitative research is critical for establishing credibility (Lincoln & Guba, 1985).

Addressing Confirmability

The collection of various forms of data increases confirmability. Guba and Lincoln (1989) identify that the member checking process is the most effective technique that can be utilized to establish credibility in a qualitative research study. The process of member checking can also serve several functions including allowing study participants to clarify the intent and essence of statements given during data collection, providing the opportunity to correct any misinterpretations or factual errors. Furthermore, finalizing the study participant's interview data as being on the record and correct according to the study participant (Guba & Lincoln, 1989).

In this study, I collected audiotaped interviews, field notes, as well as transcribed the interview data, and conducted member checks. It is through the various forms of data collected and analyzed as well as conducting member checks at the end of each personal interview that a researcher establishes and strengthens confirmability within and of a qualitative research study (Patton, 2002).

Ethical Procedures for this Research Study

Agreements to Gain Access to Sampling Population

It was not until authorization had been granted by Walden University's IRB, that I began to access the population. Walden University's IRB reviewed the IRB application submitted to them for the research study along with all the supporting documents. This included documents such as the English and Spanish versions of the volunteer research recruitment flyers, interview questions, and pre-screening questions (criteria for inclusion of the study). The IRB ensured that the study was to be conducted in an ethical and safe manner with the study participants. Once authorization had been granted for me to conduct the research study, volunteer research study participant recruitment flyers were posted at various Latino market stores located within LeFlore County. The volunteer research study participant recruitment flyers were posted in both English and Spanish versions.

The interviews were conducted in a private room securely located in a large hotel that is available for the public to rent for any occasion. The hotel where the room was located is centrally and conveniently located in LeFlore County. Dates and times for conducting the interviews were decided upon prior to beginning the interviewing and data

collection processes. Once the dates and times were decided upon for conducting the interviews, I reserved the room in which to conduct the interviews.

Treatment of Human Participants

The largest and quickest growing population group in the United States is the Latino population and yet, they are one of the most under-represented populations in research (Haack et al., 2014; Lindsey et al. 2011). My aim was to engage in ethical research practice and to facilitate a positive, respectful, and dignified experience for the study participants of this research study (Hardicre, 2014). Furthermore, if the study sample experiences a positive experience in the research study, they will be more apt to participate in future research studies and to recommend other Hispanic people to participate in research studies. This is crucial, in that this population is under-represented in research and experiences a high degree of racial and health disparities. If these are to be decreased, then more research needs to be conducted with the Hispanic population.

Ethical research and treatment of the study participants consisted of informed consent forms that were written in both English and Spanish. These forms were reviewed thoroughly with each of the study participants and a copy given to each one to take home with her. Furthermore, it is vital that each study participant's identity remains private and confidential; therefore, each study participant will be assigned a fictitious name and identified by an identification (ID) number throughout the study. The interpreter used for this research study was educated and instructed on the strict procedures utilized to ensure privacy and confidentiality of the study participants. The interpreter was required to sign Walden University's interpreter confidentiality form.

Treatment of Data

Researchers must always be concerned with the treatment and storage of data obtained from their research studies and are increasingly doing so (Buys & Shaw, 2015). The trustworthiness of any research study is dependent on the collection and securing of data so that none is for any reason. The data from each interview must be complete so that the data are a true representation of the study participant's lived experiences. Safeguards by a researcher must be in place so that data are not inadvertently lost. The data collected from this study was kept confidential, with the study participant's identity and privacy respected.

I applied a user password on my laptop while downloading and working with the interview data and data analysis so that only I could access the laptop and data. I also purchased a locked safe box in which the digital audio recordings, hard copies of transcripts from the audio recordings, signed informed consent forms, and the signed interpreter confidentiality form is kept. As per Walden University's policy, the collected data is to be stored at my residence in the locked safe box for five years and after five years, the data is to be destroyed.

Summary

Based on the aim of the research study and of the central research question, the research study method that was appropriate and therefore chosen for this study was a qualitative research design using a phenomenological approach to guide the research study. This research study sought to answer the central research question of how female Mexican immigrants in Oklahoma view health prevention and immunizations. The

phenomenon of interest for this study was the lived experiences of Mexicans who have immigrated to the United States in regards to immunizations. The sampling population was females from Mexico, 18 years of age and older, who spoke either English, Spanish, or both languages who resided in a rural geographical area in Oklahoma. The sample size for this study was 12 or until saturation occurred. Data collection consisted of face-to-face interviews that were digitally audio recorded as well as field notes taken during each interview. The researcher transcribed the audio recordings verbatim, and used the transcripts to hand code and conduct the data analysis. Triangulation was used in this research study to establish trustworthiness and confirmability. Data remain stored in a locked safe box for five years and will then be promptly destroyed. Ethical considerations and actions were taken to protect the privacy and confidentiality of the study participants. I treated the participants with respect and dignity by fully disclosing the purpose of the research study, obtaining signed informed consent forms, and assigning a fictitious name for each study participant. I will discuss the results of the study's data analysis in chapter 4 of this dissertation.

Chapter 4: Results

Introduction

The purpose of this descriptive phenomenological research study was to explore the perceptions of immunizations as health prevention among female Mexican immigrants in Oklahoma. I explored their experiences and perceptions of immunizations. The central research question of this research study was as follows: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding immunizations?

This research study addressed the following subquestions and each subquestion's corresponding interview question(s):

RQ1: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding immunizations? *IQ1*: What do you know about the role of immunizations in maintaining health?

RQ2: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding their risk of acquiring a disease without being immunized? *IQ2*: Do you think there are any possible risks related to not being immunized? If so, what are they?

RQ3: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding barriers to immunization uptake? *IQ3*: What are the conditions or situations that may influence your willingness to be immunized?

RQ4: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding the ability of immunizations to prevent disease? *IQ4*

How important would immunizations be to helping prevent diseases you may be exposed to?

Chapter 4 includes information regarding my study participant sample, recruitment method, and the process I used to conduct the personal interviews. The data analysis is discussed in this chapter along with the trustworthiness of this research study. To conclude this chapter, a summary is provided and an introduction to Chapter 5 is presented.

Setting

I conducted 12 personal interviews with study participants in a setting that was accessible to the public. This setting was selected because private rooms were available for rent. The location of the setting was easy for the study participants to find. The room where personal interviews were conducted was made comfortable for the study participants by setting the thermostat to a comfortable temperature. No study participants reported having trouble locating the setting where the personal interviews were conducted. Every study participant arrived on time for her personal interview. I allotted 1 hour for each interview with the knowledge that each interview could last for a shorter or longer period. When scheduling the interviews, I allotted 1½ hours for each interview. The length of personal interviews ranged from 1 hour to 1½ hours in length.

Demographics

Twelve female Mexican immigrants participated in this research study. All study participants self-identified as Mexican and immigrated to the United States from Mexico. They all resided in Leflore County at the time of recruitment and data collection. All 12

study participants were mothers with children whose ages ranged from 9 months to young adulthood. Study participants themselves ranged in age from young adult to 55 years of age. All study participants were employed and worked in a variety of settings inclusive of housecleaning, factory work, mobile food vending, and businesses that employed cashiers. One study participant would begin nursing school in the fall of 2016. Five of the study participants identified themselves as being married. No external factors influenced study participants' responses. Likewise, they had experienced nothing at the time of the data collection that may have influenced the interpretation of the data collected.

Data Collection

Walden University's IRB granted approval for me to conduct this research study. I posted recruitment flyers in both English and Spanish at various Latino markets located within Leflore County, Oklahoma. All fliers contained my contact information, and 12 individuals contacted me to inquire if they met the requirements to participate in the research study. Each study participant was screened prior to inclusion. All study participants met the prescreening inclusion criteria and were given a date, time, and location for the personal interview. One interview was conducted with each study participant, and member checking was conducted with each participant at the end of each interview to ensure that I understood the essence of what each study participant said.

As each study participant arrived, the translator and I were ready to conduct the personal interview. Each study participant arrived on time and ready to participate in the study. Introductions were made, the purpose of the study was explained again, and

informed consent was reviewed with each study participant. Each study participant signed an informed consent form after having the opportunity to ask any questions or decide not to participate in the research study without recrimination. Each study participant was given a $20 Wal-Mart gift card immediately upon presenting for her scheduled interview. Despite being informed that they could cease participation in the interview at any time, all 12 study participants completed their interviews.

Personal interviews were conducted in a public location where rooms could be rented to the public. These rooms allowed for privacy and confidentiality for study participants. Data collection consisted of audio recording and taking field notes during each personal interview. Prior to recording each interview using an audio recorder, I obtained consent from each study participant to do so. While interviews were scheduled in 1½-hour blocks of time, the shortest interview was 45 minutes and the longest interview was 1½ hours. At the end of each interview, study participants were encouraged to ask any questions they had or to express any concerns or comments. No study participants asked any questions. However, I will discuss several concluding, thoughtful comments later in this chapter during data analysis. No variation of data collection occurred as the study was carried out. Furthermore, there were no unusual circumstances during the process of data collection that would have been reportable as an ethical concern.

Data Analysis

The process of data analysis began during the personal interview sessions. I observed patterns of meaning units from the study participant responses to interview

questions. All personal interview sessions were transcribed from audio tapes and hard copies of the interviews printed out for ease of data analysis. I then read each transcript, hand coding identifying themes as they emerged. As identifying themes emerged, they were further coded by relating and coordinating the themes that emerged to the constructs of the HBM as well as the conceptual framework of the SCT. This study's research questions were answered fully, and the hand-coded themes allowed for identification of the perceptions of immunizations in female Mexican immigrants. It is also important to note at this time that there were no discrepant cases in this research study.

***RQ1*: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding immunizations?**

The following themes emerged for Research Question 1 during data analysis: Immunizations keep a person healthy, immunizations prevent illness and/or disease, immunizations save lives, and immunizations stop the spread of illness and/or disease. Identified themes regarding the experiences, thoughts, and perceptions of female Mexican immigrants from their prior experiences while living in their home country of Mexico include the following: immunizations are poison, lack of information provided on purpose of immunizations, lack of access to immunizations, immunizations were not an immediate priority.

***RQ2*: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding their risk of acquiring a disease without being immunized?**

The following themes emerged for Research Question 2 during data analysis: fear for themselves and their children of contracting an illness and/or disease without being immunized, fear of death without being immunized for themselves and their children, risks of acquiring an illness and/or disease or possible death from an illness and/or disease is greater than any side effects related to immunizations. There is also a fear of acquiring an illness and/or disease when not immunized and when suffering a communicable disease.

***RQ3*: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding barriers to immunization uptake?**

The following themes emerged for Research Question 3 during data analysis: language barrier, fear of deportation, lack of information in Spanish, religion, lack of transportation, reliance on herbal remedies, and prior experiences with immunizations while living in their home country of Mexico.

***RQ4*: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding the ability of immunizations to prevent disease?**

The following themes emerged for Research Question 4 during data analysis: all family is immunized, does not get the flu shot, receive information from doctor and health department regarding immunizations, religious belief prohibits immunizations for self and children.

Evidence of Trustworthiness

Credibility, Transferability, and Dependability

The use of qualitative research methods has been increasing in psychology (Roberts & Povee, 2014). Rigor in qualitative research is considered critical for establishing trustworthiness and credibility (Thomas & Magilvy, 2011). Rigor refers to the degree to which the qualitative researcher adheres to the chosen methodological design of the research study (Sousa, 2014). In the research study I conducted, I maintained an audit trail facilitated by the transcripts provided from the digital audio recordings to increase the credibility, dependability, and transferability of this research study.

The digital audio recordings were transcribed by me, which itself increased and enhanced the credibility, transferability, and dependability of the data. This increased and enhanced credibility, transferability, and dependability occurred because when I worked transcribing each interview, I remembered the intonation, nuances, and discussion with each of the 12 study participants. There is an increased risk of losing the essence of the study participant's lived experience of the phenomena being studied when someone other than the researcher transcribes audio recordings.

There is an increase in the possibility that error will occur in transcription of wording and/or meaning units (Tessier, 2012). Unambiguous translation errors can occur due to lack of familiarity with the phenomena being studied as well as lack of knowledge and understanding of Latino language and culture. Consequently, the credibility, transferability, and dependability of the data, data analysis, and results are decreased.

Therefore, I established credibility by transcribing and reviewing each of the study participant's transcripts, looking for similarities between and across them (Sousa, 2014). Credibility of a qualitative research study is achieved when the researcher presents such an accurate description of the lived, human experience that not only the study participants recognize it, but also others sharing the same experience would recognize it as well (Moustakas, 1994; Sousa, 2014).

Furthermore, I used specific techniques resulting in triangulation of the research data, triangulation being a process that increases the credibility, validity, and trustworthiness of the qualitative research study that consisted of triangulating multiple forms of data (Cope, 2014; Creswell, 2013; Patton, 2002). The multiple forms of data consisted of audio recordings, transcripts from the transcribed audio tapes, field notes, and member checks. Guba and Lincoln (1989) posited that triangulating the research study's data works to establish trustworthiness in qualitative research by increasing dependability and credibility of the research study's results. Therefore, I used member checking technique to further establish credibility in this study (Lincoln & Guba, 1985).

Confirmability

The collection of various forms of data increased this study's confirmability. Guba and Lincoln (1989) stated that the member checking process is the most effective technique to establish credibility in a qualitative research study. Whereby I conducted member checking, I allowed the study participants to clarify the intent and essence of statements they gave during data collection, providing the opportunity to correct any misinterpretations or factual errors. As previously stated, I collected audiotaped

interviews, field notes, as well as transcribed the interview data, and conducted member checks. It was through the various forms of data that I collected, analyzed, and triangulated the various forms of data, inclusive to conducting member checks at the end of each personal interview, that I further established and strengthened confirmability within this research study (Patton, 2002).

Results

In order to obtain the essence of the study participant's experiences, thoughts, and perceptions of immunizations, I applied the SCT conceptual framework and HBM theoretical framework to the coding and thematic analysis of the data. Using the SCT framework and HBM constructs during thematic analysis enabled me to fully obtain and understand the essence of the study participants' experiences in regards to immunizations prior to migrating to the United States and their experiences with immunizations since residing in the United States.

I was also able to obtain the essence of their perceptions of immunizations and their thoughts regarding the benefits and barriers to immunizations, including what motivates them to be immunized against diseases. I now present the findings according to the research questions of this research study. It is important to note that with the study participants, the words *vaccinations* and *immunizations* were used interchangeably. It is common for the term *immunization* to be utilized interchangeably with both *inoculation* and *vaccination* (CDC, 2015).

Research Question 1

The interview question for Research Question 1 was as follows: What do you know about the role of immunizations in maintaining health? In regards to this interview question, I sought to obtain the essence of the participant's perceptions, thoughts, and possible experience of risk of contracting a vaccine preventable illness or disease and the severity of the illness or disease.

Perceived Susceptibility

Twelve out of 12 study participants stated that they and their children were susceptible to contracting an illness if they were not immunized against vaccine-preventable diseases. The study participants all held the belief that without immunizations preventing a disease, a person was susceptible to contracting the disease. Participant 5 expressed, "You get immunizations so that you will not be sick and spread sickness to other people." Additionally, participant 4 further expressed, "You can get sick or die from an illness if you aren't vaccinated." Similarly, participant 11 stated, "Without immunizations you can get sick, you are open to getting sick."

Perceived Severity

Twelve out of 12 study participants stated that without being immunized, a person is at risk of becoming sick. All twelve study participants held the belief that without immunizations for themselves and their children, they were at risk of becoming sick with a disease. Participant 2 expressed, "My friend in school didn't get the shot and he got sick and was paralyzed. So I saw the consequences of not having the shot and getting sick." Participant 12 further expressed, "Without getting immunized a person can get very sick

and die." Additionally, participant 5 verbalized, "Vaccines can keep you from getting disease that can cripple you or lead to death."

Eleven out of 12 study participants stated that without being immunized, a person is at risk of death. Nearly all the study participants held the belief that without being immunized against vaccine-preventable disease, a person is at risk to die from disease. Participant 7 explained one of her experiences while as a child residing in Mexico:

> When I was young and lived in Mexico, I seen kids that dies of measles and TB. I got chickenpox when I was seven years old because I didn't have the vaccine for it. I was really, really sick from it.

Similarly, participant 8 expressed, "In Mexico, I lived in a rural town and I seen people who didn't have shots and they caught polio and died or if they lived, they were crippled." Moreover, participant 9 verbalized, "If a person is not immunized, then diseases and illness can kill you."

One out of 12 study participants stated that without being immunized against HPV, a person is at risk of getting cancer. One mother was worried about her daughter contracting HPV and consequently developing cancer. This mother planned on taking her daughter to the local health department to receive the HPV immunization when she reached the recommended age. Participant 6 expressed, "Without the HPV vaccine, my daughter can develop cancer and as her mother, I want to prevent that."

Research Question 2

The interview questions for Research Question 2 were the following: Do you think there are any possible risks related to not being immunized? and If so, what are

they? In regards to these interview questions, I wanted to glean an understanding of the essence of the study participants' perceptions, thoughts, and possible experience with the risk of not being immunized. I also wanted to ascertain their perceived risk of contracting an illness or disease from someone who chooses not to be immunized against vaccine-preventable diseases.

Perceived Susceptibility

Twelve out of 12 study participants stated that they and their children were susceptible to contracting an illness if they were not immunized against vaccine-preventable diseases. All of the 12 study participants held the belief that they were at risk of contracting a vaccine-preventable disease if they or their children were not immunized. Participant 11 expressed, "Immunizations prevent diseases before they make you sick." Furthermore, participant 4 stated, "You can get sick or die from an illness if you aren't vaccinated." Participant 10 also verbalized, "Immunizations keep you healthy and without them, people have more of a chance of getting sick."

Three out of 12 study participants stated there was an increased risk of contracting an illness or disease from someone who chose not to be immunized against vaccine-preventable diseases. Three of the study participants acknowledged their belief and concern that when other mothers do not immunize themselves or their children, they are putting other people at risk of contracting a vaccine-preventable disease. Participant 9 expressed her thoughts, "Without immunizations, you can become sick and put others at risk for getting sick." Additionally, participant 12 had concerns regarding people choosing to not immunize themselves or their children and stated, "I am worried because

there are people who are not getting immunizations because of what they are hearing that the immunizations are bad. This puts me and my family at risk to getting the diseases too." In accordance with the other study participants, participant 7 verbalized:

> There are risks to not being vaccinated. This is a country of immigrants and they come from different places in the world. Something can just break out at any time. If you come with the measles and that could end up being a huge outbreak for everyone.

Research Question 3

The interview question for Research Question 3 was this: What are the conditions or situations that may influence your willingness to be immunized? In regards to these interview questions, I wanted to obtain an understanding of the essence of the study participant's perceptions, thoughts, and possible experience with their perceived barriers to seeking immunizations.

Perceived Barriers

Six out of 12 study participants identified language as a barrier to receiving immunizations for themselves and their children. The results indicated that these six study participants identified that language was a barrier to receiving information on when to immunize and what immunizations they should obtain for themselves and their children. Participant 8 verbalized, "When you first come here as an immigrant it is scary because you don't speak the language and you feel all alone. It is difficult to do simple things like get a shot." Likewise, Participant 7 expressed, "It is good to have so much

information available, but when it is not in Spanish, it is difficult to understand. I do not read or speak English, so that is a problem for me and my family."

Six out of 12 study participants indicated that lack of information in Spanish is a barrier to learning of disease preventable immunizations for themselves and their children. The results indicated that these six participants perceived lack of information in Spanish as being a barrier to them learning about vaccine-preventable diseases and of what immunizations they should obtain. Participant 12 stated, "I can't speak English very good and I can't read English to understand any of it. I need information to be in Spanish please."

Some participants discussed that their parents did not know how to read or write and they themselves were limited in their reading and writing of Spanish. They did not speak English at all; much less know how to read English and to understand information regarding immunizations. Participant 10 expressed, "My parents never learned how to read or to write, I went to school and learned some. But I had to stop and go to work in the fields to help our family. I don't know any English."

Six out of 12 study participants indicated fear of deportation as a barrier to receiving immunizations for themselves and their children. The results indicated that for these six participants, fear and stress of deportation was a barrier to receiving immunizations. Since they spoke no English, the participants were afraid that if they sought out information regarding where they could receive medical care, inclusive of immunizations, they would be identified as being in the United States illegally and be reported and, consequently, deported. Participant 8 explained, "I was afraid someone

would ask if I was here legally and so I would not do things as I should for my health." This fear was expressed additionally by participant 7 who stated, "I have fear because I am an illegal immigrant, and I am scared of being deported." Furthermore, participant 9 further elaborated:

> When I first came to the United States, I had new things to worry about. I did not know where to go and how things worked here. There is fear especially if you are not legal because you can be deported. There is a fear that everyone will report you to immigration or they work with immigration.

Research Question 4

The interview question for Research Question 4 was as follows: How important would immunizations be in helping prevent diseases you may be exposed to? In regards to these interview questions, I wanted to glean an understanding of the essence of the study participants' perceptions, thoughts, and experience of how important immunizations were to preventing diseases to which they might be exposed. I also wanted to ascertain their perceived benefits, cues to action, and self-efficacy in being immunized for themselves and their children.

Perceived Benefits

Twelve out of 12 study participants stated the benefits of immunizations prevents illness and keeps them and their children healthy. The results indicated that all twelve of the study participants held the belief that immunizations prevent illness and keep themselves and their children healthy. Participant 9 expressed, "There are many illnesses that they have immunizations for now and the immunizations keep you from getting sick

with those illnesses." Moreover, Participant 6 stated, "Vaccines can help protect children and the elderly, since their bodies might not be strong enough to fight off illnesses without them."

The participants verbalized confidence that immunizations could prevent illness and work to keep them and their children healthy. Participant 11 declared, "We know that immunizations are effective because there are many illnesses that people don't get often anymore because they get immunized." Additionally, Participant 2 explained, "I know they prevent illnesses, I have seen the benefits of them because I have gotten the shots and haven't gotten any of the illnesses." While one participant held the perception that although she did develop a vaccine-preventable disease and came down ill with it even though she had taken the immunization for the measles, she felt that the immunization kept her from experience a more severe episode of the measles. Participant 7 expressed, "Because I had the vaccine, when I got the measles it was not as bad as it would have been if I hadn't had the immunization for it."

Six out of 12 study participants stated that immunizations could prevent death from a vaccine-preventable disease. The results indicated that these six participants held the perception that immunizations could prevent death from vaccine-preventable diseases. Participant 10 stated, "I know immunizations can save your life." Additionally, one participant spoke of her understanding of how immunizations can affect each person differently yet provide protection from illness and possibly death. Participant 7 further expressed, "Every shot works differently in our bodies; immunizations are to prevent illnesses that are out there that can kill us."

Three out of 12 study participants stated that immunizations keep them and their children healthy so that they do not miss work and school. The results indicated that perceived benefits to receiving immunizations were that they kept the mothers and their children healthy and therefore, they were less likely to have to miss work or school. They stated they had migrated to the United States so that they could improve their quality of life, and being healthy enough to work and to go to school enhanced their quality of life.

Participant 9 verbalized, "Immunizations keep me and my family healthy so that I can go to work and my kids can go to school." One participant further expressed her belief that when people are immunized, they visit the doctor less often and miss work and school less often as well. Participant 2 elaborated, "Immunizations keep people healthy. When people get their immunizations, people are less likely to go to the doctor, miss work and school, and to have to spend money buying medicine."

Cues to Action

Twelve out of 12 study participants stated that immunizations kept them healthy. Results indicated that all study participants held the perception that immunizations kept themselves and their children healthy. Participant 6 stated, "Immunizations can save your life and keep you from getting a disease that is contagious." One participant expressed her concern and worry for her own children should they contract tuberculosis (TB) and polio. Participant 8 declared, "When you see people die of illnesses like TB and live with the effects of polio, you do not want that for your children." Whereas another participant understands the health protection that immunizations provide to people who have chronic medical conditions such as diabetes. Participant 7 verbalized, "I have diabetes and I have

to make changes to my lifestyle to take care of myself with that disease. That is why I have to get vaccinations."

Six out of 12 study participants stated that information on immunizations as health promotion and disease prevention were reasons that they receive immunizations. The study results indicated that these six participants acted on information they received regarding the health benefits of immunizations and therefore, they went to either the physician's office or the health department to obtain immunizations. Participant 4 expressed, "I get information from different sources like my doctor and the health department too. They override the other things that I hear because I trust the information I get about the benefits of immunizations." Additionally, participant 10 stated, "The information that I receive about the benefits of immunizations makes me feel that they are necessary for good health."

Three out of 12 study participants stated that they sought out and received immunizations for themselves and their children because they want to be a good role model for the children. Results for these three participants indicated that, regardless of any perceived barriers, it was of upmost importance that they serve as excellent role models for their children and be proactive in getting themselves and their children their immunizations. Participant 7 expressed, "I had a lot of fear coming to the United States and not speaking English and having to ask for the immunizations, but I want to be a role model for my daughter so I do it." Additionally, Participant 8 stated, "Now that I know what the immunization schedule is for my children, it is my role to see that they get them. That overcomes my fear of being deported; I do what I need to for my children." One

participant considered it also a parental responsibility to get immunized as well as to serve as a role model for her children. Participant 5 elaborated:

> We all have a responsibility to ourselves to get immunized. It sets an example to our children and also keeps us healthy. We all need to be immunized for our health, our children's health, and the health of everyone else.

Self-Efficacy

Seven out of 12 study participants stated they understood the importance of immunizations on their health and the health of their children. The results indicated that these seven participants held the belief that immunizations were vital to their health and the health of their children. Participant 11 expressed, "If you get immunized, you are reducing your risk of getting sick or dying of a disease that can be prevented." Additionally, participant 12 further expressed, "I don't have any problems vaccinating myself or my kids. I believe that even if you get your immunization and you still get sick, the immunization lessens the severity of it." One participant discussed how she has made it a priority to take her son to receive his immunizations since he was an infant. Participant 3 elaborated:

> I know that vaccines are very important to health. This is why I make sure that my son has his. He has went for them since he was a baby and I make it a priority because I know that without them he is at risk for getting sick. Everyone in our family gets vaccinated.

Five out of 12 study participants stated that nothing would prevent them from getting immunizations for themselves and their children. Results indicated that for these

five participants, although they may have perceived barriers, nothing was going to prevent them from obtaining immunizations for themselves and their children. Participant 5 expressed, “It is best to put your health first and immunizations keep you healthy. I think it is important to get immunized so nothing will stop me from doing it.” Similarly, participant 9 verbalized, “In Mexico, my employer paid for us to get immunized when I was working in the sugar cane fields. I wasn’t going to let fear stop me here in the United States from making sure we all stay healthy.” Additionally, participant 10 stated, “Immunizations are important and I can’t think of anything that would keep me from getting them for me and my children. We shouldn’t let false information stop us from getting immunized.”

Four out of 12 study participants stated they receive immunizations because they and their children have been immunized previously and have never developed the disease they were immunized against. The study results indicated these four participants felt confident that immunizations are effective in preventing vaccine-preventable diseases based on their past experiences with immunizations. Participant 4 expressed, “I get my flu shot every year and I have never gotten sick so I know it works.” Furthermore, participant 12 verbalized, “I do not have any problems vaccinating myself or my children because we have never became sick because we do vaccinate.” Similarly, participant 1 further elaborated:

> We get immunized and we never got those diseases. That is the reason I make the choices I do to immunize. The health department hands out paperwork that

> explains the disease that they are immunizing against so that helps us to say yes, we want those shots.

Sociocultural Theory

As this study's population consisted of immigrants who have lived most their lives outside of the United States, the cultural component of SCT highlights the importance of understanding how culture serves as a filter through which the perceptions of the study participants regarding immunizations have been formed and maintained. SCT allowed for the identification of the relevance of social interaction to the development of cognitive functioning including perceptions in general that the immigrant participants held regarding immunizations as it related as well to their culture and previous experiences while living in Mexico.

All of the study participants had migrated from Mexico and had lived a vast amount of their lifetime in Mexico. In discussions during the interviews with the participants, many discussed how they lived in rural, remote areas in Mexico as they grew up. The further went on to state that they did not have medical clinics or other health care services available to them so they would rely on medicinal teas. Participant 1 expressed, "I do think herbal remedies like tea can help health, my grandmother used to make them for us." Likewise, Participant 2 elaborated:

> Where I was from was very far away from a big city so there was not much if we get sick. If we get sick we would drink tea and it would help us get better. There is not much knowledge regarding immunizations unless someone comes and says okay we are going to give these shots.

It was further discussed and believed by many participants that had lived in the rural communities that they or their parents if they were children at the time, were not given any information regarding immunizations. They further discussed that when a physician and nurse presented within the community to give immunizations, they were not given a choice to take the immunizations, instead they were informed they were giving the immunizations to them. Participant 2 expressed:

> It was a very small community and there were very limited resources so doctors were just scheduled. We didn't receive any information. They would just say they were here to immunize and that was it. We didn't really have much belief in medicine because nothing was really explained to us. You weren't asked to be immunized, you just were.

The lack of information provided to the rural residents led some to believe that they were being injected with poison instead of a vaccine. Participant 7 explained:

> They [schoolchildren] thought they were going to be injected with poison. They just came and lined us up at school and shot us with vaccine with a gun looking thing and it scared us and made us cry. My sister does not believe in immunizations because of it. She does not immunize her kids either. We have talked to her about it and she believes that they [immunizations] are harmful to so she does not do it.

Summary

Chapter 4 discussed how I hand coded the interview data and applied the conceptual SCT and HBM framework to the data in a way that provided insight into the

emergent thematic patterns resulting from a textural-structural analysis. The textural-structural analysis described the essence of the study participants' perceptions and experiences regarding immunizations and of the health promotion and disease prevention benefits. Themes indicated that all twelve participants perceived susceptibility of acquiring a vaccine-preventable disease if they and their children did not obtain recommended immunizations. The themes also indicated that participants also perceived the severity of a possible acquired disease as resulting in a person's death.

Themes identified as barriers were language, lack of immunization information in Spanish, and participants' fear of deportation. Regardless of their perceived barriers to immunizations, desire for good health for themselves and their children along with their desire to be good role models encourages their seeking out and obtaining recommended immunizations. Chapter 5 expands on the study's findings and discusses how this study's findings compare with previous research that has been conducted. Furthermore, Chapter 5 will discuss recommendations for future research along with implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this descriptive phenomenological research study was to explore the perceptions of immunizations as health prevention among female Mexican immigrants in Oklahoma. The central research question of this research study was this: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding immunizations? I explored their experiences and perceptions of immunizations for themselves and for their children so that the essence of their perceptions and experiences with immunizations as health prevention could be obtained and help fill the gaps in current research in regards to this study population. I conducted personal interviews with 12 Mexican immigrants (self-identified), who all were mothers and who all lived in a rural geographical area of Oklahoma. Study participants ranged in age from young adults to 55 years of age, all were employed, five identified themselves as being married, and all were mothers.

The length of the interviews ranged from 1 hour to 1½ hours, which provided sufficient time for me to obtain thick, rich data that I could triangulate and analyze. As identifying themes emerged, I further coded them by relating and coordinating the themes to the constructs of the HBM as well as the conceptual framework of the SCT. I have full confidence that the study's research questions were fully answered and the hand-coded themes allowed for identification of the perceptions and experiences with immunization as health prevention behaviors in female Mexican immigrants who are mothers. I was

also able to obtain the essence of the study participants' perceptions and experiences with immunizations prior to immigrating to the United States.

Twelve of the study participants held the belief that without being immunized, they and their children were at risk for contracting a vaccine-preventable disease. They also all perceived that if they contracted a vaccine-preventable disease, they would all become very ill, with 11 participants indicating that the severity of the disease could cause death potentially. Findings in regards to the perceived benefits of immunizations indicated that 12 of the study participants held the belief that immunizations protected them and their children from vaccine-preventable diseases. The participants' perceptions were that vaccines not only protected them from the disease, but if they or their child contracted the disease they were vaccinated against, the severity of the disease was not as severe as it would have been had they not had the vaccine to prevent the disease in the first place.

Furthermore, six of the 12 participants indicated that in regards to perceived barriers, language barrier, lack of information, and fear of deportation were all perceived barriers for them in easily obtaining needed immunizations for themselves and their children so that they could experience optimal health. Moreover, regarding the participants' cues to action, findings indicated for their cues to action and being proactive in overcoming the barriers, 12 of the 12 participants indicated that immunizations kept them and their children healthy. Therefore, in regards to self-efficacy, seven of the participants understood the importance of immunizations on their health and, ultimately, for them to experience optimal health.

Interpretation of the Findings

By grounding this study firmly in the theoretical and conceptual frameworks of the HBM and SCT, I was able examine and explore the research questions and connect the participants' responses to the HBM constructs as well as to view the participant responses through the sociocultural lens facilitated by the SCT (Glanz et al., 2008; McLeod, 2007). This study's population consisted of immigrants who had lived the majority of their lives outside of the United States; therefore, the cultural component of SCT had the importance of allowing me to understanding how their culture served as a filter through which they had formed, maintained, and evolved their perceptions regarding immunizations after migrating to the United States.

Perceived Susceptibility and Severity

Findings indicated that all 12 of the study participants discussed their perceptions of how, without being immunized against vaccine-preventable diseases, then they and their children were at risk of getting a disease or illness. I wanted also to ascertain the participants' perception and experience, if any, of the severity of a disease or illness if they contracted a vaccine-preventable disease for which they had not been immunized. Findings furthermore indicated all 12 of the participants stated that if a person were not immunized, then they were at risk of becoming ill. Similarly, findings indicated 11 of the 12 participants stated that if a vaccine-preventable disease was contracted, then the person was potentially at risk of death. Additionally, one of the participants indicated her knowledge of the cancer prevention benefits of the HPV vaccine when she expressed, "I

am going to make sure that my daughter has the HPV vaccine, it will prevent her from getting cancer."

Findings also indicated that three of the 12 study participants perceived susceptibility of contracting a vaccine-preventable disease from adults and children who are not immunized against vaccine-preventable diseases. Immunizations have been identified as the primary means of reducing or eliminating the spread of certain illnesses, whereas communicable/infectious illnesses are illnesses that are capable of being spread from one individual to another (CDC, 2015). However, despite the benefits of immunizations on health, many individuals are not receiving immunizations to protect themselves or others from the most common preventable diseases and illnesses. The reasons for poor immunization uptake can include lack of resources and poor oversight of continuity of immunization uptake (WHO, 2015). Participant 4 verbalized, "I make sure that my children have their shots because now some parents are not getting their children their shots that go to school with my children. This puts my children and me at risk of getting a disease." These research findings provided new knowledge of the perceptions of female Mexican immigrant mothers regarding their and their children's perceived susceptibility of contracting a vaccine-preventable disease and of the perceived severity of the disease or illness.

Perceived Benefits of Immunizations

The findings indicated that all 12 participants expressed their belief that immunizations prevent illness and works to keep their families healthy. They were adamant in their confidence in immunizations to keep them and their children healthy.

The participants held the belief that immunizations are vital to promoting and maintaining optimal health. This belief was formed because of their experiences with immunizations. Participant 2 expressed, "I know they prevent illnesses, I have seen the benefits of them because I have gotten the shots and haven't gotten any of the illnesses."

The WHO (2008) has identified numerous benefits of immunizations including elimination and eradication of diseases and reduction in severity of symptoms of a disease if an individual becomes ill. Findings further indicated that participants attributed a benefit to immunizations being that if a person contracts a vaccine-preventable disease and has had the immunization for it, then the illness will not be as severe as it would have been for them had they not already had the immunization for that disease. Participant 7 verbalized, "Because I had the vaccine, when I got the measles it was not as bad as it would have been if I hadn't had the immunization for it."

Viruses, such as seasonal influenza (flu), are very prevalent. Flu immunization uptake can decrease the negative consequences of onset including illness symptoms, disruption of life routine, transmission of the virus to others, and missed days at work (Music, 2011). Findings indicated that participants considered another benefit of immunizations to be keeping them and their children healthy, and therefore they would not miss work or school. These findings substantiated the findings of Music (2011), who described how lack of immunizations resulted in missed days of work due to illness symptoms. Three of the 12 participants expressed that immunizations kept them healthy and, therefore, they did not have to miss work or school.

Perceived Barriers to Immunizing

My study findings substantiated the findings of Leng et al. (2009), McGarvey et al. (2003), and Rojas-Guyler et al. (2008) in that the study participants lacked the knowledge of where needed medical resources were and that not knowing the English language was a barrier to them locating the resources. Six of the 12 study participants indicated that language was a barrier to them. Participant 9 explained, "When I first came to the United States, I had new things to worry about. I did not know where to go and how things worked here."

My findings also substantiated the findings of Marshall et al. (2005) in that the participants had a difficult time settling in their communities due to not knowing anyone, not speaking the same language, and not being familiar with the area they settled in to live. Participant 8 expressed, "When you first come here as an immigrant it is scary because you don't speak the language and you feel all alone."

My study findings also substantiated the findings by Shattell et al. (2008) in that the participants experienced fear and anxiety related to their illegal status that was identified as a barrier to seeking health care. Six of the 12 participants identified fear of deportation as a barrier to receiving immunizations. Participant 8 expressed, "I was afraid someone would ask if I was here legally and so I would not do things as I should for my health."

Cues to Action

The findings substantiated Congilio et al. (2011) and Ha et al. (2013), whose research findings indicated that parents would immunize their children and themselves.

However, my findings contrasted with the findings of Kowal et al. (2015), in which although the parents had immunizations as a child and would ensure that their children have immunizations, they themselves as adults did not always obtain immunizations. Twelve out of the 12 participants expressed that they obtained immunizations for themselves and their children because they wanted them to be healthy. Participant 6 stated, "I value our health and do what I can to maintain our health. It is my obligation as a parent to protect my daughter too." This desire to be healthy and for their children to be healthy is a cue to action for the participants in seeking out immunizations for themselves and their children.

My findings also corroborated the research finding by Kowal et al. (2015), Shattell et al. (2008), and Sunil et al. (2014), who found that when a health care professional recommended a health care service, inclusive of immunizations, the participants would be more likely to trust them and to receive the health care service. The participants of my study indicated that they trusted their physicians and persons working at their local health department. Participant 4 expressed, "I get information from my doctor and the health department. I trust them." This trust of health care personnel is a cue to action for the participants in seeking out immunizations for themselves and their children.

Self-Efficacy

This study's findings indicated that the participants' self-efficacy has grown since they migrated to the United States. That self-efficacy has grown despite their life experiences in Mexico and since migrating to the United States and experiencing the

barriers of language, lack of information in Spanish, and their fear of deportation. Findings indicated that because participants understand the importance of immunizations for optimal health, many participants expressed that nothing would prevent them from getting their immunizations and immunizations for their children. Participant 3 expressed, "Everyone in our family gets vaccinated."

As immigrants to the United States, my study participants had a unique perspective of health shaped by their experience in their country of origin, Mexico. Ten of the 12 participants lived in rural, small communities that often did not staff and house a medical clinic, and if there was a clinic in the community, it was inadequate to meet the community's needs. Participant 2 expressed, "Where I was from was very far away from a big city so there is really not much if you get sick. We didn't know anything about immunizations; we didn't know have any information." Similarly, Participant 8 stated, "For me as a little girl in Mexico, we did not have a choice or information. There were children crying because they were scared." Participant 6 further expressed, "But now that we are here, we want to be healthy so we can work and go to school. We have a good life here and we want to keep it. So that is why we get our immunizations."

This study's findings substantiated the findings of Huh et al. (2008), who considered the influence of nativity on chronic health conditions such as asthma and diabetes. This study's findings indicated that for two participants who were experiencing diabetes, they felt confident in knowing that by obtaining immunizations, they were protecting their health from possible complications of their diabetes. Participant 4 stated,

"I have diabetes and if I don't take care of myself, my diabetes can get really bad. Vaccinations help me take better care of myself."

Limitations of the Study

Two limitations have been identified in regards to this research study. The first was the necessity of using a translator for conducting the personal interviews. Utilizing a translator to assist with data collection added another layer to the data collection process insofar as the collection of data. A translator may or may not translate all statements verbatim or with correct emphasis. This limitation was minimized when working with the translator who was selected to assist with this study's data collection process. A previous resident of Mexico, Ms. Aguado was fluent in Spanish and was personally familiar with the language and linguistic nuances. She also had many years of professional experience as a translator working with the target population.

The second was that this was a phenomenological research design that sought to understand the perceptions of female Mexican immigrants who lived in rural Oklahoma. Using a purposeful sample will ultimately result in making this research study difficult for another researcher to replicate. However, this is in alignment with data collection using this sampling technique. Other researchers could conduct future studies by recruiting study participants utilizing the same inclusion criteria and compare study results across this study's target population or contrast with Hispanics from other countries and regions.

Recommendations

It is recommended based on the findings of this research study that future qualitative and quantitative research focus on the evaluation of linguistically and culturally appropriate immunization information. The communication strategy utilized should be in a framing of immunizations provided for optimal health. It is further recommended that this study be replicated with the same population living in a city within Oklahoma in order to compare the findings of both studies to evaluate for substantiation of this study's findings. The findings of this study indicated that two of the study participants migrated from a large city and did not experience any negative history with immunizations such as what the other 10 study participants incurred who migrated from rural, small communities in Mexico. To compare the findings of the recommended research study would provide a greater understanding of how health psychologists, doctors, and others within the public health communities can better serve this population living in both rural and urban areas across Oklahoma.

Implications

The HBM and the SCT provided the theoretical underpinnings for this research study. I feel the HBM was the most appropriate and correct choice because the constructs allowed for ease of exploration of the research questions that in turn, facilitated the obtainment of rich, thick data that further allowed me to identify the participants perceived risk of contracting a vaccine-preventable disease without being immunized. Furthermore, it allowed me to obtain the understanding of their knowledge of immunizations as a health prevention behavior. The SCT was also an appropriate choice,

because the historical component of SCT allowed for exploration of study participants' perceptions of immunizations through the lens of both citizens of Mexico and immigrants to the United States. This study's findings provide insight that can provide community health care providers, inclusive of health departments, in developing community-based interventions can increase interest in influenza vaccination uptake in hard-to-reach populations such as this study's participants who are immigrants (Coady et al., 2008).

The findings of this study can assist health psychologists and medical care professionals including doctors, nurses, epidemiologists, and others within the public health community who are concerned with health promotion and reducing the prevalence of communicable diseases with immunizations in formulating interventions targeting immunizations in female Mexican immigrants (Lindberg & Stevens, 2011).

Social Change

This study will promote positive social change in multiple ways. The findings of this study provided knowledge regarding the perceptions of female Mexican immigrants regarding immunizations, can influence future interventions that could increase immunization uptake in this population, and may bring forth greater awareness of the overall importance of immunizations within this minority population. This knowledge adds to the literature that is presently lacking in regards to this population. Individually, female Mexican immigrants were positively influenced by the data collected because it facilitated them thinking about immunizations as they shared their own experiences. Because this was the first study focusing on issues related to immunizations within this particular population, participation allowed study participants to play a significant role in

enhancing the health and well-being of other Mexican women. Furthermore, positive social change was affected by potential policy changes to promote the health of this population and, in turn, reduce lack of proper immunizations and transmission of communicable diseases to others in the family, communities, and society at large.

Furthermore, because immigrants from Mexico are an underrepresented minority population that is continuing to grow within the United States, it is essential that we understand the perceptions of health prevention behaviors such as immunization uptake in female Mexican immigrants since it could reduce health disparities and improve longevity. Reid et al. (1999) identified immunizations as one way of promoting general health and well-being as well as lowering mortality and morbidity rates. This study's findings, again, add to the current literature available and provide new information on the perceptions of immunization uptake as health prevention behavior.

Conclusion

The immigrant Hispanic population is currently at 9.6% in Oklahoma and is continuing to grow at a rapid pace. Hispanics are identified as a vulnerable population that experiences an increased rate of health disparities and social inequalities. Immigrant populations are also identified as a vulnerable population to experience these as well, therefore female Mexican immigrants and their children are at an increased risk to experience health disparities and social inequalities related to identified barriers by the participants who participated in this study. The findings identified that all twelve of the study participants perceived that they and their children were susceptible to contracting a

vaccine-preventable disease without being immunized for the disease and that if they contracted the disease; the disease had the potential to cause their death.

The construct of perceived barriers of the HBM (which along with the SCT, grounded and guided this research study) and the findings indicated that the barriers perceived by the participants were language (they spoke no or little English), lack of immunization information in Spanish, and fear of being deported. Regardless of these barriers, the participants stated a desire to be healthy and for the sake of their children to be healthy. The participants actively work to put their fear aside of being deported and although they do not speak English, they request to speak with a translator who works at the local health department so that they can ask the translator where they can locate whatever resources they are needing, inclusive to immunizations and information regarding immunizations.

Health psychologists are committed to improving physical health by understanding how an individual's physical health is influenced by their behaviors. Therefore, now that there is a better understanding of what perceptions female Mexican immigrants residing in the United States hold of immunizations health psychologists can collaborate with local physicians, epidemiologists, and other public health practitioners in targeting health prevention efforts to assist this population in increasing immunization uptake. By doing so, the incidence of morbidity and mortality among these immigrants will likely decrease, in turn lowering this population's incidence of health disparities and social inequalities.

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Appendix A: Research Questions and Interview Questions

RQ1: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding immunizations? *IQ1*: What do you know about the role of immunizations in maintaining health?

RQ2: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding their risk of acquiring a disease without being immunized? *IQ2*: Do you think there are any possible risks related to not being immunized? If so, what are they?

RQ3: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding barriers to immunization uptake? *IQ3*: What are the conditions or situations that may influence your willingness to be immunized?

RQ4: What are the experiences, perceptions, and thoughts of female Mexican immigrants in Oklahoma regarding the ability of immunizations to prevent disease? *IQ4*: How important would immunizations be to helping prevent diseases you may be exposed to?