

ACCESS TO HEALTHCARE ISSUES RELATED TO HISPANICS WITH TYPE 2
DIABETES (T2D) IN RURAL WASHINGTON STATE

A PROPOSAL DEFENSE SUBMITTED TO THE GRADUATE DIVISION OF THE
UNIVERSITY OF HAWAI'I AT MĀNOA IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

NURSING

2016

BY

Sharon K. Titus

Dissertation committee:

Merle Kataoka-Yahiro, Chairperson, Dr. P.H., MS, APRN

James Davis, PhD

John Casken, RN, MPH, PhD

Karol Richardson, PhD, MPH, RN

Jan Shoultz, Dr. P.H., APRN

Keywords: Access to Care, Type 2 Diabetes, Hispanics, Qualitative

DEDICATION

This work is dedicated to Dr. Jean Sorrell. Thank you for mentoring this young student nurse who had one ambition: “to be like you!” I submit my nursing dissertation today...because you believed in me.

ACKNOWLEDGEMENTS

I would like to extend my sincerest gratitude to the several individuals who provided help and support throughout this study. To my advisor, Merle Kataoka-Yahiro, I am most grateful for your genuine kindness and patience throughout the dissertation process. Your caring words ring repeatedly: “Get up and stretch...go for a walk.” I did... but now it is time to fly.

Dr. Tse, our days of communicating across the world, whereby you inspired me with your passion for CBPR, are near an end. I am grateful for the many things you stopped to teach me...like formatting my papers correctly, carefully choosing my words when working with community partners, and helping me to search for a scholarly journal that supported my work.

Thank you, Dr. Jan Shoultz, for exemplifying excellence in scholarly writing. Your attention to every “dot and tittle” has made me a better nursing faculty member. Please know I read each one of your corrected comments, as I wanted to learn. Thank you for pushing me to settle for nothing less than notable work.

Dr. Davis, what a privilege to have your ‘outside’ oversight! Dr. Casken, I am thankful for your kindness in helping me to finish! Thank you both. Thank you, Dr. Richardson for standing in at the last moment.

To mein Schatz, who encouraged me to start this journey... for the pain relievers, ice packs, and these words: “We have a flight to Hawai'i to catch!” I'm now ready. Book it, Dr. T!

Above all, I'm most thankful to God Almighty for placing in my heart, at the tender age of five, an all-consuming passion to be a nurse.

ABSTRACT

Background. Hispanic Americans experience many access-to-care issues and are twice as likely as non-Hispanic whites to be diagnosed with Type 2 diabetes (T2D). However, little is known of their unique access issues related to T2D.

Purpose. To conduct an exploratory study about perceptions of access-to-care issues of Latinas with T2D in Walla Walla, Washington.

Sample. Sixteen Latina women with T2D residing in Walla Walla, Washington were recruited and interviewed. This was a purposive sample using “snowball technique.” Sample included Latina immigrants, between 18 and over 60 years old, who had diabetes on average 9.31 years (SD=9.98 years), are U.S. citizens (46.2%), lived in the U.S. for an average of 27 years (SD=12.52 years), and worked part-time (33.3%).

Setting. Two local churches in Walla Walla, Washington, and one home setting.

Method/Design. This was a Community-Based Participatory Research (CBPR) descriptive qualitative study using focus groups. A total of three focus group discussions were conducted using a semi-structured *interview guide*. Data were collected through the triangulation of observations, field notes, and interviews. Data analysis included descriptive statistics and conventional content analysis. Member check was used to validate data.

Results. Six main themes, nine categories, and 19 subcategories emerged from the five core questions using conventional content analysis. Implications for future research include the need to address gender-based studies, impact of work outside the home, and role of acculturation in management of T2D among Latinas who live in rural communities.

Key Words: Access to care, Type 2 Diabetes, Hispanics, Latinas, Rural, CBPR

TABLE OF CONTENTS

DEDICATION	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
CHAPTER 1. INTRODUCTION.....	1
Problem.....	1
Significance of the Problem	2
Conceptual Framework	4
Terminology	4
Summary.....	5
CHAPTER 2. LITERATURE REVIEW	6
Literature Review	6
Methods of Inquiry	10
Purpose Statement	20
CHAPTER 3. METHODOLOGY	21
Overview of the Study.....	21
Human Subjects.....	39
Summary.....	40
CHAPTER 4. RESULTS	41
Sample	41
Themes	45
Member Check of Study Results Based on Field Notes.....	61
CHAPTER 5. DISCUSSION	65
Healthcare: What it Means to Us.....	65
Our Most Important Health Issue	69
Signs of Trouble With My Diabetes.....	72
Taking Care of My Diabetes	74
I Go Here	82
We Get To Tell Them.....	86
Limitations.....	87
Implications	88
Appendix A: Literature Search: PRISMA Flow Diagram	90
Appendix B: Proposal Literature Review by Disciplines	91
Appendix C – Systematic Review Of Literature	92
Appendix D: Hispanic Health Advisory Committee	115

Appendix E: Interview Guide.....	116
Appendix F: Demographic Data	118
Appendix G: Demographic Data (Spanish)	119
Appendix H	120
Appendix I.....	123
Appendix J: Study Timeline: January 2015 – fall, 2016.....	126
Appendix K: Contacts for Referrals.....	127
Appendix L: Study Flow Chart.....	128
References	129

LIST OF TABLES

Table 1. The Interview Guide-----	30-31
Table 2. Demographic Data of the Participants Interviewed-----	43-44
Table 3. Additional Questions of the Participants Interviewed-----	44

LIST OF FIGURES

Figure 1. Community-Based Participatory Research Approach -----23

LIST OF ABBREVIATIONS

Hemoglobin A1C level	A1C
Collaborative Institutional Training Initiative	CITI
Community-Based Participatory Research	CBPR
Critical Social Theory	CST
Edition	ed.
Figure	Fig.
Hispanic Health Advisory Committee	HHAC
No Date	n.d.
Page(s)	p. or pp.
Statistical Package for the Social Sciences	SPSS
Type 2 Diabetes Mellitus	T2D
United States	U.S.
Washington, State of	WA

CHAPTER 1. INTRODUCTION

Problem

Type 2 Diabetes (T2D) has dramatically increased in the past decade and is now the seventh leading cause of death in the U.S. (ADA, n.d.). Over 29 million Americans (9.3% of the U.S. population) have diabetes (USDHHS, “Diabetes and Hispanic”, n.d.). Among these, Hispanic Americans are twice as likely as non-Hispanic whites to be diagnosed with T2D (Brennan-Congron, Eldridge, & Truong, 2013). The American Diabetes Association (ADA) currently reports that 12.2 % of Hispanic Americans have been diagnosed with diabetes (ADA, n.d.), and one in eight Hispanic adults in the state of Washington have this disease (Washington State, “Department of Health”, 2014). Today, T2D has become the fifth leading cause of death among U.S. Hispanics (Heuman, Scholl, & Wilkinson, 2013).

The prevalence of diabetes is associated with the ability to manage the disease (Brown et al., 2011). Yet, studies consistently suggest the management of T2D is often related to ‘access-to-care’ issues (Cusi & Ocampo, 2011; Gonzalez, Salas, & Umpierrez, 2011; Herrera et al., 2011; Hu, Amirehsani, Wallace, & Letvak, 2013). Little is understood of Hispanics’ unique access-to-care issues related to T2D (Livaudais, Thompson, Ibarra, Godina, & Coronado, 2010). Even less is understood about how access-to-care issues relate to Hispanics with T2D who live in rural areas of America (McEwen, Lin, & Pasvogel, 2013). Moreover, Hispanic studies that focus on access-to-care issues as they relate to Latinas with diabetes in particular are scarce (Heuman et al., 2013).

Significance of the Problem

Access to healthcare is a significant barrier for many populations in the U.S. Indeed, certain racial and ethnic groups experience poorer health and lower-quality healthcare when compared to nonminority groups. This remains true despite living in a nation that spends more on healthcare than any other nation (Robert Wood Johnson Foundation, 2009, “Commission”). A review of literature on access to healthcare conducted by the researcher indicates a paucity of research among Hispanics who live in rural America.

Research shows many access-to-care barriers may actually be “compounded” for those who live in rural communities (Sherrill et al., 2005). Access to healthcare is often challenging even more challenging for Hispanics who live in rural America (Brennan-Congdon et al., 2013; Coronado, Thompson, Tejada, Godina, & Chen, 2007; Livaudais et al., 2010). Many are new immigrants who have come to rural America seeking work in the agricultural industry, and the state of Washington employs many of them (Coronado et al., 2007). Of the total population in Washington, 12% (790,000) are Hispanics, and more than 35% of these were born outside the U.S. (Livingston, Minushkin & Cohn, 2008). The socio-demographics of Hispanics living in the state of Washington resemble other Hispanics throughout the nation: they tend to have incomes below the federal poverty level, have no college education, and have no medical insurance (Livingston et al., 2008; “Pew”, n.d.; “Washington State”, 2006). These factors place Hispanics with chronic diseases, such as T2D, at a higher health risk than non-Hispanic whites (Coronado et al., 2007). Evidence of further related risks was seen in the state of “Washington Behavioral Risk Factor” survey, which found Hispanics adults were “more likely” to be both physically inactive and obese than non-Hispanic adults (Washington State, “Department of Health,” 2014).

Despite the prevalence of T2D among Hispanics in the state of Washington, little is known about the disease's impact among rural Hispanic populations. Current data shows that 7.7% (389,000) of Hispanics who live in Washington were diagnosed with T2D (CDC, "Diabetes Data", n.d.). However, limited data exists on the prevalence of T2D among Hispanics in rural communities of Washington, in particular those who reside in Walla Walla County (Almendarez, Boysun, & Clark, 2004). Anecdotal evidence on diabetes issues among Hispanics in rural communities is also lacking. Interviews were recently conducted among Hispanic physicians who live and work in Walla Walla County noted it is "rare" for Hispanics to make an appointment for diabetes care and some do not utilize local nonprofit clinics due to their "fear of the disease" [T2D] (Dr. Rodriguez, M.D., & Dr. Facemire, M.D., personal communication, April 26, 2015). Another local physician concurred that Hispanics who live in Walla Walla seem to have access to affordable safety-net clinics, yet it is "rare" for Hispanics to seek care related to T2D (Dr. Tachney, M.D., personal communication, April 11, 2015). Yet, despite these observations, formal data is lacking for this particular population.

Finally, little is known about Latinas' experiences and preferences in accessing diabetes healthcare information and services. There is also a paucity of research on Hispanic women with T2D who live in rural areas of America (Heuman et al., 2013). The literature review included 23 research studies, yet none focused on access-to-care issues specifically of Latina women. Two studies outside of the literature review, however, suggest that women with diabetes may identify access-to-care issues differently than men (Alam, Speed, & Beaver, 2012; Hippisley-Cox, Yates, Pringle, Coupland, & Hammersley, 2006). Gender-specific studies are needed to further understand access to care as it relates to chronic diseases such as T2D (Wagner et al., 2013).

Conceptual Framework

Critical social theory (CST) asserts that certain groups are in subordinated positions or are considered ‘vulnerable populations’ (Chinn & Kramer, 2011). This theory provided a framework for examining and critiquing socially constructed borders that produce inequalities (Boychuck-Duchscher, 2000; Henderson, 1995). Critical social theory brings recognition of the patient’s situation through understanding, emancipation, and deconstruction of previously established ideologies and dominating cultures that affect them (Chinn & Kramer, 2011). Based on this theory, “knowledge is believed to be socially constituted, historically situated, and valuationally based” (Henderson, 1995, p. 59). Yet, “objective rational thought” by itself is considered to “invalidate human perceptions and thinking” (Boychuck-Duchscher, 2000, p. 254). In addition, Weber (2005) an expert in both CST and the Habermas Model asserts that knowledge generated must be created with a “non-coercive established acceptability to all” (p. 205). Lastly, the Habermas Model purports that “practical expertise” is needed to develop a “mutual understanding” of critical issues found within the community (Allen, 1987, p. 66). The “practical” (p. 67) interest is for all participants in a social encounter to understand their own and each other’s needs and wants in order to identify social problems and solutions in a “collective” manner (Allen, 1987, p. 64).

Terminology

While the ethnic terms Hispanic and Latino are often used interchangeably, this paper will use the term *Hispanic* when speaking of ethnicity or *Latina* when specifically noting a Hispanic female. These terms refer to any person who identifies Latin America or other Spanish cultures as their racial heritage. Further, both the terms *access to healthcare* and *access to care* are used interchangeably.

Summary

In summary, a current literature review found only one study was located in the state of Washington that relates to access to care among Hispanics with diabetes (Livaudais et al., 2010). Moreover, no studies were found that reflected access to healthcare issues that may be unique to Latinas with T2D, and little research is available about access-to-care issues for rural Hispanics. These factors suggest the need for research that explores access-to-care issues as they relate to Hispanic women with T2D living in rural areas of the state of Washington.

CHAPTER 2. LITERATURE REVIEW

A review of literature is a key step in conducting a research study. Scholarly work emerges in an organized manner to form the basis of the study. The purpose of the literature review was to identify current research (2010–2015) on access-to-care issues among Latinas with T2D. The literature review was conducted in PubMed (Ebscohost) and CINAHL using the PRISMA flow diagram (see Appendix A) (PRISMA, 2009). PRISMA (2009) is a systematic approach that depicts the flow of information through different phases of the review: *identification, screening, eligibility, and included*. The PRISMA (2009) flow diagram outlined the search strategies and how articles are decided for inclusion and exclusion.

Literature Review

Search strategies. The author and her PhD advisor determined the aim of the literature search, the key terms, and the inclusion criteria. An audit check between the author and the PhD advisor provided rigor in the study selection process (PRISMA, 2009). Moreover, each of the key terms was discussed with each member of the author’s dissertation committee. The author then met with the University of Hawai’i reference librarian to discuss the search strategies. The reference librarian suggested two electronic databases: PubMed (Ebscohost) and CINAHL. These databases were selected due to their relevance to healthcare professions, respectively. The author and the reference librarian conducted the *identification* step of the literature search using the following key terms: *Hispanic or Latino or Latina*, and *Diabetes Mellitus*, and *Access**. Filters applied included: 1) “peer-reviewed” published article, 2) English, 3) female, 4) 2010–2015, and 5) United States. “Female” Hispanics only were included as they commonly reported to be overweight (Livingston et al., 2008) and take responsibility and pride in preparing the

family meals (Obrien, Shuman, Barrios, Alos, & Whitaker, 2014). Further, obesity is a well-documented risk factor to diabetes, especially among Hispanics (USDHHS, “Diabetes and Hispanic”, n.d.). A five-year selection (2010–2015) in English was chosen to reflect current access-to-care issues among Hispanics, as this population has dramatically increased in the United States within the past five years (Kullgren & McLaughlin, 2010). Excluded were articles among pediatrics, pregnant populations, undocumented populations, and ethnic populations where less than half the sample identified as “Hispanic.” Also excluded were Hispanic diabetes studies that did not reflect the topic (cardiac, hypertension, mental health, urban populations, elderly only, depression, home health) and case reports. The first author and advisor completed the remaining steps of the literature search by building a consensus throughout each of the following steps: *screening*, *eligibility*, and *included* studies.

Screening of studies for review. The initial literature search identified 84 studies (PubMed; n=36; CINAHL, n=48). The PubMed search was conducted prior to the CINAHL search. Seven articles in CINAHL were found to be duplicates and, therefore, excluded to yield a total of 77 studies (PubMed; n=36; CINAHL, n=41). Abstracts were then manually screened for relevance, with attention to studies that described the above search terms to yield 18 *eligible* articles. Next, a manual search was conducted of the reference list from all 18 eligible studies. Most articles within the reference list were reported prior to 2010 or held a focus other than an adult Hispanic population. In addition, five reference articles were *eligible* and included into this review (PubMed, n=5; CINAHL, n=0). Collectively, the search *included* a total of 23 studies from several disciplines (medicine, nursing, public health, social sciences) (see Appendix B).

Overall, the PubMed search yielded several more studies than the CINAHL search (PubMed, n=20; CINAHL, n =3). A table of the studies was organized to show progression in

the systematic review (see Appendix C). Information in Appendix C was organized by research method (Quantitative, n=12; Qualitative, n=4/Mixed Methods, n=7), year of publication, and alphabetically by first author. Access to care is a well-documented public health issue; therefore, as expected, most of the studies were found in the disciplines of public health (n=13), nursing (n=4), medicine (n=4), and social sciences (n=2), respectively.

An overview of the study aims from the 23 articles identified several important topics. Few studies held a direct focus on access-to-care issues among Hispanics with diabetes (n=3) (Baig et al., 2014; Kaplan, Billimek, Sorkin, Ngo-Metzger, & Greenfield, 2013; McEwen et al., 2013). Similar access-to-care studies explored the impact of neighborhood problems to exercise facilities (Moreno et al., 2014), food insecurity as a risk factor to medication access (Kollannoor-Samuel et al., 2012), and personal factors that influence access to care (Mier et al., 2012). Several studies specifically noted “barriers” in their aims (n=5). They included barriers to medication adherence (Bailey et al., 2012), barriers unique to Hispanic immigrants (Hu et al., 2013), cultural barriers to managing diabetes (McCloskey & Flenniken, 2010), perceived barriers to diagnosis (Livaudais et al., 2010), and perceived barrier to control of diabetes (Sullivan, Hicks, Salazar, & Robinson, 2010). The inability to speak English was also a barrier among Hispanics. One study explored English proficiency and receiving physical activity and/or dietary advice (Lopez-Quintero, Berry, & Neumark, 2010), while a similar study compared if Hispanics lacked a ‘usual source of care’ due to a previous “problem care experience” such as “language concordance” (Rodriguez, Chen, & Rodriguez, 2010, p. 1155). Diabetes self-management education (DSME) was also a main topic of several studies (n=7). Study aims included the role of healthcare providers in DSME (Brown et al., 2011; Castillo et al., 2010; Sadowski, Devlin, & Hussain, 2011), patient practices of DSME (Bolin, Ory, Wilson, & Salge, 2013; Herrera et al.,

2011), factors that influence the use of DSME (Ramal, Petersen, Ingram, & Champlin, 2012), and medical outcomes related to DSME (Fortmann, Gallo, & Philis-Tsimikas, 2011). Finally, two studies explored Hispanic beliefs and attitudes toward diabetes disease and related body image (Long et al., 2012; Weitzman, Caballero, Millan-Ferro, Becker, & Levkoff, 2013). In summary, the study aims among Hispanics with T2D reflected the importance of current research on access-to-care issues, barriers to access to care, and the use of DSME to increase self-care compliance.

The *study sample and settings* also varied among the quantitative and qualitative studies. In respect to quantitative studies, more than half had sample sizes greater than 500, including two that had samples sizes greater than 1,000 (Kaplan et al., 2013; Lopez-Qunitero et al., 2010). Only one quantitative study had a sample size less than 100 (McEwen et al., 2013). All but two quantitative study samples (n=21) included both male and female participants, of which female participants ranged between 37% and 75%. One quantitative study did not report the gender of Hispanics, as this sample focused on healthcare providers whose patient population was primarily Hispanic (Moreno et al., 2014), and one quantitative study held a Hispanic (Latin and Caribbean immigrants) female-only sample (Weitzman et al., 2013). In regard to subpopulations, five of the 12 quantitative studies included samples where more than 50% were of Mexican descent. Whereas, the other seven studies included “Hispanic Americans.”

Qualitative/mixed-method study sample sizes ranged between 25 and 249. Only three qualitative samples were greater than 100; two were questionnaires (Mier et al., 2012; Sadowski et al., 2011), and one was a study that utilized a kiosk located at multiple sites (Bolin et al., 2013). Qualitative studies with small samples utilized focus group settings. Female participants ranged between 37% and 76%, with the highest percentages in studies that conducted focus

groups. Finally, four of the seven mixed-method studies included samples where more than 50% were Mexican descent and only one of the four qualitative studies held a sample that included mostly Mexican participants.

A distinction was noted, however, among the sample settings. Of the quantitative studies (n=12), seven were located in states that commonly have a high Hispanic population. One additional quantitative study was held in “10 Midwestern states” (Baig et al., 2014), two quantitative studies used the same setting in Connecticut (Kollannoor-Samuel et al., 2011; Kollannoor-Samuel et al., 2012), and two quantitative studies used a national survey in “U.S. households” (Lopez-Quintero et al., 2010; Rodriguez et al., 2010). Each of ten of the eleven qualitative study settings was held in a different U.S. state (California, Colorado, Georgia, Iowa, Illinois, Indiana, New Mexico, Maine, Texas, and Washington), thus representing most regions of the nation. One additional qualitative study was held on the “Texas-Mexico border” (Mier et al., 2012, p. 149).

In summary, the study sample sizes and settings varied. The study sample sizes ranged from a few to several hundred. All sample populations included both male and female populations, with the exception of one qualitative study that included only Hispanic women. The study settings were located throughout the United States; however, quantitative studies were located primarily among states with a high Hispanic population, while each qualitative study represented most regions of the nation.

Methods of Inquiry

The literature review of 23 studies between two health databases (PubMed & CINAHL) focused on four research questions.

1. What are the methods used in the empirical literature on access to care among

Hispanics with T2D?

2. What theoretical frameworks were used to guide each study?
3. What strategies were implemented related to improving access to care?
4. What are the access-to-care barriers?

Methods used in the empirical literature. The literature review found several methods were used to conduct studies among Hispanics with T2D related to access to care. These included quantitative (n=12) and qualitative (n=4)/mixed methods (n=7).

Quantitative studies. An examination of the quantitative studies identified several findings related to the method of the study. Among the 12 quantitative studies, most were a cross-sectional analysis of a survey (n=10). Two were intervention studies (Brown et al., 2011; Fortmann et al., 2011), of which both included diabetes education (DSME) as the predictor variable and hemoglobin (A1C) levels as an outcome variable. Nonintervention studies included A1C as the outcome variable (n=4). Other outcome variables included level of English proficiency (Lopez-Quintero et al., 2010), problematic care experiences (Rodriguez et al., 2010), depression (Fortmann et al., 2011), access barriers (Baig et al., 2014; Kollannoor-Samuel et al., 2012; McEwen et al., 2013), foot and retinal exams (Herrera et al., 2011), and medication adherence (Bailey et al., 2012). Most quantitative studies also included common demographic characteristics as outcome variables (e.g. gender, ethnicity, age, employment status, and insurance status).

Qualitative/mixed-methods studies. For the purpose of this literature review, both qualitative and mixed-methods studies were reported together. Among the 11 qualitative/mixed methods studies, six utilized focus-group settings (qualitative, n=2; mixed, n=4), all of which

collected data through interviews or questionnaires. The other five studies (qualitative, n=2; mixed, n=3) also conducted interviews, but with various settings and samples that included: stakeholders from the community (Bolin et al., 2013; Livaudais et al., 2012), patients and their spouses who live in “counties” (McCloskey & Flenniken, 2010, p. 11), and, finally, face-to-face interviews that included a questionnaire (Mier et al., 2012; Sadowski et al., 2011).

Theoretical frameworks used to guide the studies. Several studies within the literature search reported utilizing a theoretical framework (n=8; 34%), while many more did not report any theory (n=15; 65%).

Quantitative studies. Few quantitative studies utilized a theory within their research (quantitative, n=4, 33%). Moreno et al. (2014) used a “socioeconomic position” to explain relationships between neighborhoods and diabetes outcomes (p. 1078). Specifically, they applied the Brown et al. (2004) “Conceptual Model” to measure if Hispanics associate their neighborhood with their “diabetes-related outcomes” (p. 1078). Moreno et al. (2014) concurred that the Brown et al. (2004) model explained neighborhood problems associated with health outcomes related to diabetes. Herrera et al. (2011) employed the Health Service Utilization Model, by Aday and Andersen’s (1974) “Model of Health Service,” to identify “enabling factors” associated with diabetes monitoring practices among older Hispanics (p. 1095). The authors found the *need factor* (treatment/medication), *enabling factors* (health insurance and English-language proficiency), and *predisposing factor* (age) were “more important than disability-driven need” for healthcare services (p. 1090). Fortmann et al. (2011) chose a comprehensive social-ecological framework by Glasgow et al. (2005) to assess support resources received from family and friends of Hispanic adults with diabetes. They found Hispanics who had greater support services to manage their diabetes also reported personal self-management

behaviors and less depression (Fortmann et al., 2011, p. 254). Rodriguez et al. (2010) used the Blinder-Oaxaca Decomposition Model to assess “mean outcome differences” of “problem care experiences” and “perceived quality of care across usual care sites” (p.1156). The authors found health insurance coverage and level of acculturation accounted for the highest proportion of differences in problematic care experiences between community health clinics and private physician offices” (Rodriguez et al., 2010).

Qualitative/mixed-methods studies. Of the eleven qualitative/mixed-methods studies, four were qualitative, three (75%) of which reported utilizing either a theory or an approach, and seven were mixed-methods, one (14%) of which reported applying a theoretical approach. Livaudais et al. (2010) used a “Social Ecology Approach” to guide interview community stakeholders on diabetes issues to help “target behavior change strategies,” but gave no additional details on the author of their approach (p. 591). Nevertheless, the community stakeholders identified rural Hispanics in the state of Washington had insufficient knowledge of T2D, lacked access to appropriate healthcare services and needed help with personal responsibility in managing their disease (Livaudais et al., 2010). McCloskey and Flenniken (2010) used Bandura’s Social Cognitive Theory (n.d.) to assess the impact of cultural barriers on diabetes self-management education (DSME). They asked Hispanic participants three questions based on Bandura’s Social Cognitive Theory (n.d.) to determine an “individual’s adoption of a healthy behavior change (self-efficacy, goals, and outcome expectancies)” (p. 111). In this study, Hispanics reported a “sense of empowerment and increased self-efficacy to overcome cultural barriers related to traditional Hispanic diet, lack of social support, and denial” about having T2D (p. 110). Ramal et al. (2012) applied Grounded Theory to construct interviews, analyze the data, and interpret the results of phenomena that influence DSME. Ramal et al. (2012) purported that

Grounded Theory provided a “sociocultural context” for Hispanics to make a “lifestyle change to improve self-management of their diabetes” (p. 1095). Finally, Long et al. (2012), a mixed method study, utilized Leininger and McFarland’s Model of Cultural Care Diversity and Universality (2006) to help explain similarities and differences in beliefs and attitudes related to health and healthcare practices across four T2D Hispanic subpopulations (Mexican, Colombian, Puerto Rican, and Mayan). The authors reported four themes: view of health, access to care, acculturation, and stress/worry. Furthermore, the authors noted “many more differences” than similarities among these four Hispanic cultures (Long et al., 2012). In summary, eight of the 23 studies used either a theoretical framework or an approach to support their work.

Interventions implemented related to improving access to care. Two intervention studies were found in the literature review that focused on improving access to care (Brown et al., 2011; Fortmann et al., 2011). Brown et al. (2011) conducted a two-year, pre-test/post-test study to predict DSME and the use of a nurse case manager among Hispanics with diabetes. They hypothesized and concluded that adding a nurse case manager to underserved Hispanic patients, who use DSME, was an effective strategy to achieving better healthcare services (Brown et al., 2011). They further concluded that culturally tailored DSME continues to be an effective strategy for improving glycemic control among Hispanics (Brown et al., 2011). Similarly, Fortmann et al. (2011) hypothesized in their clinical trial that DSME would mediate the relationship between support services for disease management and glycemic control among Hispanics. They also found that increasing support services resulted in better use of DSME and, consequently, better glycemic control. Fortmann et al. (2011) also recommend the use of culturally tailored DSME when conducting studies among Hispanic populations. In summary, two (8%) of 23 intervention studies included DSME as a predictor variable.

Access-to-care barriers among Hispanics with diabetes. Barriers across the multiple studies (n=23) consistently fell within three overarching themes: *self*, *provider*, and *environment* (see Appendix C). The barrier of *self* was further defined by three subcategories: *covariates*, *self-care behaviors*, and *individual resources*. Covariates included age, educational level, genetics, and culture. “Self-care behaviors” was defined by the American Association of Diabetes Educators (2014) to include healthy eating, being active, monitoring, taking medication, problem-solving, healthy coping, and reducing risks. Individual resources were defined as personal cost, personal choice, lack of personal transportation, and lack of services due to personal reasons. *Provider* barriers were defined as lack of healthcare providers and lack of culturally competent healthcare providers. Finally, *environment* barriers were defined as lack of external resources such as public funding, location or actual sites to teach diabetes education, and lack of safety-net clinics or affordable healthcare services.

Self was a primary barrier to access to care among Hispanics with diabetes in the majority of the studies (91%). A lack of *providers* or culturally competent providers and *environment* were both noted barriers to access to care and were found in approximately half of the 23 studies (47% and 43%, respectively). It is interesting to note, however, that the *provider* barrier was seen consistently in both quantitative and qualitative/mixed-method studies. Yet the *environment* barrier was identified fewer times in quantitative studies than in qualitative/mixed-method studies (25% and 63%, respectively). Specific barriers found within the two categorized research methods are discussed below.

Self—Covariates of self. Age, a covariate to self, was found to be a barrier. Younger and middle-aged Hispanics were less likely to have insurance than the elderly Hispanics (Kollannoor-Samuel et al., 2011). Educational level, a second covariate of self, was also seen as

a barrier to access to care. Specifically, Hispanic participants who had a high school education experienced a “medication access barrier” compared with Hispanics who had “no/some schooling” (Kollannoor-Samuel et al., 2012, p. 558). Culture, a third covariate to self, was found to be a “prevalent barrier” to accessing medication (Bailey et al., 2012, p. 277). Bailey et al. (2012) found Hispanics with diabetes who “substantially” used complementary alternative medicine (CAM) may not access their prescription medication as they may prefer other forms of CAM treatment that were commonly utilized within their culture such as “spiritual healers, herbal medications...and home remedies” (p. 278).

Self-care behaviors, the second subcategory of self, held additional barriers to access to care. Kollannoor-Samuel et al. (2012) found ‘healthy eating’ was a “strong” barrier to healthcare access and utilization among low-income Hispanics, which was often related to a lack of “nutritionally adequate and safe foods” (p. 554). Other self-care behaviors associated with access-to-care barriers included ‘being active’ or access to daily exercise (Kollannoor-Samuel et al., 2011), inability to monitor disease due to lack of access to culturally tailored diabetes education (Brown et al., 2011), medication adherence due to lack of access to medication refills (Bailey et al., 2012), inability to problem-solve or monitor their diabetes due to a lack of knowledge of the disease (Herrera et al., 2011), and, finally, unhealthy coping habits due to depression of having the disease (Fortmann et al., 2011) or lack of acculturation (Rodriguez et al., 2010).

Finally, *individual resources*, the third subcategory of self, also held barriers to access to care. Cost was consistently found as a barrier throughout the quantitative studies and included cost of insurance (Herrera et al., 2011; Kaplan et al., 2013; Kollannoor-Samuel et al., 2011), cost of services (Baig et al., 2014; Kaplan et al., 2013), and cost of medications (Bailey et al., 2012).

In addition, a lack of ‘usual source of care’ was seen as an additional barrier of access to care. Both Kaplan et al. (2013) and Rodriguez et al. (2010) reported Hispanics lacked a usual source of diabetes care compared to non-Hispanic whites.

Lack of providers, was the second major barrier. The quantitative studies in this literature review highlighted that a lack of healthcare providers was a primary barrier for Hispanics with diabetes. In particular, these studies noted a lack of certified diabetes educators or staff to maintain these programs (Baig et al., 2014), a lack of community health workers (Brown et al., 2011), an overall lack of healthcare providers with subspecialties related to diabetes care (Kaplan et al., 2013), a lack of culturally competent healthcare providers (Rodriguez et al., 2010) and those who spoke Spanish (Baig et al., 2014; Bailey et al., 2012).

Finally, the ***environment***, the third major barrier, defined as “external resources” was noted among the quantitative studies. A lack of public funding (Herrera et al., 2011), the location of diabetes education classes (Moreno et al., 2014), and lack of diabetes support services (Fortmann et al., 2011) were found to be barriers of external resources among Hispanics with diabetes.

The barriers of *self*, *providers*, and *environment* were also found within the qualitative studies. Many of these qualitative barriers, related to access to care, were similar to those found within the quantitative studies. For example, education level (Mier et al., 2012), use of complementary alternative medicine (Sullivan et al., 2010), being active and its relationship to exercise (Sullivan et al., 2010; Weitzman et al., 2013), and lack of medication refills (Hu et al., 2013) were noted in these studies. Inability to solve problems due to knowledge deficit of diabetes (Bolin et al., 2013), adherence issues (Hu et al., 2013), lack of Spanish-speaking

healthcare staff (Sadowski et al., 2011), location or site to teach diabetes education classes (Bolin et al., 2013), and cost factors (Sadowski et al., 2011) were also found in both quantitative and qualitative studies.

There were several barriers to access to care that were unique to qualitative studies only. Barriers of *self* included the covariate of genetics (Ramal et al., 2012), the use of a *curandera* (Hispanic folk healer) to get “a lot of help” (Ramal et al., 2012, p. 1093), preference to receive diabetes education from a church site (Long et al., 2012), and distrust of Western medicine (Ramal et al., 2012). Additional barriers of *self* that were identified in the subcategory “self-care behaviors” included employer responsibilities that prevented Hispanics from having the time needed to access healthcare services (Livaudais et al., 2010), lack of healthy coping related to denial of disease (Castillo et al., 2010), forgetfulness (Kollannoor-Samuel et al., 2012), as well as delayed diagnosis (Livaudais et al., 2010). Individual resources, the last subcategory barrier of *self*, included lack of social support prevented access to care (Hu et al., 2013; McCloskey & Flenniken, 2010). Each of these identified barriers of *self* was unique to qualitative studies only.

Similarly, a few barriers under the themes of *providers* and *environment* were noted within the qualitative studies. One qualitative barrier unique to the *providers* found that Hispanics felt they were “neglected” by their healthcare providers (Hu et al., 2013, p. 500). Furthermore, two barriers emerged under the theme of *environment* within the qualitative studies. Castillo et al. (2010) noted Hispanics were “challenged” due to wait time for services (p. 592), while Sadowski et al. (2011) found that Hispanics who live in a rural setting consistently reported having “no regular provider” for their healthcare needs (p. 1009).

Access to care continues to be a significant barrier for Hispanics with T2D. In the 23 studies found in the literature review (quantitative, qualitative, and mixed methods), most access-to-care barriers were identified within three themes (*self, providers, and environment*). However, a few barriers to access to care were uniquely found in the qualitative studies. It is possible, but not known if, the nature of interviews conducted in most of the qualitative studies played a role in eliciting barriers of access to care that did not emerge within the quantitative studies.

Summary. A systematic literature review was conducted for the purpose of identifying current research (2010–2015) on access-to-care issues among Latinas with T2D. The study methods varied; most quantitative studies used a cross-sectional analysis, while all qualitative/mixed-method studies conducted either one-on-one interviews or focus-group interviews. Very few studies utilized a theory or approach to support their research, which only one study was conducted by a nursing research team. Of the 12 quantitative studies, only two were interventions, which included DSME as a predictor to improving access-to-care. Finally, access-to-care barriers among Hispanics with T2D were identified under three overarching themes: *self, providers, and environment*. Access-to-care barriers within quantitative and qualitative studies were similar; however, a few unique barriers were identified within the qualitative studies only.

In addition, based on the literature review, there is a paucity of research that explored diabetes health issues unique to Hispanics who live in *rural* communities. Further, only one research study was found that addressed health issues unique to Latinas or Hispanic women with diabetes; however, that study did not focus on issues related to access to care (Weitzman et al., 2013). The word “Latina” was found imbedded throughout the overall literature review, but only once within the ‘keywords’ of all abstracts (Weitzman et al., 2013). This literature review

highlighted a critical gap in knowledge about current access-to-care barriers among Hispanic women with T2D in rural communities.

Purpose Statement

The purpose of this study was to open dialogue among Latinas, to better understand their access-to-care issues as they relate to T2D in rural Walla Walla, Washington.

CHAPTER 3. METHODOLOGY

Overview of the Study

The study focused on access-to-care issues among Latinas with T2D who lived in rural Washington. A descriptive qualitative design using a Community-Based Participatory Research (CBPR) approach was applied. A qualitative descriptive method was the “choice when descriptive phenomena are desired” (Hu et al., 2013, 496). Qualitative descriptive method encouraged the production of knowledge, but also was a “vehicle for presenting and treating research methods as living entities that resist simple classification” (Sandelowski, 2010, p. 83). Qualitative research methods are commonly used when studying Hispanic populations as this methodology recognizes that cultures and subcultures are diverse and the issues surrounding them may be unique (Brown, 2014). CBPR is an approach whereby the participants are included in all phases of the research design, data collection and analysis, and dissemination of the findings (DeChesnay, 2015). In CBPR, the participants are viewed as “holders of the knowledge” (DeChesnay, 2015, p. 1). Therefore, participatory research places value on knowledge generated from the experiences, lives, and self-understandings of the participants engaged in the research (DeChesnay, 2015). Data collection occurred through focus-group discussions, led by a “moderating team.” This allowed participants to share their opinions about their access-to-care issues in a natural setting (Krueger & Casey, 2015).

Prior to the research study, the academic research partner met with key community stakeholders to seek partners for the research study. During a meeting, Dr. P., an academic researcher, recommended to form an advisory committee that would give oversight to the research design and collectively participate in the decision-making process of the study. Dr. P. referred the researcher to Dr. L., a second key stakeholder in the community. Dr. L. serves as

director of a safety-net clinic located in Walla Walla that provides care to Hispanic teens. Dr. L. felt it was best if he referred the researcher to a second safety-net clinic for potential members for the proposed advisory committee. This second clinic serves the adult Hispanic community living and working in Walla Walla, Washington. The first member of the advisory committee came from the second safety-net clinic, who in turn referred the researcher to a second committee member. The advisory committee became complete after four healthcare professionals, all with a stake in local Hispanic healthcare issues, decided they wanted to engage in this community research study. The advisory committee was soon named the Hispanic Health Advisory Committee (HHAC). The formation of the advisory committee occurred over a one-year span. The researcher carefully recorded the formation of the advisory committee through field notes. The advisory committee's individual expertise and roles in the research study are discussed in the research method section of this paper (see pp. 34-35).

Methods

Study design. The study design included the use of a CBPR approach. An advisory committee, or the "HHAC," was formed to provide oversight and decision-making throughout the study design as part of the CBPR approach. Data were collected through focus-group settings with the use of a 'moderating team.' The researcher recorded field notes to organize events, conversations, and actions that occurred throughout the research process (Polit & Tatano-Beck, 2012).

CBPR. The CBPR approach (see Figure 1) used in this study is commonly utilized when studying Hispanic populations (Aguado-Loi & McDermott, 2010; Baig et al., 2014; Castillo et al., 2010; Livaudais et al., 2010). The goal of CBPR was to generate an increased community capacity to solve Hispanic access-to-care issues by building on the strengths and resources

within the community (Minkler & Wallerstien, 2008). The steps of CBPR are included in Figure 1.

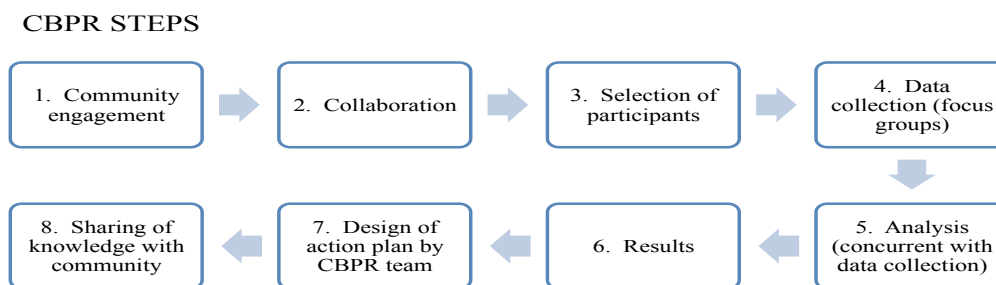


Figure 1.

The process began by engaging the community through a partnership with those who held a stake in local Hispanic health issues (step 1). The partnership for this study was called the Hispanic Health Advisory Committee (HHAC). Livaudais et al. (2010) found a community advisory committee to be “very important” in conducting research among Hispanics who live in rural communities in the state of Washington (p. 594). The HHAC for this study shared power and decision-making as they collaboratively selected the study design and setting for the focus groups; guided content for the study instruments; assisted in data collection, data management, and data analysis; and provided overall direction to both the study and its findings (step 2). The HHAC recruited the study participants through snowball-sampling method (step 3). Data were collected during each of the three focus-group discussions, which were facilitated by the moderating team (step 4). Analysis of the data occurred during and immediately following the

data collection (step 5). The categories that emerged created results that represented significant Latina health issues among Latinas with diabetes (step 6). Finally, the members of the HHAC helped to determine future action plans (step 7), as a result of the knowledge generated from the study, and how the knowledge gained was disseminated to the community (step 8). As expected, the shared decision-making by the HHAC led to an increased commitment to the research study, as well as a sense of ownership on the part of the community.

Hispanic Health Advisory Committee (HHAC) (see Appendix D). The HHAC was formed to recruit the study participants, select the study setting, formulate the interview guide, review all forms, and provide direction to both the study and its findings. The HHAC members were selected due to their professional expertise, interest in Hispanic health, and keen understanding of health needs within the Walla Walla community. Each partner of the committee brought “unique perspectives” and “diverse resources” that strengthened the partnership and study (Schulz, Israel, & Lantz, 2003, p. 256). Two of the four partners were purposely selected because they were Hispanic (one is a physician, and the other is a registered nurse). Hispanics who participate in research studies assert that there is *trust* when other Hispanics collaborate throughout the research process (Martinez, Carter-Pokras, & Bohrer-Brown, 2009).

The HHAC was comprised of four partners: the academic research partner, two physicians, and a registered nurse. The researcher served as a transcultural nurse for 20 years, living and working in many nations throughout the world, including a Hispanic country in Central America. She currently works as a nurse educator. The researcher is trained in the use of both the CBPR approach and the design and use of focus groups. She previously conducted three CBPR research studies that utilized focus-group sessions, of which two were held among the U.S. Hispanic populations. Both physicians were experts in local healthcare knowledge. The

physicians were fluent in Latina culture and Spanish language, and each held medical practices among large Hispanic populations. Finally, the registered nurse is immersed in the Latina culture and the Spanish language. She previously worked as a supervising nurse at a local safety-net health clinic in Walla Walla, whose patient population was primarily Mexican Hispanics. In short, all members of the HHAC live in Walla Walla, Washington, and are trusted by the Hispanic community to provide for their healthcare needs. Appendix D includes the pseudonyms, contact information, professional credentials, and areas of expertise of the HHAC members.

CBPR approach requires a careful evaluation of the partnership throughout the study (Schulz et al., 2003). Thus, a formative evaluation was conducted to discuss any concerns regarding the effectiveness of the partnership, their continued extent of involvement, their shared ownership and cohesiveness, the benefits of their partnership, and any expectations that had risen since the study began (Schulz et al., 2003). The formative evaluations occurred several times and at various points during the study. The researcher met with the study moderator, her academic advisor, the HHAC, and the study participants. The evaluations appeared most important to the study participants, as several wanted to know the “next step” of the study and their role. All formative evaluations were recorded in the study field notes and discussed with the PhD advisor.

Focus-group setting. Three focus-group sessions were held in different locations in Walla Walla County. At least three focus groups are needed to “compare and contrast data across groups” (Krueger & Casey, 2015, p. 7). The participants from each group independently decided the setting for their focus group. Two focus groups chose their local church at which they were members. Hispanics commonly attend church and find this environment to be a “safe, trusted

setting...to share their struggles with diabetes” as they relate to access to care (Baig et al., 2015, p. 1487). The third focus group chose to have the session at the home of one of the participants in their group. This participant lived in a neighborhood of Walla Walla County that is considered a Latino community.

Moderating team for focus groups. A “moderating team” facilitated each of the three focus groups (Krueger & Casey, 2015, p. 107). Krueger and Casey (2015) assert the ‘right moderator’ may be one who “matches the culture” with the participants and makes them feel “comfortable and respected” (p. 106). They add, however, when a research study is trying to understand a specific culture, participants may actually explain more about their culture if one of the moderators does not share the same “culture, role, or behavior” as those of the participants (Krueger & Casey, 2015, p. 106). Thus, the moderating team for this study consisted of a *moderator* who identified with the culture and a *co-moderator* who did not identify with the culture. The moderator was Hispanic, bilingual in English and Spanish, and shared cultural roots with the study sample. She is a registered nurse who has professional nursing skills that include soliciting interviews and careful listening. The moderator received additional training on how to conduct interviews through focus-group sessions by the co-moderator (Boswell & Cannon, 2014). The moderator’s primary role was to encourage communication within the focus-group settings. She also distributed the honorariums and gave a “short (two-minute) summary of the key points of discussion” at the end of each focus-group (Krueger & Casey, 2015, p. 107).

The co-moderator (researcher) was trained in conducting focus-groups. The co-moderator served as the *note taker* for all three focus group sessions. As the *note taker*, the co-moderator’s primary task during the focus-group sessions was to take comprehensive notes, digitally record the interviews, and serve as a “second set of eyes and ears” (Krueger & Casey, 2015, p. 107).

The moderator reported being able to “improve” facilitating the focus-group discussions due to the notes being taken by the co-moderator (Krueger & Casey, 2015, p. 112). An improvement was seen when there was an increase in “both the total sum of information gathered and the validity of analysis” obtained during the data collection (Krueger & Casey, 2015, p. 107). The notes added observational data that were not found in the digital interviews. The co-moderator also prepared the room for the focus group, arranged for refreshments, and welcomed the participants for each focus group (Krueger & Casey, 2015, p. 107).

Sample. The potential participants were drawn from Walla Walla County, Washington, in the spring of 2016. Walla Walla County is located in the southeast corner of the state of Washington. Similar to many rural counties in the U.S., Walla Walla County residents are primarily non-Hispanic whites; yet, many others are Hispanics who have emigrated from Mexico (Aguado Loi & McDermott, 2010). According to the U.S. Department of Commerce, over 20% of Walla Walla County’s population of nearly 60,000 are of Hispanic descent (USDC, 2011). While the total population for Walla Walla County has been stable for the past five years, the Hispanic population continues to see significant growth, from 8,654 (15.7% of total population) in 2009 to 11,593 (>20% of total population) in 2014 (Suljic, 2015).

Snowball sampling, or network sampling, was used to recruit research participants for the study. The sample included participants who met the following inclusion criteria: (a) Latina (self-reported as either Hispanic or Latino), (b) adult (age 18 years or older), (c) diagnosed with T2D (self-reported), (d) sought healthcare from a safety-net clinic located in Walla Walla County and (e) agreed to participate in the study. Latinas who did not speak minimal level of conversational English were excluded due to the conversational nature of the study. Latinas who

did not self-report as having been diagnosed with T2D were also excluded. Pregnant women were excluded as the study focused on T2D issues that were not related to pregnancy.

Field notes. Field notes were compiled throughout the research study. The researcher collected field notes from the “early stages of the field work” to the completion of the study (Polit & Tatano-Beck, 2012, p. 548). The field notes recorded dates, times, settings, people, and activities associated with the study (Munhall, 2007).

Instruments. The study utilized two instruments: an *interview guide* and a *demographic data form*.

Interview guide. An interview guide was constructed, as it is the most common approach to data collection in qualitative studies (Boswell & Cannon, 2014). Interview guides are often utilized to gain an understanding of participants experience during focus-group settings (Livaudais et al., 2010). The interview guide contained formal, predetermined questions, which helped guide the discussion and reduce the variation of the discussion (Harkness, Van deVijver & Mohler, 2003).

The Interview Guide (see Appendix E) was based on the HHAC’s feedback and that of an extensive literature review conducted by the researcher. The interview questions focused on, “What are the significant access to healthcare issues among Latinas as they relate to diabetes?” The interview guide included questions that were carefully constructed to provide “useable results” (Krueger & Casey, 2015, p. 177). Therefore, Dr. Alice Tse, an expert in both CBPR methodology and focus-group settings, initially guided the instrument along with the researcher. The HHAC and researcher took the initial guide and further developed open-ended research questions so that the intent of all questions and the nature of information sought would be

relevant to the target community. Dr. Jan Shoultz, Dr. Felicitas dela Cruz, and Dr. Merle Kataoka-Yahiro (PhD advisor) were selected because of their expertise in health disparities research. These experts reviewed the instrument to ensure the content was culturally relevant and appropriate for the proposed study. Discussion and debate over the interview guide content occurred until these four academic experts and the dissertation researcher reached a consensus. Revisions to the interview guide were made once again until a final consensus was reached. The HHAC reviewed the revised interview guide and gave agreement on the final instrument.

Table 1 outlines the loosely structured, yet orderly, interview guide. It includes both core research questions and follow-up questions and prompts. Each core question depicted at least one of three identified “dimensions” that, reflected an overarching barrier to access to care: *self*, *providers*, and *environment*. Each dimension was identified during the literature review of this paper (Chapter 2). Further, all dimensions were well-supported from a previously written concept analysis paper by the researcher on ‘access to care.’

Table 1

The Interview Guide

Critical Social Theory Core Tenet	Dimensions to Describe: Barriers to Access to Care*	Core Question	Follow-up Questions and Prompts
<p>Assess how things are in order to transform them into what they ought to be (Henderson, 1995)</p>	<p>Self, Providers, Environment</p>	<p><i>What does health mean to you?</i></p>	<p>Do you think some Latinas might view health differently than you? What do you think they may say?</p> <p>Can you tell me how you see your health now compared to when you first came to the States or xxxx years ago? In what ways is your health (better or worse)?</p>
<p>Engage client in a critical assessment of health issues/situation that affect Latina care (BoychuckDuchscher, 2000)</p>	<p>Self, Providers, Environment</p>	<p><i>What do you think are the most important health issues faced by Latinas today?</i></p>	<p>What about diabetes? How important do you think diabetes is? Is it a very important issue, one of the most important, a somewhat important, or not too important of an <i>issue</i>? Can you tell me why you rated it this way?</p>
<p>Engage client in critical recognition of their own health issues/situation (Weber, 2005)</p>	<p>Self</p>	<p><i>What do you do to take care of your health?</i></p>	<p>Can you give me some examples of things you do [to take care of your health]?</p>
<p>Engage client to transform and improve healthcare access and practices in managing and</p>	<p>Self, Providers, Environment</p>	<p><i>How can you tell you are having trouble with your health?</i></p>	<p>So what do you do when you're having trouble with your health [don't feel</p>

Critical Social Theory Core Tenet	Dimensions to Describe: Barriers to Access to Care*	Core Question	Follow-up Questions and Prompts
controlling T2D (Allen, 1987)			well]? Are there specific people or places you go to get help with your health? How do you figure out where to go to get help?
Engage clients to illuminate healthcare structures that may compromise their care (Chinn & Cramer, 2011)	Providers, Environment	<i>Where do you go to get care for your health? [type of service or name of clinic]</i>	[for each one mentioned] What are your reasons to choose to go there?
Engage clients to illuminate healthcare providers who help them value their autonomy and responsibility (Browne, 2000)	Providers	<i>Who do you go to get care for your health issues?</i>	What are your reasons to choose to see this person(s)? Can you tell me how your doctor or nurse (healthcare provider) shows respect for how you think you should take care of yourself?

* AADE (American Association of Diabetes Education) 7 Self-Care Behaviors (2014)

Demographic data form. A short Demographic Data form, in both English (see Appendix F) and Spanish (see Appendix G), was distributed during the focus-group sessions to capture each participant's ethnicity, age, marital status, citizenship, years in the U.S., work status, health insurance, year diagnosed with T2D, overall general health status, and language spoken in the home. The Demographic Data form contained forced choice selections. The form was coded so that no personal identifying information was included in the results. A bilingual transcriptionist with expertise in English-Spanish translated the Demographic Data form

(DeChesnay, 2015) (see Appendix D). Three external bi-lingual expert reviewers, fluent in Spanish, confirmed the translated forms for accuracy. The Statistical Package for the Social Sciences (vs. 23) (IBM Corp. Released 2015) was used to analyze the frequency distributions and statistical analysis of all information found on the Demographic Data form.

Data collection. The data collection included the recruitment plan, training, and data collection protocol.

Recruitment plan. The HHAC collectively decided the recruitment steps. Snowball-sampling method was utilized to recruit Hispanic participants as this ethnic population was considered to be a close-knit community. One physician from the community partnership initially recruited the first study participant—a Latina who met the eligibility criteria and was not a patient of the physician—for each of the three focus groups. The first recruited participant referred other study participants from her community to the HHAC, which provided a fairly homogenous sample. The number of participants for each of the three focus-groups resulted by agreement among the HHAC. Sample size was not an issue as the focus was on achieving a “theoretical variation in a concept instead of numbers” (Munhall, 2007, p. 249). Data saturation occurred during focus group three as no new ideas emerge; hence, no additional focus groups were conducted (Krueger & Casey, 2015).

Training. The moderator and all members of the HHAC received training for this study. The training of the partnership added to the research study timetable, but it was expected to also “increase the quality of data collected” and offer greater protection to the research participants (Minkler & Wallerstein, 2008, p. 116). The researcher trained the moderator for her integral role in each focus-group session. The moderator read “Moderating Skills” (Krueger & Casey, 2015,

Chapter 5) and “The Focus-Group Moderator” (Fern, 2001, Chapters 4 and 5). Once the readings were completed, the researcher reviewed the readings with the moderator to ensure she understood her role.

In addition, each member of the HHAC received training through Collaborative Institutional Training Initiative (CITI training) in human subject protection, as required by Office of Research Compliance, University of Hawai'i. The training was through self-instructed computer modules. The researcher submitted the completed certificates along with her institutional review board application.

Data collection protocol. The moderating team started the focus-group sessions by obtaining consent. Each participant completed the Informed Consent form in either English (see Appendix H) or Spanish (see Appendix I) by their choice and according to the human subjects protection protocol by the Office of Research Compliance. All participants were provided a \$10 Wal-Mart gift card for their participation. Wal-Mart gift cards are an appropriate compensation for Hispanic populations participating in research studies (Sherrill et al., 2005). The participants were then asked to complete a short Demographic Data form using either the English or Spanish form. Two participants completed the English version form and 14 participants completed the Spanish version form.

The interview protocol was similar for each of the three focus-group sessions. The moderator conducted the interviews in English. However, the moderator spoke Spanish throughout the focus group sessions to restate a question or to offer clarity of the question in the participants' native language. All participants spoke English during the focus groups, but at different levels of confidence. In particular, the moderator spoke Spanish more often during the

focus groups to the few participants who were less comfortable speaking English. The co-moderator digitally recorded all interviews and took notes to identify observations, comments, and transitions that occurred during the focus-group interviews. The moderating team opened each of the three focus-group sessions with greetings, to establish rapport. The moderator stated the study objectives, clarification of the role of each person on the moderating team, and the research process. The participants were told that the research findings might be used for future publications.

The moderator shared a few “ground rules” with the participants. These included that the discussion was informal and that their participation was voluntary. The moderator emphasized that any participant may leave the group session at any time and for any reason (Krueger & Casey, 2015, p. 118). The following script provided other important ground rules and set the tone for the discussion. The moderator then asked if the participants had additional ground rules they would like to include. None were offered for the three focus groups. The script included an ‘ice-breaker’ that was intentionally designed to get all participants to engage in participation. Krueger and Casey (2015) asserted that participants were more likely to speak again after they have had an opportunity to share something about themselves. The ice-breaker question was based on a topic common to all participants (Krueger & Casey, 2015).

1. *The greeting*: “Good afternoon, ladies. Thank you for taking the time to join our discussion of health issues. My name is G.P. I am nurse at “X” Hospital and am fluent in Spanish. This is S.T., a doctoral nursing student at the University of Hawai'i. I will be serving as moderator for this study. S.T. will help me moderate our discussion today.”
2. *Study objectives*: “The purpose of the focus group is to gather information about Latinos’ access-to-healthcare issues. You will be asked to share your thoughts and experience with access-to-care issues that are unique to Latino culture.”

3. *Research process*: “We will audio record today’s focus-group study because we don’t want to miss any of your comments. Following today’s discussion, the researchers will gather the comments and write them down into meaningful categories. When we do, no names will be included. Your comments are confidential. The results from the focus-group discussions will be written up into a paper for the completion of S.T.’s doctoral studies. Lastly the results from the discussions may be used for future publications.”
4. *Ground rules*: “The discussion today will be informal. All participation is voluntary, and you may leave the discussion at any time without penalty. There are no wrong answers in the discussion. We expect that you will have differing points of view. Please share your point of view even if it differs from what others have said. S.T. and I are here today to ask questions, to listen, and to make sure everyone has a chance to share. We’re interested in hearing from each of you. So if you are talking a lot, I may ask you to give others a chance. And if you aren’t saying much, I may call on you. We just want to make sure all of you have a chance to share your ideas. If you have a cell phone, please put it on the quiet mode, and if you need to answer, step out of the room to do so. Feel free to get up and get refreshments if you would like. Does anyone want to include other ground rules for today?”
5. *Opening Question*: “Let’s get started. Share your name and how long you have lived in Walla Walla” (Krueger & Casey, 2015).

The semi-structured interviews lasted approximately 45 minutes in length for each focus group and included open-ended questions, which allowed the participants to lead the discussion with structured guidance. The interview guide included core questions, which focused on, “What are the significant access-to-healthcare issues among Latinas?” Each core question reflected a “dimension” of barriers to access to care. The three dimensions included: self, providers, and environment. A core question was asked in an orderly manner according to the interview guide. Each core question reflected at least one of the three dimensions. Studies report the dimensions of “self” and “providers” vary among sub-Hispanic populations (Gonzalez et al., 2011; Hu et al., 2013; Long et al., 2012). Therefore, three core questions were asked that reflect these two dimensions. A few probing questions were also asked to seek additional experiences. For example, the moderator was particularly interested in knowing if “some Latinas view health differently.” The moderator recognized that all participants were immigrants to the U.S. and had

lived in the U.S. for many years. Thus, she sought the participants' perceptions on whether other Latinas, such as non-immigrants or newer immigrants would experience health issues differently. Additional probing questions such as "can you please clarify..." were asked to ensure validity. Finally, a few questions were directed to less expressive or vocal participants. It was important to hear the voice of all participants. Overall, most participants answered each core question during their focus-group discussion.

Data management. Data management (step 5 of CBPR) occurred during and immediately following the data collection (Boswell & Cannon, 2014). Data management began as the moderating team carefully handled all documents and digital recordings related to the study.

Conventional content analysis approach was used to analyze and report the data findings. Conventional content analysis is utilized when there is limited or unclear research on a particular phenomenon (Hsieh & Shannon, 2005). True to the spirit of CBPR, the steps within the content analysis process were determined by the HHAC and were "consistent across all focus-group" sessions (Kruger & Casey, 2015, p. 146).

The first step of conventional content analysis occurred during each focus group. The moderator facilitated the discussions using the interview guide, while the co-moderator recorded observations, comments, and transitions of thoughts. Data "evolved" as the discussions ensued (Boswell & Cannon, 2014, p. 236). At the end of each focus-group discussion, the moderating team requested the participants to leave the room. The moderating team spent the next 15 minutes independently writing their impressions of the discussion's key points, tone, and dynamics (Hsieh & Shannon, 2005). Data were generated from these initial impressions as well.

The researcher compiled these initial impressions after each focus group session. After the completion of the third focus group, the researcher shared the compiled impressions (all three focus groups) with the HHAC group (Minkler & Wallerstein, 2008).

The next step of the conventional content analysis process included the transcription of the digital data collected from each of the three focus groups. As suggested by Krueger and Casey (2015), the transcription occurred “immediately” after the data collection (p. 146). A bilingual transcriptionist transcribed and translated all three focus group tapes onto a file document. The hard copy data were de-identified and coded. A “full transcript” of each focus group interviews was prepared to “accurately capture the nuances” of all discussion (Krueger & Casey, 2015, p. 146). The digital files were transcribed into English. All texts that were spoken in Spanish were first transcribed into Spanish and then translated into English (a two-step approach). After transcription and translation were completed, the full texts were returned to each focus group for a member check of the data. One participant from Focus Group 2 requested a meeting to review the entire text from her focus group session. During this member check, the researcher asked the participant if she would like to listen to the original transcript as the two of them reviewed the transcript text together. This participant asked to proceed with the member check by carefully reviewing the entire text, line-by-line, as she simultaneously listened to the original transcript. The participant found the transcribed text for Focus Group 2 to be about 99% accurate; only two sentences out of more than 10 pages of text required slight revisions for clearer context. Eventually, each focus group returned the transcribed text verifying the reliability of the data.

Analyzing the data was the next step of conventional content analysis process. It began as the moderating team spent several weeks in a prolonged engagement of the data (Hsieh & Shannon, 2005). During these weeks of engagement, the moderating team independently read the data to develop a sense of the “whole” content (Hsieh & Shannon, 2005, p. 1279). Re-reading the data also served as a cross-reference for relevance, consistency, and relationships. The moderating team individually highlighted and color-coded words that reflected, “more than one key thought”, which became the initial themes (Hsieh & Shannon, 2005, p. 1279). Both the moderator and the co-moderator selected quotes from the texts by “examining who said what, to whom, and to what effect” (Vaismoradi et al., 2013). This process became the “initial coding scheme” (Hsieh, & Shannon, 2005, p. 1279). The researcher discussed these initial coding with the academic advisor, as she served as an independent reviewer of the data. Over two months’ time, the data were analyzed through a ‘back-and-forth’ process between the moderator, researcher, and independent reviewer (Krueger & Casey, 2015). Categories and subcategories were rearranged several times until agreement and consensus was obtained. Decisions were made based on whether the context answered the research question (Vaismoradi et al., 2013), on how “different the codes were related” (Hsieh, & Shannon, 2005, p. 1279), as well as the “frequency of its occurrence” (Vaismoradi et al., 2013, p. 399). Moreover, the focus group moderator and researcher gave special consideration to the participants’ emotions as they discussed each core interview question. Thus, a personal pronoun was placed in each theme to capture Latina voices in relation to each research question. A flow chart was created to organize the themes, categories, and subcategories that emerged. The processes ended when no new themes or categories were uncovered. In summary, data analysis included a “convergence of

evidence (triangulation)”, which was obtained from the observations, field notes, and interviews taken by the moderating team and the independent reviewer (Munhall, 2007, p. 354).

The coded findings were then returned to the focus group to verify the study results. For the final ‘member check’, a ‘Celebration Party’ was held that included all three focus groups. One study participant organized the celebration party, which was held at Focus Group 1 church setting. All participants and the HHAC were invited. The focus group moderator shared the study findings in Spanish through a “peer debriefing” until a consensus was reached (Hsieh & Shannon, 2005, p. 1280). Dr. A., a local Hispanic physician and committee member of the HHAC ended the evening by asking the participants “what can local healthcare providers do to help Latinas improve their diabetes care?” The evening ended as the participants expressed their overwhelming appreciation to the research team and the HHAC.

Human Subjects

The researcher received approval from the University of Hawai'i at Mānoa, Office of Research Compliance for the study—CHS #23905 on March, 21, 2016. Guidelines for the ethical and safe conduct of human subject research were carefully followed throughout the study. The moderating team explained the purpose and the procedures of the study to all participants, who completed and signed an Informed Consent form according to Human Subjects Protocol. A bilingual (Spanish/English) transcriptionist transcribed and translated (see Appendix D for credentials) the Informed Consent form. Three external bilingual experts, fluent in Spanish, reviewed the translated informed consent forms for content verification. Participants who meet the inclusion criteria and voluntarily signed the informed consent form were enrolled into the study. The demographic data and transcribed data forms were coded and de-identified.

Audiotapes, field notes, and all data related to the study were safely stored in a locked cabinet and will be destroyed upon completion of the study. The HHAC will be notified when data has been destroyed.

Summary

A research study was conducted through a combined effort of the researcher and community partners based on a CBPR approach. The community partners became known as the Hispanic Health Advisory Committee (HHAC), which was comprised of both healthcare experts and Latina women who lived in the Walla Walla community. Sixteen Latinas were recruited using snowball-sampling technique. The research team conducted three focus-group using a semi-structured interview guide. Demographic data were analyzed for descriptive statistics using SPSS (Version 23) (IBM Corp. Released 2015). Conventional content analysis approach was applied throughout the analysis process. Several member checks occurred to yield a consensus building of the findings. Triangulation of data using field notes along with conventional content analysis and member checks was completed. The University of Hawai'i at Mānoa, Office of Research Compliance, approved the study for exempt status.

CHAPTER 4. RESULTS

The results of this CBPR study were based on the analysis of qualitative data from the semi-structured interviews and focus groups. A homogenous sample of 16 Hispanic females, from three focus group settings, shared their access-to-care experiences. The narratives from the interviews were the main source of data collection. Six main themes, nine categories, and 19 subcategories emerged from the five core questions using conventional content analysis. Descriptive information of the sample was also obtained.

Sample

The final sample consisted of 16 Hispanic females who participated in three focus groups (group 1, n=5; group 2, n=5; group 3, n=6) and completed the Demographic Data form. All participants in this study self-reported as Mexican. Seven of them spoke Spanish exclusively at home, while nine spoke both Spanish and English at home. The participants were between 18 and over 60 years old. Half of the participants (n=8) were between 41 and 50 years of age, while 5 individuals (31.3%) were over 60. Most participants were married (86.7%). The majority of respondents indicated they were U.S. citizens (46.2%); four participants (30.8%) were permanent residents of the U.S. It is interesting to note that six individuals (37.6%) did not identify their residential status. About one-third of the participants worked part time (33.3%), 26.7% of the respondents worked full time, and another 26.7% of sample did not work at all or were disabled. Two individuals (13.3%) were retired.

Nine participants (56.3%) had health insurance, whereas seven (43.8%) reported having no health insurance. Of the insurance type, most indicated they had either Medicaid or Medicare

(66.6%). Approximately a third (33.4%) had private insurance. Finally, among those who had insurance, two participants had out-of-state health insurance.

Regarding their self-perception of their general health, a majority of participants felt they were in good health (43.8%) or had “normal” health (18.8%). Almost a third of the sample (31.3%) reported being in poor health. No participant reported being in excellent health.

Nearly all individuals (81.3%) utilized one of two local community health clinics (community clinic A, community clinic B) for their medical needs. Ten individuals (62.5%) accessed care from community clinic A and three individuals (18.8%) accessed care from community clinic B. Two (12.6%) reported having accessed care from both community clinics A and B. The three remaining individuals utilized either a private clinic (n=2) or a non-specified clinic out of state (n=1). Please refer to Table 2 below.

Table 2.

Demographic Data of the Participants Interviewed (n=16)

Characteristic	Value Labels	N (%)
Age (years)	18–30	1
	31–40	1
	41–50	8
	51–60	1
	> 60	5
Marital status	Married	13 (86.7)
	Divorced	1 (6.7)
	Single	1 (6.7)
Language spoken at home	Spanish	7 (43.8)
	Both Spanish and English	9 (56.3)
U.S. citizen	Yes	6 (46.2)
	No	3 (23.1)
	Green Card	4 (30.8)
Work status	Full-time	4 (26.7)
	Part-time	5 (33.3)
	Not working/disabled	4 (26.7)
	Retired	2 (13.3)
Health insurance	Yes	9 (56.3)
	No	7 (43.8)
Type of Health insurance	Medicare/Medicaid	6 (66.6)
	Private insurance	3 (33.3)

Characteristics	Value Labels	N (%)
General health	Good	7 (43.8)
	Normal	3 (18.8)
	Poor	5 (31.3)
	Not sure	1 (6.3)
Do you go to a medical clinic?	Community clinic A	10 (62.5)
	Community clinic B	3 (18.8)
	Other	3 (18.8)

All individuals who participated in the focus groups had T2D. On average, the participants had T2D for 9.31 years (SD=9.98 years). The shortest amount of time a participant had T2D was one year, and the longest was 32 years. A physician also diagnosed the respondents for T2D on average 9.38 years (SD=10.12 years). This might be explained by the fact that the group of participants lived in the U.S. for an average of 27 years (SD=12.52 years). The participant who lived in the U.S. for the longest time had been here for 60 years, while the participant who lived in the U.S. for the least amount of time had been here for nine years. Table 3 below summarizes these findings.

Table 3

Additional Questions of the Participants Interviewed (n=16)

<i>Additional Questions</i>	<i>Range in Years</i>			
	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>SD</i>
How long have you been a diabetic?	1.0	32.0	9.31	9.98
When were you first diagnosed with diabetes by a doctor?	1.0	32.0	9.37	10.12
Number of years lived in the U.S.	9.0	60.0	27.12	12.52

Themes

Six main themes were identified through conventional content analysis. Five of the six themes reflected Latina responses to the five core interview guide questions: “healthcare: what it means to us”; “our most important health issues”; “signs of trouble with my diabetes”; “taking care of my diabetes”; and “I go here....” Each of the five themes was made up of at least one category and multiple subcategories for a total of nine categories and 19 subcategories. A sixth theme acknowledged critical social theory because the participants recognized the study allowed their voices to be heard: “we get to tell them.” The following narratives support the themes, categories, and subcategories by descriptive words and direct quotations to communicate the meaning of each category, and subcategory (see Appendix L).

Theme 1: Healthcare: What it means to us. The first question from the interview guide broadly sought the meaning of healthcare. The participants focused their responses around healthcare as it related to diabetes. Two categories and four subcategories emerged from this theme. Overall, the participants believed healthcare provided optimal life, but that their personal healthcare needs were not an individual priority.

Provides optimal life. The Latinas expressed the meaning of healthcare was different for different people. For some Latina it may mean one thing, but for other Latinas it may have a different meaning. In general, the participants felt health was very important and “more health” provided optimal life. The two subcategories identified were: independence/freedom and self-care.

Independence/freedom. Independence or freedom was defined as the ability to do anything as a result of good health. On the contrary, poor health meant Latinas “won’t survive”:

[Healthcare means] providing for a better life. If you’re healthy you can do anything you want! (Participant).

Some Latinas also suggested all Hispanics have health problems. Those who have diabetes lose their sense of freedom as a result of the illness:

Well everybody is different, but about the health, we always need more health, you know? ...everybody has diseases. Everybody has problems...Everybody needs help...I know my husband has diabetes and [therefore] never go any place (Participant).

Self-care. Participants noted the value of healthcare in each focus group. Yet, they believed to have optimal health required they take care of themselves. Likewise, they understood consequences that resulted to their health if personal self-care was not a priority:

If you don’t take care of your diabetes, your diabetes will take care of you! (Participant). I had a time in my life where I didn’t even know that I had diabetes, and I wasn’t taking care of myself...since then I been trying to take care of myself more little by little (Participant).

Not an individual priority. Latinas felt it was “very important” to take care of their health with one participant also emphasized that Latinas should not approach their personal healthcare needs “too slightly.” Yet, most participants considered their family and work as a higher priority.

Family. Many emphasized the needs of their family played an important role in how Latinas viewed their personal healthcare needs. Simply put, when the needs of their families rose, personal healthcare was not an individual priority:

We [Latinas] are busy with the kids, with the family and always, but everything first, then your health (Participant).

One participant poignantly shared she could only focus on one thing at a time. When her family had needs, her personal health lacked priority. This was true even after she was diagnosed with a chronic illness:

I was diagnosed with hypertension, and so I had to switch gears [take care of my personal health]. I feel like I can only focus on the one thing. My focus is primarily the family, not my own health (Participant).

Work. Latinas also perceived their family needs required they work, and therefore, their personal health needs no longer an individual priority. The role of the mother within the Hispanic family was to provide food during meal times:

What comes to my mind, is, um, if you are not feeling sick their priority is to put food on table for the family, so they [Latina women] are just gonna continue working until they drop, and then taken to the hospital and stuff, but you know...priority actually is having enough food on the table for the kids and family (Participant).

Moreover, many respondents felt there was a strong cultural expectation that required them to work. At times the Latina mother will work for food even when she is not well:

The problem for the Latinas is that always we are thinking working. We want to work, work, work. And [we work even when] it hurts me....Oh, later, I can take Tylenol, and whatever. I think so many Latinas don't pay attention to their health [because we work] (Participant).

Theme 2: Our most important health issues. The second interview question queried Latinas' most important health issues. Their results focused again on responses related to diabetes. Two categories emerged: "knowledge of T2D" and "killer diseases."

Knowledge of T2D. The interviews suggested the Latinas understood diabetes as the "most important health issue" and that the disease was "a process." They also recognized diabetes resources that were available for their healthcare needs. The two subcategories identified were: disease/terminology and resources.

Disease and terminology. Many Latinas understood the causes of T2D. They used correct diabetic terminology to express their knowledge of the disease. For example, participants used words such as "borderline", "high blood sugars", "insulin", and "glucometer" to speak about their knowledge of T2D. Finally, the participants also recognized the prevalence of diabetes among the Hispanic population. As the disease was described, one participant interrupted another participant to say:

And you know the blood analysis don't lie! (Participant).

I think, uh, diabetes is the number one uh illness or disease in the Hispanic people. You know, it seems like every, um, ethnic group has something. Caucasians have heart problems... We have diabetes (Participant).

Resources. The participants on average, had diabetes for 9.31 years, while several participants had diabetes for more than 20 years. Their length of disease combined with their length of time living in Walla Walla showed that the participants knew diabetes care required a lot of resources:

Unfortunately, when you become diabetic you tend to have a lot of doctors (Participant).

The participants were well-aware of the many available resources in Walla Walla that provided diabetic care, including those that offered specialty care. Both safety-net clinics provided a dietician as a resource to the community:

A nutritionist at the clinic teaches you [about diabetes] ...she gives us the education (Participant).

“Killer diseases”. Participants from each focus group easily identified resources that helped them with their diabetes. Interestingly, the Latinas held a general belief that diabetes could be controlled with these resources, but if you had another disease, it would actually “kill” you. Most of the killer diseases identified were related to women’s health, including breast cancer, uterine cancer, the “pap”, and menopause. The Latinas feared all “killer” diseases:

Latinas put more attention in the breast cancer and the uterus...instead of diabetes because having diabetes is “ok” because you won’t die from it. You will die from cancer as it is not controllable (Participant).

Other diseases, are not particularly women’s health issues, but were also perceived as “killer” diseases. These included heart disease, stroke, cholesterol, hypertension, and thyroid. One Latina felt the killer diseases:

Cause a lotta stress (Participant).

High blood pressure is a lot [of problems] ...and also cholesterol, hypertension, more [then] menopause problems (Participant).

Theme 3: Signs of trouble with my diabetes. The third interview question asked Latinas how they knew if they were having trouble with their diabetes. They were able to articulate the signs and symptoms of T2D, but as they did, many expressed emotional responses

to having the disease. The Latinas' responses were placed in two categories: symptoms and emotional.

Symptoms. Most participants were diagnosed with diabetes many years ago. Their disease has taught them clear signs and symptoms of T2D. One Latina reported she was diagnosed with T2D because of her symptoms:

I had open sores under my breasts... it was the first time I knew I had diabetes because the sugar was making those wounds...I went to the doctor to get it checked out, and that's when they found that I had the diabetes. Um, 'cause they just weren't healing
(Participant).

Other Latinas have learned triggers to their diabetic symptoms:

I realized immediately once I starts eating the foods that I know I shouldn't be eating, the bread, um, that I starts getting a headache and my body starts giving me symptoms
(Participant).

Additional symptoms included being thirsty, low blood sugars, high blood sugars, and frequent urination. The Latinas explained most symptoms made them feel bad or ill:

Because [When I feel the symptoms] I feel bad. I have headache, tired, sleepy. My feet hurt and my hands [hurt] (Participant).

Emotional. As the Latinas reported the physical symptoms related to having T2D, other emotional responses followed. The Latinas expressed feelings of guilt, struggling with diabetes, and feelings of denial as subcategories to signs of trouble with T2D.

Guilty. Feelings of guilt frequently emerged throughout the interviews. The Latina reported how much they enjoyed their cultural foods, in particular those that were high in carbohydrates. Some participants spoke about the need to 'count their carbs' as increased carbohydrates impacted their diabetes. One participant expressed feelings of guilt when she

chose to indulge in carbohydrates and not count them. Another participant felt feelings of guilt, as she believed her personal behaviors might have led to her diabetes:

Why did it [T2D] happen to me? Is it because I didn't take care of myself? Or because of genetics? Was it genetics or my diet? (Participant).

Struggle. The word 'struggle' was repeatedly voiced as the Latinas spoke about the troubles they experienced as a result of having diabetes. In particular, they found diabetes to be an emotional battle. They suggested it was due to having the disease for many years with no end in sight. Others felt the struggle was adhering to an exercise routine or control of their diet. One focus group believed:

We're all struggling with diabetes (Focus Group 3).

I've tried to lose weight...but I struggle because I really like bread, sodas, tortillas and all the things that have fat (Participant).

Denial. The largest number of responses to all interview questions was related to denial of T2D. One defined denial as:

No take seriously the diabetes (Participant).

Another participant defined denial as the doctor actually gave her Type 2 diabetes. Prior to going to the doctor where he diagnosed her, the Latina believed she did not have diabetes:

I worked about 30 years in a [local health] clinic and [Hispanics would] say, "Well, I didn't have any diabetes until I came and saw the doctor.....the doctor gave it to me!" (Participant).

Other participants had a fatalistic view of their personal diabetes: It's like if I'm gonna die, I'm gonna die happy, drinking what I like (Participant).

Some Latina held that they were not in denial of having the disease, but felt ‘other’ Latinas were in denial. One said her Hispanic friend chose to live fatalistically in denial. Her friend would eat whatever she wanted and then seek urgent care to control her high sugar levels. A participant added:

My friend thinks this behavior is “natural”: My friends, sometimes I know, they think it’s [T2D] natural, they have an IV, they say, “eat bread...dulce...sweet” (participants laughed) Yes! (Participant).

Theme 4: Taking care of my diabetes. The fourth interview question focused on Latinas’ overall experiences in regard to taking care of their diabetes. It was not surprising Latinas knew how to take care of their diabetes. However, many felt barriers existed that kept them from adhering to activities that provided care for their diabetes. The participant responses comprised two categories: adherence and barriers. Each category had three subcategories, respectively.

Adherence. The participants enthusiastically spoke of many activities they adhere to manage their personal diabetes. Nearly all responses included activities around exercise and diet. Other participants included their medication regiment. The three subcategories were: exercise, diet, and medication.

Exercise. The need to exercise was the most frequent response to what Latinas did to care for their diabetes. Some shared where they went to exercise and the frequency of their exercise:

Others noted what they did to exercise: Um, I mow lawns. I go walking. Actually, that’s why I was a little late, because I had to shower. Um, I don’t walk every day, but I should, but I do, I’m active. I—clean my house, you know (Participant).

The participants also seemed to understand there were consequences if they did not exercise: If you don't exercise it will contribute [T2D]. That's what I think (Participant).

Control of diet. In addition to exercise, the women discussed at length the many things they did to effectively adhere to their diet. Adherence was perceived as avoiding foods that were high in fat or carbohydrates, eating more vegetables, and maintaining a balance in their food choices. The Latinas also utilized a local dietician for help in controlling their diets. One participant acknowledged the essential role the dietician had in her personal life:

I know I needs to listen to what Pam [dietician] is telling me, the dietician, and uh, take heed to the advice that she has, and gets back on track [with her diet] (Participant).

It is interesting to note that participants found it easier to control their diabetes diet if they were at home rather than dining out. In particular, they suggested it is easier to include vegetables in their diet if they cooked their meal at home:

But yes, now, not to eat as much food in the street. Do more vegetables in the house, is what I am trying to do (Participant).

On the contrary, Latinas who did not work outside the home felt it more challenging to control their diet at home because when they were home, they ate more often:

When I would stay home, I wasn't working...I would eat [more]... (Participant).

Medications. In addition, the Latinas recognized the critical importance of also adhering to their medication regimen. Responses included how many medications they took and where they go to get their medication. Two participants suggested a correlation between their diets and how much insulin they took. They seemed to recognize that having T2D meant they needed to take many medications:

*I need to stay on top of my medications because I want to keep that under control
(Participant).*

One participant noted that to properly care for her diabetes, she needed to carefully manage her schedule of medications:

[Diabetes] to me is kind of the process of managing it with medication (Participant).

Barriers. The Latinas suggested, based on their experiences, they must exercise, control their diet, and manage their medications to take care of their T2D. Yet, the women felt there were barriers that influenced their ability to adhere to these activities. In particular, they mentioned several challenges of living in America where food was more available and less expensive than in Mexico. They also pointed out that while they know what to do to control their diet, they simply lacked control. Finally, some participants found the cost of healthy foods as a barrier to adherence to their diet.

Balance of cultures. All participants emigrated to the U.S. from Mexico. Many reminisced about life in their home country. Several commented that they were poorer living in Mexico; therefore, they could not afford luxuries such as certain foods. Since living in the U.S., most Latinas have higher incomes and a more expensive lifestyle that now included the ability to purchase foods they know contribute to diabetes:

When you get into the United States that diet changes tremendously, where we eat a lotta junk! We really do, we eat a lot of sweet stuff and, because it's all out there. You come from a poor family in Mexico, there's no way you're gonna go get pastries or donuts or whatever. You're not gonna find that over there (Participant).

Some Latinas recalled details in the different diets of Mexico and that of America:

Yes, [when I lived in Mexico] I ate chicken soup, with greens...but now I eat hamburgers, pizza...(Participant).

Again, the Latinas suggested meals cooked at home in Mexico provided better nutrition than fast foods in America, which they found were readily available:

Uh, beans, rice, tortillas, salsa, and meat...and then legumes. Lentils. I mean, that is an excellent diet...and home-cooked meals [are more nutritious] (Participant).

Lack of self-control. The participants expressed an earnest desire to take care of their diabetes by controlling their diets. Yet some perceived a lack of self-control was actually a barrier to adhering to their diets:

[to follow a healthy diet] Exactly see, that's the kind, for me that's a barrier, big times! (Participant).

Others expressed they did not have the will power to resist foods:

Because we Latinas, well I, I like to eat... And so I doesn't have control over the things that she should, uh, not eat. She eats them (Participant).

Cost of diet. The cost of eating healthy was perceived as a barrier. Participants believed healthy foods in America were expensive. Interestingly, one participant stated healthy foods in Mexico were simple and less expensive. She suggested, people in Mexico do not struggle with diabetes because they can't afford to purchase bad foods such as "junk foods":

My family, it's not diabetes. [does not have T2D]. My grandparents, my, nobody in...my mother passed away last month. [They live in Mexico where they are poor and can't afford to each junk food so Mexicans in Mexico do not have T2D.](Participant).

Theme 5: I go here...The fifth core question in the interviews sought where Latinas go for their healthcare. Overall, participants felt their choice of healthcare facilities depended on one

of four situations or sometimes an overlap of a couple of situations. The theme, “I go here...” held one category, “it depends,” and four subcategories: trust, appointment, respected, and insurance.

It depends. There was much variability in the participant responses on where they go or who they seek for their healthcare needs. The Latinas frequently prefaced their explanations with “it depends....”

Trust. Trust was an overwhelming concern on whether participants could seek diabetic care at a particular healthcare facility. A few participants reported they did not trust physicians who misdiagnosed their medical conditions:

One time I had abdominal pain, and the doctor said I didn't have anything wrong. When I switched doctors, the [new] doctor sent me for tests and told me I was sick. I had lots of stones and I needed surgery (Participant).

I wanna say something, I have a friend that, she had, um, colitis, and [doctors] said that [my friend] had something else, so they, they went to urgent care, and they discovered that she had colitis. To be honest, I just don't trust them over there (Participant).

Walla Walla is a small community that holds limited resources for Latina healthcare needs. Moreover, Hispanics are a close-knit community. Latinas often share their personal medical experiences with other Latinas in the community. The participants expressed this was especially true when their experiences were perceived as “bad”:

When my doctor is out...I will wait for my doctor for the next month to have an appointment with her [my doctor], because I don't like the bad doctor! (Participant).

You know, right here in Walla Walla it's in a small town, and almost everybody knows, so we have a lot of people that they have a bad experience. My friends talk to me and let me know

about their bad experiences...you talk to everybody...you can hear a lotta stories
(Participant).

Likewise, participants did not trust the staff at the clinics to keep their diagnosis and personal information confidential:

To be honest I don't trust staff. I have a friend that works there and they, yeah, [says] that person has colitis, that person has HIV or that person have...The staff is telling you this
(Participant).

Appointment. Where Latinas went and who they sought care from often depended upon if they could get an appointment or if their appointment was canceled. Walk-in appointments were not readily available at the local clinics. Participants felt they needed to stay home and not receive appropriate medical care because they could not get an appointment:

You go to the doctor because you don't feel good. "We don't have anything today, you can come back tomorrow." But, I'm sick right now. I'm not sick tomorrow...it was a long time ago. [But], I don't wanna go back there (Participant).

Likewise, much emotion was expressed when participants had an appointment to be seen by the doctor and the clinic staff cancelled their appointment. Two participants tell their stories:

One lady [came far to the clinic], and they say, "Oh, the doctor is not coming today" and she say, "Why don't you call me because I wake up early to come in here and be one time. And they cancelled [my appointment]" (Participant).

[I went to the clinic] and they told me [my appointment was cancelled] because doctor is not here. So I had to sit up in the chair because I was tired, and I can take a little breath, and I can go back to my house. So I was sitting there [still in the clinic], and the doctor coming out, [the doctor] drink some coffee, and I said, "that's my doctor!" (Participant).

Respected. Many participants expected respect from their healthcare provider when seeking care for their diabetes. When asked, “Where do you go for your healthcare?” several responded to the idea of “it depends on if I feel respected.” The Latinas often spoke of respect and “time” simultaneously. They believed to receive high-quality care, components of trust and respect were essential:

The doctor will call the day before to change my appointment. That bothers me deeply.

The doctor changes the appointment like it's no big deal! (Participant).

Similarly, one Latina felt like a local clinic was no longer an option for her healthcare needs as the provider was hasty in treating her emergent need:

You just go in [complaining of being dizzy]. And my primary doctor looked at me and says, oh you just have your blood sugar high, that's all you have, okay? So I said, okay...I don't want her anymore, with all respect and everything. I just felt that I'd been neglected from her as my doctor, because we're supposed to have a close relationship regarding my health, and I don't have that with her...she's my primary [doctor] for four years...So I'm going to look for a different one [doctor] (Participant).

Participants adamantly stated they do not like being examined by medical students. It was the belief that medical students lacked knowledge and they gave advice that contradicted the counsel of their primary care physician:

So that's my attitude. One provider [medical doctor] was saying something different than the other provider [medical student]... I thought she was a doctor but she's not. And that was my, my misunderstanding. Okay, so right now I just feel, what's going on, you know? I don't think I deserve to be treated like this [to be examined by a student and given conflicting

medical advice]...so I'm going to call my provider and say "thank you for your time. Can you refer me?" [to another clinic that does not have medical students] (Participant).

Several Latina perceive that medical students were "not professionals":

I have had several experiences with doctors that are not doctors, no more an intern of doctor... I don't like being seen by, uh, those like when they are doing their medical training the students, they are the ones that are mostly there [at the community health clinic]...they are not professionals [they are not medical doctors] (Participant).

Insurance. Finally, Latinas told of their insurance experiences with regard to places you could or could not seek for medical care that depended on your medical insurance status. One participant simply stated:

You have insurance, and that way you can go to the doctor (Participant).

On the contrary, if you do not have medical insurance, this influenced where you could seek medical care. One Latina stated in Spanish:

No insurance. No money...So you wait until you are very sick before you go to get your blood drawn (Participant).

It was interesting to find that some women knew that one particular safety-net clinic in town accepted donations as payment for their medical care:

Go to the [community] clinic. You can get an appointment...You give a donation and you get seen right away! (Participant).

Other Latinas were unaware, but seemed delighted of this potential new access to care:

We need more places kind of that [safety-net clinics that receive donations] because a lot of people, more the Latinos, we don't have health insurance over here. And then we need more help, with medications and, and doctors and everything (Participant).

Theme 6: We get to tell them. The results were based on both the focus group discussions and field notes. After the moderator restated the study objectives, participants in Focus Group 3 enthusiastically shared:

Oh! You mean we get to tell you [about what we feel]? Always we go to places, and they tell us. The clinic tells us. The dietician tells us. The health fair tells us. It's the reverse here! This is the first time we get to tell them! (Focus Group 3).

Focus Group 1 was held at the Catholic church where all participants were members. As the discussion began, one participant in the group said:

Look what [name withheld] did for us today! She deserves a big hug! [The participant whose name was withheld was the first participant recruited for Focus Group 1. She was also a retired community health worker and highly respected amongst the Latina community].

At the end of Focus Group 1 discussion, the moderating team asked the participants to leave the room so they could write their field notes. The moderator over heard the Latinas continue their conversation outside of the church building. The moderator wrote the following in her field notes:

The Latinas chatted outside for several minutes...they did not want to stop talking about their stories. Their conversation seemed to come to life as they discussed their obstacles (Moderator).

Latinas in Focus Group 1 continued to converse in the church parking lot. One participant, who was very shy and spoke the least during the discussion, returned to the meeting room to speak to the moderators about further access issues of care. She shared the following before leaving the room the second time:

I was very thankful for the opportunity to share (Participant).

With the same eagerness, Focus Group 2 wanted to speak about their personal access-to-care issues. The moderator began by asking the Latina the first core interview question. Several Latinas responded. In the midst of exchanging ideas about the meaning of health, one Latina asked the moderator if she could answer the first question in Spanish. This Latina shared:

...I'm thankful...I'm prediabetic and very glad that we're having this group to be able to give information and to be able to discuss these issues with, uh, the Latina women. Thank you (Participant).

Member Check of Study Results Based on Field Notes

Upon completion of the study, the moderating team invited all participants from each of the three focus groups to a “Celebration Party.” The HHAC also attended. The party began by sharing a meal together. Each Latina brought a dish to share. During the meal several Latinas spoke about the dish they brought and how it did or did not reflect their diabetic diet. One participant spoke about how she wanted to bring something “bad” as it is “so good.” Another Latina added that she grew the vegetables and canned the salsa that she had brought. Finally, a third participant stated she wanted to bring “diabetic food” but did not as she wanted our Celebration Party to be a “happy” time. Following the meal, the moderator reviewed the study findings, including the study flow chart (see Appendix L) with the participants and the HHAC. The researcher served as the note taker and did not participate in the discussion, as she wanted to uphold the principles of CBPR approach. It was interesting to note the participants remained silent and only listened to the moderator as she reviewed the study flow diagram. Heads nodded in agreement as the moderator discussed the results. However, once the moderator began to speak on the category of “emotional” and “adherence,” the Latina excitedly shared additional comments on the guilt, struggle, and denial they continued to have with managing their diabetes.

Each of their comments were related to food and control of diet. A few Latina also mentioned they now perceive their access to care experiences are different then when they first immigrated to the U.S. At that time, they accepted any form of health care they could access, as they did not understand the U.S. culture and its health care system. After living in the U.S. for many years, they now felt they had more knowledge and were aware of the U.S. health care services and subsequently have become less tolerant of care they now perceive as sub-standard. Dr. A., a local Hispanic physician and committee member of the HHAC ended the evening by asking the participants, “What can local healthcare providers do to help Latinas improve their diabetes care?” The participants eagerly answered with continued care from physicians who speak Spanish and who are also “female.” One participant expressed:

We have a hard enough time telling the doctor what is wrong in our language [Spanish] (Participant).

The Latina was then asked how they would like to share the knowledge gained from the study with the community. They suggested placing “their work” in a publication. Some mentioned forming an exercise group. One participant stated:

We eat together, why shouldn't we exercise together?(Participant).

Dr. A. then offered to teach cooking classes that included their Hispanic culture and also met their diabetic dietary needs. Dr. A. mentioned if the Latina cooked their own meals they would have better control of their diabetes. She also reminded the Latina that fast food may be cheaper for them, but that fast food also “clogs your arteries.” In all, the participants felt they now held a “different vision” of T2D and asked Dr. A. if “we could have another” [focus group] to help other Latinas in our community.

Summary

The study sought to better understand access-to-care issues among Latinas with diabetes who live in a rural area of Washington. Participants from three focus groups provided valuable qualitative data. The Latinas were immigrants from Mexico having lived in the United States for many years. All except one participant were middle-aged and married. Most spoke Spanish and English at home and were U.S. citizens or permanent residents. All but a few worked full time or part time with four on disabled status and two retired. Most participants held some form of insurance and perceived their health status as either “good” or “poor.” Finally, all but three Latinas utilized one of two safety-net clinics located in Walla Walla, Washington.

The participants’ experiences identified five major themes of access-to-care issues as they related to their diabetic care. An additional sixth theme emerged that expressed the empowerment the participants felt when they got to share their personal stories.

All themes identified represented the Latina voices. The first theme expressed the meaning of healthcare to Latinas. Participants believe they would have an “optimal life” if they took care of themselves. The second theme explored the health issues most important to Latinas. The responses suggested T2D was very important. The participants understood causes of their chronic disease and available resources to help them manage their diabetes. However, most felt that diabetes was not a fatal disease; rather, they believed cancer and heart attacks were killer diseases and more important than diabetes. The third theme indicated Latinas understood the signs and symptoms of diabetes. Yet most participants expressed emotional issues as a result of having a chronic disease. Specifically, some felt guilty, many felt like it was a struggle, while several participants believe Latinas deny having the disease. In the fourth theme Latinas explained what was required to “take care” of their personal diabetes. Participants stated three essentials they needed to adhere to: exercise, control of diet, and medications. The Latinas

desired to adhere to these essentials, but found three barriers that prevented them from doing so: balance of cultures, lack of self-control, and cost of healthy diet. In the fifth theme, the participants reported where they go for their healthcare needs. Nearly all respondents prefaced their answers with “it depends” on...if Latinas: trusted the healthcare facility, could get an appointment, felt respected, and had their insurance accepted. Finally, a sixth theme rose unexpectedly. This theme expressed Latina voices were heard, that they are the ones that know their issues the best, and that the qualitative study provided them an opportunity to share their voices.

CHAPTER 5. DISCUSSION

Hispanic Americans experience many access-to-care issues and are twice as likely as non-Hispanic whites to be diagnosed with T2D. However, little is known of their unique access issues related to diabetes. Therefore, this study was conducted to explore perceptions of access-to-care issues of Latinas with T2D in rural Walla Walla, Washington. CBPR approach was utilized to form three focus groups that allowed Latinas to narrate and reflect on each other's experiences. A homogenous sample of 16 Hispanic females was recruited using snowball sampling. The first participant recruited for each focus group was a middle-aged Mexican woman. This may explain why most of the remaining participants recruited fell in the same age group, reported as Mexican, and, all but one, married. Two groups of participants chose a church setting, and one group chose the home of a participant for their focus group. The main results showed six themes: 1) what healthcare means to us, 2) our most important health concern, 3) signs of trouble with my diabetes, 4) taking care of my diabetes, 5) I go here, and 6) I get to tell them. This discussion will compare and contrast what was found in the study with that of the literature, provide implications, and discuss future plans.

Healthcare: What it Means to Us

The meaning of healthcare varied between the Latina. Some responded in the context of general health, while most Latina answers reflected their diabetes disease. All participants came to the focus group with the awareness of the study purpose; hence, many responses were directed toward T2D.

Provides optimal life. Overall, the Latinas believed their diabetes was a chronic disease that affected their life. Their health was considered to be on a continuum where “more health” meant they would live the optimal life and “no health” meant they would not survive. In spite of their diabetes, more health offered freedom so they could “do anything they wanted.” Yet they also asserted that living the optimal life required self-care activities. Interestingly, none of the participants in the study believed they currently lived the optimal life, but perceived “other Latinas with diabetes” might have optimal life.

Independence/freedom. It was interesting to find Latina believed the concept of “optimal life” provided independence and freedom. Many comments embodied the belief that with health you can go where you want and do what you want. Freedom also suggested you can eat whatever you wanted. On the contrary, the Latinas felt they lacked a sense of freedom to do as they pleased because much of their time was spent managing their illness and seeking medical care. Hispanic Mexicans reported you have to “work at being healthy” to live a quality life because “without it you don’t have anything” (Long et al., 2012, p. 137). Collins, Decker, and Esquibel (2006) used the Cultural Competency Community Care Model (2001) to understand how Hispanics defined the meaning of health. They found senior adult (ages 65–92 years) Hispanics viewed health to mean “independent,” meaning they could care for themselves and not be dependent upon others (Collins et al., 2006, p. 17). They also argued health meant “freedom,” which was defined as an absence from illness (Collins et al., 2006, p.18). In short, health offered elderly Hispanics “everything” and without health, life was “not important” (Collins et al., 2006, p.18). A paucity of studies were found that spoke about the perceptions of “lack of freedom” when Hispanic women do not experience the “optimal life.” Studies that explore the meaning of

“lack of freedom” could offer significant insights on how healthcare providers help Latinas manage their diabetes disease throughout their lifespan.

Self-care. The participants believed optimal life for diabetics’ required self-care activities. The “more” self-care activities they did, the more likely they would live a healthy life. Three specific activities were named: exercise, diet, and “going to the doctor.” Similarly, Long et al. (2012) found Hispanics with diabetes (42% female; Guatemalan, Columbian, Puerto Rican, and Mexico [n=6]) viewed health to mean, “achieving the good life” that also required self-care activities (exercise and good eating habits) (p.137). Moreover, Baig et al. (2015) asserts Hispanics with diabetes (81% female; 95% Mexican) reported improvements in their quality of life occurred through exercise and diet (p. 1485). Finally, in a study among older Hispanics (> 55 years old), eye exams, foot exams, and the need to monitor other illnesses, were reported as required self-care activities for the aging diabetics (Herrera et al., 2011). However, Caballero (2011), a family physician, notes there are “multiple” cultural factors, which often impact Hispanics ability to care for self (p. S11). The cultural complexities may be why many interventional studies have had mixed success in impacting diabetes self-care activities among Hispanics (Baig et al., 2015, p.1485). Thus, Baig et al. (2015) suggests culturally tailored interventions such as using a photovoice during a focus group setting may encourage low-literate Hispanics to discuss their struggles with diabetes self-care management. Indeed, as the prevalence of diabetes increases, culturally tailored self-care management skills are critical for the nation’s diverse Hispanic population.

Not an individual priority. Assuredly, all Latinas in the study perceived their personal health was “very important,” especially as it related to their diagnosis of T2D. Nevertheless, all Latinas also posited their personal health was not a priority; rather, family and work were

believed to have much greater importance.

Family. The Latina participants in this study frequently expressed their desire to manage their diabetes, but strongly held to the belief their family needs were a greater priority than their own individual needs. Their overall belief was that *familismo* was a cultural value the Latina participants embraced at all cost. Family, or *familia*, is a value Hispanics hold high. This concept is consistently seen in the literature (Kiessler, McFadden, & Belliard, 2006; Latham & Calvillo, 2009; Ramal et al., 2012; Scollan-Koliopoulous, Schechter, Caban, & Walker, 2012). Further, the concept of *familismo*, meaning the “family is more important than the individual,” is also highly regarded (Caballero, 2011, S11). The extended family is often viewed as a “motivator” (Caballero, 2011, S12) or a help to “problem-solve” (Scollan-Koliopoulous et al., 2012) diabetes care for other family members. On the contrary, Caballero (2011), a family physician, adds that the Hispanic value of *familia* can actually hinder individuals within the family to seek proper medical care as many individuals will not make independent decisions without consulting with other family members (Caballero, 2011, p. S12). Scollan-Koliopoulous et al. (2012) emphasizes a need for diabetes educators who understand the psychosocial support system unique to Hispanics with diabetes. This understanding is particularly important for new immigrant Hispanics who have yet to establish a strong support system in their new country (Scollan-Koliopoulous et al., 2012).

Work. With regard to work, the Latinas reported that since they immigrated to the U.S., all they do is “work, work, work.” Overall, the participants associated their obligation to work with their family’s need for food. The literature suggests working outside the home has a negative impact in the Hispanics’ ability to care for their diabetes. Long et al. (2012) found “heavy work...created a barrier that limited their ability” to properly care for themselves even

though Hispanics understood how to care for their personal health (p. 137). For example, their respondents suggested they were unable to eat healthfully and exercise because of their demanding workload (Long et al., 2012, p. 137). Moreover, Ferrer, Cruz, Burge, Bayles, and Catilla, (2014) asserts many Hispanics experience “work-related fatigue,” which makes them even “more vulnerable” and less capable of healthy self-care behaviors (pp. 48, 49). Because of work, they were too tired to exercise or cook their own meals (Ferrer et al., 2014; Mier et al., 2007). For the Hispanic who works outside the home, much of diabetes management occurs during these hours. As such, future studies should consider if variables at work, such as nutritional vending machines or co-worker motivation, might influence self-care behaviors for Hispanics with diabetes while they work.

Our Most Important Health Issue

The results for this theme were interesting. When the Latinas were asked “what was their *most important* health issue,” nearly all responded, “diabetes.” However, other responses support “killer diseases” were even more important.

Knowledge of T2D. The Latinas expressed their diabetes to be “very important” health issue. They anecdotally suggested they gained most of their knowledge about T2D from healthcare providers at the local community health clinics and health fairs in Walla Walla County.

Disease and terminology. Their overall understanding of diabetes demonstrated their concern for their disease. Moreover, they had a high level of general knowledge about T2D. The participants used language such as, blood glucose levels, dietary restrictions, insulin, and genetics to share their diabetes experiences. These findings are consistent with other studies in which Hispanics ranked diabetes to be a top-five health concern (Long et al., 2012). Other

studies add community health clinics to be an effective resource for Hispanics to receive healthcare education and they were significantly more likely to receive diabetes education at a community health clinic than from their own healthcare provider (Sadowski et al., 2011). Several studies found Hispanics have the knowledge needed to successfully care for their diabetes (Ceballos, Coronado, & Thompson, 2010; Ferrer et al, 2014; McCloskey & Flennike, 2010). Women were more likely to have the most knowledge of diabetes when compared to men (Caballero, 2011; Ceballos et al., 2010). Furthermore, as a culture, Hispanics often shared information with their family and friends, and this may contribute to their high level of diabetes knowledge (Ceballos et al., 2010). On the contrary, Livaudais et al. (2010) found “a lot” of Hispanics did not know how to take care of their diabetes or know diabetic symptoms that posed health risks to them (p. 593). McEwen et al. (2013) suggested that despite receiving diabetes knowledge, Hispanics were “unable to transfer the knowledge and skills” they learned to help manage their own self-care needs (p. 750). The incongruent results suggest additional research is needed to gain a better understanding of the many variables that may determine Hispanics knowledge of T2D as it relates to their self-care.

Resources. Available resources for diabetic care were an unexpected finding. Walla Walla is located in a rural area of the state of Washington but has two private hospitals, two community health clinics, several private clinics, and many specialty care practices. Overall, participants knew what resources were required to support their diabetes care and how to utilize these resources. Many participants confidently named available resources found in Walla Walla County that were both valued and needed. All participants immigrated to the U.S. many years ago. This may explain why these Latinas understood available resources for their diabetes and how to utilize them. Heuer, Hess, and Batson (2006) reported similar findings as Hispanics who

lived in a rural area sought resources at their local clinic for their diabetes care. They went to the clinic for nutritional education on “which foods to eat, and not to eat, and how to diet...” (Heuer et al, 2006, p. 476). Further, Hispanics (71% female, 88% Mexican) believe the greater their resources (support services) the more they were able to both adhere and manage their diabetes (Fortmann et al, 2011). Conversely, other studies among immigrant Hispanics reported a lack of resources as a major barrier to managing their diabetes (Hu et al., 2013). Likewise, uninsured Hispanic families in rural America have available resources, but they did not know how to utilize them (Kim-Godwin & McMurry, 2012, p. 413). These and other studies suggest that having resources alone does not guarantee the ability to utilize resources. It is essential for community health clinics to know the needs of their population well enough so their Hispanic families can both have access to diabetic resources and know how to utilize them.

Killer diseases. As the name suggests, the category of “killer disease” was an intriguing finding. Some Latinas reported if you are a Hispanic American you would get chronic diabetes, but you would not die from diabetes; however, “other” diseases such as acute illnesses could actually kill Latinas. They specifically considered women’s health issues such as uterine and breast cancers were more fatal than T2D. Other Latinas held to the possible fatality of diabetes. Long et al. (2012) sheds light to this as they suggested diabetes is such a common illness among Hispanics that many support the belief “if you live long enough, you will have diabetes” (Long et al., 2012, p. 137). They propose because of its prevalence, diabetes may not be perceived as fatal. On the contrary, few Latinas have “killer diseases” such as breast cancer. It is essential to learn if other Latinas also believe some diseases are more fatal than diabetes. There appears to be a need for research that explores how the priority of “killer diseases” may impact Latinas’ diabetes.

Signs of Trouble With My Diabetes

One of the core interview questions asked the signs that indicated the Latinas were having trouble with their diabetes.

Symptoms. Many told stories of how their diabetic signs and symptoms had prompted them to seek a diagnosis. These included specific words related to diabetes such as A1C, borderline, and feeling thirsty. A similar study also found Hispanics commonly seek medical care when they have diabetic symptoms, and this is often when they are first diagnosed (Kahn et al., 2013).

Emotional. However, as the participants shared their personal signs of trouble, it appeared the longer they had the disease, the more emotional they were in discussing its impact on their personal life. The Latinas spoke of feeling guilty for having the disease, the struggle they have with diabetes, and denial of having the disease. Similar reports found Hispanics suffer both physically and emotionally when they have T2D (Hu et al., 2013).

Guilty. Feelings of guilt were identified as an emotional sign of having diabetes. The Latinas' expressions of guilt were primarily related to food. Some felt their lifestyle diet was related to them acquiring the disease, others suggested being overweight or being over-indulgent at mealtime caused them to have diabetes. One participant poignantly asked if it was because she did not take care of herself. It is noteworthy the actual term "guilt" was not found in this study's literature review. It is not known if the word "guilt" is not a usual part of Hispanics vocabulary or if other words are used to describe guilt. Irrespective, future studies that include emotional issues related to food and Hispanics with diabetes should consider the concept of "guilt."

Struggle. On the contrary, participants frequently voiced the words "struggle" or "battle" to describe their emotions related to having chronic diabetes. The participants associated their

emotional struggle with food restrictions and portion sizes they felt would not be satisfying. Several participants reported seeing a dietician to help them control their diet, but believed the restricted diets would cause them to “starve to death.” Overall, the Latinas expressed they could make the necessary dietary changes to manage their disease, but the process of change is what they struggled with the most. This finding is congruent with studies that found Latinas struggled to please their family and at the same time adhere to their own diabetic dietary needs (Ramal et al., 2012; McCloskey & Flennike, 2010). Cusi and Ocampo (2011) indicated Hispanics struggled when they could not eat their preferred cultural foods. Moreover, immigrant Hispanics with diabetes (75% female, 78% Mexican) perceived an emotional “sense of loss” from the dietary changes that were required when having diabetes (Hu et al., 2013, p. 501). As such, Ramal et al. (2012) suggested communities help Latinas become aware of resources such as food banks that offer free fresh fruits and vegetables, nutrition classes, and support groups that provide nutritional counseling. They add community centers and churches are ideal places to promote awareness of community resources (Ramal et al., 2012).

Denial. The participants spoke of their personal denial of T2D. Some did not want to go to the doctors for fear they would be diagnosed with diabetes. Others suggested if they denied the disease, they could eat what they wanted and not have to live a life of being managed by a disease. There is a plethora of literature on denial as it relates to Hispanics with diabetes (Clark et al., 2009; Kahn et al., 2013; Livaudias et al., 2010; McCloskey & Flenniken, 2010; Shedlin, Decena, & Beltran, 2012). In fact, denial was frequently found to be the initial response when Hispanics are diagnosed with the disease (Kahn et al., 2013; Livaudias et al., 2010; McCloskey & Flenniken, 2010). Denial can be precipitated by the “acknowledgement that one’s lifestyle must change” when they have diabetes (Livaudias et al., 2010, p. 596) as the experience of the

change can be as dramatic as being diagnosed with cancer (Rivera-Adams, 2003). Thus, it was less emotional for Hispanics to deny the disease than to live with the “burden” that comes with it (Kaplan et al., 2013, p. 1344). Other studies suggested denial was related to Hispanics not wanting others to know they had the disease (Kahn et al., 2013; Larkey, Hecht, Miller, & Alatorre, 2001). Kahn et al. (2013) reported those who have a family history of diabetes often experience denial as they have seen the consequences of the disease in others. They add denial for these new diabetics is similar to the stage of denial found in the Kubler-Ross Grief Theory (1972) (Kahn et al., 2013). Kahn et al. (2013) suggested healthcare providers invite their patients to express their denial of the disease, so they might accept their illness and move toward a readiness of managing their disease. McCloskey and Flenniken (2010) also suggested utilizing a support group facilitated by a *promotore*, or a Hispanic community health worker, who can offer help with cultural issues related to diabetes. Additional research is merited on the emotional suffering Latinas experience and the role this has in denial of their disease. Studies that explore cultural beliefs toward diabetes, including cultural expectations of Hispanics with diabetes, appear to be lacking in the literature.

Taking Care of My Diabetes

The Latinas in the study believed earnest efforts of adherence to self-care activities were needed to either have control or have improvements of their diabetes. At the same time, they felt they lacked adherence because barriers often prevented them from adherence. Collins et al. (2006) also found adult Hispanics who lived in a senior citizen center identified “maintenance activities” as a way to remain healthy as they age. They noted exercise, eating well, and “taking prescribed medications” were required (p. 17). This study focused on the definitions of health and, therefore, did not identify barriers to adherence. However, Ferrer et al. (2014) notes the

Capability Approach framework, based on the principals of welfare economics, has helped Hispanics identify their “capability” to pursue healthy behaviors. For example, the model was found useful in naming determinants of health behaviors for diabetes management. They purport the Capability Approach is especially useful among communities who serve poor Hispanics as it “emphasizes the limitations of their personal choice” by expanding “practical opportunities” to care for their diabetes (p. 54). Whereas, Wallace, Pomery, Latimer, Martinez, and Salovey (2010) suggested the use of a bicultural model, which “measures Hispanic diversity and beliefs,” to explore determinants of health behaviors that may influence their diabetic self-care in a positive direction (p. 49).

Adherence. Three specific activities were identified that helped Latinas manage their diabetes: exercise, control of a diabetic diet, and medication management. The participants believed all played a role in taking care of their diabetes. The Latina findings are similar to other studies. Hispanics recognize their diabetes “can’t be ignored” (Heuer et al., 2006, p. 472) and they must “diligently” watch over their personal care (Gonzalez et al., 2011, p. 976). Likewise, Hispanics who take control of their diabetic needs have “significant improvement” in their overall health (Lorig, Sobel, Ritter, Laurent, & Hobbs, 2001, p. 258). On the contrary, lacking a personal responsibility in caring for their diabetes is seen as a barrier to managing their disease (Livaudais et al., 2010). Other studies suggest Hispanics often include a combination of physical activities to take care of their diabetes (Mier, Medina & Ory, 2007).

Exercise. When Latinas were asked what they did to control their diabetes, nearly all responded first with physical exercise. Some responded with places they went to exercise, while others talked about going on walks or household chores that provided them exercise. The Latinas lived in Walla Walla, Washington, home to many community exercise facilities and programs.

This may explain why no participant mentioned exercise facilities to be a barrier. However, a few participants felt their work environment required a lot of physical exercise and suggested this work amounted as the same as nonworking exercise. Many studies support the findings that Latinas consistently perceived physically exercise as essential to control their disease (Hu et al., 2013; Livaudias et al., 2010; Long et al., 2012; Mainous, Diaz, & Geesey, 2008; Mier et al., 2007; Sullivan et al., 2010). However, Sullivan et al. (2010) reported 40% of Hispanic women with diabetes (Mexican 71%) never exercised, while only 20% exercised once or twice per week (p. 387). Caballero (2011) reported national studies also found Hispanics are less likely to exercise than non-Hispanics whites. Likewise, Hu et al. (2013) found Hispanic immigrants (78% from Mexico) perceived “difficulty in exercising” as a major barrier to managing their diabetes (Hu et al., 2013, p. 500). Other studies reported Hispanics found a lack of exercise programs and facilities as a barrier to exercise (Livaudias et al., 2010; Mier et al., 2007). The cost of exercise programs or a lack of public environments in which to exercise may also contribute to Hispanics’ inability to exercise (Livaudias et al., 2010). For example, some communities lacked resources (e.g. parks) due to cost, suggesting their local environment may actually be a determinant for Hispanics with diabetes to gain exercise (Ferrer et al., 2014). Finally, three studies reflect the importance of tailoring community exercise programs to meet the cultural needs of Hispanics. The first study explored physical activity among Hispanics with diabetes (87% female, 62% immigrants from Mexico) and found they preferred walking together in their neighborhood with other family members as an ideal, low-cost form of physical activity (Mier et al., 2007). The second study noted Latinas with diabetes (88% immigrants from Mexico) perceived “partner support” influenced their decision to exercise (Congello, 2015). This study was conducted in a metropolitan area of the U.S. and suggested future studies are needed that include physical

activity as an intervention program for Latinas with diabetes in various settings. Finally, the third study was a community partnership with academic partners who collectively helped create a salsa aerobics class for Latinas (Everham-Whitehorse, Manzano, Baezconde-Garbanati, & Hahn, 1999). The community partners found salsa aerobics to be a culturally appropriate form of physical activity for Hispanics (Everham-Whitehorse et al., 1999).

Control of diet. Adherence to a diabetic diet was found to be essential among the Latinas. They understood the essential components to a controlled diabetic diet. For instance, they mentioned the need to eat more vegetables, “green” foods such as salad, and foods low in fats. Several discussed the need for “balance,” and the importance of portion sizes to control their diets. The participants believed Walla Walla had plenty of safe and nutritious foods, as the region is blanketed by a huge agricultural industry. However, as the Latinas spoke about the many things they did to control their diet, they often prefaced their thoughts with the words “I try.” This suggests they knew what to do to adhere to their diet, but that it also required an effort to control their diet. The literature also found Hispanics with diabetes attempt (Bolin et al., 2013; Sullivan et al., 2010, p. 387) to make dietary changes or hold a desire to “work on it” (McCloskey & Flennike, 2010, p. 114). Castillo et al. (2010) found the “key factor to improving diabetes management” among Hispanics (73% female) was a “balance of meals and portion sizes” (p. 591). One health behavior study suggested the Information-Motivation Behavioral Skills Model (IMB) (Fisher & Fisher, 1992) may be useful to help Hispanics with diabetes “path” the way from receiving dietary information to motivating a change in dietary behaviors (Osborn, Amico, Fisher, Egede, & Fisher, 2010). This study was conducted on a primarily Puerto-Rican immigrant population. However, the IMB model might also prove useful to help

Mexican Latinas transition from “I try to control my diet” to successful behavior changes that help them manage their diabetes.

Medications. The participants recognized having T2D meant they also must adhere to a schedule of medications. Many Latinas reported how many medications they took and where they go to get their medication. None of the participants reported any barrier to adhering to their medication schedule. It is not understood if there was no barrier to medications or if the Latinas chose not to address this issue. However, medication adherence is a well-known barrier to Hispanic with diabetes. In fact, some believe it to be the “frustrating” barrier related to caring for their diabetes (Hu et al., 2013, p. 500). Other common adherence issues related to diabetic medication include, forgetting to take medication (Hu et al., 2013), the need to take injections (Herrera et al., 2012; Hu et al., 2013), too many medications to take (Hu et al., 2013; Kaplan et al., 2013), and lack of medication refills (Bailey et al., 2012; Brown et al., 2011). Finally, the cost of diabetic medications (Bailey et al., 2012; deHeer et al., 2013; Hu et al., 2013) is also a frequent barrier to adherence. Kaplan et al. (2013) reported Hispanics (40%) “more frequently discussed the costs of diabetes” medication with their physicians compared to non-Hispanic white (28%) with diabetes (p. 1344). Bailey et al. (2012) also suggested an additional concern might be whether Hispanics with diabetes (43% female) have a language barrier between them and the pharmacist so they can purchase their medication. It is important for healthcare providers to understand their communities’ medication needs, specifically those who live in a rural setting, where Hispanic populations tend to have even lower incomes and access to medications is often more challenging.

Barriers. Three barriers were identified to adherence of activities that help Latinas take care of their diabetes: balance of culture, lack of self-control, and cost of diet.

Balance of cultures. Perhaps the most interesting barrier to adhering to activities was a balance of cultures. Their primary struggle revolved around their inability to balance food options in America from the traditional diet they held in Mexico, which they believed to be healthier. Most reminisced how poor they were growing up in Mexico, where they consumed less food and ate more simply. Participants laughed that they were too poor to even buy a doughnut in Mexico. Since immigrating to the U.S., many have become employed. This has resulted in a higher income that has allowed them to consume more food and higher-calorie foods than they ate while living in Mexico. Several participants shared how often they ate fast foods in America, including pizza, hamburgers, and ice cream. They added that fast foods were both enjoyable and inexpensive. Other participants noted they worked and led busier lives in America and it was easier and less expensive to stop and buy fast foods than to return home and cook for the family. These findings are similar to the studies that show a relationship between acculturation and diet among Hispanics in the U.S. Ayala et al. (2008) found Hispanic women do not work in Mexico and, therefore, were poorer and cooked at home, but after immigrating to the U.S. they “frequently” ate “fried chicken and fast food” (p. 1341). Further, the more acculturated Hispanics were to the U.S., the more their diets lowered in fiber and rose in fats (Ayala et al., 2008; Mainous et al., 2008; Lopez-Quintero et al., 2010). A recent study reported rural Hispanics also struggle with the “mainstream fast food culture” and was considered to “increase their likelihood of developing diabetes” (Heuman et al., 2013, p. 263). Long et al. (2012) suggested Hispanics eat fast foods as a desire to “fit in” with their new culture when they immigrate to the U.S. even though they believe it will have a “negative impact” on their health (p. 138). Others reported Latinas were tired from work and it was easier to “stop off” and eat fast foods (Ayala et al., 2008, p. 1341). Finally, Weitzman et al. (2013) reported on bodily aesthetic ideals among

Latinas with T2D and found they preferred “larger than average body size” and that body dissatisfaction focused more on “skin changes and fatigue” rather than weight (p. 856). They add Latinas believed the American diet caused them to have diabetes, while their traditional Hispanic diet (meat from the open-air market and fruit from the trees) helped them to manage their diabetes (Weitzman et al., 2013). Yet, in a study among 35 Hispanics with diabetes, only one (3%) reported to have made changes to their diet (Sullivan et al., 2010). When asked why others did not make necessary changes, nearly half of the participants responded it was just “too hard” to change their diets (Sullivan et al., 2010, p. 387). These findings underpin the importance of a need for diabetes educators and dieticians who live in rural communities. Studies are warranted that explore the complex emotions immigrant Hispanics with diabetes endure as they decide which traditional dietary behaviors to “retain” and which “new ones to adopt” from the U.S. food culture (Mainous, 2008, p. 135). Such efforts should consider using bicultural measures in the role acculturation plays as a barrier to Hispanics health (Wallace et al., 2010).

Lack of self-control. Indeed, the Latinas earnestly desired to adhere to diets that improved their diabetes disease. Yet, most identified they lacked self-control and noted this to be a significant barrier to controlling their diabetes. Several added their lack of control was their preference for unhealthy foods, while others identified their lack of control was related to temptation. The literature supports these findings as Hispanics with diabetes “desire to eat healthy,” but lacked self-control as they also desired “comfort foods” (Bolin et al., 2013; Heuman et al., 2013, p. 266; McCloskey & Flennike, 2010; Sullivan et al., 2010). Temptation of foods is another perceived barrier to controlling their diets (Ramal et al., 2012). One Hispanic mother with diabetes shared her lack of control with food leaves her “locked in her room” so she is not tempted to eat the foods her family eats (Hu et al., 2013, p. 500). Further research

suggested, family support is critical for Hispanics to make changes that improve control over their diets (Baig et al., 2015; McCloskey & Flennike, 2010; Ramal et al., 2012; Scollan-Koliopoulous et al., 2012), and a lack of family support is perceived as a barrier to change dietary behaviors (Heuman et al., 2013). Hispanic family members want to help support their family member, but feel they lacked the knowledge (Hu et al., 2013) or time (Scollan-Koliopoulous, 2012) to do so. Other studies suggested the diabetic Hispanic does not want to “burden” their family members with their own disease (Ferrer et al., 2014). It is interesting to note some Latinas with diabetes “feel pressured” to eat at family events (Gonzalez et al., 2011, p. 974), while others feel at times their life is “under a magnifying glass” (Rivera-Adams, 2003, p. 262). They hear people say, “That’s bad for you” or “You shouldn’t have that—you know you have diabetes” (Rivera-Adams, 2003, p. 262). However, when Hispanics decline food at a social occasion, this may also be perceived as “impolite” and culturally “unacceptable” (Caballero, 2011, p. S12). Rather, the Hispanic is expected to participate in social meals to “maintain interpersonal relationships” with family and friends (p. S12). Perhaps Baig et al. (2015) summarizes it best by suggesting Hispanics with diabetes struggle to make dietary “lifestyle changes due to competing demands” (p. 1485).

Cost of diet. Similar to balance of cultures and lack of self-control, cost of healthy diet was found to be a barrier for Latinas. In the barrier of “balance of cultures,” the participants believed that since immigrating to the U.S., they worked and had busier lifestyles, suggesting this is why they often ate at fast food restaurants. However, in the barrier of “cost of diet,” they considered healthy foods to be prohibitively expensive and thus ate fast foods, as it was less expensive. Healthy foods are considered to be expensive, in particular for those who live in rural

areas of America (Liese, Weis, Pluto, Smith, & Lawson, 2007). On the contrary, Sullivan et al. (2010) found “dietary changes were not too expensive” for Hispanics with diabetes (p. 387).

I Go Here

The study results on where Latinas go for their healthcare needs varied. Most participants utilized community health clinics for their primary care services. They also utilized private clinics and local hospitals for additional diabetic care, such as podiatry and optometry care. The majority of the responses for “I go here” reflected care provided at a local community health clinic.

It depends. The participants did not report poor healthcare experiences (lack of trust, inability to get an appointment, or lack of respect) from healthcare they received at private clinics or local hospitals. This finding is similar to Rodriguez et al. (2010), which noted Hispanics who utilized community healthcare clinics reported more “problem care experiences,” such as language concordance, than Hispanics who receive care in private practices (p. 1160). Rodriguez et al. (2010) suggested this is due to the high rates of being uninsured among Hispanics who seek care from community health clinics. They asserted when Hispanics increased their insurance coverage, their clinical experiences in community health clinics often improved. On the contrary, the Pew Research Center note three-fourths of Hispanics, including immigrants and noncitizens, reported their healthcare experiences in the last year were either excellent or good (Livingston, 2009). The report, however, did not specify if the care received was from a community health clinic or a private facility.

Trust. A lack of trust was a strong influence whether or not Latinas with diabetes perceived they had access to healthcare. Where the participants went for their diabetic healthcare

depended on both a place they trusted for a correct diagnosis and trust that their personal information (e.g. medical diagnosis) remained confidential. Trust (*confianza*) is a cultural factor that Hispanics highly value (Aguado et al., 2010). Latinas often disclosed information to their physicians based on a trusting relationship (Julliard et al., 2008). Hispanics also found trust to be a “notable” concern when someone “outside of the family” receives their personal health information (Aguado et al., 2010, p. 253). Not all Latinas experience mistrust during their healthcare provider experiences (Abraido-Lana, Cespedes, Daya, Florez, & White, 2011). In short, unless trust is present between Latinas and their healthcare providers, access to quality care is perceived as limited.

Appointment. The participants shared their access to care greatly depended on if they could get an appointment. The Latinas noted some healthcare facilities offered appointments based on their insurance status. Most healthcare facilities in Walla Walla receive government insurance plans (Medicaid or Medicare) and private insurance plans that allow appointments to be made. However, the study results found 43.8% of Latinas reported having no health insurance. Only one healthcare facility, a safety-net clinic in Walla Walla, provided an appointment for services if a donation was given. In short, the participants in the Walla Walla study all have a chronic illness, know where to go for care, have healthcare facilities with fluent Spanish speaking staff and providers, but either do not have the appropriate type of health insurance or have problems with their appointments being cancelled. On the contrary, the Pew Hispanic Center reported the main reasons Hispanics do not have a usual source of medical care included that they are not sick, have no health insurance, do not know where to go for care, and cannot find a provider who speaks Spanish (Livingston, 2009). It is noteworthy that “inability to

make an appointment” was not found in the Pew Hispanic Center report, but noted in other studies (Larkey et al., 2001).

Respect. In addition to a lack of trust and inability to get an appointment, participants felt a lack of respect by their healthcare providers was a determinant to their access to care. Respect was perceived as inconsideration of the patient’s time, hasty clinical encounters, and being examined by a medical student. The study results also suggest that Latinas often disclose information to their physicians based on a relationship that included respect. One participant held respect means the physician would touch the Latina during the clinical encounter and not be hasty. The need for Latinas to have a clinical encounter they receive as respectful is consistent with other studies. Caballero (2011) found Hispanics “expect close physical contact” (e.g. handshakes and hugging) with their healthcare provider (p. S12). In fact, friendliness (*personalismo*) and respect (*respeto*) are values Hispanics hold high (Juckett, 2013). Moreover, Latinas will “not share information” (Julliard, 2008, p. 545) with their physician unless they receive “genuine” care by their physician (Caballero, 2001, S12), rather than care that feels “institutional” (Kim-Godwin & McMurry, 2012, p. 411). On the contrary, Julliard (2008) found Latinas (71% were immigrants) perceived lack of respect as: the physician did not “pay attention” to the patient, time spent with the physician seemed hasty, and student healthcare providers were present during the clinical encounter (p. 545). Yet Sherill et al. (2005) reported their community provided better access to healthcare services to their rural Hispanic community (67% female, 65% Mexican) by utilizing nursing students, public health students, and medical students. The study added the patients reported the medical staff including students, were friendly and open, which provided them a “comfortable” environment for their healthcare

services (Sherill et al., 2005, p. 243). Finally, Rogers (2010) reported if Hispanics perceive they will not be respected, this alone is enough to keep them from seeking healthcare.

Anecdotal comments from field notes suggested, Latinas accepted most healthcare provisions they could receive when they first came to the U.S. They did not understand the America healthcare system, and they had limited English proficiency during their early years of living in America. The more acculturated the Latinas became to American culture and its health system, the more Latinas desired care they perceived was respectful. Indeed, additional research is needed on perceived lack of respect for the Latinas seeking healthcare and the potential influence on their access to care. Healthcare providers can properly engage Latinas during the clinical encounter by knowing how Latinas perceive *respecto*.

Insurance. Latinas' view on access to care depended on whether or not they have health insurance. The study results found 43.8% of the sample had no health insurance. These results are alarming as the National Health Interview Survey show Hispanics have the lowest rate of health insurance coverage at 25.2% when compared to other ethnic groups (Cohen & Martinez, 2015). Moreover, a report from the U.S. Census Bureau found Hispanic immigrants are more likely (39%) than U.S.-born Hispanics (17%) to lack insurance (Krogstad & Hugo-Lopez, 2014). The national rate for uninsured Hispanics is lower than found in the Walla Walla study. On the contrary, an expected finding was three Latinas (23.1%) in the study reported they were neither a U.S. citizen nor a permanent resident and did not have health insurance. Hispanics make up the majority (56%) of the U.S. noncitizen immigrants, of which nearly half (49%) lack health insurance (Krogstad & Hugo-Lopez, 2014). In regard to the type of insurance, 31.3% received government health insurance (Medicare or Medicaid), while 18.8% held private insurance. Other reports suggested Hispanics who reside in Washington tend to have no medical insurance or government health insurance (Livingston

et al., 2008; “Washington State,” 2006). Finally, participants’ work status appeared to be related to insurance status and type of insurance. A lack of health insurance has been consistently shown as a barrier to seeking healthcare, particularly among Hispanic populations in rural areas of America (Herrera et al., 2011, Livaudais et al., 2010; Mier et al., 2012; Sherill et al., 2005). Lopez-Class and Jurkowski (2010) also add insurance status is related to Hispanics ability to receive “diabetes related services” (p. 812). Further consideration needs to be given on why Latina immigrants in this study have higher rates of being uninsured than the national average and why more than half of the Latina participants, who work in Walla Walla, have no insurance.

We Get To Tell Them

The final theme evolved unexpectedly from participant discussions and impressions made by the moderating team. “We get to tell them” speaks to the confidence the Latinas felt as they voiced the meaning of their personal access-to-care experiences related to their T2D. The participant responses are similar to what Munhall (1993) described in her article, “Unknowing as a way of knowing.” Munhall (1993) suggested the “unknowing” is an “intersubjective space” where two people of different cultures “allow” others to speak (p. 125). As the person or people who “know” speak of the meaning of their experience, the “unknowing” person begins to understand “the actual essence of the meaning an experience” has for the one who has yet to know (Munhall, 1993, p. 128). Munhall (1993) asserted for “the art of “unknowing” toward another pattern of knowing” to occur, it is critical the “unknowing” recognizes they do not “know” the knowledge that is about to be developed (p. 125). The moderator was a Latina from Cuba, while all participants were Latina immigrants from Mexico. The participants repeatedly demonstrated that the moderator spoke the same language as the participants, but also perceived the moderator to be an “outsider.” The Latina participants viewed the moderator as “one who

does not understand” their Mexican culture (Munhall, 1993, p. 125). The moderators and Latina participants in the study believed to have engaged in an authentic encounter whereby a “full unknowingness about the other’s life” evolved (Munhall, 1993, p. 125). This presence led to an intimate “intersubjective space” between the moderators and the Latinas, such that the Latinas felt confident in sharing, both verbally and nonverbally, what they know with those who did not know. Thus, the sixth theme, “I get to tell them” is a fitting expression of how the Latina felt like they know and were able to share what they know.

Limitations

Several limitations to this study are noted as they related to the study findings. The snowball recruiting sampling may have limited the findings to a select Latina population. Further, the homogeneity in this sample of immigrant Latinas limits transferability of findings with other Latina subgroups and geographical locations (Boswell & Cannon, 2014). An additional limitation was that the participants were willing to participate throughout the study, but their level of participation was limited as most worked outside the home or were disabled. Another noted limitation was all three focus groups had one participant who preferred to speak in Spanish. To address this issue, the moderator spoke to these participants in Spanish allowing them to respond in their native tongue. The moderator then translated to the co-moderator. As a result of the translation process, some of the context shared by the Spanish-speaking participants may have been lost. The Interview Guide was carefully constructed with oversight from three expert qualitative researchers. However, the guide may have thwarted participant responses so that they answered with information they perceived was required of them (Harkness et al., 2003).

Although there were limitations to this study, several strengths were also found. CBPR approach was included in all phases of the study. This research approach provided an

environment where the Latinas freely shared their experiences. Secondly, the study spanned more than a year, yet the advisory committee members remained engaged to the end. The participants welcomed the “outside” moderator as they freely disclosed their greatest struggles with their diabetes. Finally, the participants and the community partnership expressed how they benefited from the study during the last evaluation, as they named specific actions they desired to do next.

Implications

The following implications are offered for future research, clinical practice, and nursing education.

Research. This study highlights the perceptions of access-to-care issues of Latinas with T2D in rural communities. Given the paucity of gender-based studies in prior diabetic research, the cultural and psychosocial factors that impact Hispanic women are significant to contribute to the current literature. The relationship of diet, nutrition, lifestyle, culture, and access to care remains poorly understood in this rural population.

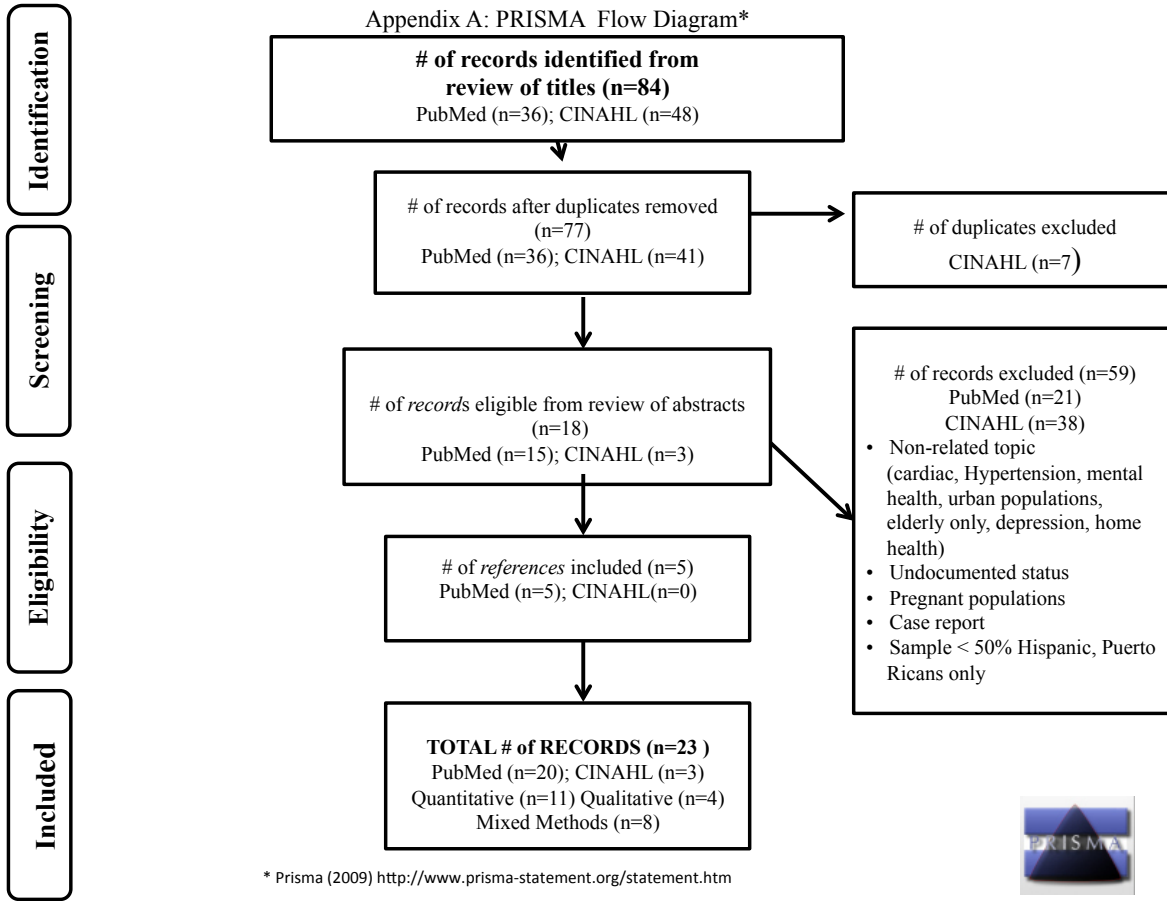
An important finding in this research is the impact of employment outside the home and its perceived effect on Latinas with diabetes. Prior research has shown the negative health impact of acculturation among Hispanics who migrated to the U.S. Future studies comparing Latina immigrants, who maintain their traditional cultural lifestyle, with those who have acculturated to the American tradition of women working outside the home, may elucidate what role work outside the home has on the Latina diabetic population. Does work outside the home among Latina immigrants affect, not only the prevalence of T2D but also the severity of the disease? Future investigation comparing nutritional, economic, and behavioral patterns may further define the impact of working Latinas who no longer adhere to traditional Hispanic gender roles.

The results found the Latinas were more eager to be attentive to their self-care when they were diagnosed with a “killer disease” (e.g. breast or uterine cancer). Despite numerous large educational efforts, Latinas in general do not consider T2D to be among the category of “killer diseases.” A new approach to this problem might involve a prospective study of Latinas with T2D with and without cancer, assessing the impact of diabetic nutritional intervention between those with “killer disease” and the non-cancer population.

Practice. The Latinas exhibited a number of emotional responses to their diabetic condition including denial, guilt, and struggle. An unexpected finding was the atypical feature of denial expressed in the ambivalent attitude that T2D is a “normal” aspect of life and as such is not a priority of concern for Latinas. To promote both emotional and physical health among Latinas, healthcare providers should encourage their patients who are in denial to participate in a support group where they can express their feelings (McCloskey & Flenniken, 2010).

Education. The richness of social interaction and data acquisition utilizing Critical Social Theory and the CBPR approach among rural Hispanic women with T2D is important. Furthermore, research needs to support Munhall’s (1993) approach of “Unknowing as a way of knowing.” Standard research models may not offer an environment milieu that receives culturally relevant knowledge. Therefore, it is essential for nurse educators to continue to teach culturally competent research methods that empower vulnerable populations and address social justice and health disparity issues.

Appendix A: Literature Search: PRISMA Flow Diagram



Appendix B: Proposal Literature Review by Disciplines

PUBMED	QUANT	QUALI	MIXED	TOTAL
Public Health	n=5	n=2	n=4	n=11
Nursing	n=1	n=2	n=0	n=3
Medicine	n=2	n=0	n=2	n=4
Social Sciences	n=2	n=0	n=0	n=2
TOTAL	n=10	n=4	n=6	n=20
CINAHL	QUANT	QUALI	MIXED	TOTAL
Public Health	n=2	n=0	n=0	n=2
Nursing	n=0	n=0	n=1	n=1
Medicine	n=0	n=0	n=0	n=0
Social Sciences	n=0	n=0	n=0	n=0
TOTAL	n=2	n=0	n=1	n=3
TOTAL PubMed & CIN	n=12	n=4	n=7	n=23

Research Studies (n=23)

(Quantitative articles: n=12; Qualitative articles: n= 4; Mixed Methods:

Appendix C – Systematic Review Of Literature

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
1	Baig et al. (2014)	Determine community health center providers and staff access to resources for their Hispanic vs. non-Hispanic with T2D	<i>none</i>	<p><i>Sample:</i> n= 577 health care providers</p> <p>Multi-disciplinary (eg. MD, RN, educators)</p> <p>Female (46%); Male (39%); (p=0.04)</p> <p><i>Setting:</i> 10 Mid-western states</p>	Quantitative Cross-sectional analysis	<p><i>Measurements:</i> Questionnaire of participant & workplace characteristics and healthcare resources (28 item)</p> <p>HP=25% of their site’s diabetes population was Hispanic</p> <p><i>Analysis:</i> SAS (version 9.2) descriptive statistics, Chi-Square, Wilcox rank; (p ≤ 0.001)</p>	<p><i>Results:</i> High Proportion (HP) provider access than non-HP providers Spanish-speaking providers (42.6%), interpreters (83 vs. 59% diabetes education programs (vs. 26%), & community outreach programs (77 vs. 52%) (p< 0.001) HP providers more likely than non-HP provider to have access to Physician’s assistants (71 vs. 52%) And certified diabetes educators (61 vs. 51%)</p> <p>Barriers: <i>Self:</i> individual resources <i>Provider:</i> healthcare providers, culturally competent healthcare providers</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
2	Moreno et al. (2014)	Examine perceived neighborhood problems vs. diabetes outcomes	Socioeconomic position and health among persons with diabetes mellitus: A conceptual framework (Brown et al., 2004)	<i>Sample:</i> n=250 Hispanic, adult, T2D <i>Setting:</i> large migrant health center in San Joaquin Valley, CA	Quantitative Cross-sectional survey (July 2009-January 2010)	<i>Measurements:</i> IVs: perceived neighborhood problems: crime, access to exercise facilities, trash & liter, lighting at night, public transportation, access to supermarkets DVs: A1C, LDL, BP, BMI <i>Analysis:</i> IV: Stata (version 11.1) Cronbach's alpha = 0.86; (p <0.05) Chi-Square assessed one global health item DV: logistic regression	<i>Results:</i> Perceived neighborhood problem (48%); crime was most common problem Perception of neighborhood problems was independently associated with a higher BMI <30 (AOR= 0.43; 95% CI 0.24, 0.77), and not having BP <140/80 (AOR)=0.45; 95 % CI 0.22, 0.92) Barriers: <i>Environment:</i> external resources

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
3	Kaplan et al. (2013)	Understand patient disparities in diabetes care and glycemic control	<i>none</i>	<p><i>Sample:</i> n=1,484 adult patients with T2D (Mexican American (n=782; female, n- 67%), Vietnamese American (n=313, female, 60.1%), or non-Hispanic White (n=389, n=44.5%)</p> <p><i>Setting:</i> 7 out patient clinics associated with academic medical center, Irvine, CA</p>	Quantitative Cross-sectional analysis	<p><i>Measurements:</i> Reducing Racial Disparities in Diabetes Using Coached Care Survey (2007) IV: Patient characteristics (modifiable & non-modifiable), provider characteristics, system characteristics, societal characteristics DV: A1C</p> <p><i>Analysis:</i> SPSS (version 20.0) Univariate and distributional analysis (measure of central tendency, kurtosis and skew) Multi-item were tested for reliability using Cronbach's alpha, and standard error, construct validity for derived multi-item scales assessed using confirmatory Principal components & varimax rotated factor analyses (p ≤ 0.001)</p>	<p><i>Results:</i> Significantly higher HbA1c values (n=782) (mean= 8.3% [SD:2.1]) compared with non-Hispanic whites (n=389) (mean = 7.1% [SD:1.4]) ¾ Mexican American reported annual household incomes < \$20,000 Significantly higher barriers to access to care 25.4 (23.2)* compared with non-Hispanic whites 10.6 (14.2) and Vietnamese Americans 9.0 (17.3) Disease management and adherence to treatment related to glycemic control for all patient subgroups</p> <p>Barriers: <i>Self:</i> individual resources <i>Providers:</i> healthcare providers</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
4	McEwen et al. (2013)	Compare personal characteristics, healthcare access and utilization & DSME	<i>none</i>	<p><i>Sample:</i> n= 600 Hispanic American adults with T2D; did not have high school education, 51%; were obese, 80%)</p> <p><i>Setting:</i> Yuma County, AZ, 19%; Dona Ana County, New Mexico, 35%; El Paso County, TX, 45%</p>	Quantitative Cross-sectional analysis	<p><i>Measurements:</i> Behavioral Risk Factor Surveillance Survey (2005–2009) (combined samples)</p> <p><i>Analysis:</i> SPSS (version 17.0), Chi-Square and one-way ANOVA, two tailed, ($p \leq 0.05$)</p>	<p><i>Results:</i> Majority of participants (84%) had a care provider; healthcare coverage (76.3%), report taking a DSME class (60%), overweight or obese (80%) Significant differences in health- care access & utilization and daily feet checks, across the counties ($p \leq .001$) Oral hypoglycemic agents used more frequently (77.4%) than insulin (26%) to control diabetes Majority (60%) report taking a course in DSME</p> <p>Barriers: <i>Self:</i> individual resources</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
5	Bailey et al. (2012)	Assess medication adherence barriers to adherence; Factors related to medication nonadherence	<i>none</i>	<i>Sample:</i> n= 59 Adult T2D (male, 57%; Hispanic, 85%; mean age was 50.4 ± 10.3 years) <i>Setting:</i> pharmacy and community clinic in south, TX	Quantitative Cross- sectional analysis	<i>Measurements:</i> IV: barriers to medication adherence, CAM use, and patient perceptions and preferences. DV: Morisky Medication Adherence Survey (8 item; ($\alpha = .83$); Cronbach's alpha >.80 <i>Analysis:</i> SAS (version 9.1), ($p < .05$), Chi-Square	<i>Results:</i> Most underserved patients with T2D had a comorbidity (hypertension or dyslipidemia) and took 3 or more medications (>50%) Most report having health status of "good or excellent" (52.6%) Most were non-adherent to diabetes ($p < .05$) Barriers: <i>Self:</i> covariate, self-care behaviors, individual resources

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
6	Kollanoor et al. (2012)	Test for an independent association between household food insecurity and healthcare access/ utilization	<i>none</i>	<i>Sample:</i> n=211 Hispanic adults with T2D (mostly Puerto Ricans; 81%; mean age 56.4 years; unemployed (84%) <i>Setting:</i> 'Metabolic syndrome clinic' at Brownstone clinic, Hartford Hospital, Hartford, CT	Quantitative Cross- sectional analysis	<i>Measurements:</i> Health Care Barrier Instrument (2006– 2009) (11 item) IVs: demographic and socio-economic, psychosocial, cultural, clinical, and diabetes factors (p < 0.05) DV: barrier for seeing a MD regularly (enabling factors, doctor access, medication access, forgetfulness access) <i>Analysis:</i> SPSS (version 19.0) DV: multi-logistic regression; backward stepwise (95% CI), Hosmer-Lemeshow goodness of fit	<i>Results:</i> Higher food insecurity was a risk factor for experiencing enabling (OR=1.46; 95% CI = 1.17–1.82), medication access (OR=1.26; 95 CI% = 1.06–1.50), and forgetfulness (OR=1.22; 95 CI% = 1.04– 1.43) barriers Participants insured (86%) with report of government insurance (97%) Barriers: <i>Self:</i> covariate, self-care behaviors, individual resources

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
7	Brown et al. (2011)	Explore feasibility of nurse case manager (NCM) to follow-up DSME education	<i>none</i>	<p><i>Sample:</i> n=165 Mexican American adults (83 participants and 82 supporters; participants were aged 35–70 years; female (69%))</p> <p><i>Setting:</i> rural community on Texas-Mexico border</p>	Quantitative pretest-posttest, control group	<p><i>Measurements:</i> IV: Experimental group: DSME and access to nurse case manager (NCM)</p> <p>Comparison group: DSME only</p> <p><i>Analysis:</i> SPSS (version 17.0); hierarchical linear and nonlinear models 2-level analysis of DV: H1C, FBG, diabetes knowledge at 3 points (baseline, 3 months, 6 months)</p>	<p><i>Results:</i> Both experimental and control groups reported (+) changes FBG (3 months, 158.8 ± 58.0; 6 months, 149.1 ± 49.1)</p> <p>Women experience decline in BMI over time compared to men (coefficient= -.27, t-ratio=1.982. p=.048)</p> <p>Overall, health outcomes of those receiving NCM were no better than those receiving DSME alone.</p> <p>Barriers: <i>Self:</i> covariate, self-care behaviors <i>Provider:</i> culturally competent healthcare providers</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
8	Herrera et al. (2011)	Explore factors associated with provision of diabetes-monitoring practices	Health service utilization model (Aday & Andersen, 1974)	<p><i>Sample:</i> n=547 Hispanics with T2D (age ≥55), female (58%)</p> <p><i>Setting:</i> CA</p>	Quantitative Cross-sectional analysis of RCT	<p><i>Measurements:</i> California Health Interview Survey (2007) IV: Needs factors, Bartlett's test of Sphericity, χ^2 (15) = 435.02, (p = .000); enabling factors, 4 point Likert scale; predisposing factors (4 covariates on a scale)</p> <p>DV: A1C tests, foot exams, retinal exams (2 point Likert scale)</p> <p><i>Analysis:</i> SPSS (version 17.0), Chi-Square, T-Tests, Hosmer-Lemshow Goodness of Fit, Kessler 6 Scale (depression)</p>	<p><i>Results:</i> Hispanics received foot exams (87%) and retinal exams (76.6%), low semiannual HbA1c tests (30%) Treated T2D with oral medication only (62.7%) Functional impairment score averaged 1.89 (SD = 1.57) Never heard of A1C (20%)</p> <p>Barriers: <i>Self:</i> self-care behaviors, individual resources <i>Environment:</i> external resources</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
9	Kollannoor et al. (2011)	Determine fasting plasma glucose and glycosylated Hgb vs. poorly controlled T2D	<i>none</i>	<i>Sample:</i> n=211 Hispanic adults with T2D (Mean age 56.4 ± 11.8 year; Puerto Rican (n = 171; 81%). <i>Setting:</i> 'Metabolic syndrome clinic' at Brownstone clinic, Hartford Hospital, Hartford, CT	Quantitative Cross- sectional analysis of RCT	<i>Measurements:</i> Barrier Instrument (2006-2009) (11 item) IVs: demographic and socio-economic, acculturation, lifestyle, and biomedical DV: FBG & A1C <i>Analysis:</i> SPSS (version 15.0), Chi- Square IV: ($p \leq 0.05$) backward stepwise multivariate logistic regression: (95% CI)	<i>Results:</i> FPG was less likely to be high = 0.30) if exercise compared to those who did not follow exer routine FPG 2.8 times higher among those who skip meals compared with those who do A1C levels associated with mi age (2.24, 1.2-4.47) Middle age 2.2 times higher A than elderly), those who nap l likely to have high A1C compared to those who d nap (OR=0.07)., & health insu coverage less likely to have high A1C (OR=0.31) Barriers: <i>Self:</i> covariate, self-care behaviors, individual resources

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
10	Fortmann et al. (2011)	Compare relationship between support resources for DSME and HbA1c; mediated by and/or depression	Social- ecological framework (Glasgow, Strycker, Toobert, & Eakin; 2000)	<i>Sample:</i> n=208 Hispanics with T2D from low income communities (ages 21-75 years), (M = 50.61, SD = 10.93); female (71%), born in Mexico (88%), uninsured (67%) <i>Setting:</i> community clinics in San Diego, CA	Quantitative Intervention (part of RCT) Intervention: 8 DSME classes & support group Control: usual care	<i>Measurements:</i> Socio-environmental support survey for DSME (6-item scale), depression (PHQ-9), A1C, and socio- demographic characteristics <i>Analysis:</i> A multiple mediator model [$\chi^2(1)=1.06, p=.30$; RMSEA= .02, SRMR =.01].	<i>Results:</i> Perceived greater support resources for disease- management reported better diabetes self-management ($\beta=.40, p < .001$) and less depression ($\beta= -.19, p < .01$). Better DSME and less depression were associated with tighter glycemic control (HbA1c; $\beta= -.17, p < .05$ and $\beta= .15, p < .05$, respectively). Once the indirect effects via DSME (95% CI [-.25; -.03]) and depression (95% CI [-.14; -. .01]) were controlled, the direct pathway from support resources to HbA1c was markedly reduced ($p=.57$) Barriers: <i>Self:</i> self-care behaviors <i>Provider:</i> healthcare providers <i>Environment:</i> external resource

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
11	Lopez- Quintero et al. (2010) (article is reprinted from 2009)	Explore role of English proficiency in receiving physical activity and/or dietary advice	<i>none</i>	<i>Sample:</i> n=1186 Hispanic adults (aged >20 years; BMI ≥30; English proficient, n= 681; Non- English proficient, n=505 (58.8%), female (58%) <i>Setting:</i> households in the U.S.	Quantitative Cross- sectional analysis	<i>Measurements:</i> National Health Interview Survey (2000) IV: Receipt of physical activity, BMI (Kg/m ²) and/or dietary advice DV: English proficient, Limited English Proficiency <i>Analysis:</i> SUDANN (version 9.0); Chi- Square, two-tailed (p=0.05), logistic regression (95% CI)	<i>Results:</i> Obesity higher among English proficient Hispanics than those with limited English proficiency (66.5 vs. 48.4%), Cardiac Vascular Disease was higher among limited-English- proficient Hispanics than among English-proficient Hispanics (58.8 vs. 44%), 1/3 reported receiving advice from their MD about physical activity (32.0%) or dietary habits (31.2%) Barriers: <i>Provider:</i> healthcare providers

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
12	Rodriguez et al. (2010)	Compare problem care experiences with usual source of care	Blinder-Oaxaca decomposition method (1973)	<p><i>Sample:</i> n=583 Hispanics with T2D (Male, 51.4%; Mexicans, 64%; Puerto Ricans, 12.4%; U.S. Citizen, 69.3%)</p> <p><i>Setting:</i> national sample in the U.S.</p>	Quantitative Two stage weighting design	<p><i>Measurements:</i> Pew Hispanic Center/Robert Wood Johnson Foundation Latino Health Survey (2007) to measure usual care sites (negative = no usual care; positive =usual care), problematic care experiences (range= 0-100), and perceived quality of care (range= 0-100; “poor” =0) age, acculturation, spirituality (mean of 0, S.D.= 1)</p> <p><i>Analysis:</i> problematic are experiences ($\alpha=0.67$), acculturation scale ($\alpha=0.88$), spirituality scale ($\alpha=0.72$; range =0-3); Chi-Square, T- Test, Blinder-Oaxaca decomposition method</p>	<p><i>Results:</i> Hispanics with T2D (47.4%) reported at least one problematic care experience during their last clinic visit. Problematic care experiences were not having a usual source of care ($p=.03$), male gender ($p=.009$), higher spirituality ($p=.02$), poor self-rated health ($p=.03$), and reporting a depression diagnosis ($p=.01$). Perceived quality of care worse when receiving care in community health centers ($p<.001$) or without a usual source of care ($p=.03$)</p> <p>Barriers: <i>Self:</i> covariate, self-care behaviors, individual resources <i>Provider:</i> culturally competent healthcare providers</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
13	Bolin et al. (2013)	Examine implement-ation, use, & sustainability of a computer touch screen diabetes education kisok (Diosk)	<i>none</i>	<i>Sample:</i> n=179 (female, 63%; Hispanic, 66%) <i>Setting:</i> Hispanic community in south, TX	Mixed Qualitative Interviews of key stakeholders at pilot sites Quantitative Questionnaire	<i>Measurements:</i> Feasibility and acceptability of Diosk through: 1) software program, bi-lingual; content created by research team, sites visited by research team weekly (nurses), Spanish translation reviewed independently 2) questionnaire (14 item, self-administered) <i>Analysis:</i> Qualitative: data not reported Quantitative: tracking and monitoring of disok by CHRISTUS Spohn Hospital	<i>Results:</i> 5372 uses at 3 Diosk locations n=2313, hospital pharmacy; n=1877 grocery store pharmacy; n=581 community center) Users were female (64%), between 36-64 yo (63%), and Hispanic (66%) 90% of users state Diosk would help take better care of their diabetes, 85% planned to make lifestyle changes Most frequently used modules: kids corner (n=1161), health recipes (n=979), diabetes complications (n=784) Barriers: <i>Self:</i> self-care behaviors, individual resources <i>Provider:</i> healthcare providers <i>Environment:</i> external resource

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
14	Castillo et al. (2010)	Conduct DSME program by community health workers (CHWs); Evaluate its effectiveness improving glycemic control and self- management skills	<i>none</i>	<i>Sample:</i> n=70 Hispanics (female, 75% insured, 58.6%; married, 10%) <i>Setting:</i> 2 community settings in Chicago, IL	Mixed Qualitative 2 focus groups Quantitative: pretest- posttest single design	<i>Measurements:</i> Diabetes Empowerment Education Program (DES-SF) (8 DSME modules; 10-week program) DV: height, weight, A1C, self-monitor, blood pressure <i>Analysis:</i> Qualitative analysis: thematic analysis by bilingual researchers Quantitative data: SPSS (version 15.0), 2 tailed T-Test, Chi- Square CHWs received training in human subjects' protection; experience > 1 year in facilitating DSME	<i>Results:</i> Improvements were significant for A1C (p=.001) and systolic blood pressure (p=.006) Other positive outcomes were diabetes knowledge, physical activity, spacing carbohydrates, following a healthy eating plan, and eating fruits & vegetables <i>Barriers:</i> <i>Self:</i> covariate, self-care behaviors, individual resources <i>Environment:</i> external resource

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
15	Hu et al. (2013).	Explore perceived barriers among Hispanic immigrants and their family	<i>none</i>	<i>Sample:</i> n=73 Hispanic Immigrants (n=36 with T2D) and families (n=37); female (75%); Mexican (77.8%); average length in U.S. (15.1 years, SD=11.06) <i>Setting:</i> free health clinic in NC	Qualitative Focus group; open-ended interviews	<i>Measurements:</i> Participants perceptions of barriers to DSME. <i>Analysis:</i> Focus groups facilitated by bilingual researcher Content analysis enhanced by bilingual research team and member checking	<i>Results:</i> Barriers to DSME themes: suffering from diabetes, difficulties in managing the disease, and lack of resources/support. Two key themes emerged to family members: we can provide support and we lack knowledge. <i>Barriers:</i> <i>Self:</i> covariate, self-care behaviors, individual resources <i>Provider:</i> culturally competent healthcare providers <i>Environment:</i> external resource

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
16	Livaudais, et al. (2010)	Obtain concerns and recommendations for T2D	Social Ecology Approach (n.d.)	<p><i>Sample:</i> n=23 community stakeholders who serve Hispanics with T2D (3/4 were female)</p> <p>Participants included: e.g. local hospitals, long-term facilities, social services, churches</p> <p><i>Setting:</i> rural community in WA</p>	<p>Qualitative</p> <p>Interviews using CBPR approach (Wallerstein & Duran, 2006)</p>	<p><i>Measurements:</i> Perceived barriers to diabetes diagnosis and treatment</p> <p><i>Analysis:</i> Thematic analysis by 3 staff members until consensus reached</p>	<p><i>Results:</i> Need for heightened awareness DSME in the community, average intervention: churches, hospitals, food banks, & retail, need for DSME education, need for school to set examples of good nutrition</p> <p>Barriers: <i>Self:</i> self-care behaviors, individual resources <i>Provider:</i> culturally competent healthcare providers <i>Environment:</i> external resources</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
17	Long et al. (2012)	Explore similarities and differences in beliefs and attitudes related to health and healthcare practices	Leininger's Model of Cultural Diversity (Leinger & McFarland, 2006)	<p><i>Sample:</i> n=24 Hispanics with T2D (Mexico; n=6; Guatemala; n=6, Colombia; n=5; Puerto Rico, n=7' male (58%); married (> 50%); age 19-58 (mean 36.9)</p> <p><i>Setting:</i> local community clinic, the university, church, and the Latin American association, Kennesaw, GA</p>	<p>Mixed Methods</p> <p>Qualitative Focus groups, semi-structured interviews (Krueger, 1988)</p> <p>Quantitative Instrument: Community Resident Health Care Opinion Survey (2001)</p>	<p><i>Measurements:</i> Participants view regarding T2D</p> <p>Qualitative: interviews were bilingual, experience researchers</p> <p>Quantitative: Community Resident Health Care Opinion Survey</p> <p><i>Analysis:</i> Qualitative: N6QSR NUD*IST; 2 independent reviewers identified themes</p> <p>Quantitative: SPSS (version 14.0)</p>	<p><i>Results:</i> Themes: view of health, access care, acculturation, and stress ; worry</p> <p>Participants had college education (>60%), but few had jobs related education preparation</p> <p>Mayans were only group all m and all employed full-time</p> <p>Participants in Colombian and Puerto Rican groups had more of formal education</p> <p>Overall, diabetes as a concern (>70%)</p> <p>Cost of care and provider does speak Spanish as primary barrier access to care</p> <p>Mayans (90%) describe their preference to take care of their problems as a primary barrier to seek care</p> <p>Overall, 80% prefer to get their Health Information through the churches</p> <p>Barriers: <i>Self:</i> covariate, self-care behavior individual resources</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
18	McCloskey & Flenniken (2010)	Examine impact of cultural barriers of DSME	Bandura's Social Cognitive (Speaking of Health: Assessing Health Communication Strategies for Diverse Populations, 2000)	<i>Sample:</i> n=50 Hispanics with diabetes (T2D, n=37; gestational, n=1; pre- diabetes, n=2; risk for diabetes, n=2; family members, n=8; female, n=37) <i>Setting:</i> southwestern, NM	Qualitative Structured, open ended interviews	<i>Measurements:</i> Changes in diabetes knowledge, attitudes, and behavior after participating in <i>LA VIDA</i> program Self-efficacy (3 questions)(Bandura, 1997) Interviews conducted by experienced interviewer <i>Analysis:</i> Content analysis (Ryan & Bernard, 2003) Empowerment (Wallerstein, 2006)	<i>Results:</i> Lifestyle program provides empowerment and increased self- efficacy to overcome cultural barriers related to Hispanic die- lack of social support, and denial about T2D Barriers: <i>Self:</i> self-care behaviors, individual resources <i>Provider:</i> cultural competence of healthcare provider

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
19	Mier et al. (2012)	Determine level of health care access; personal and health correlates to health care utilization	<i>none</i>	<i>Sample:</i> n=249 Hispanics with T2D; > 60 y.o (p = 0.02); female(65.9%) <i>Setting:</i> US-Mexico border area	Mixed Qualitative Interviews Quantitative Cross-sectional analysis	<i>Measurements:</i> National Health Assessment Survey (2008; 94 item) IV: predictors of health care utilization (eg. demographics, health conditions) DV: MD visits, eye care, & ER use <i>Analysis:</i> MD visits: logistic regression (95% CI), Chi-Square, ANOVA Effect sizes reported	<i>Results:</i> Affordability of physician fees (p= 0.02) were significant correlates to more frequent physician visits Factors significantly associated with eye care were being insured (p=0.001) and reporting high cholesterol (p=0.005) ER use was significantly associated with younger age (60–64 yo; p=0.03) & suffering from hypertension (p=0.02) Those with diabetes education (p= 0.04) were less likely to use the ER Barriers: <i>Self:</i> covariate, individual resources <i>Environment:</i> external resources

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
20	Ramal et al. (2012)	Identify factors that influence diabetes self- management in low socio- economic neighborhoods	Grounded theory (Charmaz, 2006)	<i>Sample:</i> n= 27 Hispanics with T2D or families with T2D (n=21 female, n=6 male) <i>Setting:</i> Hispanic neighborhoods in San Bernardino, CA	Qualitative 5 focus groups semi- structured interview guide (10 questions)	<i>Measurements:</i> The lived experiences of DSME among Hispanics in 4 low- income communities <i>Analysis:</i> Content analysis, extraction of quotes (Charmaz, 2006) Interviews conducted in Spanish, coding agreed upon by research team (agreement “high”)	<i>Results:</i> Themes as enhancing or limiting factors: access to resources, struggle with diet, self-efficacy, and social support Barriers: <i>Provider:</i> covariate, self-care behaviors, individual resources <i>Environment:</i> external resource

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
21	Sadowski, et al. (2011)	Investigate degree Hispanics with T2D receive recommended diabetes care services from health care providers	<i>none</i>	<i>Sample:</i> n=134 Hispanics with T2D (18 years or older) <i>Setting:</i> rural IA	Mixed Qualitative structured interview Quantitative cross- sectional survey (2009)	<i>Measurements:</i> American Diabetes Association: Standards of medical care in diabetes IVs: socio- demographics, access to care, diabetes related DV: A1C, foot exam, dilated eye examination, and cholesterol test <i>Analysis</i> SPSS (version 16.0) descriptive statistics, Pearson's Chi- Square, one-way ANOVA, binary logistic regression (p<.05)	<i>Results:</i> Patients were 4x more likely to receive DSME at community health center than at private MD Barriers: <i>Provider:</i> individual resources <i>Environment:</i> external resourc

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
22	Sullivan et al. (2010)	Evaluate perceived barriers to diabetes control; compare physician beliefs to rates of DSME behaviors	<i>none</i>	<p><i>Sample:</i> n=35 Spanish speaking patients with T2D (female, 71%; Mexican, 71%; private insurance, 49%; family history of T2D, 89%)</p> <p><i>Setting:</i> rural northeast CO</p>	<p>Mixed Qualitative Focus groups</p> <p>Quantitative Questionnaire</p>	<p><i>Measurements:</i> Qualitative: issues related to T2D management</p> <p>Quantitative: Questionnaire (12 item) developed by content experts, trained administrators, internal validity based on frequency of similar responses; results compared with previous surveys and shared with staff</p> <p><i>Analysis:</i> Epi Info (version 6.0)</p> <p>Descriptive statistics: Chi-Square and risk ratios (95% CI)</p>	<p><i>Results:</i> Patients perceived a high level of control over their diabetes (51%), patients who had never exercise (40%), use of herbal home remedies to maintain A1C (31%), respondents felt that <i>susto</i> played a role in the development of their diabetes (46%; S.D.=1.4), physicians not interested in reviewing blood sugar logs (77%)</p> <p>Barriers: <i>Self:</i> self-care behavior <i>Provider:</i> culturally competent health care providers</p>

No.	Author/ Year	Study Aims	Theoretical Framework	Sample/Setting	Method & Research Design	Measurements & Data Analysis	Results
23	Weitzman et al. (2013)	Examine attitudes and practices related to bodily aesthetic ideals & self-care	<i>none</i>	<i>Sample:</i> n=29 Hispanic women with T2D (> 21 y.o.) <i>Setting:</i> Joslin Diabetes Center, Boston, MA	Mixed 4 Qualitative focus groups in Spanish Quantitative: acculturation data	<i>Measurements:</i> Qualitative: identify attitudes toward body and self-care and potential cultural barriers (8 Silhouette images) Quantitative: Latino Bicultural Scale (10 items) <i>Analysis:</i> Qualitative analysis: thematic analysis (Strauss & Corbin, 1998) Validity: participants helped analysis data	<i>Results:</i> Themes: preference for larger than average body size, diabetic complications (foot pain) as a major obstacle to exercise, fatalistic attitudes regarding the inevitability of diabetes, and social burdens, isolation, & financial stressors as contributing to disease exacerbation Participants were significantly more involved with Hispanic culture (mean=28) than with American culture (mean=21), t= 5.44, p=.000004 Barriers: <i>Self:</i> covariate, self-care behav

- Confidence Intervals (CI)
- Diabetes self-management education (DSME)
- Dependent variable (DV)
- Fasting Blood Glucose (FBG)
- Independent variable (IV)
- Type 2 Diabetes (T2D)
- “Hispanics” refers to either Hispanic or Latino as reported in the articles.

Appendix D: Hispanic Health Advisory Committee

Sharon Titus, MSN, RN, Doctoral of Philosophy Nursing Candidate, U of Hawaii

Researcher; *CITI trained*

University of Hawaii at Manoa, School of Nursing

stitus@apu.edu Cell: (630) 780-8756

* Sharon served as a transcultural nurse for 20 years, living and working in many nations throughout the world, including a Hispanic country in Central America. Sharon previously conducted 2 research study's among Hispanics, where she utilized CBPR and focus group methods. Sharon will serve as the academic partner for this study.

“Dr. A.”, MD

Cardiology; *CITI trained*

Hospital

Walla Walla, WA 99362

* Dr. A. was born and lived most of her life in Central America. Her passion and research interest is preventive medicine. Dr. A. is fluent in Spanish, having expert skills in Latino health issues.

“Dr. B.”, MD

Family Medicine; *CITI trained*

Community Health Clinic

Walla Walla, WA 99362

* Dr. B. served as a transcultural medical practitioner in both Africa and South America. Currently, Dr. B. is a medical provider at a community health clinic, whom most patients are Hispanic. Dr. B. is fluent in Spanish, having expert skills in Latino health issues.

Moderator, RN

Nurse; *CITI trained*

Hospital

Walla Walla, WA 99362

* The moderator was born in L.A, from a Cuban-Puerto Rican family. She previously served as Nursing Director at a community health clinic, where most patients are Hispanic. The moderator is fluent Spanish, having expert skills in Latino health issues.

Mrs. B., translator

Retired administrative assistant, translator

* Mrs. B is a native Cuban, fluent in Spanish, having immigrated to Florida in 1956. She is retired administrative assistant from the *Florida Department of Transportation*, where she also served as a translator for many of their official document.

Appendix E: Interview Guide

Critical Social Theory Core Tenet	Dimensions to describe: Barriers to Access to Care*	Core Question	Follow up Questions and Prompts
Assess how things are in order to transform them into what they ought to be (Henderson, 1995)	Self, Providers, Environment	<i>What does health mean to you?</i>	<p>Do you think some Latinas might view health differently than you? What do you think they may say?</p> <p>Can you tell me how you see your health now compared to when you first came to the States or xxxx years ago? In what ways is your health (better or worse)?</p>
Engage client in a critical assessment of health issues/situation that affect Latina care (BoychuckDuchscher, 2000)	Self, Providers, Environment	<i>What do you think are the most important health issues faced by Latinas today</i>	What about diabetes? How important do you think diabetes is? Is it a very important issue, one of the most important, a somewhat important, or not too important of an <i>issue</i> ? Can you tell me why you rated it this way?
Engage client in critical recognition of their own health issues/situation (Weber, 2005)	Self	<i>What do you do to take care of your health?</i>	Can you give me some examples of things you do [to take care of your health]?
Engage client to transform and improve healthcare access and practices in managing and controlling T2D (Allen, 1987)	Self, Providers, Environment	<i>How can you tell you are having trouble with your health?</i>	<p>So what do you do when you're having trouble with your health [don't feel well]? Are there specific people or places you go to get help with your health?</p> <p>How do you figure out where to go to get help?</p>

Engage clients to illuminate <u>healthcare structures</u> that may compromise their care (Chinn & Cramer, 2011)	Providers, Environment	<i>Where do you go to get care for your health? [type of service or name of clinic]</i>	[for each one mentioned] What are your reasons to choose to go there?
Engage clients to illuminate healthcare providers who help them value their autonomy and responsibility (Browne, 2000)	Providers	<i>Who do you go to get care for your health issues?</i>	<p>What are your reasons to choose to see this person(s)?</p> <p>Can you tell me how your doctor or nurse (healthcare provider) shows respect for how you think you should take care of yourself?</p>

Appendix F: Demographic Data

Appendix F: Demographic Data

Code _____

(PLEASE CHECK or FILL)

ETHNIC BACKGROUND:

- Cuban _____
- Dominican _____
- Ecuadorian _____
- Guatemalan _____
- Honduran _____
- Mexican _____
- Puerto Rican _____
- Salvadoran _____
- Other _____
- (please identify) _____

Language spoken at home:

Spanish _____ English _____
Both _____ Other _____

Do you go to MEDICAL CLINIC at:

Family Medical Center _____
SonBridge Clinic (SOS) _____
Other _____

How would you rate your general health status:

excellent _____ good _____
normal _____ poor _____

How long have you been a diabetic?

When were you first diagnosed with diabetes by a doctor? _____

MARITAL STATUS:

Married _____
Divorced _____
Separated _____
Single _____

AGE:

18 – 30 years old _____
31 – 40 years old _____
41 – 50 years old _____
> 60 years old _____

Are you a U. S. Citizen?

Yes _____
Green card _____
Job permit _____

Number of years in the U.S. _____

Work Status:

- Full-time _____
- Part-time _____
- Not working _____
- Retired _____

Health Insurance:

No _____
Yes _____, If Yes, name it... _____

Appendix G: Demographic Data (Spanish)

Apéndice G: Datos Demográficos

Código _____

(FAVOR DE MARCAR O LLENAR)

HISTORIAL DEMOGRAFICO:

- Cubano _____
- Dominicano _____
- Ecuatoriano _____
- Guatemalteco _____
- Hondureño _____
- Mejicano _____
- Puertorriqueño _____
- Salvadoreño _____
- Otro _____
- (favor de identificar)

Idioma hablado en su casa:

Español _____ Inglés _____
Ambos _____ Otro _____

A cual CLINICA MEDICA asiste:

Family Medical Center _____
SonBridge Clinic (SOS) _____
Otro _____

Como calificaría su estado de salud en general:

excelente _____ bueno _____
normal _____ malo _____

¿Por cuanto tiempo es diabético?

Cuando fue diagnosticado con diabetes por primera vez?

ESTADO CIVIL:

Casado _____
Divorciado _____
Separado _____
Soltero _____

EDAD:

18 – 30 años _____
31 – 40 años _____
41 – 50 años _____
> 60 años _____

¿Es Ciudadano de los Estados Unidos?

Si _____
Residente (tarjeta verde) _____
Permiso de trabajo _____

¿Cuantos años lleva viviendo en los Estados Unidos? _____

Estado Laboral:

- Tiempo completo _____
- Medio tiempo _____
- Desempleado _____
- Retirado _____

Seguro de Salud:

No _____
Si _____

Si su respuesta es **Si**, escriba el nombre del seguro:

Appendix H

AGREEMENT TO PARTICIPATE IN

“Access to healthcare issues related to Hispanics with Type 2 diabetes in rural Washington state:
A focus group project”

School of Nursing, University of Hawaii, Honolulu, HI 96822

Sharon K. Titus, RN, MSN, PhDc.

Academic Research Partner, Doctoral of Philosophy Nursing Student

(630) 780-8756

My name is Sharon Titus. I am a graduate student at the University of Hawaii at Mānoa in the Department of Nursing. I am doing a research project as a requirement for earning my graduate degree. The purpose of my project is to gather information about Latinos' access to healthcare issues. The overall project will include information collected from Latinos regarding what they perceive are Latino access to healthcare issues in Walla Walla, Washington. You will be asked to volunteer your thoughts and experience with access to care issues that are unique to Latino culture.

Project Description: If you participate in this project, you will sign this consent form. You will be asked to complete a demographic form and participate in a focus group session. A bilingual facilitator and a co-facilitator will conduct three focus group sessions (at a church in Walla Walla). You will be one of about 5 or 6 Latinos who will participate in *only one* focus group that will take approximately 45-60 minutes to complete. The discussions will be audio-recorded so that the investigator can later transcribe the interview and analyze the responses. One member from each focus group may volunteer to help analyze the data. If you agree to help analyze the data, you will need to complete a protocol for human subjects. This protocol will be given in English, with the assistance of a bilingual health care provider, and may take 2-3 hours in time. Once the study data has been analyzed, you will be asked to verify the accuracy of the data. The projected completion date of the study is Summer 2016.

Benefits and Risks: There will be no direct benefit to you for participating in this interview. The results of this project may increase your understanding of Latino access to care issues and may benefit other Latinos, their families, and/or health care providers who serve Latino families in Walla Walla community. I believe there is little risk to you in participating in this research project. You may have a loss of privacy due to the group discussion. You may also become stressed or uncomfortable answering any of the interview questions or discussing topics with the facilitators during the interview. If you do become stressed or uncomfortable, you can skip the question or take a break. You can also stop the interview or you can withdraw from the project altogether. A list of support health resources will be provided to you.

Privacy and Confidentiality: I will keep all information in a safe place. Only my University of Hawaii advisor and I will have access to the information. Other agencies that have legal permission have the right to review research records. The University of Hawaii Human Studies Program has the right to review research records for this study. After a copy of the interviews is written, I will erase or destroy the audio-recordings. When I report the results of my research project, I will not use your name. I will not use any other personal identifying information that can identify you. I will use fake names and report my findings in a way that protects your privacy and confidentiality to the extent allowed by law.

Voluntary Participation: Your participation in this project is completely voluntary. You may stop participating at any time. If you stop being in the study, there will be no penalty or loss to you. Your choice to participate or not participate will not affect your rights to services at any medical care facilities in Walla Walla, Washington.

You will receive a \$10.00 Wal-Mart gift card for my participation in the project, whether or not I complete the study.

Questions: If you have any questions about this study, please call or email me at (630) 780-8756 or stitus@apu.edu. You may also contact my adviser, Dr. Merle Kataoka-Yahiro, at (808) 956-5329 or merle@hawaii.edu. If you have questions about your rights as a research participant, you may contact the UH Human Studies Program at 808.956.5007 or uhirb@hawaii.edu.

If you agree to participate in this project, please sign and date this signature page and return it to:

Please keep the section above for your records.

If you consent to be in this project, please sign the signature section below and return it to ***.

Tear or cut here

Signature(s) for Consent:

I give permission to join the research project entitled, *“Access to healthcare issues related to Hispanics with Type 2 diabetes in rural Washington state: A focus group project”*

Please initial next to either “Yes” or “No” to the following:

- | | | |
|------------------------------|-----------------------------|---|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | I consent to be audio-recorded for the interview portion of this research. |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | I consent to being video-recorded for the interview portion of this research. |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | I give permission to allow the investigator to use my real name to be used for the publication of this research |

Name of Participant (Print): _____

Participant's Signature: _____

Signature of the Person Obtaining Consent: _____

Date: _____

I give permission to join the research project entitled, "focus group project."

Name of Participant (Print): _____

Participant's Signature: _____

Signature of the Person Obtaining Consent:

Date: _____

Appendix I

ACUERDO DE PARTICIPACION EN

“Acceso a los asuntos de salud relacionados a los Hispanos con diabetes Tipo 2
en el área rural del estado de Washington: Proyecto para grupo de enfoque”

School of Nursing, University of Hawai'i, Honolulu, HI 96822

Sharon K. Titus, RN, MSN, PhDc.

Investigadora Principal, Estudiante de Enfermería, Doctoral de Filosofía

(630) 780-8756

Me llamo Sharon Titus. Soy una estudiante graduada de la Universidad de Hawái en Mānoa, Departamento de Enfermería. Estoy participando en un proyecto de investigación como requisito para obtener mi título de posgrado. El propósito de este proyecto es recopilar información sobre el acceso disponible a los Latinos relacionado a la salud de los mismos. El proyecto total incluirá información recopilada de Latinos sobre lo que ellos perciben en cuanto a la atención medica en Walla Walla, Washington. Se le pedirá su participación voluntaria, su pensar y experiencia sobre la atención medica específicamente única a la cultura Latina.

Descripción del Proyecto: Si usted participa en este proyecto, se le pedirá que firme el formulario de consentimiento. También se le pedirá que llene la planilla de información demográfica y que participe en una sesión de enfoque en grupo. Un facilitador bilingüe o un co-facilitador dirigirá tres sesiones de enfoque en grupo (en una iglesia en Walla Walla). Usted será uno de 5 o 6 Latinos quienes participarían en *solo un* grupo de enfoque, el cual duraría aproximadamente de 45-60 minutos para completar. Las discusiones serán grabadas para que así el investigador pueda traducir mas tarde la entrevista y de esa manera analizar las respuestas. Un miembro de cada grupo de enfoque puede ofrecerse voluntariamente para ayudar a analizar la información. Si usted se ofrece para ayudar en el análisis, deberá participar en un protocolo para sujetos humanos. Dicho protocolo será administrado en Ingles con la asistencia de un proveedor de asistencia medica bilingüe, cual protocolo duraría de 2-3 horas para completar. Una vez se analice toda la información obtenida, se le pedirá que verifique la exactitud de la misma. La fecha planificada para la terminación del proyecto es el Verano del 2016.

Beneficios y Riesgos: Como resultado de su participación en este proyecto, no recibirá directamente beneficio alguno. Los resultados de este proyecto investigativo podrían aumentar la comprensión del acceso a cuidados médicos los cuales podrían beneficiar a otros Latinos, sus familiares y/o proveedores de cuidados médicos quienes sirven a las familias Latinas en la comunidad de Walla Walla. Yo creo que hay muy poco riesgo como resultado de su participación en este proyecto. Como resultado, podría perder su privacidad debido a las discusiones del grupo. Podría usted sentirse estresado/incomodo respondiendo algunas

preguntas, o discutiendo ciertos tópicos con los facilitadores durante la entrevista. Si se siente incomodo o estresado con referencia a una pregunta en particular, puede saltar a otra. Si desea detener la entrevista o retirarse del proyecto totalmente, puede hacerlo. Se le proveerá una lista de recursos de cuidado medico.

Privacidad y Confidencialidad: Guardare toda la información en un lugar seguro. Solo mi consejero en la Universidad de Hawái y yo tendremos acceso a dicha información. Otras agencias con permiso legal tendrán derecho a revisar los registros. El programa de Estudios Humanos de la Universidad de Hawái tiene el derecho de revisar los registros relacionados con el estudio. Una vez se escriba la copia de la entrevista, borraré o destruiré las grabaciones. Al reportar los resultados de mi proyecto, no usare su nombre. Tampoco usare información personal que le pueda identificar. Usare nombres falsos y reportare mis conclusiones de una manera que proteja su privacidad y confidencialidad al grado permitido por la ley.

Participación Voluntaria: Su participación en este proyecto es completamente voluntaria. Usted puede dejar de participar en este proyecto en cualquier momento sin penalidades o pérdidas a usted. Participar o no participar no afectaran sus derechos a los servicios de cuidado medico en Walla Walla, Washington.

Usted recibirá una tarjeta de regalo valorada en \$10 de Wal-Mart por su participación en este proyecto, aunque no lo termine.

Preguntas: Cualquier pregunta que tenga sobre este estudio puede hacerla llamándome al (630) 780-8756 o escribiéndome a mi correo postal: stitus@apu.edu igual que a mi consejero, el Dr. Merle Kataoka-Yahiro llamando al (808) 956-5329 o escribiendo a su correo postal: merle@hawaii.edu Si tiene preguntas sobre sus derechos como participante en este estudio, puede conectarse con el UH Human Studies Program (Universidad de Hawái, Programa de Estudios Humanos) llamando al (808) 956-5007 o escribiendo al correo postal: uhirb@hawaii.edu

Si esta de acuerdo en participar en este proyecto, por favor firme y feche la pagina de firma y devuélvala a:

Guarde las secciones anteriores para sus archivos.

Si esta de acuerdo en participar en este proyecto, por favor firme la sección debajo y devuélvala a:

Corte Aquí

Firma(s) para el consentimiento:

Por este medio doy mi consentimiento para participar en este proyecto titulado, *“Acceso a los asuntos de salud relacionados a los Hispanos con diabetes Tipo 2 en el área rural del estado de Washington: Proyecto para grupo de enfoque.”*

Escriba sus iniciales al lado de “Si” o “No” sobre lo siguiente:

_____ Si _____ No Doy mi consentimiento a ser audio-grabado durante la entrevista que forma parte de este estudio.

_____ Si _____ No Doy mi consentimiento a ser video-grabado durante la entrevista que forma parte de este estudio.

_____ Si _____ No Doy permiso para permitir que el investigador use mi verdadero nombre para ser usado en la publicación de este estudio.

Nombre del Participante (Letras de Molde): _____

Firma del Participante: _____

Fecha: _____

Firma de Quien Obtuvo El Consentimiento Para Este Formulario de Acuerdo:

Fecha: _____

Appendix J: Study Timeline: January 2015 – fall, 2016

JAN- APR 2015	MAY 2015	JUN 2015	JUL 2015	DEC 2015	April 2016	April 2016	MAY- AUG 2016	SEP 2016	OCT 2016
Collect Field notes Jan 2014-present	Create study instruments: 1. Interview Guide 2. Demographic Data		Proposal Defense, UH, Mānoa, Academic Partner (UH, SON PhD student)	Resubmit Proposal Defense to committee	Recruit study participants (upon approval of IRB)	Schedule 3 Focus Groups; to be conducted at separate times	Data transcription	Write Chap 4 & 5 PhD studies	De-fense
	Review of study instruments by experts	Review of informed consent form by 3 Hispanic nurse educators, PhD		IRB: Application for New Approval of a Study Involving Human Subjects	Moderating team practices use of digital audio equipment;	Secure sites for focus groups; Data collection during focus groups	Data coding, Data entry, Data analysis		
	CITI Training: all HHAC partnership			Moderator to read 2 textbooks on role of moderator	Academic partner will train moderator role in the focus groups	Moderator will help participant take CITI training			

Appendix K: Contacts for Referrals

Clinic	Clinic Purpose Statement
<p>Family Medical Center</p> <p>1120 Rose St., Walla Walla, WA 99362</p> <p>509-525-6650</p> <p>M-F 7:30 AM – 8:00 PM</p>	<p>“Dedicated to lead, with the courage to care, the determination to promote personal growth, and the compassion to champion the cause of those who have no voice”</p>
<p>SOS Health Services of Walla Walla</p> <p>1200 SE 12th St., College Place, WA 99324</p> <p>509-529-1481</p> <p>Monday 5-7 PM</p> <p>Wednesday 3-5 PM</p>	<p>“Is a faith-based, non-denominational clinic providing compassionate urgent-care services to uninsured people in Walla Walla.”</p>
<p>Walla Walla General Hospital-Adventist Health</p> <p>1025 S. 2nd Ave, Walla Walla, WA 99362</p> <p>509-525-0480</p> <p>24 hour service; every day</p>	<p>“Our Mission Restoring Peace... Restoring Hope... Restoring Health... To do this as Christ did, This is our Mission.”</p>

Appendix L: Study Flow Chart

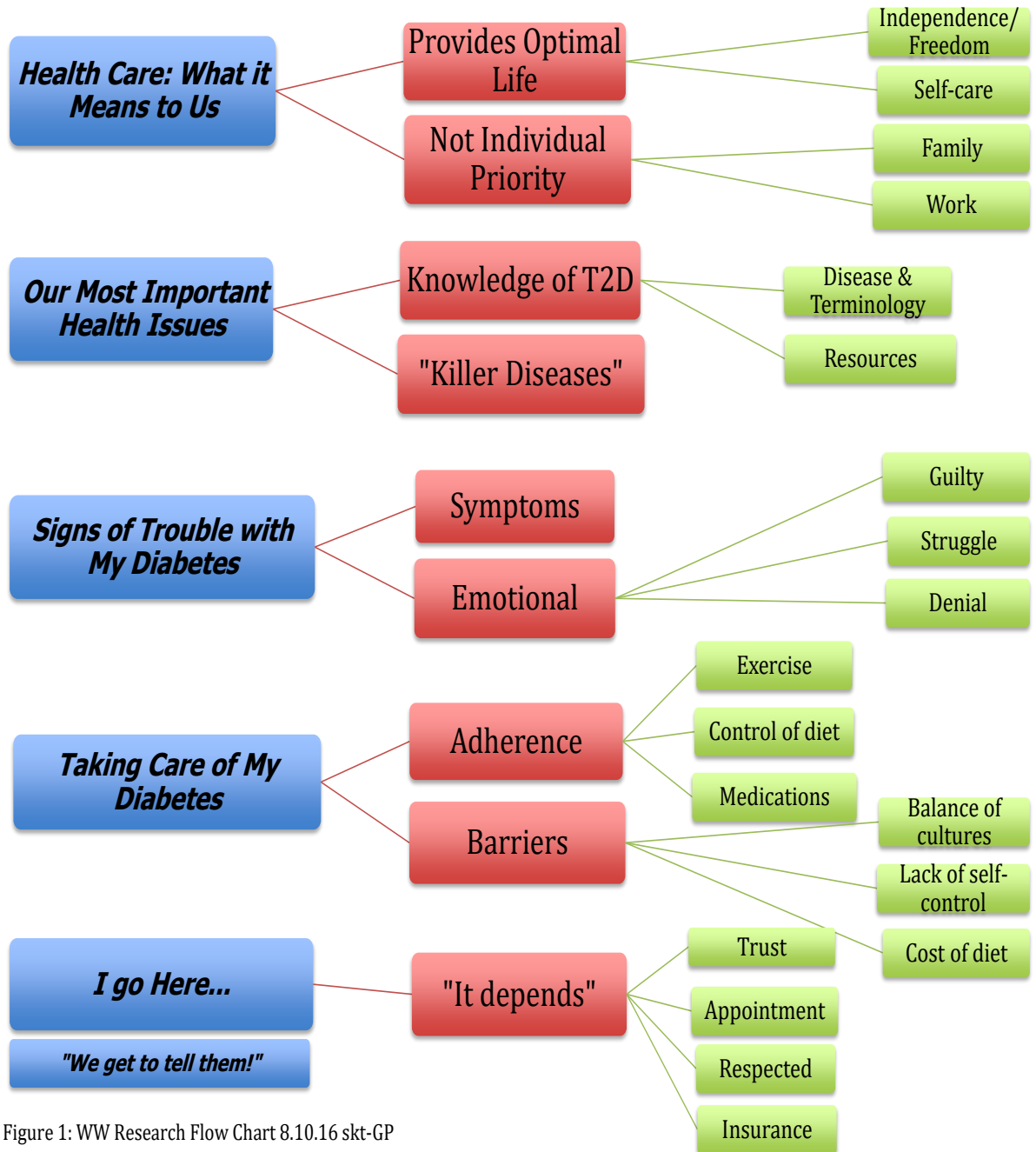


Figure 1: WW Research Flow Chart 8.10.16 skt-GP

References

- Abraido-Lanzas, A., Cespedes, Amarilis, C., Daya, S., Florez, K., & White, K. (2011). Satisfaction with health care among Latinas. *Journal of Health Care of Poor and Underserved, 22*(2), 491-505. doi: 10.1353/hpu.2011.0042
- Aday, L. & Andersen, R. (1974). A framework for the study of access to medical care, *Health Services Research, 9*(3), 208-220. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC107180>
- Aguado-Loi, C. & McDermott, R. (2010). Conducting program evaluation with Hispanics in Rural Settings: Ethical issues and evaluation challenges. *American Journal of Health Education, 41*(4), 252-256. doi: 10.1080/19325037.2010.10599151
- Alam, R., Speed, S., & Beaver, K. (2012). A scoping review on the experiences and preferences in accessing diabetes-related healthcare information and services by British Bangladeshis. *Health and Social Care in the Community, 20*(2), 155-171. doi: 10.1111/j.1365-2524.2011.01027.x
- Allen, D. (1987). Critical social theory as a model for analyzing ethical issues in family and community health. *Family & Community Health, 10*(1), 63-72. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11645598>
- Almendarez, I., Boysun, M., & Clark, K. (2004). Thunder and lightning and rain: A Latino/Hispanic diabetes media awareness campaign. *Family & Community Health, 27*(2), 114-122. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15596978>
- American Diabetes Association (ADA), (n.d.). Statistics about diabetes. Retrieved from <http://www.diabetes.org/diabetes-basics/statistics/?loc=superfooter>

- Ayala, G., Baquero, B., Klinger, S. (2008). A systematic review of the relationship between acculturation and diet among Latinos in the United States: Implications for future research. *Journal of the American Dietetic Association, 108*(8), 1330-1244. doi: 10.1016/j.jada.2008.05.009
- Baig, A., Locklin, C., Campbell, A., Schaefer, C., Heuer, L., Lee, S.,... & Chin, M. (2014). Community health center access to resources for their patients with diabetes. *Journal of Immigrant Minority Health, 16*(3), 553-558. doi: 10.1007/s10903-013-9775-y
- Baig, A. Benitez, A., Locklin, C., Gao, Y., Quinn, M., Solomon, M., Sanchez-Johnsen. L., Burnet, D., Chin, M., & Little Village Community Advisory Board. (2015). Picture good health: A church-based self-management intervention among Latino adults with diabetes. *Journal of Internal Medicine, 30*(10), 1481-1490. doi: 10.1007/s11606-015-3339
- Bailey, G., Bamer, J., Weems, J., Leckbee, G., Solis, R., Montemayor, D., & Pope, N. (2012). Assessing barriers to medication adherence in underserved patients with diabetes in Texas. *The Diabetes Educator, 38*(2), 271-279. doi: 10.1177/01457217111436134
- Bolin, J., Ory, M., Wilson, A., & Salge, L. (2013). Diabetes education kiosks in a Latino community. *The Diabetes Educator, 39*(2), 204-212. doi: 10.1177/0145721713476346
- Boswell, C. & Cannon, S. (2014). *Introduction to Nursing Research: Incorporating Evidence-Based Practice (3rd ed.)*. Burlington, MA: Jones & Bartlett.
- Boyчук-Duchscher, J. (2000). Bending a habit: Critical social theory as a framework for humanistic nursing education. *Nurse Education Today, 20*(6), 453-462. doi: 10.1054/nedt.2000.0492

- Brennan-Congdon, H., Eldridge, B., & Truong, H. (2013). Development and implementation of a navigator-facilitated care coordination algorithm to improve clinical outcomes of underserved Latino patients with uncontrolled diabetes. *Journal of Health Care for the Poor and Underserved, 24*(4), 1604-1613. doi: 10.1353/hpu.2013.0181
- Brown, S., Garcia, A., Winter, M., Silva, L., Brown, A., & Hanis, C. (2011). Integrating education, group support, and case management for diabetic Hispanics. *Ethnicity & Disease, 21*(1), 20-26. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21462725>
- Brown, S. (2014). *Evidence-based Nursing: The research-Practice Connection (3rd ed.)*. Burlington: Jones & Bartlett.
- Caballero, E. (2011). Understanding the Hispanic/Latino patient. *The American Journal of Medicine, 124*(10 Supp), p. S10-S15. doi:10.1016/j.amjmed.2011.07.018
- Castillo, A., Giachello, A., Bates, R., Concha, J., Ramirez, V., Sanchez, C.,...& Arrom, J. (2010). Community-based diabetes education for Latinos. *The Diabetes Educator, 36*(4), 586-592. doi: 10.1177/0145721710371524
- Ceballos, R., Coronado, G., & Thompson, B. (2010). Having a diagnosis of diabetes is not associated with general diabetes knowledge in rural Hispanics. *Journal of Rural Health, 26*(4), 342-351. doi: 10.1111/j.1748-0361.2010.00299.x
- Center for Disease Control and Prevention (n.d.). "Diabetes Data" & Trends: Washington. Percentage of adults with diagnosed diabetes, 1994-2010. Retrieved from <http://apps.nccd.cdc.gov/ddtstrs/Index.aspx?stateId=53&state=Washington&cat=prevalence&Data=data&view=TO&trend=prevalence&id=1>
- Chinn, P., & Kramer, M. (2011). Integrated theory and knowledge development in nursing (8th

- ed.). St. Louis: Mosby Elsevier.
- Clark, L., Vincent, D., Zimmer, L. & Sanchez, J. (2009). Cultural Values and Political Economic Contexts of Diabetes Among Low-Income Mexican Americans. *Journal of Transcultural Nursing, 20*(4), 382-394. doi: 10.1177/1043659609334851
- Cohen, R. & Martinez, M. (June, 2015). Health insurance coverage: Early release of estimates from the national health interview survey, 2014. *National Health Interview Survey. National Center for Health Statistics*. Retrieved from <http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201506.pdf>
- Collins, C., Decker, S., & Esquibel, K. (2006). Definitions of health: Comparison of Hispanic and African-American Elders. *The Journal of Multicultural Nursing & Health, 12*(1), p. 14-19.
- Congello, N. C. (2015). Influences of Perceived Environment, Partner Support, and Attitudinal Familism on Physical Activity among Mexican American Women (Doctoral dissertation). University of California, California.
- Coronado, G., Thompson, B., Tejada, S., Godina, R., & Chen, L. (2007). Sociodemographic factors and self-management practices related to Type 2 diabetes among Hispanics and non-Hispanic Whites in a rural setting. *Journal of Rural Health, 23*(1), 49-54.
- Cusi, K., & Ocampo, G. (2011). Unmet needs in Hispanic/Latino patients with type 2 diabetes mellitus. *The American Journal of Medicine, 124*(10 Supp), S2-S9.
doi: 10.1016/j.amjmed.2011.07.017
- De Chesnay, M. (2015). *Nursing Research Using Participatory Action Research: Qualitative Designs and Methods in Nursing*. New York: Springer.

- De Heer, H., Salinas, J., Lapeyrouse, L., Heyman, J., Osvaldo, M., & Balcazar, H. (2013). Binational utilization and barriers to care among Mexican American border residents with diabetes. *Review Panam Salud Publica*, 34(3), 147-154.
- Evernham-Whitehorse, L. Manzano, R., Baezconde-Garbanati, L., & Hahn, G. (1999). Culturally tailoring a physical activity program for Hispanic women: Recruitment success of La Vida Buena's Salsa aerobics. *Journal of Health Education*, 30(2), S18-S24. doi:10.1080/10556699.1999.10603424
- Fern, E. (2001). *Advanced Focus Group Research*. Thousand Oaks: Sage.
- Ferrer, R., Cruz, I., Burge, S., Bayles, B., & Castilla, M. (2014). Measuring Capability for Healthy Diet and Physical Activity. *Annals of Family Medicine*, 12(1), 46-56. doi: doi:10.1370/afm.1580
- Fortmann, A., Gallo, L., & Philis-Tsimikas, A. (2011). Glycemic control among Latinos with type 2 diabetes: The role of social-environmental support resources. *Health Psychology*, 30(3), 251-258. doi: 10.1037/a0022850
- Gonzalez, A., Salas, D., & Umpierrez, G. (2011). Special considerations on the management of Latino patients with type 2 diabetes mellitus. *Current Medical Research & Opinion*, 27(5), 969-979. doi: 10.1185/03007995.2011.563505
- Harkness, J., Van de Vijver, F., & Mohler, P. (2003). *Cross-Cultural Survey Methods*. Hoboken, New Jersey: Wiley.
- Henderson, D. (1995). Consciousness raising in participatory research: Method and methodology for emancipatory nursing inquiry. *Advances in Nursing Science*, 17(3), 58-69.

- Herrera, A., Smith, M., Ory, M., Rodriguez, H., Warre, R., Thompson, W., Azcue, A., & Romero, J. (2011). The provision of diabetes-monitoring exams to older Latinos. *Journal of Aging and Health, 23*(7), 1075-1100. doi: 10.1177/0898264311421370
- Heuer, L, Hess, C. & Batson, A. (2006). Cluster clinics for migrant Hispanic farmworkers with diabetes: perceptions, successes, and challenges. *Journal of Rural and Remote Health Research, Education, Practice and Policy, 6*(1), 469. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16573366>
- Heuman, A., Scholl, J., & Wilkinson, K. (2013). Rural Hispanic Populations at Risk in Developing Diabetes: Sociocultural and Familial Challenges in Promoting a Healthy Diet. *Health Communication, 28*: 260-274. doi: 10.1080/10410236.2012.680947
- Hippisley-Cox, J., Yates, J., Pringle, M., Coupland, C., & Hammersley, V. (2006). Sex inequalities in access to care for patients with diabetes in primary care: questionnaire survey. *British Journal of General Practice, 56*: 342-348. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16638249>
- Hsieh, H. & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288. doi: 10.1177/1049732305276687
- Hu, J., Amirehsani, K., Wallace, D., & Letvak, S. (2013). Perceptions of barriers in managing diabetes: perspectives of Hispanic immigrant patients and family members. *The Diabetes Educator, 39*(4), 494-503. doi: 10.1177/0145721713486200
- IBM Corp. Released 2015. IBM SPSS Statistics for Windows, Version 23.0. [Computer software]. Armonk, NY: IBM Corp. Retrieved from <http://www.ibm-spss-online.com/ibm-spss-free-trial>

Juckett, G. (2013). Caring for Latino patients. *American Family Physician*, 87(1), 48-54.

Retrieved from <http://www.aafp.org/afp/2013/0101/p48.html>

Julliard, K., Vivar, J., Delgado, C., Cruz, E., Kabak, J., & Sabers, H. (2008). What Latina patients don't tell their doctors: A qualitative study. *Annals of Family Medicine*, 6(6), 543-549. doi: 10.1370/afm.912

Kahn, L., Vest, B., Karl, R., Tumieli-Berhalter, L., Taylor, R., Schuster, R., ... Fox, C. (2013). Living with diabetes on Buffalo, New York's culturally diverse West Side. *Chronic Illness*, 9(1), 43-56. doi: 10.1177/1742395312450895

Kaplan, S., Billimek, J., Sorkin, D., Ngo-Metzger, Q., & Greenfield, S. (2013). Reducing racial/ethnic disparities in diabetes: The coached care (R2D2C2) project. *Journal of General Internal Medicine*, 28(10), 1340-1349. doi: 10.1007/s11606-013-2452-y

Kiesser, M., McFadden, J., & Belliard, J. (2006) An interdisciplinary view of medical pluralism among Mexican-Americans. *Journal of Interprofessional Care*, 20(3), 223-234. doi: 10.1080/13561820600718055

Kim-Godwin, Y. & McMurry, M. (2012). Perspectives of nurse practitioners on health care needs among Latino children and families in the rural Southeastern United States: A pilot study. *Journal of Pediatric Health Care*, 26(6), 409_417. doi.org/10.1016/j.pedhc.2011.02.013

Kollanoor-Samuel, G., Chhabra, J., Fernandez, M., Vega-Lopez, S., Perez, S., & Damio, G. (2011). Determinants of fasting plasma glucose and glycosylated hemoglobin among low income Latinos with poorly controlled Type 2 diabetes. (2011). *Journal of Immigrant and Minority Health*, 13(5), 809-817. doi: 10.1007/s10903-010-9428-3

- Kollannoor-Samuel, G., Vega-Lopez, S., Chhabra, J., Segura-Perez, S., Damio, G., & Perez-Escamilla, R. (2012). Food security and low self-efficacy are associated with health care access barriers among Puerto-Ricans with type 2 diabetes. *Journal of Immigrant and Minority Health, 14*(4), 552-562. doi: 10.1007/s10903-011-9551-9
- Krogstad, J. & Lopez, M. (2014). Hispanic immigrants more likely to lack health insurance than U.S. born. *Pew Research Center*. Retrieved from <http://www.pewresearch.org/fact-tank/2014/09/26/higher-share-of-hispanic-immigrants-than-u-s-born-lack-health-insurance/>
- Krueger, R., & Casey, M. A. (2015). *Focus groups: A practical guide for applied research* (5th ed.). Los Angeles, CA: Sage.
- Kullgren, J., & McLaughlin, C. (2010). Beyond affordability: The impact of nonfinancial barriers on access for uninsured adults in three diverse communities. *Journal of Community Health, 35*(3), 240-248. doi: 10.1007/s10900-010-9230-0
- Larkey, L., Hecht, M., Miller, K., & Alatorre, C. (2001). Hispanic cultural norms for health-seeking behaviors in face of symptoms. *Health Education Behavior, 28*(1), 65-80. doi: 10.1177/109019810102800107
- Latham, C. & Calvillo, E. (2009). Predictors of successful diabetes management in low-income Hispanic people. *Western Journal of Nursing Research, 31*(3), 364-388. doi: 10.1177/0193945908328263
- Liese, A. D., Weis, K. E., Pluto, D., Smith, E., & Lawson, A. (2007). Food store types, availability, and cost of foods in a rural environment. *Journal of the American Dietetic Association, 107*(11), 1916–1923. doi: 10.1016/j.jada.2007.08.012

- Livaudais, J., Thompson, B., Islas, I., Ibarra, G., Godina, R., & Coronado, G. (2010). Type 2 diabetes among rural Hispanics in Washington state: Perspectives from community stakeholders. *Health Promotion Practice, 11*(4), 589-599.
doi: 10.1177/1524839909354458
- Livingston, G., Minushkin, S., & Cohn, D. (2008). Hispanics and Health Care in the U.S.: Access, information, and knowledge. *Pew Research Center*. Retrieved from <http://www.pewhispanic.org/2008/08/13/hispanics-and-health-care-in-the-united-states-access-information-and-knowledge/>
- Livingston, G. (2009). Hispanics, Health Insurance and health care access. *Pew Research Center*. Retrieved from <http://www.pewhispanic.org/2009/09/25/hispanics-health-insurance-and-health-care-access/>
- Long, J., Sowell, R., Bairan, A., Holtz, C., Curtis, A., & Fogarty, K. (2012). Exploration of commonalities and variations in health related beliefs across four Latino subgroups using focus group methodology: Implications in care for Latinos with type 2 diabetes. *Journal of Cultural Diversity, 19*(4), 133-142. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/23362694>
- Lopez-Class, M. & Jurkowski, J. (2010). The limits of self-management: Community and health care system barriers among Latinos with diabetes. *Journal of Human Behavior in Social Environment, 20*(6), 808-826. doi: 10.1080/10911351003765967

- Lopez-Quintero, C., Berry, E., & Neumark, Y. (2010). Limited English proficiency is a barrier to receipt of advice about physical activity and diet among Hispanics with chronic diseases in the United States. *Journal of the American Dietetic Association, 110*(5 Suppl), S62-S67. doi: 10.1016/j.jada.2010.03.009
- Lorig, K., Sobel, D, Ritter, P, Laurent, D., & Hobbs, M. (2001). Effect of a self-management program on patients with chronic disease. *Effective Clinical Practice, 4*(6), 256-22. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/11769298>
- Mainous, A., Diaz, V., & Geesey, M. (2008). Acculturation and health lifestyle among Latinos with diabetes. *Annals of Family Medicine, 6*(2),131-137. doi: 10.1370/afm.814.
- Martinez, I., Carter-Pokras, O., & Bohrer-Brown, P. (2009). Addressing the challenges of Latino health research: Participatory approaches in an emergent urban community. *Journal of National Medical Association, 101*(9), 908-914. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19806848>
- McCloskey, J., & Flenniken, D. (2010). Overcoming cultural barriers to diabetes control: A qualitative study of southwestern New Mexico Hispanics. *Journal of Cultural Diversity, 17*(3), 110-115. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20860336>
- McEwen, M., Lin, P., & Pasvogel, A. (2013). Analysis of behavior risk factor surveillance system data to assess the health of Hispanics with diabetes in US-Mexico border communities. *The Diabetes Educator, 39*(6), 742-751. doi: 10.1177/0145721713504629

- Mier, N., Medina, A., & Ory, M. (2007). Mexican Americans With Type 2 Diabetes: Perspectives on Definitions, Motivators, and Programs of Physical Activity. *Preventing Chronic Disease: public health research, practice and policy*, 4(2), 1-8.
Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1893123/>
- Mier, N., Wang, X., Smith, M., Irizarry, D., Trevino, L., Alen, M., & Ory, M. (2012). Factors influencing health care utilization in older Hispanics with diabetes along the Texas-Mexico border. *Population Health Management*, 15(3), 149-156.
doi: 10.1089/pop.2011.0044
- Minkler, M., & Wallerstein, N. (2008). *Community-Based Participatory Research: From Process to Outcomes (2nd ed.)* San Francisco: Jossey-Bass.
- Moreno, G., Morales, L., Nunez-deJaimes, F., Tseng, C., Isiordia, M., Noguera, C., & Mangione, C. (2014). Neighborhood perceptions and health-related outcomes among Latinos with diabetes from a rural agricultural community. *Journal of Community Health*, 39(6), 1077-1084. doi: 10.1007/s10900-014-9854-6
- Munhall, P. (1993). 'Unknowing': toward another pattern of knowing in nursing. *Nursing Outlook*, 41(3), 125-128. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/8346052>
- Munhall, P. (2007). *Nursing research: A qualitative perspective (4th ed.)*. Boston: Jones & Bartlett.
- Obrien, M., Shuman, S., Barrios, D., Alos, V., & Whitaker, R. (2014). A qualitative study of acculturation and diabetes risk among urban immigrant Latinas: Implications for diabetes prevention efforts. *Diabetes Educator*, 40(5), 616-625. doi: 10.1177/0145721714535992

- Osborn, C., Amico, K. R., Fisher, W., Egede, L., & Fisher, J. (2010). An Information—Motivation—Behavioral Skills Analysis of Diet and Exercise Behavior in Puerto Ricans with Diabetes. *Journal of Health Psychology, 15*(8), 1201-1213. doi: 10.1177/1359105310364173
- “Pew” Research Center: Hispanic trends (n.d.). Demographic profile of Hispanics in Washington, 2011. Retrieved from <http://www.pewhispanic.org/states/state/wa/>
- Polit, D. & Tatano-Beck, C. (2012). *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (9th ed.). Philadelphia: Wolters–Kluwer.
- PRISMA (2009). Transparent reporting of systematic reviews and meta-analysis. Retrieved from <http://www.prisma-statement.org/index.htm>
- Ramal, E., Petersen, A., Ingram, K., & Champlin, A. (2012). Factors that influence diabetes self-management in Hispanics living in low socioeconomic neighborhoods in San Bernardino, California. *Journal of Immigrant and Minority Health, 14*(6), 1090-1096. doi: 10.1007/s10903-012-9601-y
- Rivera-Adams, C. (2003). Lessons learned from urban Latinas with Type 2 Diabetes Mellitus. *Journal of Transcultural Nursing, 14*(3), 255-65. doi: 10.1177/1043659603014003012
- Robert Wood Johnson Foundation. (2009). “Commission” to Build a Healthier America. *Breaking through on the social determinants of health and health disparities* (Issue Brief 7). Retrieved from <http://www.rwjf.org/pr/product.jsp?id=53235>
- Rodriguez, H., Chen, J., & Rodriguez, M. (2010). A national study of problematic care experiences among Latinos with diabetes. *Journal of Health Care for the Poor and*

Underserved, 21(4), 1152-1168.

- Rogers, A. (2010). Exploring health beliefs and care-seeking behaviors of older USA-dwelling Mexicans and Mexican-Americans. *Ethnicity & Health*, 15(6), 581-599. doi: 10.1080/13557858.2010.500018.
- Sadowski, D., Devlin, M., & Hussain, A. (2011). Better care at safety net providers? Utilization of recommended standards of diabetes care for rural Latinos in one midwestern state. *Journal of Health Care for the Poor and Underserved*, 22(3), 995-1013.
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, 33(1),77-84. doi: 10.1002/nur.20362
- Schulz, A., Israel, B., & Lantz, P. (2003). Instruments for evaluating dimensions of group dynamics within community-based participatory research partnerships. *Evaluation and Program Planning*, 26(3), 249–262. doi: 10.1016/S0149-7189(03)00029-6
- Scollan-Koliopoulos, M., Schechter, C., Caban, A., & Walker, E. (2012). Hispanic Acculturation, Psychosocial Functioning, and Routine Support for Diabetes Self-Management. *Diabetes Educator*, 38(5), 715-722. doi: 10.1177/0145721712450924
- Shedlin, M., Decena, C., & Beltran, O. (2012). Geopolitical and cultural factors affecting ARV adherence on the U.S. Mexico border. *Journal of Immigrant and Minority Health*, 15(5), 969-974. doi: 10.1007/s10903-012-9681-8
- Sherrill, W., Crew, L., Mayo, R. M., Mayo, W.F., Rogers, B.,L. & Haynes, D. F. (2005). Educational and health services innovation to improve care for rural Hispanic communities in the U.S. *Rural and Remote Health*, 5(402). doi: 10.1080/13576280500312850

- Suljic, A. (2015). Walla Walla County Profile. Employment security department: Washington State. Retrieved from <https://fortress.wa.gov/esd/employmentdata/reports-publications/regional-reports/county-profiles/walla-walla-county-profile#geo>
- Sullivan, L., Hicks, P., Salazar, G., & Robinson, C. (2010). Patient beliefs and sense of control among Spanish-speaking patients with diabetes in northeast Colorado. *Journal of Immigrant and Minority Health, 12*(3), 384-389. doi: 10.1007/s10903-008-9184-9
- U.S. Department of Commerce, Census Bureau (USDC), (2011). Profile America Facts for Feature. (CB11-FF.18). Retrieved from http://www.census.gov/newsroom/releases/archives/facts_for_features_special_editions/cb11-ff18.html
- U.S. Department of Health and Human Services. The Office of Minority Health: “Diabetes and Hispanic” American (n.d.). Retrieved from <http://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlID=63>
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences, 15*, p. 398-405. doi: 10.1111/nhs.12048
- Wagner, A., Graves, A., Fan, Z., Walker, S., Zhang, F., & Ross-Degnan, D. (2013). Need for and Access to Health Care and Medicines: Are There Gender Inequities? *PLoS ONE, 8*(3): e57228. doi:10.1371/journal.pone.0057228
- Wallace, P., Pomery, E., Latimer, A., Martinez, J., & Salovey, P. (2010). A Review of Acculturation Measures and Their Utility in Studies Promoting Latino Health. *Hispanic Journal of Behavioral Sciences, 32*(1), 37-54. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2891555/>

“Washington State”, (2006, July). Diabetes disparities report: A review of Washington state data. DOH 345-248. Retrieved from <http://www.doh.wa.gov/portals/1/Documents/Pubs/345-248-DiabetesDisparitiesReport.pdf>

Washington State “Department of Health”, (revised 3-12-2014). Chronic Disease Profile for Hispanics. DOH 345-344. Retrieved from <http://www.doh.wa.gov/Portals/1/Documents/Pubs/345-334-Hispanic.pdf>

Weber, M. (2005). The Critical Social Theory of the Frankfurt School, and the ‘social turn’ in IR. *Review of International Studies*, 31(1), 195-209. doi: 10.1017/S0260210505006388

Weitzman, P., Caballero, A., Millan-Ferro, A., Becker, A., & Levkoff, S. (2013). Bodily aesthetic ideals among Latinas with type 2 diabetes. *The Diabetes Educator*, 39(6), 856-863. doi: 10.1177/014572171350711